THE TABERNACLE OF EXODUS AS A WORK OF ART
THE TABERNACLE OF EXODUS
AS A WORK OF ART
An Aesthetic of Monotheism

Maurice Schmidt

With a Preface by
Michael J. Lewis

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To my generations:

To my dear wife, Rebecca goes the thanks that most works of long gestation must have - encouragement, protection of time, provision of a lifestyle, and an appreciation of the "other" given with loving self-sacrifice. The work of "the woman of valor" is of a divine essence, being in so many ways as incorporeal as the Divine, Himself. I therefore dedicate this work to my beloved wife, Rebecca and beloved son, Joshua Jacob, who illuminate my days with love and encouragement.

Unending too is my gratitude to my dear parents, Max and Serene Schmidt and Oma Levy, and to my grandparents, Jacob and Minna Schmidt who formed me strongly in the veneration of our tradition. With them belong my dear nurturing Aunt Jolan and Dr. Mark "Uncle Maxi" Hirschfeld, the "God fearing atheist" as he titled himself. He was the first in my life as a budding teen to challenge and debate with me in hard philosophical terms the beliefs that the rest of the family were instilling into my soul. None of the family members in this last paragraph are here to see my finished work. The root sees not the branch, nor the seed the plant, but they are never apart. Therefore, to my grandparents who kindled the light of my past, and to my beloved parents who bound me to my heritage I dedicate this work.
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Author's Foreword

This book is the first work that establishes the ancient Israelite Tabernacle as a seminal work of art. It brings together the seemingly divergent worlds of biblical symbolism and art history. While all acknowledge that Western art was often inspired by biblical story and poetry, the modern study of art presupposes that Western religious art originates only from Greco-Roman civilizations.

I propose that a distinct and unique aesthetic enters world history with the Bible of the Jewish people, the Torah. A new civilization was born based on the book of Exodus and its detailed description of Israel's primal artwork, the Tabernacle. A new aesthetic was necessary that would express Israel's unique concept of a singular, non-corporeal God and His divine teachings. The Israelite innovations made from borrowed Egyptian forms were for the purpose of avoiding image worship while expressing the Oneness and noncorporeality of Israel's God and His covenant with Israel. These two interconnected criteria comprise the essence of my thesis. The Israelite innovations emerge out of a dialectic between the necessity for beauty of expression and the limits of beauty as it enters the realm of idolatry. A subtle and deep aesthetic understanding and a powerful imagination for expressive symbolism is revealed in this dialectic. These Israelite innovations and deviations insured monotheism's survival and laid the aesthetic foundation for its triumph. For the future, these decisions constituted an epic moment in the origins of liturgical art.

The aesthetic incorporated into the Tabernacle's construction and attendant ritual was further incorporated into Solomon's Temple and then into the synagogue. As for Judaism, the Tabernacle is the source from which all Jewish ritual and its authentic liturgical art and architecture was derived, and is derived to this day from its original aesthetic premises.

But the Tabernacle's story does not end with Judaism. Its unique aesthetic and teaching also underlies the art and architecture of Christianity and emerges again in the mosques of Islam. As each of the three structures of Judaism,
Tabernacle, Temple, and synagogue are unique and serve a different purpose, yet incorporate the basic form relationships of the Tabernacle, so too, the scriptural religions of Christianity and Islam also serve distinct modes of faith while they yet retain significant elements of the Tabernacle's unique design and symbolism in their art and architecture.

The study of art history rightly prefers the physical presence of the objects to be studied or at least a significant remnant of them. In this regard, my work is at some disadvantage. The Tabernacle is not extant physically. Some today argue that it never existed; that it, along with the Exodus story from which it emanates, is a myth made up in later Jewish history.

But this skeptical view also has no proof. The great ivory and gold statue of the goddess, Athena, once housed in the Parthenon, has long disappeared, but there is no shortage of respected scholarship devoted to how she might have looked. Suppose that the entire Parthenon complex had been razed and all that was left behind were old texts describing in intricate details the materials, measurements, and the size and shape of the Acropolis buildings. Could we not reconstruct a reasonably agreed upon plan as to how they looked? Could we augment our view by study of the remains of proximate civilizations and, from this knowledge, trace out a reasonable thesis as to the Acropolis's subsequent influence and importance? Even if the dates of origin of the texts were in dispute, the discovery of its reconstructed forms and their relationships found in later works of similar use and significance would warrant a respectable thesis.

In this manner, I pursued my research. It is not an uncommon approach. The city of Troy was considered mythological until its rediscovery by Schliemann through his close study of Homer's ancient text. One can proceed from an object to a thesis or begin from a text or an inscribed image of an object and from that to an image. The results in either case may be at some points vague. However, a thesis is entitled to be considered on the logic of its own constructs which are made from reasonable if not absolutely provable sources. The world of scientific discovery does not always proceed from certain knowledge to hypothesis. Many
of the greatest discoveries came to us from the other direction, from hypothesis to knowledge.

The basic forms, form relationships, materials, and workmanship governing the sacred art of ancient Egypt, the civilization most proximate to biblical Israel, correspond exactly to the descriptions in Exodus which recount the Israelite forms, materials, and workmanship of the Tabernacle altars and courts. A further reasonable hypothesis can be made. These same relationships appear in the unique religious art, architecture, and ritual forms of a later religion, born directly out of its Jewish ancestry and whose Gospel texts refer many times to its own “new” Tabernacle emerging from the “old.” These familiar form-space-relationships can also be found albeit manifested differently for different rituals, in the third scriptural religion of Islam, emerging from the same Judaic sources.

I make no claim that the Tabernacle’s influence is the whole story but in the diamond that makes up man’s effort in visual liturgical art, the Israelite Tabernacle as described in Exodus is a facet that should no longer be overlooked.

Respectfully,

Maurice Schmidt
The Tabernacle of Exodus—the first site of monotheistic worship for which we have a precise description—was not a physically imposing object. Built by the ancient Israelites during their wandering in the wilderness, it was of necessity a portable structure, a "tent of meeting" that was made of linen fabric suspended between wooden poles. Even its most sacred component, the Ark of the Covenant of the Lord, containing the stone tablets that Moses received on Mount Sinai, was built of perishable wood under its gold plate. Not a shard of it could have survived the destruction of the First Temple two and a half millennia ago, if indeed any of it survived that long.

Nonetheless, the Tabernacle is of fundamental importance in the history of religion, and of religious architecture. It is the wellspring from which descends every synagogue, church, and mosque ever built. Yet in the history of art it has never played much of a role, and in the standard textbooks it is scarcely mentioned. That a discipline dedicated to tracing the origin of forms should slight one of the most influential form-giving objects in history is more than peculiar. It is this relative neglect, which has caused the Tabernacle to be treated as a religious object but not a work of art that Maurice Schmidt now seeks to remedy.

The neglect of the Tabernacle is an extraordinary phenomenon. Other vanished works of religious art enjoy great prestige in art history, and haunt the Western imagination. Phidias's cult statue of Athena in the Parthenon, for example has long since been pulverized but is recognized as one of the principal artistic achievements of Greek art. Likewise the Benedictine Abbey of Cluny, despoiled and carted away during the French Revolution, is regarded as the apex of romanesque art. Yet certain aspects of the Tabernacle have made it difficult to
consider aesthetically, that is, to treat it as a work of art with distinctive formal and stylistic properties—and with the power to inspire other artists. For one thing, it stands outside the main channel of Western art, which despite the enormous expansion of the canon in recent decades still begins as it always did with the monumental art of ancient Egypt and proceeds through classical antiquity to the present. This way of looking at art and artistic change was established as long ago as 1764, when J. J. Winckelmann published his *Geschichte der Kunst des Alterthums* ("History of Ancient Art"). For Winckelmann, Greek art at the time of the building of the Parthenon was the summit of artistic accomplishment, the standard against which all other art was measured.

In this great family tree of art, there was little place for the art of the ancient Near East, largely because that region was poorly understood during the eighteenth century, known only second hand through classical sources. It did not become generally accessible to Europeans until well into the nineteenth century; not until 1845, for example, did Henry Austen Layard begin his investigations of Biblical Nineveh and Nimrud. Because of this late start, when the art of the ancient Near East came at last to be studied, it fell to the lot of archaeologists, who by professional outlook and habit are oriented toward excavations and the tangible objects that they yield.

It is hardly surprising that an intangible object like the Tabernacle, known only from a literary account, would not exert a strong claim on the attention of archaeologists. But what is rather surprising is that Biblical scholars would themselves be skeptical toward the Tabernacle. In his *Prolegomena to the History of Ancient Israel* (1883; English translation 1885), the scholar Julius Wellhausen laid out what came to be the standard interpretation: instead of the Tabernacle serving as the sacred prototype from which the form and proportions of the Temple of Solomon were later derived, it was the other way round. The text of Exodus achieved canonic form many centuries after the events that it relates took place, and it was largely shaped by contemporary ideas and terms. The elaborate description of the Tabernacle was something of a poetic creation, which projected
the forms of the Temple backwards to give it a respectable ancestor. "The representation of the tabernacle," Wellhausen concluded, "arose out of the temple of Solomon as its root." Such would become the conventional wisdom in Biblical scholarship for more than a century.

This has changed in the last generation, as Biblical scholars have once more begun to take the Tabernacle seriously. Both Carol L. Meyers' *Exodus* (2005) and James Karl Hoffmeier's *Ancient Israel in Sinai: the Evidence for the Authenticity of the Wilderness Tradition* (2005) use a wide variety of different kinds of evidence—linguistic, archaeological, material culture—to show that the text of Exodus, whoever shaped its definitive version, contains much information of considerable antiquity. And the preponderance of evidence suggests that at some point there was indeed an elaborate tent of meeting, made of fine Egyptian linen, and containing a wooden ark that might well have resembled the portable shrine with the cult figure of Anubis found in the tomb of Tutankhamen.

The Tabernacle is long overdue for a sympathetic, speculative and wide-ranging exploration of the sort that Professor Schmidt provides here. Whether or not it existed precisely as described in Exodus some thirty-two hundred years ago, generations of believers have acted as if it did, along with their architects and builders. For this reason alone, it deserves respectful attention. But this book offers something more provocative than a monograph. It suggests that the Tabernacle, its sequence of spaces, its proportional modules, and even its details, have been a central force on the making of Western art and architecture, and that its influence remains active to the present. It is where "moral monotheism is given its first emergence in specific forms of art and artisanship." One need not be a believer to welcome Professor Schmidt's long overdue and stimulating book.

Dr. Michael J. Lewis
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Acknowledgements

I wish to thank those without whose help this work would not have been formulated nor come to fruition: those hands and minds beyond the work of authors. The Tabernacle of Israel was completed in a year. If I go back to that time when I was a youth already obsessed with the practice of art, I read in Exodus the call to Bezalel to build the sanctuary, the only part of the Torah that deals with art making, then the completion of this, my work has taken more years than the forty of my ancestors' wandering in Sinai. For its shortcomings and I suspect there are some, I take full responsibility and thank in advance those willing to call them to my attention. But I hold blameless those who have served me so well and give them my heartfelt gratitude.

To my editor of this work and other of my publications goes the deepest gratitude. Carla Suson organized my early notes and chapters and oversaw many newer chapters comprising over half of the book. After endless considerations and rewrites, she brought the material to book form. In those years, she edited and compiled the illustrated lectures and PowerPoint presentations presented to the public and to the annual conferences at the School of Visual Arts in New York City. These presentations formed the heart of this book.

Carla's labor on this work goes back over fifteen years, the last two over the distance from Texas to Indiana. Her work was done with great faithfulness, and I think it should be said with loving-kindness as well. Her promise to never abandon this work has been kept and, without her professional knowledge of modern methods of publication, her dedication, and intelligence, this book could not have been achieved.

Going back to this book's beginning as a series of handwritten notes in many notebooks, another person, Lisa McLaughlin must be thanked. In the year we worked together, Lisa typed the notes from the notebooks up to that time into their first neatly readable manuscript. Lisa was deeply devoted to the work. From her drafts, the early chapters were revised and other totally new chapters evolved.
With deep appreciation, I thank those colleagues and friends who read the partial manuscript of my developing book and with whom I sought counsel over its conception and content. Remembering the generosity of their time, encouragement, and suggestions, I recall their names: Dr. Richard Hartwig, Professor of Political Science, Texas A&M University, Kingsville; Rev. Dr. Robert "Bob" Trache, Episcopal minister; and Robert O. "Roc" Curry, D. Min.

Thanks go also to my dear brother Baruch whose interest and encouragement in my project was early and remained steady. He found and sent me illustrated books of rabbinic content dealing with my subject that were unknown to me. These books proved invaluable references which allowed me to check my hypothesis and conclusions against accurate authorities.

Thanks too, to my dear son, Joshua Jacob whose interest was early, long, and steady. When he was a child, this work also was in its developing stages. We would walk together and I pointed out geometric relationships and their similarity to the Tabernacle's structures—buildings, furniture, street signs, tricolored stoplights, and the invariably square SELF SERVE signs of gas stations. He helped me set up equipment for my first public lecture on the Tabernacle for the Brandeis Women of Corpus Christi. And finally, as a grown young man living in New York City, Joshua was allowed to present what became a chapter in this book: The Seven Branched Lamp, at the Annual Conference of the School of Visual Arts, New York City. The time was immediately after September 11th and I was too travel averse to make the journey. Joshua's interest in this work has always remained supportive.

Also, I want to thank Mrs. Helen Thorington for her work in the final formatting of my book for The Edwin Mellen Press.
Introduction

The Tabernacle of Exodus and its attendant ritual embodies all the commandments and teachings of the Torah (the Pentateuch or Five Books of Moses) and anticipates the nature and poetry of the prophetic writings as well as the design of Jewish liturgical art and architecture. Its influence is also of basic significance to the art and architecture of the two subsequent scriptural religions of Christianity and Islam.

The people who constructed the Tabernacle and made use of it for four hundred and eighty years\(^1\) would have been master artisans and craftsmen but unused to the written word. Like other ancient people and most of Europe through the Middle Ages and Renaissance, the Israelites would have to come to an understanding of their beliefs and culture through the agencies of art such as symbol, color, form, proportion, and ritual in both action and music as much as by the spoken word.

It is little appreciated and difficult for modern persons who get most of their information through the written word to comprehend the task of teaching a people a religion such as Judaism which is more preeminently than all others a belief system embodied in the written word. Yet all those visual and ritual elements unique to Jewish art were inspired by the necessity of the task to create visible forms that would convey the belief system of an imageless God. In form,

\(^{1}\) First Kings 6:1. Every reference to biblical quotes in this book was taken from Holy Scriptures According to the Masoretic Text (Philadelphia: Jewish Publication Society of America, 1917).
material, workmanship, and ritual, the Tabernacle's structures bear resemblance and origin to that of much of the pagan art of its time, particularly to Egyptian art. But slight shifts in relationship and some unique forms create bold changes in message and thus in meaning, as much as small changes in wording alter meaning in language. Through carefully calibrated innovation and in using a visual language familiar to the people, Moses and Aaron, were able to bring Israel to a visceral understanding of its eternal and unique covenant.

One of the hypotheses presented here is that people who work with their hands in art and agriculture for all their daily necessities rely heavily on visual and auditory information. They will develop an extraordinary sensitivity to interrelated visual-ritual material. They are able to detect significant relationships invisible to those whose primary information is derived from the written word. There is a barrier between modern thought patterns and those of ancient ancestors that can be bridged by the visual imagination. The superiority of written language is its precision, its ability to draw clear abstract and finely tuned distinctions. This ability is absolutely crucial to Judaism and to any civilization of law as we know it. Who can conceive of a modern legal code or contract written exclusively in pictures of natural forms?

Unfortunately, throughout the ages, visual symbolic thought has been the handmaiden of Paganism in both its aesthetic and most horrific forms. The visual image was the wall of superstition against both the advance of morality and science. As the power of language is to "separate" ("make holy" in Hebrew) and judge distinctions, the power of art lies in its power to blur distinctions, to blend and fuse the edges of the corporeal and the abstract, of the past, present, and future. Feelings are maneuvered as in dreams to fuse with all things real and imaginary. If unchecked by the clarity and permanence of written language, the visual-auditory by itself will lead always to the inability to think in any of those ways essential to moral law and democratic institutions.²

² The Torah portion, which begins the making of the Tabernacle (Teruhmah, Exodus 25-27), is preceded by the Decalogue (Yithro, Exodus: 18-20) and by the recitation of civil laws, also
But the very power of art to fuse, blur, and intertwine is also its gift beyond language. Through the modulated feelings endowed by forms, colors, and music used in ritual, connections are made seamlessly between a people’s present, past, future, and to our primordial past. For example, consider how much feeling-thought was suddenly encompassed by the display of the American flag after September 11th, 2001.

The Tabernacle of the Exodus is history’s first conscious example of the liberation of art from superstition and the paganism of nature worship. It was also the earliest example of art forms underpinning moral monotheism.

The study of the process of this unique artistic venture is the subject of this book. It is the fruit of a lifelong (literally from my childhood) fascination with the Torah’s only treatise on art, artists, and their place in a moral monotheistic civilization. As a working artist and teacher, I found my studies led me to an ever deeper understanding and appreciation for those very passages of the Torah that are most difficult if not meaningless to the modern reader. In fact, those long chapters of dry cataloguing of materials, instructions on meticulous fabrications and liturgies of ritual minutiae are the foundation stones of the religious art of Judaism, Christianity, and Islam.

It is the capacity of the visual imagination to transcend the barrier between our modern linguistically-centered world and go back to Sinai and see as those who witnessed this great beginning. This journey has deepened my insight into visual art as well as the linguistic imagery of Scripture. Biblical language, its imagery, and poetry from Moses to King David through the prophets of Israel and into the New Testament was shaped by the forms and rituals of that wandering sanctuary of Israel.

revealed at Sinai (Mishpatim, Exodus: 21-24). Such an order of appearance re-enforces the concepts that Israel’s liturgical art must reflect and support God’s commandments, laws, and ordinances and never supercede or undermine them.
Part I
The Tabernacle’s Creation and its Vocabulary of Forms

The study and practice of visual art is in understanding the relationships between form, space, and color. Examining the Tabernacle in terms of its aesthetics, in no way contradicts the traditional Jewish view that its purpose was “to wean the Israelites away from idolatry and turn them towards God”3 How did the Tabernacle aid in this great pedagogical enterprise? Devoid of any pretense of magic, there was no *deus ex machina* or hidden mechanical device used in its service; no theatrics or secret rituals were used in the Tabernacle and the services attendant upon it. All was transparent and knowable. The methods of its construction, the priestly rituals, including those carried on in the Holy of Holies by the high priest, are described in detail in Exodus and Leviticus. In these characteristics, the Tabernacle complex differed uniquely from its contemporaries and from future religious centers such as Delphi with its screaming Oracle enhanced by mechanical device.

While there are some divine elements in the biblical narrative such as the Pillar of Fire and the Cloud which are not explainable, everything that pertained to the Tabernacle’s service, maintenance, and use by human agency is rational, knowable, and described in detail.

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For nearly five hundred years, from the second year of the Exodus throughout the period of Judges and through the kingships of Saul and David, the Tabernacle served as Israel’s only sacred shrine. It predates fifth-century Greece by approximately eight hundred years. In a moving ceremony recorded in First Kings, the Ark of the Covenant was removed from the sanctuary by the priests and placed in King Solomon’s Temple. In its time, the Tabernacle, this diminutive structure, was the world’s only shrine dedicated to monotheism. Truth like geometry does not depend on scale.
Chapter 1
In The Shadow of the Divine: Monotheism's First Work of Art

All these rely upon their hands,
and each is skilful (sic.) in his own work.
Without them a city cannot be established,
and men can neither sojourn nor live there.
Yet they are not sought out for the council of the people,
nor do they attain eminency in the public assembly.
They do not sit in the judge's seat,
nor do they understand the sentence of judgment.
They cannot expound discipline or judgment,
and they are not found using proverbs.
But they keep stable the fabric of the world.4

One looks in vain through the literature of art for any mention of the Tabernacle of the Israelites as a work of art, yet it was the first work made to express the concept of moral monotheism. Unlike the wondrous ruins of ancient times which are still partially visible, we have the complete plans in writing for the Tabernacle's construction as well as the ritual objects used in conjunction with its purpose in the last fifteen chapters of the book of Exodus. Since no visible trace of the Tabernacle has come down to modern man, it is astonishing that it has had decisive influence not only upon synagogue design, décor, and ritual, but also

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on the Temple of Solomon, Christian art and architecture, and the mosque design of Islam.

There are many reasons to explain such an historical omission of so seminal a work. First of all, there is no known remnant of it in existence though its description occupies over half of the forty chapters in the Book of Exodus. The many conventional opinions about Jewish aversion to visual art may also be pertinent, some of which are still shared by Jews. Indeed, there is no mention of its beauty either in the Torah, which details its materials and measurements; nor does subsequent Jewish commentary and literature consider any aspect of the Tabernacle from an aesthetic viewpoint. As detailed as it is, the Talmudic literature does not deal with the structure's artistic merits; nor does the voluminous accompanying literature although there are rabbinically approved floor plans with the placement of its furnishings. These illustrations form the basis of this book's conclusions and their illustrations.

In contrast, there is a sense in the biblical descriptions of Solomon's Temple\(^5\) of a very aesthetically conceived edifice. However, Talmudic literature written millennia later is full of rapturous passages celebrating the beauty of Herod's temple, which was influenced largely by the classical architecture of Greece and Rome. So there is an anomaly in the Judaic record itself that seems to recognize the aesthetic element only to the extent that it is distant from the most original and seminal work of art of the Jewish people: the Tabernacle.

It appears then that the children of Israel did not think of the Tabernacle structure as a work of art or even as an aesthetic accomplishment of exceptional merit, though the attention and material lavished upon it was considerable. There are two related points that can throw light on this phenomenon.

First, our modern idea views art as a separate kind of consciousness and a distinct enterprise apart from others, having laws and meanings universal to itself and separate from all else. This is very much a Western idea derived from the Greco-Roman culture. This should not be construed to mean that the aesthetic

\(^5\) First Kings 6.
sensibility and the use of color, shape, relationship, and mathematical formulations of harmonious proportions were absent from earlier civilizations. As will be seen later, aesthetic principles were actively at work in the seminal period of Israelite civilization.

Secondly, there is a historically unique and consistent Judaic view of the aesthetic that is made manifest in the Tabernacle. This viewpoint is evident in the Psalms and the prophetic literature of later periods and throughout all subsequent Jewish thought. This Judaic aesthetic, for lack of a better term, derives from the second commandment in Jewish liturgy, the prohibition against the making of graven images. But the concept is much more complex than a mere prohibition against carved images. Rabbinic law and commentary makes many distinctions between forbidden and permissible art in both personal ritual objects and synagogues. For example, complete figures, fully carved in-the-round statues such as statues of heroic persons, are forbidden, whereas figures carved in relief are permitted. If clothed, painted figures are permitted. Incomplete figures such as head and torso are preferable to full bodies or complete figures, a view in total contradiction to the Greek preference for the whole figure and the nude male body. These seemingly arbitrary distinctions actually deal with very profound elements of psychological response and were themselves derived from and built into the Tabernacle's structural elements. Rabbinical thought reveals a profound understanding of how people react to visual forms, as well as an acute awareness of aesthetics.

In Judaism, the aesthetic is held in similar check as the concept of freedom. Beauty and freedom are necessary for the higher possibility of genuine servitude to God but they cannot be ends in themselves. This is a view contrary to most Western thought especially today. However in Israelite civilization, the moral always is primal. Freedom and beauty are like all else, bound in servitude to God.

The Psalms of David give good illustration of the above principle. The 19th and 23rd Psalms open with beautiful, descriptive landscape poetry only to
turn suddenly into mini-sermons of obedience to God and His commandments. The Psalmic verse seemingly leaps off course. But Judaism has no concept of "nature" in the detached western sense. In the ancient Judaic mindset, the creation is at one with the moral-spiritual revelation at Sinai. Judaism does not recognize nature in the Western sense of a separate self-motivated entity, but rather as a direct handiwork of the same God who appeared at Sinai. Psalm 19 is one of the finest examples, illustrating the movement from the descriptive to the moral, from the dramatic to the didactic. From the Judaic viewpoint, there is no shift at all from the beautiful to the God-moral but rather an ordained ascent from the sublime to the supreme.

A. The Aesthetic in Judaism

To understand the aesthetic as it applies to Judaism even today, modern people must find their way between the conflicting mindsets of the aesthetic as a value and end in itself, a good that is absolute versus the constrained, reigned in view of Judaism. Implicit in the Jewish concept is the conviction that the unbridled aesthetic does seduce to idolatry by making feelings a substitute for spirituality and thus subsuming the moral commandment from servitude to God into a haze of good feelings. It is the unbridled aesthetic that is often the gateway to mankind's most horrid practices and addictions. The chapters in Exodus that describe the making of the Tabernacle are the only ones in all the canonical lore of Judaism that discuss the place of art. Here we find the elevated statement made in Exodus 31:1-6. In this single verse, the biblical relationship of the aesthetic to moral monotheism is established.

And the Lord spoke unto Moses saying "See, I have called by name Bezalel [Bezalel, Hebrew name meaning "in the shadow of the Divine"], the son of Nun, the son of Hur, of the tribe of Judah, and I have filled him with the spirit of God, in wisdom, and in understanding, and in knowledge and in all manner of workmanship, to devise skillful works to work in gold, and in silver, and in brass, and in cutting of stones for setting and in carving of wood, to work in all manner of workmanship."
This description of the artist's talent is worthy of the Renaissance, revealing an almost prophet-like esteem for aesthetic enterprise. What connections did the Tabernacle have with other works of art? Was there a meaning in the aesthetic sense, in its precise measurements of form and space, and in its colors and their relationship? Could those same mathematical relationships of beauty and harmony, so basic to the art of Greece and Rome built half a millennia later, also be present in the Tabernacle structures of pre-dynastic Israel? Were these geometry-based golden section proportions carried forward into Solomon's Temple? What influence if any, had its colors and forms on the subsequent religious art and architecture of those other religions directly influenced by Hebrew Scripture, namely Christianity and Islam?

B. Tzniut - Hiddeness/Modesty versus Visible Power

Significant Judaic aesthetic relationships are manifest most characteristically in modesty and hiddenness (tzniut, Hebrew for modesty). In contrast, Greek art as in most other world art, the godhead is manifested in full physical beauty. In the Israelite mindset, God is robed, clothed in beauty. Majesty is a mere garment surrounding Him. World-art bathes the spectator in beauty; he is awesomely confronted by it. There is a deliberate theatricality in a Greek temple facade which is even more pronounced in Roman architecture. The Tabernacle's influence on modern Jewish ritual places us in the presence of beauty but not in a way that makes us acutely conscious of its presence. Rather, the beauty of things is an antechamber, a vestibule, a veil or covering, a garment covering something still more precious. The aesthetic is never the main event. The removal of a Torah from the Ark in a traditional synagogue service is a mini-pageant of solemnity and color, like the entry of a bride, but it climaxes in small groups reading from its deliberately unadorned text. It is but one example of Judaism subsuming the aesthetic to the moral-religious.

A note on gold threads. The gold threads woven into the Tabernacle curtains and screen are a supposition of the author. They are not mentioned in the
Torah passages describing these weavings but gold threads were woven into the garments of Aaron, the High Priest. The ancient Egyptians did weave gold threads with cloth. Gold threads may be seen in the heavy brocade garments of Catholic clergy and also worked into decorative patterns in cloth Torah covers. Technical feasibility and the added beauty of such threads woven with blue, purple, and scarlet would have been irresistible to Israel’s ancient artisans.

In contrast to other traditions, Jewish ritual deliberately avoids climax in the usual dramatic sense. Movement is away from the richly adorned or highly dramatic to the less dramatic, away from the beautiful and towards the unadorned and didactic. Again, Psalm 19 comes to mind. The same movement away from dramatic climax is evident in the patriarchal narratives and to a great extent in the Exodus narrative. Though full of highly charged scenes and the most intricately woven art, there is never that sense of finis, of a curtain coming down upon an absolutely completed event. Like a work forged by the smith’s hammer, events end by merely stopping. The smith’s hammer is deft but utterly devoid of rhetoric.

C. Origins, Structures, and Purpose

The Exodus is thought to have occurred in the twelfth dynasty of Egypt’s New Kingdom under Pharaoh Ramses around 1245 B.C.E. Archeologists have varying views, some going as far back as 1400 B.C.E.

The Tabernacle of the Exodus is similar to sacred Egyptian architecture and artifacts in its materials, methods of construction, and the geometric basis of its proportions. Neither concept nor technology changed over any of the periods of ancient Egyptian history. Raised as a prince and adopted son of Pharaoh’s daughter, Moses would have been intimate with the high arts and lore of Egypt, and his kinsmen as slaves would have been familiar with the working of materials though not with the arcane and subtle meanings of Egyptian measurements and proportions.

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Exodus 28:4-8.
Fig. 1. *Floor Plan of the Tabernacle Structures*

This drawing is based on illustrations from Yisrael Ohad Ezrachi. The dimensions of the Mishkan are given in *The Mishkan and the Holy Garments* by Rabbi Shalom Dove Steinberg.
When comparing shape and proportion in Egyptian sacred artifacts to the proportions and shapes of structures used in the Tabernacle as described in Exodus, it is evident that similar shapes, proportions, and materials were used for similar purposes. A surprising correlation exists between proportion and meaning, not necessarily the same meaning but meaning of equal importance or rank in significance. However, there are many significant departures from this simple formula of comparisons. For example, the seven-branched lamp, or Menorah, is not attributable to Egyptian civilization in any way nor is it related to any other civilization. However, the basic concordances of form to meaning are so amazing that it was as if a code of forms and proportions opened up their meaning and cast a great light upon a very heightened aesthetic awareness never yet attributed to the Jewish people.

D. The Tabernacle Structures

Placed always at the center of the Israelite encampment, the Tabernacle of the Exodus was a pre-fabricated structure, designed to be portable when dismantled and sited east to west when erected or "laid out," to use the biblical scriptural wording. It consisted of an Outer Court with poles set at 5 cubit\(^7\) (cu) intervals between which were hung curtains not woven but plaited of white linen threads of an openwork (netlike) structure "with designs worked into them."\(^8\) It was a rectangular area, fenced in on its four sides by cloth in a manner like the sides of a large tent with ropes and poles to steady it. This enclosure, 50 cu wide, 5 cu high (about 8 ft) and 100 cu long, was roughly 55-1/3 yards long and 27-1/2 yards wide. The measurement are translated here in relationship to the size of a football field for the purpose of easy visualization.\(^9\)

Inside the Outer Court was the Tent of Meeting, an enclosed structure 10 cu in height and width, and 30 cu in length. Entered through its veil, located at the

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7 The cubit used in this book is derived from the Egyptian royal cubit of 19 in which I have changed to 20 inches for convenience.
beginning of the second or westward square of the Outer Court, the Tent of Meeting was a little over 16 ft in height and width, and about 50 ft long. In contrast to the Outer Court, it was a solid enclosure made of acacia boards covered with gold and then covered on the top and sides with curtains woven of blue, purple, and scarlet and "fine twined linen." The design possibly included gold threads, similar in color to the entrance screen of the Outer Court. The Tent of Meeting or Holy Place was further subdivided into two sacred areas, the Holy Place which consisted of a space 20 cu long, 10 cu wide, and 10 cu high. The last space, the Holy of Holies, was separated from the Holy Place by a veil of blue, purple, scarlet, and gold thread. This most sacred enclosure was a cubed space of 10 cu, some 16 ft in height, width, and length.

The Ark of Testimony was contained inside the Holy of Holies. The stone tablets of the Mosaic Law which were revealed at Sinai were held in this gold covered box. The Ark was Israel's most sacred object. The great Torah commentator, Rashi noted the sensual, even erotic elements embodied in the Tent of Meeting structure. Furthermore, its elongated, coffin-like shape suggests that the Israelites thought of their sacred structures as a living body, a human form of perhaps feminine gender. The ancient Egyptians thought of their boats as living beings, and it is logical to assume that this could also be true of their religious structures.

E. Entrance Screen of the Outer Court

At the eastern end of the Outer Court stood the entrance gate, a 20 cu long screen (33.3 ft approximately) and 5 cu high (8.3 ft approximately). It echoed the colors of blue, purple, and scarlet of the curtains that covered the Tent of Meeting inside the western square of the Outer Court. Separated by the white

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10 Exodus 26:1.
11 Ark of the Covenant, Ark of Testimony, and Ark of the Tablets all refer to the same structure throughout this text.
12 Exodus 27:16-19. "...length of the gate of the Court shall be a screen of twenty cubits... of blue and purple and scarlet..."
mesh curtains surrounding the Outer Court, the entrance gate screen just outside the eastern square and the Tent of Meeting inside the western square together unified the entire Tabernacle structure in bursts of vibrant color and design like two precious jewels set in a band of white gold.

Besides being the place where the presence of God (Shechinah) descended to dwell among the people, later prophetic writing and rabbinic commentary strongly suggest that this inner sanctuary, consisting of the Holy Place and Holy of Holies, was also conceived simultaneously as a symbolic bride and actual nuptial chamber: a living metaphor of Israel as the Bride of God. The spirit of God descended to the "Judgment Seat," a space above the top of the Ark of Testimony within the veil of the Holy of Holies. Here He metaphorically embraced Israel, His Bride, while dwelling in the center of their encampment, which is metaphorically in the center of the body of Israel. The conception of the Tabernacle structure as a bridal chamber and bride symbol may well have originated in the Exodus period.

In the passages that describe the procedure for dismantling the Tabernacle, it states that only the priests of the highest rank could dismantle and wrap the holy things. Anyone else coming near to see would die. Such an aura of sanctity suggests several things but it certainly suggests a dread of the kind of voyeurism that would be equivalent to unauthorized persons viewing the undressed bride of a king.

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13 Numbers 4:15, 18-20.
The Altar of Offering was 10 cu distance from the sanctuary. An invisible third 50-cu square is formed from ramp of Altar of Offering to Ark of Covenant. The invisible square from altar ramp to Ark of the Covenant also forms a pair of golden section rectangles of a square and one-half each. The result is geometric-symbolic union at its most subtle and profound. These halves, or pair of harmonious rectangles, unite the first step of the High Priest’s ascent and culminates at the Ark of the Tablets inside the Holy of Holies. The first step of the High Priest unites his ascent to the Altar with the Ark of the Covenant.
Furthermore, this Torah portion in Numbers, which describes the dismantling of the Tabernacle, is always read in connection with the Prophet Hosea\textsuperscript{14} which ends in an almost orgy-like sensuous embrace between God and Israel and makes direct reference to Israel's wilderness experience as God's faithful lover. Another prophetic reference to the bridal theme occurs in Jeremiah 2:2:

> I remember for thee the affections of thy youth; the love of thine espousals; how thou wentest after Me in the wilderness, in a land that was not sown.

If correct, these assumptions give the Tabernacle structure a unique meaning never again replicated in any Jewish religious structure: not in Solomon's Temple nor in the synagogue. Even though the Ark of the Covenant was placed inside the Temple of Solomon, nevertheless the temple structure represents a different episode in the life of the Israelite nation. King Solomon's words at the Temple's dedication stated the new purpose:

> For they shall hear of Thy great name and of Thy mighty hand and of Thine outstretched arm when he (the stranger) shall come and pray toward this house.\textsuperscript{15}

Solomon's Temple, the central worship point for all Israel, was also the point from which God's name would go out to the people of all the world. It proclaims Israel's universal mission. As for the synagogue, a much later development, it has neither the sanctity of the Temple or the Tabernacle but is simply a structure, virtually of secular rank by comparison. It is primarily a meeting place, civic center, and a house of study and prayer. However, the influence of both the Tabernacle and the Temple can be seen in its traditional interior arrangement and its ritual service.

The Tabernacle was the bride Israel's wedding chamber where her covenantal—betrothal to God was manifest. It was not the site of Israel's universal

\textsuperscript{14} Hosea 2:15-25.

\textsuperscript{15} First Kings 8:42.
mission to the world, like Solomon's Temple, nor was it a general meeting place like a synagogue where all Jews could enter equally. The Tabernacle consisted of chambers where God dwelt in the midst of His people.

Israel's Lord and bridegroom entered the bridal chamber and sat upon the Mercy Seat\(^{16}\) above the cover of the Ark, shielded by the cherubim. The bride, Israel ascended up to Him symbolically by way of the rituals of the High Priest and his symbolic ascent (\(aliyah,\) Hebrew for "to go up") through the Tabernacle. Though in fact, the progression of the priestly ritual from the altar of the Outer Court to the Holy of Holies at the end of the Tent of Meeting was horizontal; the inner or symbolic logic of the structure indicated that in the minds of priest and congregation, an ascent of Israel up to God and God's descent from heaven to Israel on earth was taking place.

Religious ritual, where the theatre art has its origin, is a symbolic reenactment of events already familiar to a culture. Unless one understands symbolic connotations, the meaning is lost.

**F. Geometry: The Compass of Divine Navigation**

Using the familiar handicraft and geometry of Egypt, the Tabernacle transforms a coffin-like holy chamber from the tomb of a deity into a bridal chamber of a people and their God who redeems them from slavery. In doing so, Judaism eliminates the death cult, the sanctuary as a tomb which is the basis of Egyptian and other nature worship religions. The moral imperative becomes the means of demonstrating fidelity to God's personal covenant with every Israelite and in anticipation with every human being. It establishes further a God who acts in history and is not merely an onlooker in a cyclical unending process but a God who redeems slaves from bondage and establishes justice.

\(^{16}\) The Mercy Seat and the Judgment Seat refer to the same thing in this text.
G. Death Cult Eliminated

There were no tombs, burial sites, or memorials of any person or animal in any Israelite religious structure; not in the Tabernacle, Solomon's Temple, later temples, or the synagogue. The Torah forbids the High Priest to come near the dead.\textsuperscript{17} Strict laws of purity also prevent ritual adoration of the dead beyond simple burial and prescribed periods of mourning.\textsuperscript{18}

Eliminating death veneration as a part of the religious belief system is as unique as the Torah itself. The connection is self-evident. The inner personal quiet and educational emphasis necessary to teach and learn a religion whose non-corporeal God is manifest in history, covenant and commandment cannot withstand a competition with the emotionalism and theatricality attendant upon enshrinement of the dead. Moses shattered the Tablets of Law\textsuperscript{19} at seeing the Golden Calf.\textsuperscript{20} It was a demonstration of the absolute incompatibility between any adorational mythology towards any animate or inanimate form and the pure union of God and man through the Torah.

Of course, the above is not accomplished merely by the Tabernacle's construction. It is the elaborate priestly ritual and teaching carried on in it and around it, from the very method of its making, to its rearing up and dismantling that play a crucial role at the heart of which was and remains "the teaching" or Torah. The Tabernacle structures eventually disappear; their proportions subsumed in suggestive but unobtrusive ways into the Temple of Solomon and the later temples of Israelite history. But Jewish rituals, color combinations, and forms of Jewish ritual objects and synagogue architecture throughout Israel's history down to today are profound reenactments of its splendid historical moment. From this bridal chamber issue also the visual art and architectural elements basic to Christianity and Islam.

\textsuperscript{17} Leviticus 21:10-11. Applies to High Priest
\textsuperscript{18} Numbers 19:11. Applies to all Israelites as well as to strangers.
\textsuperscript{19} Tablets of Law, Tablets of Covenant, and Tablets of Testimony refer to the same thing throughout the text.
\textsuperscript{20} Exodus 32:19-20.
All ancient temples, their imagery, and their ritual accompaniment, were designed to fix their respective peoples' temporal, ever-changing, and uncertain earthly lives to the fixed elements of an eternal and unchanging concept. The means most commonly employed were orientation to cardinal points, geometric proportion, permanent materials (gold, silver, stone, etc.), color, symbol, and ritual. All these are in use today both for religious and secular purposes. Man is the only being responsive to the abstract arrangement of forms; the only being capable of reverence before designed form and space.

An analogy exists between navigation and the use of orientation and geometry in ancient religious architecture, art, and ritual. Greatly simplified, navigation can be said to combine orientation and geometry. We tie our ever-wandering craft to a fixed point, to an unchanging marker as if by an invisible string. By going nearer or farther from that point and determining in what direction, we know where we are and which way we want to go. With a combination of straight lines and angles from a fixed point, we align our position and move toward our goal. The analogy of navigation to spiritual position is obvious when we consider that, in synagogues around the world, the Ark containing a Torah always points in the direction of Jerusalem which is the fixed point towards which Jews pray. The headstones of Jewish graves are similarly oriented towards Jerusalem. In like manner, Moslems direct their prayer towards Mecca. Thus is the ever-changing, unpredictable, and fearfully uncertain journey of our earthly existence guided by eternal points, fixed in the Pagan world to stars, sun, moon, and cardinal points, and in later biblical religion to points fixed by significant events in time.

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21 Sigfried Giedion, *The Eternal Present: The Beginnings of Architecture* (New York: Mellon Lectures, Pantheon Books, 1957), 296. "In one respect above all, the pyramids are unique. Human endeavor has never achieved such sublime simplicity in materializing man's irrepressible urge to link his fate with eternity." 225. "Building was a sacred enterprise. It was the medium of union between man and god."
Fig. 3. Cosmic Orientation of the Tabernacle to Cardinal Points and Vertically to Earth and Heaven

Entrance curtain to the Tent of Meeting is in the exact center of the Outer Court. The ramp to the altar (outside) begins at the first square of the Outer Court.

With geometry, man creates harmonic relationships which seem to echo nature. These harmonies appeal to all peoples, cultures, and times. In its constancy and abstract conception, geometry is metaphoric of the eternal and spiritual.

Another attribute of geometry commonly unrecognized but important to our topic is that the value of a geometric form is not bound by its scale. Thus a modest earth-bound structure like the Tabernacle, using a limited vocabulary of oriented forms and calibrated spaces, can evoke the infinite and eternal geometry reflecting the divinely ordained harmony of the universe. Italian Renaissance architects applied similar principles of orchestrated geometry used by the ancient
civilizations of Greece and Rome. There is a moral dimension also, to the
elevation of form above scale. The equal sanctity of all human life regardless of
social rank, and the equal sacredness of good deeds or offerings are based upon
trueness of heart or form rather than scale of size, expense, wealth, or position.

H. The Shape of the Holy: the Square, the Square and a Half, and the Double
Square

The entire harmonic structure of the Tabernacle of the Exodus is derived
from a small vocabulary of forms based on the square. The square is the form of
the bases of Egyptian pyramids, the tops of their altars, and the holiest room
wherein was placed the statue of the godhead. Its repetitive use cannot be merely
coincidental to the geometry used in Israel’s Tabernacle; nor can the use of
squares in calculating the facades of Greek temples be logically attributed to mere
accident since that civilization was also under the influence of ancient Egypt.
Such an unlikely accident would merely underscore the universality of the
psychic authority of geometric forms.

The mosques of Islam are dominated by square-shaped facades whose
intricate color and carving present us with tent-like buildings that seem weightless
in contrast to their Greek and Roman predecessors. The above characteristics, in
combination with the water-filled ponds immediately before their entrance doors,
establish the mosque as the most literal architectural reinterpretation of the
Tabernacle of all three of the biblical religions. The holiest object in Islam, the
Kaaba in Mecca, is also a large cube like the Holy of Holies in the Tabernacle.

The small, box-like phylacteries placed on the head and arm by Jewish
men in daily prayer are cubes. Folded carefully inside the phylactery of the head
are prayers rolled into four separate parchments. The same prayers are rolled up inside the phylactery of the hand. The difference is that they are written on a single parchment instead of four.
veil before the Holy of Holies of the Tabernacle. Such is the fascinating continuum of symbolic forms whose significance, unlike forms in nature, bears no intrinsic relation to their scale.

But the square, the absolute perfectly geometric square, has its perfection only in the human mind: in abstract mathematical thought and not in nature. Of the natural forms, only the salt crystal most nearly resembles the geometric cube. This humble substance is of great symbolic significance in Judaism.

However, the conflict between the importance of the square/cube and its relatively un-aesthetic appeal is puzzling. It bears no harmonic relationship to any other shape and in itself is not beautiful as is a golden section rectangle. It would be unsatisfying aesthetically to live in cube-shaped rooms and we don't find them in homes. Yet it is from this shape that the other significant and aesthetic harmonic relationships are derived. Its virtue then is that it is the lodestone of harmonic forms and relationships.

Thus, the conclusion is that the square/cube is the geometric metaphor for the Eternal/Divine or eternity. The very cause of the square/cube's lack of aesthetic appeal is its static aspect, its absolute immobility; a perfection that of itself offers no prospect of change, a form discomforting to beings that live by freedom of movement.
Siegfried Giedion states in his Mellon Lectures published as, The Eternal Present: The Beginnings of Architecture\textsuperscript{23} that the number "four" was sacred to the Egyptians and that the "square" was to them a diagram or pictogram of "four." It is at least possible that a similar cognition existed in Israelite culture between the four-letter word for God, the tetragrammaton (phonetic: \textit{yod hey vov hey}) and the subsequent adoption of the square/cube for the Tabernacle structure. Hebrew root words are three letters. In a language of three-letter root words, a four-letter word for its most sacred name seems significant, especially in its close association with Exodus. Yet the logic fits. A unique word form or name for God, the Tetragrammaton is revealed to mark a covenant not heard by the Patriarchs, the revelation of the Ten Commandments.\textsuperscript{24}

For Israel, the ancestral sacredness of the square may possibly have originated with the \textit{sukkah} (Hebrew for booth). This portable booth was erected in fields during harvest time wherein farmers spent the night. Such booths are erected today by Jews for the celebration of the ancient pilgrimage festival of Sukkot\textsuperscript{25} and precise instructions are given as to its making, the main emphasis being on its non-permanent structure. The celebration of this seven-day pilgrimage festival also involves the waving of four species of plants: palm, citron,\textsuperscript{26} myrtle, and willow. It commemorates the divine protection given to Israel during the forty years of the Exodus. Thus the significance of the number four may actually be indigenous to the Israelites and only re-enforced by Egyptian usage.

From the square, the square and a half, and the double square derive all the measurements of the Tabernacle construction beginning with the Ark of the Covenant. Also the proportions and arrangement of the sacred objects are derived

\textsuperscript{23} Giedion, \textit{The Eternal Present} (1957): 348. "The square, as far as we can see, was the most complete plastic expression of the sacred number." The sacred number referred to is "four."
\textsuperscript{24} Deuteronomy 5: 2-5. "The Lord made not this covenant with our fathers, but with us, even us, who are all of us here alive this day."
\textsuperscript{26} A lemon-like fruit unique for producing a flower directly from the fruit itself.
from the above. From the square and a half and the three-to-five relationship known by the Greeks as the golden section or as Leonardo Da Vinci called it, "the Divine Proportion," the use of these proportional relationships places the Tabernacle within the lineage of Egyptian and Greek art and architecture, and of itself, must establish the Tabernacle of the Exodus as a conscious work of art. It is a work made by people fully aware of the vocabulary of universal harmonic forms and their everlasting effect. Indeed, the golden section was revived beyond the Greeks in the Italian Renaissance.

The Temple of Solomon precedes the building of the Parthenon by some four hundred years. According to First Kings 6, the Tabernacle served the Israelite nation for 480 years: since leaving Egypt to the commencement of King Solomon's Temple.

It is possible to trace a relationship of the Tabernacle's forms and proportions in the measurements of Solomon's Temple. This enfolding of the Tabernacle's proportion is done in a subtle manner. It is not a literal copying. In its height of 30 cu and its width of 20 cu, the front facade of Solomon's Temple presents a golden section rectangle whose square and one-half proportion is the same as that used in the Ark of Covenant. Most obvious is the ratio of the 20 cu width of Solomon's Temple to its 60 ell length, the same as the 10 to 30 cu proportion of the Tabernacle's Tent of Meeting.

Again, in the side view of Solomon's Temple, we see the three-to-five ratio in length to height if we use the measure of 60 cu in length to the beginning of the porch. Finally, with a cutaway to the inner Sanctuary, spaces proportionate to the Holy of Holies and Tent of Meeting of the Tabernacle can be seen repeated in the three 20-cu square spaces inside Solomon's Temple. By merely reflecting the Tabernacle's proportions and those of the Ark of the Covenant, Solomon's Temple pays homage to its venerated predecessor but does not attempt to repeat it. "It is in the nature of the golden section," says Siegfried Giedion, "that it

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**Fig. 5. The Golden Ratio**

The action of the spiral intersecting square and rectangles to infinity is visible in the Tabernacle’s sacred locations and spaces, all intersected by the spiral.

Automatically introduces a continuity of proportions and an infinite series of harmonic reflections.²⁸ Whereas the Tabernacle of the Exodus manifests God’s separate and eternal covenant or betrothal bond to Israel alone,²⁹ Solomon’s Temple, as his great commemorative speech³⁰ amply indicates, is the point on earth that manifests the universal kingship of God, "...that all the peoples of the earth may know thy name to fear thee,..."³¹

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²⁸ First Kings: 8:21.
²⁹ First Kings: 8:42-43.
³⁰ First Kings 8:42-43.
By its subtle or hidden incorporation of the Tabernacle's and Ark's proportional relationships, Solomon's Temple simultaneously honors the former and announces the new purpose of the permanently sited architecture of his Temple. By altering the size or scale of the primal shapes of the Ark of Covenant and Tabernacle, yet repeating their geometric ratios, Solomon's Temple makes its formal artistic statement of homage, incorporation, and enlargement of purpose that extends to the universal mission of the Israelite nation. Solomon's Temple becomes Israel's second work of high art.

I. The Shape of the Holy: Geometry as the Metaphorical Bond to Eternity

Unchanging in form, the geometric shapes of ancient temples reflected the ever-changing light playing over them from the heavens, thus creating a metaphor for Siegfried Giedion's phrase, "constancy and change." Our equivocal, uncertain, and ever-changing life on earth is metaphorically echoed by the changing light of heaven, whereas our miniaturized construct of abstract, eternal forms below echo the eternal verities above. It is a simple, direct, and yet unfailingly forceful way used by both religious and secular architecture throughout history to aesthetically make connections between man's temporal existence and his spiritual need for meaning that unites past, present, and future.

Almost no one visiting capital cities could be insensitive to the feelings inspired by this interplay of large-scale geometry retaining its form moment by moment, as the infinite varying light and shadow of days and seasons march across it. Our sensitivity to this interplay between earth and heaven, human construct and creation, is what gives us the sense of majesty even in the presence of ancient ruins. While scale is a factor, the sizes of even the largest buildings of antiquity are dwarfed by the majesty of mountains, waterfalls, and rock formations. That our human metaphors can hold their own in majesty beside

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From the biblical text of First Kings 6, it can be seen that all the sacred elements of the Tabernacle are incorporated into Solomon's Temple, varying only in their enlarged scale and elaboration of decoration.
natural wonders is what makes the point that ephemeral man's abstracted constructs can penetrate to the everlasting. The creation of man-made aesthetic or majestic space is never primarily a matter of scale but of the relationship of forms and spaces.

The two seminal Israelite structures, the Tabernacle and Solomon's Temple, were small by ancient standards. Especially by Egyptian standards, the Tabernacle was a mere dwarf. That Solomon's Temple should be only 60 cu long, 20 cu wide and 30 cu in height\(^{33}\) (roughly 100 ft long, 33 ft wide and 50 ft high) was not a choice made by limited technology or wealth. His palace was larger.\(^{34}\) Solomon's Temple becomes a truncated or encapsulated version of the Tabernacle complex's Tent of Meeting and its Outer Court combined into a single building. How else can we explain that the Outer Court of the Tabernacle of the Exodus, this portable structure of desert wanderers, was 166 ft long, some 66 ft longer than the Temple of Solomon? Its width was some 33 ft in comparison to the Tabernacle's Outer Court of about 83 ft. Only in its overall height of 30 cu, or 50 ft did Solomon's Temple exceed the highest point of the Tabernacle complex, which was the Tent of Meeting, a mere 10 cu or 16 1/2 ft in height.

Evident is a deliberate diminution in grandeur that throws into relief the Judaically alien spirit that inspires the later Greco-Roman grandeur of Herod's Temple. There is a principle embodied in Solomon's Temple as in the Tabernacle which can be observed in every ritual aspect authentic to Judaism. It is best described by that sweet sounding Hebrew word whose sound evokes its meaning, *tzniut*, Hebrew for modest or modesty. Solomon's Temple indicates that the Formless One is beyond scale and not enamored with human grandeur. How must it have been to have witnessed the mighty King Solomon coming forth out of his large palace and giving homage before this diminutive house of the Name, proclaiming:

\[^{33}\text{First Kings 6:2-3.}\]
\[^{34}\text{First Kings 7:1-2. A 100 cu long, 50 cu wide, and 30 cu high.}\]
But will God in very truth dwell on the earth? Behold heaven and the heaven of heavens cannot contain Thee; how much less this house that I have builded?\textsuperscript{35}

To visually perceptive people, as ancient people were, this movement from large to small was a profound lesson that Israel's God is beyond being impressed by man's earthly might. It is another example of movement away from the dramatic to the didactic.

Egyptian architecture is grander in scale than the Greek, but not as theatrical. That is, it inspires awe but does not, as does the Parthenon complex of the Acropolis, immediately inundate or sweep up the viewer with aesthetic grandeur. The flood of pure beauty pouring from a Greek temple virtually creates the Greek religious ethos, whereas the Egyptian religious architecture, in conjunction with the aesthetic relationship of its forms, conjures almost the majestic scale of natural wonders.

In the Tabernacle and in Solomon's Temple, we feel neither the lofty scale of Egypt nor the Greek up-front theatrical magic of subtle relationships dancing immediately before us. Yet the same geometrical relationships underpin all these disparate structures, as do their similar materials and methods of construction. For a civilization to forego deliberately both vast scale and the overt communication of the lavishly theatrical in its most important public forums at the high points of its historical independence is as strange as it is unique. It appears to be a deliberate choice, another of those Israelite decisions of apartness from other nations. The influence of an empire can be traced by the influence of its forms. For instance, notice how far Greek architectural and art forms have traveled across the earth. But Israel has no form for her God and, consequently, no physical empire to establish. From its very outset, it appears that everything of a purely aesthetical nature done by Israel was subdued or subsumed. It was modestly handled so as not to draw attention to itself, to its own singular grandeur, but rather to serve merely as a gateway to the one unknowable God and

\textsuperscript{35} First Kings 8:27.
His sacred teaching inscribed on the two tablets and scroll inside the diminutive Ark. This principle of tzniut is observable today in every synagogue ceremony involving the removal of a Torah from its sacred resting place into the midst of the congregation.

The faithfulness of ancient Israel to this principle of aesthetic restraint in the service of her unknowable One and His insistence on the moral above the aesthetic may be demonstrated in the fact that in all her history, not a single image of an Israelite king, or priest, prophet, or warrior in statue or coin has ever been found: an unheard of phenomenon among other civilizations.

J. Divine Proportion: The Golden Section Relationships in the Tabernacle

The concept of the Tabernacle complex working in unison as a single structure is imperative for an understanding of its aesthetic, as is the imaginative leap from the horizontal fact of its existence to the vertical ascent in its symbolism.

Like Solomon's Temple, the Tabernacle was designed as a structural unit. The Outer Court is not a separation between itself and the Tent of Meeting but a kind of patio or vestibule that is nevertheless a proportionally related part of a building. A reversal of proportion takes place between Temple and Tabernacle. The Tabernacle's Outer Court diminishes the size of the Tent of Meeting with its Holy of Holies; whereas Solomon's Temple diminishes the Outer Court to a 10 by 20 cu porch and enlarges the Tent of Meeting and its Holy of Holies as if to change the wording of David's Psalm in bringing the Ark to Jerusalem, "...that the
There are two versions of the placement of the ramp. The spiral line intersects the first step of both versions.

Fig. 7. Tabernacle Golden Section Spiral
The length of the Mishkan to the width of the Outer Court is exactly three to five. The entire structure is unified by golden section spaces in infinitude. Both the entrance to the Tent of Meeting and the veil before the Holy of Holies creates golden section rectangles of three to five ratios on three sides of the Holy Place beginning at the entrance with the four primal elements of the Tabernacle structure: the Ark of the Tablets, the veil of the Holy of Holies, the veil of the entrance to the Holy Place, the beginning of the ramp to the Altar of Offering.
King of Glory may come in...” to “that the King of Glory may go forth...”

The 30-cu height of the Temple’s front facade acts as a metaphorical expression of symbolic ascent from the Outer Court into the sanctuary. The 10 by 20 cu porch is divisible into two 10-cu squares, becoming a scaled down reflection of the Tabernacle's Outer Court. In imposing this golden section spiral on the proportions of the Tabernacle complex, and thus uniting its rectilinear parts into a harmonic whole of a geometric nature, the conscious aesthetic of its design is established.

The mathematical and symbolic relationship of this spiral should be visualized not only in two but also in three dimensions like those of hurricanes and galaxies as well as a ram's horn. Mathematically, there is no end to its diminution in littleness, nor end to its enlargement. Mathematically, as symbolically, it reaches outward to the end of time and inward to the beginning of time, instantly and forever, inconceivably and invisibly, not God but not unlike God.

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36 "Morning Service," *Art Scroll Siddur* (New York: Mesorah Publications, Ltd. 1996), 149. Psalm 24:7. This Psalm of David is recited during the synagogue service when the Torah scroll is restored inside the Ark.
I would... side with the medieval philosophers and builders for whom building in the last analysis reflected the harmonic structure of the universe.

-Francois Bucher

Medieval Architectural Design Methods (800-1560 C.E.)

The study and practice of visual art is in understanding relationships between form, space, and color. The Tabernacle of the Exodus was made to function as a work of art. It made use of the artisanship of its time in both its material and workmanship. In its design, it made use of the same classical principles that would be used later by the artisans and architects of ancient Greece and by the artists and artisans of the Italian Renaissance. The purpose of art in ancient times was to reflect the divine within man's temporal existence.

Today we live in an age where art refers only to itself. What we have lost sight of is the concept that art or beauty can contain knowledge and truth. Art can instruct or guide by refining the sensibilities to receive nobler growth as a plow prepares wilderness soil to receive seed. Art can guide our senses upward to the heavenly and divine.

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Art and artifice do not really belong in the same context. Far from artificial or distant, high art is a bridge linking the mundane to the sublime, the temporal to an awareness of the Eternal.

In studying the great achievements of art for a higher understanding, we must emulate the scientist in his study of natural phenomena or perhaps even more fittingly, the Talmudic sages of antiquity. They approached the sacred writings as the scientist today approaches nature with an absolute faith in the premise that in the subject of scrutiny, nothing is superfluous, accidental, or gratuitous. Every part has a purpose and is central to an understanding of the overall structure.

The great or high work of art is analogous to great religious systems in that it works by exercising its sway throughout all the layers of our consciousness and subconsciousness. Perhaps this is why the noblest art, whether pictorial, poetic, musical, or architectural has always been inspired by religion. Even those art forms thought to be secular in nature such as portraits or landscapes have grown out of very specific religious underpinnings. There is no portrait art of the highly individuated likeness in primitive or pre-civilized societies, nor is there any evidence of landscape art among any people which did not see mankind as being significantly differentiated from the rest of nature. The arts work by adding layers of meaning, conveying these layers through our sensibilities and senses where they make often new and unexpected connections between our senses and conscious and unconscious memories.

The least affecting art is that of ideas only. Examples abound in the modernist tradition. When ideologies replace belief in principles, the result ends always in extremes whether in art or in political life.

Most satisfying and moving is that type of art that combines intellectual, structural relationships and emotionally charged forms. It draws together from the direct observation of life, as well as cultural, historical, and symbolic relationships, and both conscious and subconscious personal experience. All these layers, from objective knowledge and memory in the historical-cultural sense and
personal feelings from the conscious and unconscious level of the artist are woven together in ways that make a viewer absorb them as his own personal feeling.

In the following examination of three well-known works of art, two paintings and one work of architecture, the layered manner in which art works upon our sensibilities will become plain.

A. Mona Lisa

Before us is a woman with strongly individualized features, obviously a portrait of a real person. What makes this one so different? Let us begin with the most obvious, her smile which in reality is a smirk. If the viewer covers the eyes of the portrait and sees only the mouth, the smirk becomes evident. Reverse this. Cover her mouth and the eyes are laughing. It is the eyes that give the lady her smile, as if Leonardo had painted them in while she was laughing.

Aside from a portrait, this is a painting about repose: about harmony and equilibrium in the most profound philosophical and religious sense. Note that she has no adornment whatsoever, no ring on her finger or jewelry of any kind. She wears only a peasant's garb of very fine material and texture, rather like a designer-jeans version of her poorer counterpart. A wilderness landscape of a swirling river winding through forbidding mountains is in the background. The only mark of human habitation is a remnant of five Roman arches, only three of which are completely intact. They are seen above her shoulder. The plain dress, absence of jewelry, and wild background are all highly unusual in a portrait of a wealthy woman of Leonardo's time. The color of the painting moves from cool, coppery green tones in the landscape to the deep lavenders of her garment and warm tones of her skin. Her high forehead and plucked eyebrows were both fashions of the day. The colors proceed along two harmonious levels: from cool to warm and from light to dark in the most subtle blending for which Leonardo's work was famous and unexcelled.

As well, her pose faces us but not directly or defensively. She is inviting without being demanding. There is not a jarring note in her expression, form, or
color. All of it is a series of transitions in harmony. Still, the landscape is a wilderness.

How photographic or realistic is this portrait? If one drew a rectangle from the borders of her head to the garment line of her bosom, it becomes one of those ever-beautiful or harmonious rectangles known as a golden section rectangle. Also known by the Greeks as the “golden mean,” Leonardo referred to it as the “divine proportion.” This same measurement plays a central role in the construction of the Tabernacle, the Ark of the Covenant, and possibly the two tablets within it. A double square rectangle is formed from her forehead to her bosom and is the brightest area of the painting.

Leonardo, as well as the other great Renaissance artists and architects, was quite familiar with the golden mean of the ancients, and the lore surrounding it. Leonardo illustrated the book on the subject by the Italian mathematician, Fibonacci.

Look now at the top of Mona Lisa’s head. It is not realistic. No person’s head is so perfectly spherical. Trace a line around it and down her left side and it forms a perfect Roman arch. A circle half the radius of this arch will form another arch going between her lips to her cheekbones. It forms the smile. A larger arch forms the line of her shoulders. The painting works subliminally exactly as a work of classical architecture: a series of arches increasing and diminishing in size to a prescribed order, or like classical music in which musical themes are ordered in increasing and diminishing volumes and timbres. The tiny arches in the background complete the theme and tie man and nature into a single unity or harmony.

Leonardo constructed his painting using the ancient concepts of architectural harmony. He put a geometric foundation beneath the order established by proportions, color, shading, and the manner in which he posed his model, but there are more layers yet.

The unadorned lady before the unadorned landscape takes on aspects of universality. This is not simply a lady of her time, showing off her wealth and
position. She is a concept of a world to be, of man in harmony with nature, fellowman, and self. She engages us full face at conversational distance, in her self-assured, relaxed pose, at harmony with self and with God. How with God? Her pose, garment, and unadornedness remind one of the Madonna of the Christian religion. Here we have an example of symbolic suggestion. Her garment is the universal garb of humble women to this day, whether in the Levant, Latin America, or Eastern Europe, and whether Jew, Christian, or Moslem.

There are always theories about this painting, a current one being that this is a self-portrait of Leonardo. There are aspects to her features that suggest this, but when we are probing into the final layer we can never really know the subconscious. Many artists impart subconsciously much of their own physiognomy to the features of their portraits. Michelangelo’s Moses has Michelangelo’s features. Rodin’s “Thinker” strongly favors the artist. By the same subconsciousness as the above, some of Leonardo’s features may be in the painting. But one might also consider that Mona Lisa is subconsciously a portrait of Leonardo’s mother.

Leonardo was born of a wealthy landowner father and a peasant mother who worked for him. Leonardo was parted early from his peasant mother because the father saw his intelligence and talent and had him educated. In this final layer, we have expressed a wish for universal harmony: a touching reminder of the loving, adoring mother, the universal source of security and harmony, and the last word on the lips of many who die in battle. As a theory, it accounts for the similarity of features, choice of garments, and the unusual lack of adornment. Begun as a portrait, it grew under Leonardo’s hand into a sublime statement. It never left his possession during his lifetime.

B. BathSheba

BathSheba, painted by Rembrandt Van Rijn in 1654, has among its distinctions the most unusual one of being both a nude and a portrait. To paint an unadorned body that does not call attention to itself is very rare in art, but
Rembrandt's work impels us to concentrate on the thought-filled inwardness of the woman's face: a face in profile so that the artist had deprived himself of half his arsenal of portrait physiognomy. We are truly voyeurs before this painting. Rembrandt's BathSheba has no knowledge of the viewer's presence anymore than the real BathSheba was aware of King David's voyeurism from his balcony.

She is not beautiful, even by the standards of the seventeenth century. Looking at her, we see a robust but middle-aged body, unadorned and rapt in solitude. This too is unusual in the history of art, wherein subjects like of BathSheba were usually an opportunity for an artist to show off his ability to portray the sensual and sexual. Nor is this a painting built upon the classical complexity of Leonardo's work. Yet, its statement also rests upon many levels not attainable by pure reason, knowledge, or technique.

Her head is directed slightly downward as if reflecting upon the note in her hand: her summons to appear before the king. We see her in a sad or perhaps resigned obedience, finishing her bath in order to comply. She seems to find the attentions of her king no more flattering than her own body appears to us.

The painting is a square shape (142 cm x 142 cm). BathSheba's full body, sitting erect, reinforces the squareness or solidity of the painting. Her body posture forms a right angle to the right angle of the right side of the picture plane. This may be its only classical element or reference to a hidden geometry as is also observed in Leonardo's work. Its effect is to give force, an inner strength to her body. The square shape of the painting bolsters her body on the one side and echoes it on the other. BathSheba's body, sitting in near perfect profile to the viewer, echoes the right angles of the square picture plane, which gives her the quality of dignified strength in repose. But she does not dominate or control the space. Her body is backed up against one side of her square canvas as if to say "I am being forced out of my place." There is much empty and unknown space in front of her. Here is a woman naked, innocent, and helpless before us.

For all her strength, BathSheba is portrayed as she is in the biblical narrative, the victim of forces over which she has no control. She cannot refuse
her sovereign and so she will be shamed into an adulterous relationship. Yet her life becomes one of those great biblical reversals wherein the weak become strong and the strong weak. This occurs in the later years when David is old and helpless. BathSheba, with great deftness and cunning activity, assures her son, Solomon of the kingship of Israel.

However, we also know about the life of the model of this painting. We know who she was: Hendrickje Stoffels, the maid and then mistress of Rembrandt. By 1654, Rembrandt’s fortunes were failing. His wife, Saskia had died and his marriage contract had a clause that would cut him off from inheriting an income from her family if he married another woman. Hendrickje loved Rembrandt enough to care for him and his son by Saskia and she helped him form a kind of corporation to protect his financial assets. She also bore a child by Rembrandt. However, she was unable to become a respectable wife to Rembrandt without bringing ruin to his financial situation. So the actual model of this painting, like her biblical counterpart, also willingly accepted shame as a consequence of bowing to irresistible forces.

I doubt that this parallel was a conscious part of Rembrandt’s painting. Rembrandt was not making a social statement but a human one. It is an example of that wonderful symbiosis that takes place in genius of all kinds, whether artistic or prophetic, in which individual biography becomes metaphoric for the universal.

Perhaps the very choice by Rembrandt at that time in his life to paint his subject in this way came out of a subconscious confluence of his insight into the feelings of his mistress and his profound reading of scripture.

C. Architecture: Teacher of the Ancients

On the Acropolis of Athens, even in its ruinous state, we still observe with clarity what is meant by the term classical and its aspect of the sublime. Fifth century Greece arrived near the end of antiquity and near the beginning of the Christian world. In the 166 years between 586 and 420 B.C.E., ancient Israel had experienced the Babylonian exile and the destruction of Solomon’s Temple (586
B.C.E.), the return to Israel, and the beginning of Israel's second Temple (536 B.C.E.). Greece built the Parthenon (450 B.C.E.). The Greeks absorbed the lessons of Egypt, both the means and the purposes of temple construction as well as the subtlety of mathematical proportions that underlie Egyptian architecture. Their art was more theatrical than Egypt's, but nevertheless it formed the bridge between east and west.

On the Acropolis, we see a temple complex composed of those elements of proportion and of subtle deviation that mathematically departs from the rigidly regular. They weave throughout both structural and spatial elements that are best likened to the patterns and subtle deviations from pattern that we hear in the finest of classical music.

When ancient Egyptians built their boats, they thought of them as living things, a concept probably close to the hearts of sailors or to anyone whose life may depend on the functioning of a mechanism. It is difficult to believe that these same attitudes were not present in the design and construction of the ancient world's most sacred architecture, its tombs, and temples. Yet, one can almost count the number of buildings or architectural spaces in the world that actually express a life force or so engage our senses through their structural form and proportion as to have the same rejuvenating effect as a great piece of music. There are probably fewer than a hundred such buildings or building complexes over the entire earth. Certainly the great cathedrals of Europe are in this exalted category. Others include the Parthenon and the complex on the Acropolis of Athens, Notre Dame Cathedral in Paris, Michelangelo's Medici tomb, and Bruneleschis' Chapel, these last two in Florence, Italy. In America, there are the Spanish missions and Governor's Palace in San Antonio, Texas, but the Lincoln Memorial in Washington DC might be the most well known American structure capable of imparting these exalted emotions.

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39 Literally "City on the Hill"
The effect of these works of living architecture is not strictly a function of their size or materials. In the case of the Parthenon, the effect directly contradicts its vast scale. The effect is rather the consequence of their proportion, the relationships of their parts, and the beauty of their forms. They work by the same means as all the other arts; an inspired use of the relationships of their materials and workmanship to inner or abstract principles and proportions, which derive from deep personal convictions, beliefs, and feelings but are universal in their meaning. This is why all mechanical efforts to imitate art's most exalted qualities are always doomed to failure. The rules alone can never produce art because the rules are themselves merely the most visible manifestation of a conviction—feeling—intellectual complex that issues from our whole character and being and not merely our intellect.

The Hebrews carry such an understanding of art into their system of law and morality. The Torah was never viewed as a mere legalistic guide but rather as a vast and unified complex of endless life, majesty, and mystery as a living soul that inhabits its wood and parchment body. And so, traditionally when a Torah is worn or desecrated beyond further use, it is given the burial of a righteous person. Through two thousand years of exile, the Jewish people have carried their country, their Tabernacle, their birthright, and the hand of their God on their shoulders and over against their heart. When a Jew carries a Torah, an expression of deep inwardness rests on his face as if he is slightly parted from this world. His posture and his gait are not proud like that of a soldier but rather tentative like that of a lover wooing his beloved. No one is ever taught this posture. It seems to be absorbed. The Torah is the most sublime and sacred space of the Jews. A Torah is made today as throughout the ages according to a strict canon which reflects the rules of artistic beauty and proportion, an historical memory, and an embodiment of symbolic memory that recalls the details of its revelation in Exodus.

The purpose of ancient tomb and temple architecture was to reflect the cosmos, the eternal cycles of all nature, time, and divinity in an earthly construct amidst the temporal life of man in that particular civilization. This concept was
observed by Sigfried Giedion and developed in his great lecture series: The Eternal Present in Art and in Architecture.\textsuperscript{40}

In the ancient days, the mass of people worshipped outside the Temple proper. Only priests, kings, and others of exalted position entered into the holy buildings. This was true of the Tabernacle and later of Solomon's Temple. However, these complexes did not exclude the common people. On the contrary, the temple-tomb by its outward orientation, shape, proportion, imagery, and color gave the vast area around it the same aura of majesty, beauty, and eternity as was likewise reflected in miniature by the proportions and contents of its inner chambers. The ancient Temple complex gave to its surroundings the aspect of an open-air cathedral. Moreover, as Giedion explains, the day dawns, waxes, and wanes over the striking yet subtle geometry and color of pyramid and temple. The changes of light interact with the unchanging geometry of the building, giving the effect of eternity involved in the transitory moment. Conversely, each generation's and each person's temporal moment is enhanced and connected to eternity.

Then spoke Solomon: The Lord hath said that He would dwell in the thick darkness. I have surely built thee a house of habitation, a place for thee to dwell in forever.\textsuperscript{41}

Only the inner, closed chambers could be said to reflect the dimness of eternity itself as if to say that these are the spaces that are closest to the Godhead and therefore approachable by only the most exalted of human society.

The color, geometry, and imagery then interacting with the ever-changing light of a single day (erev ba boker, Hebrew for evening and morning) act as a kaleidoscope wherein everything changes but yet remains an orderly, geometric pattern of great beauty. This interplay of time passing over geometry is the perfect visual metaphor for the eternal in the fleeting present. The earthly moment

\textsuperscript{40} Giedion, The Eternal Present (1957). Also see pages 504-505 on the effect of light on the exterior surface of the pyramid.

\textsuperscript{41} First Kings 8:12-13.
captures the cosmic and everlasting. In this concept and its visual expression, we grasp the essence not only of all sacred architecture of the ancient world, but indeed of the religious sensibility underlying all human worship. The principle of aligning our present, finite existence with the living Eternal is as bedrock to Judaism as to all other religions. The great difference is in the God concept itself and the moral mantle that Israel casts over the aesthetic. These two differences forever changed the thrust of civilization.

The Tabernacle, and even more so Solomon's Temple, are conceived and constructed exactly in accordance with the principles of their pagan antecedents, although Moses made some highly unique divergences. As Jewish tradition recounts, the purpose of the Tabernacle was to educate the people about the nature of God and Judaism. As Israel's greatest teacher, Moses proceeds along the lines of all good pedagogy, to use what people already know and understand so to guide them to new knowledge. The great painter Rembrandt summed it up well: "Use what you know to learn what you do not know." In the same manner, the mathematicians find the missing angle or length, and even measure the circumference of the earth. The entire world of discovery is based upon Rembrandt's simply stated maxim.

When the geometry is exact, the proportion exalted, the materials permanent and lovely, and the workmanship, caring and superb, the result is majestic and sublime, uplifting and yet restful, restorative to body and spirit. That we no longer are able to build this way is a reflection of our incapacity to feel and to believe and not of our lack of technology.

But even the ancients were short of the mark most of the time. The Temple of Haiphaistos, the twin of the Parthenon in the agora of Athens is nearly perfectly preserved but has none of the aspects of its sister temple on the Acropolis. On the contrary, its aspect is somewhat heavy and oppressive like a person who has the physical features of someone we love but an altogether different personality.

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42 Moshe Rabbenu: Hebrew title given to Moses, literally "Moses, our Teacher."
Even in its ruinous state, the Parthenon and its complex, especially the Porch of the Maidens, exercises a hold on our sensibilities that is unmatched by any other structure. Its vast scale speaks not of intimidation like modern corporate buildings or ancient Roman ones, but rather of a glory in being human. For all our and its physical rootedness to the earth, we receive also a feeling of lightness, of being lifted up and freed as if by the divine aspects of our nature to the image of God implanted in us. The Parthenon is Genesis in stone. What acts upon us is the most subtle mathematical exactitude of solid shape and its formed spaces and the most precise of deviation from the strictly vertical and horizontal angles that support architectural works. Its columns are not straight up as they appear, but cambered inward. Nor are they equally spaced as they appear, but bunched slightly closer together at the corners. The columns are of varying thickness, again more so as they approach the corners. The floor, both in width and length, is curved though it appears straight, and so are its rooflines. Its rectangles, its façade, and length, are beautiful golden section rectangles, common shapes that always please, and its length-to-width are related also in mathematical golden section. This golden section is found also in music as well as in natural phenomena. The subtle and inspired deviations from the rigidly mathematical pattern we note in this and in later Renaissance architecture correspond to the same principles as the great compositions of classical music.

Overall, the effect is of an uncanny aliveness while giving one an utter confidence in its eternal stability. Its columns seem like walking legs. The building seems capable of moving grandly on its own power, and, in so doing, moves us with it in stately procession to an exalted rendezvous. If this is what we can get from her ruin when all that remains is her mathematical skeleton, what might we have seen in antiquity when arrayed in her glory, finery, and "coat of many colors"?

43 The Parthenon, completed in 438 B.C.E., was in excellent preservation until 1687 when the Turks, fighting against the Venetians, used it as an ammunition dump which then exploded.
Before answering that question, we must note two important points. The conception of a building and of a city in the classical mind is derived from the human body. Its aspect or countenance was to be pleasing and noble but not oppressive. Windows, doorways, or gates are eyes and mouths, a means of breathing; pillars are limbs, legs, and feet, walls extended as in a city fortress are arms with shields. Furthermore, the cubit and all other measurements of length and width are taken from the human body, namely the forearm, hand, and fingers; the limbs that actually make things and are unique to man. The orders of measure so derived were applied also to carvings and reliefs of the sculptured figures of gods and royalty, most often interchangeable in the ancient world. These orders of measure expand outward into the geometric forms of architecture, which in turn relate to each other in mathematical ratios of correspondence or deviation of shape and scale or size. Contracting again, the same orders define the noble proportions of the god-priest: royal figures that adorn the outer and inner walls of ancient temple-tomb architecture. It is this human body concept and human body derived geometry and proportion common to both building and figure depiction that enabled the ancients to form perfect harmonic unions of abstract architectural shape with the organic human forms that adorn them. This feat steadily eludes modern architecture with its emphasis on the showy or attention-catchy aspects of commercial advertising.

As modernist tendencies left the classical concepts, it left the human figure behind and finally all that had to do with man as an aspect of divinity. The age that reduced architecture to containers of space for sale also reduced man to a mere accident of nature, finally to soap and lampshades. It reduced creation itself to a series of disconnected data devoid of ultimate meaning. And here we are: the twentieth century was the most barbaric in history even as it became the most technologically advanced.
D. Measured by Hand; Made by Hand.

Perspective changes after days on the road in a world without benefit of electrical or motorized device. Darkness was truly dark and daytime was quieter, at least outside of the cities than now. We would finally see on the distant hill, a geometric complex of dazzling color in the sunlight. Its yellows, blues, browns, blacks, reds, and whites shimmer in the hard, crystalline light of the Mediterranean sun. As we come nearer, but still outside the city proper, we sense the invisible arms of order, of rational civilization reaching out to our distance from it, as if to midwife the traveler from his wilderness into the arms of civilization.

Climbing the carefully spaced terraces to the summit of the Acropolis, we sense that the very pacing of our ascent, now easier then steeper, have been carefully timed as if to a musical rhythm, slowing us as we pass a temple outcropping. At the summit we enter through a gateway and see the majestic, yet brilliantly bright building on stately legs, a priestess in grand adornment, a Joseph in his coat of many colors, or as Vizier of Egypt. We approach as his humble and dusty brethren. But the presence is beautiful and benign, majestic and sublime, glorious and holy. Round the walls are scenes of people bringing offerings and libations of sacrifice and thanksgiving, a reverential procession. We can rest in the cool shadow of her countenance. In the ever-changing light across her eternal forms we can learn where we came from and what our purpose is. If not Greek, we knew we were in the presence of a civilization, at least in its art and design of a high and rational order that has grasped something of the Eternal and set it down among us.

For all its stony massiveness, it seems light, almost floating, weightless on its pillars. Here is matter infused by divine precept, as man himself is likewise dust imbued with God’s breath (ruah, in Hebrew, spirit).

Is there anything like this in our lives today that in a single moment, can harness us and bind us to the evening and morning of a single day through to the cycle of seasons from planting to harvest, from harvest to mealtime, and to the
vast cycles of cosmic time? The beauty of nature is transformed by art and bound to our dialogue with God, with offerings of thanks, and appeals for the cleansing of forgiveness and peace.

This is what the Jewish people mourn to this day in the destruction of their Temple in Jerusalem, the only people that weep for a work of art, the same people who are forbidden to bow down to any work of man or God.
Chapter 3
The Ascent of the Moral-Spiritual Aesthetic in Civilization

The ancients may have surpassed us in those things pertaining to a high order of beauty and the over-arching sense of order and universal grandeur in the world. In the art of ancient cultures, we find very little of the purely decorative. Every symbol, every part of a composition evolved in its time to those who made it and who saw in it a meaning pertaining to some mytho-heroic epic or to a religious conception. In all ancient cultures, writing was scarce and difficult to reproduce. Stories and information, was spread by way of the ears rather than by eyes scanning a page. People listened more and remembered better than our fast-paced, message-filled lives can scarcely grasp. Perhaps more important might be the fact that ancient cultures were not driven by the reproduced and read word as we are today. Even those who were of literate families still retained an experiential mentality common to the non-literate. They experienced the physical world of seasons, stars, animals, handmade tools, and objects in a more sensory way, and even day and night in greater depth than we today. It was through their art and their architecture, and the hearing of their poetry and history that our ancestors learned about who they were and what was to be expected of them. Their cities and markets were their schools for life, religion, and manufacture. People lived in a handmade world where they saw their purchased products being made. It was possible to live a complete life without encountering any writing.
In both the Hebrew Bible and New Testament, the written word introduces us to just such a world as described above. The same could be said of Shakespeare’s world. Our difficulties in reading these writings is only in part because of language style. Our world is perceived differently in that we learn our life’s orientation from the manufactured world of the flattened, geometrically shaped page or image. We have reversed the ancient mode of primary experience. What before was learned from sensibility passed through the mind is today absorbed by the mind and passed through sensibility. The first paradox of such a reversal of perception is the diminished sensibility to the beauty and grandeur of language, to its music or sound. When language was mostly heard rather than read, it had to be well organized, full of imagery and patterned sound. One had to consider the tongue and the ear. The eye would then see and remember.

Art was the technology of the ancient world and art is the opposite of specialization or compartmentalization. Walls of separation melt away in its presence. The visual symbol is not a sentence or even a statement but a microchip of a people’s historical memory combined with personal experience. Consider a crucifix, a menorah, a flag, or a piece of music and what they evoke in both the collective and the individual experience. How does that experience become in many ways more highly sophisticated than our own? People lived in a world where eye, ear, and hand moved in a slower time frame where nature’s forms, rhythms, and seasons were more acutely experienced. All technology then was of materials cut, spun, woven, turned, poured, and hammered by people’s hands most often in plain sight of their fellows.

A. The Sublime, the Majestic, the Glorious, and the Holy

The four word-title of this section embodies four concepts that are hardly part of our modern vocabulary; yet an understanding of them is central to a true understanding of the highest art: the Tabernacle complex, the Torah, and prophetic writings. These four words partake of each other, overlap and intertwine like themes in a symphony. Without an understanding of them or a feeling for
them, there is no hope of knowing anything of great depth or transcendent meaning. Art becomes trite decoration or commercial dross. Religion mires in fundamentalism and fanaticism. Those who escape from these enter a world of meaningless, mechanistic sensual experiences without any lasting satisfaction. This is very much the world of today. The paganism of the ancients erred on the side of too much majesty, making of things and objects more than they are. Our modern paganism reduces everything to insignificances, making light of every act and feeling as nothing more than a technical or mechanical function. This modern, secular paganism may prove harder to overcome than its forbearer for the simple reason that the old-style pagan had his heart attuned. It was mainly his head that misled him. Our modern paganism has a brilliance of mind operating out of blind, deaf, and mute hearts.

Paganism can be defined in several ways but all its meanings have in common a deviation from the belief in monotheism. The concept, "pagan" does not exist in the mind of pagans either in the ancient world or in the present.

The worship of anything visible to our physical senses would be the definition of paganism used here, whether it is image, i.e., a statue or a tree, or a concept, i.e., an ideal, idea or human power coupled with no respect for the limits placed on them by the moral laws of scripture. The seven universal moral laws necessary for all mankind are defined by rabbinical teaching as the seven Noachian laws: 44 Noah being the common ancestor of all existing people.

Nothing is said in these commandments/laws that favor a particular form of government but only that all people are to be governed under law and that law must be just, equitable, and accessible. The biblical influence on the American founders was profound. They arrived at a form of government that would most

44 Dan Cohn-Sherbok, The Blackwell Dictionary of Judaica (Great Britain: Blackwell Publishers, 1999), 399. "Noachian Laws [Laws of Noah]: A series of laws derived from Genesis 9:4-7, which according to the rabbis are binding on all human beings. They prohibit idolatry, blasphemy, murder, adultery, robbery, and the eating of flesh cut from a living animal. They also require the establishment of courts of justice. According to (Jewish) tradition, gentiles can enter into the afterlife as long as they observe these commandments."
ensure the demands of these Noachian Laws and ensure their establishment throughout all subsequent states and territories of the United States.

If there is one supreme gift that could be given to modern man in general, it is what could be called the sense of the sublime. It may not be a gift possible for man to give. Perhaps it is a grace bestowed by God alone but the Hebraic view must be like that of the Sabbath which is mandatorily available to all. The sense of the sublime is also mandatorily available to every human being. As the Torah envisions it, a holy society would place this golden coin into the heart of all its members.

Great melody is scripture without the consonants. Western classical music remains the only mode in which the modern mind may experience something of that unified host of majestic feelings that must have been attendant upon ancient peoples at their ritual, temple worship. That experience centers around a unification of feelings and historical memories brought out by the meeting of the temporal with the eternal, the finite with the infinite, the routine and cyclic of everyday with the never-ending cycles of past and future cosmic time. Art, ritual, and symbol imbued with art were then, and must be in the future, the primal means of bringing about this high range of intellect with feeling at the religious level for the common person: those of us who have not attained the high moral gifts of the patriarchs, prophets, and great teachers.

In the works of Bach, Handel, Haydn, Mozart, Beethoven, Rossini, and many others of the great western tradition, we are always in the presence of the sublime. Even the numerous, most lighthearted melodies of Mozart’s comic operas transport the listener to a larger, more radiantly beautiful world, at once sweeter and nobler than the one we inhabit. Even the buffoonery in the operatic canon, as in Shakespeare’s plays, is always encased within the sublime or majestic aura, taking its place as part of the larger, morally transcendent whole.

Thus in the Torah, incidents of everyday life are illuminated by the light of eternity and its Divine Creator. The classical, or truly whole never depresses or leave us hopeless and empty. Its healing power wells up even in descriptions of
defeat, travail, and weakness because it admits nothing into itself of the maudlin, sentimental, or momentarily stylish.

While every human failing can be found in the Torah narratives in detail, they are always presented in a classical mode. That is, their telling never sinks beneath the level of the great music which thus bathes them in the divine light of eternal, sublime, moral majesty.

To the Egyptians, a square was the visual image of four, a number sacred to this culture. In the classical canon, if we count beats, we run into the same recurring numbers as in the Torah: fours and sevens. How many Beethoven themes are set to four carefully timed beats? Or in Mozart, four beats are followed by three to equal seven. Often four beats are repeated two times (the Outer Court), three times (The Tent of Meeting), or simply once (The Holy of Holies) to be followed by seven (the Menorah).

Less speculative perhaps than equating musical beats with geometric proportions is the fact that the Torah narratives, like classical music, often work by a development of themes, weaving and building toward dramatic climaxes.

From the birth of Jacob and Esau until the journey of Israel (seventy persons) into Egypt and later under the rule of Joseph which ends the book of Genesis, there are a series of deception stories each with the same moral: to right a wrong that could be righted no other way. Yet these deceptions are painful and still cause much moral debate. They climax in Joseph’s deception of his brothers in order to right the wrong they did to him. In each case, the deception was made by a weaker opponent against a stronger. But in the case of Joseph, the weaker became the stronger and at this climactic point, deception ended as it was transformed into compassion and forgiveness.

Another thematic development in narrative occurs when Sarah wanted to send Hagar and Ishmael away.45 Later, Abraham did send them away.46 Ishmael, conceived through Abraham’s concubine, Hagar, was near death in the desert and

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45 Genesis 21:9-10.
was miraculously saved by God who pointed out a place of water to Hagar and made a covenant with Hagar and Ishmael.\textsuperscript{47} The theme climaxes in the Akedah, the Binding of Isaac\textsuperscript{48} in which Abraham was commanded to offer his “son, thine only son Isaac whom thou lovest...”\textsuperscript{49} Each of these episodes is marked by a perilous, hopeless beginning only to climax in divine rescue and covenant.

A little noted but majestic symbolic theme development in the Torah is the recurrent image of the smoking furnace. Beginning in Genesis 15 with Abraham’s small covenantal “Offering of the Pieces”\textsuperscript{50} being consumed in fire and smoke, the climax of this image occurs when God speaks the Ten Commandments directly to Israel at the foot of Horeb, the fiery, smoking mountain.\textsuperscript{51} This imagery may arise from the analogy of an altar to a smelting furnace. Fire is the turning agent in both, whereas the smelter turns formless metal into idols, the altar transforms flesh into the food of holy covenant.

The golden calf is the false god emerging from the fire and smoke of the smelter’s furnace, “of itself...” as Aaron says to Moses.\textsuperscript{52} The cloud by day and pillar of fire by night, which accompany the Tabernacle throughout the desert wanderings, is a commemorative establishment of the covenants between Abraham in Genesis and his descendants at Horeb in the book of Exodus.

In his farewell orations in Deuteronomy, Moses made poetic reference to this striking imagery comparing the “iron furnace of Egypt” symbolizing bondage, with the smoking mountain of Horeb, symbolizing freedom and salvation.\textsuperscript{53} Thus “the mountain all on smoke”\textsuperscript{54} is opposed to the puny smelter of the golden calf, the symbolic covenant with idolatry. When Israel crosses over to take the land, the cloud and the fire depart. They are not mentioned again in

\textsuperscript{47} Genesis 21:17-18.  
\textsuperscript{48} Genesis 22:1-2.  
\textsuperscript{49} Genesis 22:1-19.  
\textsuperscript{50} Genesis 15:7-21.  
\textsuperscript{51} Exodus 20:1-23.  
\textsuperscript{52} Exodus 32:23-24.  
\textsuperscript{53} Deuteronomy 4:20.  
\textsuperscript{54} Exodus 19:18-20.
Judges or Kings. Only when the Ark is placed inside Solomon’s Temple does the cloud of smoke reappear and this is its last appearance in Scripture.

The sense of the sublime is to grasp the whole in an instant, to remember in a present event or gesture both history and a promise of the future. Religious ritual is a form of this art. In its noblest forms, works of art engage us through a path that begins at the present but moves us simultaneously through our sense-memory and sense-anticipation.

Of the majestic, it may be said that it partakes of vast power visibly under control of the benign, or force held in check by an invisible, just law or principle. The majestic is the opposite of terror which is brute power indiscriminately or wantonly unleashed. One may compare a riot to an army in orderly array for battle. Force unleashed may or may not be majestic but always majesty depends on the sense of orderly disposal, or power held in reserve by a higher justice. The releasing of the ten plagues upon Egypt is an example of majestic power unleashed because they were carried out proportionally from lesser to greater and withheld in between. Had they all been unleashed at once, it would have been terror, the act of wrathful power unbounded by principle. Pharaoh’s edict was such an act which suddenly, irrevocably commanded the slaying of Israel’s first-born. The unleashing of terrible force by a non-benign power, acting as power without principle, is the very essence of terror.

In architecture, the post and lintel can partake of the sublime, depending upon scale. The arch and the dome partake more of the majestic as the force holding up these vastly opened spaces is an invisible principle. Indians of the Americas would often drop to their knees in instant conversion when the forms were pulled away from the cathedral arches. The orderly procession of cavalry drawing up for battle was sometimes enough to prevent a battle. Roman history also recounts the intimidating powers of an orderly show of force to barbarian hordes. The majesty of a gathering storm is a natural demonstration of power gathering itself while held in check.
Some may disagree, but large scale is not always necessary to express the sublime-majestic. We can place the smoking mountain, the gathering storm, and the army drawn up for battle on one end of the scale and balance these out with the flight of a hawk, the unfolding bud of a flower, a field of flowers, or the birth of a child. Sublime to majestic partakes of both these levels simultaneously. This fact allows art to express the sublime-majestic without the vast scale of nature. The moral action undertaken wholeheartedly and with courage partakes of the sublime-majestic and changes the course of history. The size of power is not as important as its quality. From the same incalculable vast force which exploded the universe into existence comes forth the most delicate bud, the crying babe, the butterfly and the flower it lights upon. The image of God as the One "with a mighty hand and an outstretched arm..." connotes simultaneously the force that humbles empire and the hand of a loving father guiding his child. The warrior who fights for Israel, the all-seeing judge, the tender loving father and husband: these are the composite God-images of Israel.

God reveals himself to Moses from the cleft of the rock. In this majestic image, we see infinite power held in check by infinite tenderness as God’s outstretched hand protects Moses from death until He passes Moses by. Then God speaks. It is a sublime-majestic passage that moves us into the realm of the holy.

Manner of workmanship and proportion, the quality of soul and character manifested in workmanship gives to art its sublime majestic character. When these or any action are following the divine commandments and consciously directed to the service of fellow man through the service of God, we enter the realm of the holy. Hassidic Jews believe that the joyousness of a wedding carries far beyond the participants and enters into the cosmic scale, moving the world closer to the Messianic Age. We could say the same for the bearing and rearing of children, of education, of service to the poor, and when playing a piece of music.

55 Deuteronomy 5:15.
56 Exodus 33:21-23.
57 Exodus 34:5-10.
It is not the powerful doctrines that improve the world, but rather the silent working of the heart manifested in the moral act.

B. Exoskeleton versus Internal Skeleton: A Comparison Between Classical and Non-classical Music

One can compare Western classical and folk or non-classical music to the internal skeleton of man and the exoskeleton of insects, equating rhythm or meter as the support or skeleton of a living thing and the living thing itself to a melody.

In folk or non-classical music, the meter or rhythm dominates melody. Melody lives exclusively within the bounds of rhythm and never exceeds it. The opposite is true of the classical mode. Here, the pattern is that of muscles and sinew connecting at critical points and working in and out of an internal skeletal structure. It allows for the wonderful suppleness and grace of action or movement we see in the athlete, the dancer, or a horse breaking into a trot: a symphony of lines and shapes form and reform across empty space.

So moves the melody line and thematic life of classical music, with the suppleness of mammalian grace and strength, weaving unbounded, climbing with dazzling grace to exalted heights, connecting at the crucial skeletal points, and always to increase both in its grace and expressiveness. Because of these structural differences, the non-classical can never attain to the exalted nobility of the classical anymore than the beetle can move with the grace of a horse or a housecat.

The temple architecture, the ritual of ancient times, and the high art forms derived from them work upon us in the same manner as classical music. Western classical music derives from the same mentality, the same biblical literature, and the same numerical systems as the art of classical civilization. Hence the feeling we derive from it is the last remaining memory of the sublime-majestic-glorious and holy which is available to the modern mind in its present, spiritually undernourished state.
The layers of meaning this music draws forth through its complex layering of moment with memory and anticipation is parallel to what culminated in the art-architectural and ritual practice of the ancient high civilizations. The same is emulated and carried forward to a nobler moral, God-commandment conception by the Tabernacle complex and ritual described in Exodus and Leviticus.

C. The Primitive versus the Classical

The world has changed in its terms of power. Gone is the hypnotic drumbeat, the fearful loud noise, and any use of raw power or dread to instill reverence. Gone is the frenzied dance to unconsciousness. Gone the skin covered skull, the literal use of once-living forms, the mimicking of creatures, the whole belief system that equates unconsciousness and hysterics with devotion to the divine. No pre-civilized society can attain to the sublime-majestic-glorious state and be holy anymore than they can organize armies around systematic numerical codes and move them with the same geometrical precision as the Egyptians dug their irrigation canals or laid out the corners of their pyramids.

The primitive admires raw power which is visibly unchecked and wrathful. They are still under the spell of unconscious knowledge, the willing slave to incoherent forces of nature. Man worshipping nature can never participate in the ordering of nature. His view of power is limited to pure force. His culture cannot grasp that union of visible power governed over by an unseen tenderness or moral principle which culminates in its highest form in the scriptural culture. No other culture envisions the unity of all mankind as equal under the laws of God. Consciousness of God outside of and beyond nature brings consciousness of principle over matter, law over power, and conscious choice over servitude. Man’s action can reflect the divine grandeur because it is part of his being, but he must consciously be aware of the divine before he can address his actions thereto.

The morality of a Roman arch or a Greek temple is precisely its play upon the massiveness of its stonework held in suspension by the delicate balance of
invisible principle. It acts upon our sensibilities by the grace of invisible proportional relationships and their subtle divergences.

**D. Thought and Knowledge**

Nothing has so destroyed our love of learning or the acquisition of wisdom and understanding as specialized knowledge. The division of knowledge into ever smaller or narrower bodies is the exact antithesis of the ancient mentality. What is learning other than rote memorization if not being trained to see the connectedness of all things? What is imagination if not the trained ability to see significant parallels or connections between facts, ideas, or symbols?

The ancients defined learning by the drawing of connections: the significant insight that lets us connect what we do and know to that which is not yet fully understood. All good teaching draws such connections. Examination of all wisdom literature reveals the drawing of parallels as the primary means to increase understanding. The ancients did not separate knowledge, measurements, geometry, mathematics, art, and religion but saw them as a continuum of divine revelation. Knowledge of one area is enlarged upon the meaning of others. It remained for the Hebrews to draw the deepest and most intricate connections between human morality and knowledge of the divine.

These enlarged connections had the most profound implication, not only for religion but also for science and art. Science separates from magic and is based upon law. Art gains moral dimensions that can be traced from the Tabernacle of the Exodus to the great art and music of Christian Europe. The breaking down of knowledge into narrow specialties can destroy the richness of symbolic life and hence contribute to the breakdown of morals. Society becomes cynical, purposeless, and coarsened without a rich symbolic life. We become a Tower of Babel, full of power but not able to understand one another.

When we emphasize the influence that civilizations have on each other, then it will be seen how profoundly the world was influenced by the Israelite civilization. Principles of civilization were learned by other peoples in those four
centuries between Solomon’s Temple in Jerusalem and the rise of Greek civilization. Concepts of written law, one “Unknown God,” and electoral forms of government with limits on the powers of kings and priesthoods are some examples once unique to the Israelite civilization. It may very well be that Temple architecture and their geometric codes were at least in part also influenced by Israelite thought as well as other Levantine civilizations. The pyramids of Egypt and the great religious structures and artworks of the ancient world were conceived and built to reflect and connect to the cosmos.

That the letters of the Hebrew and other alphabets carry numerical value strengthens the evidence for the unified view of life and knowledge held in common by ancient and biblical man and expressed throughout the Torah. Numerical harmonies reflect the spiritual order imposed on nature by God.

The Renaissance architects rediscovered this holistic view and incorporated their knowledge of classical proportions into their architecture. The villas of Palladio, the churches of Bramante derive from the ancient philosophy to connect earthly impermanence to cosmic eternity, “…the little temples we make ought to resemble this very great one.”

Thomas Jefferson incorporated Palladian principles into his architectural designs of the University of Virginia and his home, Monticello. His memorial also contains them. The architect of American liberty, Jefferson like Moses and Israel before him, saw nature’s laws as given by nature’s God, to be equally the foundation of beauty, proportion, and human freedom under law.

These same golden section rectangle proportions as are seen in a Palladian Villa are described exactly in those portions of Exodus which describe the Ark and the combination of proportions between the Holy of Holies and the Outer

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58 As by Solomon’s time, we can assume that sacred proportional codes were very well known. Solomon’s Temple was in many respects like other temples in the Middle East.
Court. Like the pyramids of Egypt, their origin is in the right triangle and the square.

It may seem strange to the modern mind that a people can have an almost primitive material life alongside a very high intellectual and spiritual culture, but the reverse is certainly true. We are witness to the grossest coarsening of intellectual and spiritual life, alongside the highest material standards ever attained. We who watched a man walk on the moon have difficulty praying, and standing in awe or in reverence of anything.

The orientation of mind is everything, beyond all material gain in the attainment of a high and fulfilling culture. Without the right direction, the richest laden beast is soon lost. With all its wealth, it may yet die of thirst, but going the right way, the poorest beast finds rest, shade, food, water, and life.

Coming out of Egypt, the Israelites were much like ourselves, full of the knowledge of all the skills and arts of the world but they did not know how to be Jews. They learned how to turn and direct their knowledge toward the One and True God and, in turn, to be filled with His knowledge.

Our shepherd ancestors could talk with God and compose psalms, not because they knew less or more, but because they knew differently. We who hear only separated notes cannot hear the great music of the universe and its Creator.

E. The Attributes of Idols: Singularity, Wholeness, and Frontality

These attributes make an object or image subject to idolatry: singularity, wholeness, and frontality. Observation of image worship past and present bears this out. The idol is a single image; this is singularity. It must be whole. If it is broken, then it is no longer fit for worship: this is wholeness. It confronts the viewer/worshipper face to face; this is frontality.

From the revelation of the law throughout the construction of the Tabernacle, these three attributes are studiously avoided. In the two Tablets of the Law, there is the principle of pairing, replacing both singularity and wholeness. Being a pair destabilizes focused concentration. The viewer cannot concentrate
his focus so as to worship the stones themselves as holy. That they are separate yet represent a single concept makes them unfit for worship since they are no longer a whole or single unit.

Fig. 8. The Ark Cover
The wing arrangement of the cherubim on the Ark cover follows the symmetry of the wings of a moth; 2 pairs of wings mathematically related in size unfold from a shoulder wing at the top. This solves the problem: how to attain a complete cover from the sides and front without making the bodies of the Cherubim unnaturally wide. The “shoulder wing” supplies the width.

The cherubs at each end of the Ark cover are as close as Israelite civilization comes to a proscribed graven image. While they form a single unit thus having the attributes of wholeness, they avoid frontality, as they are looking inward towards each other across the length of the Ark. While maintaining a proper distance and worshipful posture, a viewer cannot see them face-to-face. Furthermore, being exactly the same in size and shape, they form a pair and lose the presence of singularity. One would have to constantly swing his head from side to side across the width of the Ark in order to pay them homage. This eye
movement is not seen in idol worship. As the cherubs face inward, their faces are invisible from either end of the Ark. There are no instances of idol worship taking place from the backside of an image, especially when it has a face.

The cherubs, like the Tablets of the Law and the seven-branched lamp, are the only major elements of the Ark and Tabernacle whose exact size and dimensions are not given in the Torah. These omissions were no accident. They prevent anyone from reproducing their image for purposes of idolatry. Knowing their exact size would be important for this purpose.

These construction avoidance measures are Judaic in origin and resulted in some of the most unique aspects of Israel's first work of art. In them, we see art itself used as the means to deflect the worship of art. The liturgical art of other civilizations has taken full advantage of the aesthetic to move its adherents. In the modern world, the aesthetic is considered sacred enough to be given completely free reign in and for itself. It is only in Israelite civilization and from its beginnings in Exodus that the aesthetic was sublimated to the moral, to not point to itself but toward a yet higher order. However sublimation should not be confused with rejection. The aesthetic is a necessary component of all civilized societies. It was for Israel to turn the aesthetic from service to idolatry to service to God. The results which become manifest in the high art of Christian civilization are immense, unique, and paradoxical. For in sublimating the aesthetic to the moral, to metaphorically circumcise art, the arts attained eventually to a greater humanity and aesthetic majesty than they were capable of in the pagan world.

There is no parallel in pagan art to the expression of majesty and humanity attained in Christian religious and western secular art and classical music or the Gregorian chant from which classical music derives. Nor is it possible that this sublime art could have come into being without the scriptural influence of Israelite civilization. In the greatest of this art, Giotto, Da Vinci, Michelangelo, Peiro De La Francesco, Rembrandt, and El Greco, we see expressed all the ecstasies, sorrows, and hopes of the common lot of mankind but elevated as if seen through the eyes of the Divine. The god/warrior/athlete of the Greeks
becomes under the chisel of Michelangelo, the being of inner, spiritual trembling man in struggle with God. The tender touch of the hand raised in blessing in a Rembrandt work expresses the hesed or lovingkindness of God for his creatures. From the Gregorian chant, to Bach, Beethoven, and Mozart, we hear the sublime majesty of heaven and the innocence of truth brought down to earth. It is a vocabulary of feeling alien to the pagan world except for the merest instances of insight. We are no longer in a world of mythical beings cavorting with warrior kings but with the ordinary people of this earth: the shepherds, the fishermen, the tree trimmers, and the herdsmen illumined in the light of the Divine.

F. Moses and Aaron, Prophets and Artisans

There is no reason why Moses should not have been trained in the arts and crafts of Egypt. We can visualize the young Moses standing in the presence of many of the Egyptian artifacts still available to us today, as indeed they were to his own ancestors going back to Joseph and Abraham. From those times to the conquest of Egypt by Greece and Rome, there was virtually no change in Egyptian technology as regards artisanship and agriculture. Thus from Abraham to the kings of Israel, to the prophets, and down to the Roman destruction of Israel’s second Temple, the entire biblical period can be seen as unfolding against an unchanging artistic-technological backdrop as regards to Israel’s contact with Egypt and other ancient civilizations.

Moses must have witnessed the actual making of many Egyptian artifacts. Indeed, many of his brethren were likely engaged in their making and he probably participated himself in many of the crafts. As befits what must have been the natural curiosity of such an intellect as Moses and by the privilege of his rank as an adopted son of Pharaoh’s daughter, he must have learned also the hidden meanings of Egypt’s aesthetic forms and the visual-spiritual language of their combinations, the significance of their geometry, as well as how they made their gods.
The Torah gives specific instances of the artisanship of Moses and Aaron. Moses is instructed to hew the second set of Tablets himself. Moses also fashions the Ark for the Tablets and of course, gives all the instructions for the making of the Tabernacle. God reveals the design of the Menorah to Moses. The Torah indicates that Moses also fashioned by his own hand the bronze (copper) serpents, which he mounted on a pole to ward off the plague of serpents. This particular work of Moses remained in the Temple until the reign of Hezekiah, who had it destroyed because of the idolatry then rampant in Israel and the king’s fear that this object too would be worshipped as an idol.

Finally, Moses “…rears up the Tabernacle,” thus imitating the task of Pharaoh as “Chief Rope Stretcher” in laying out the foundations of temples and pyramids. As in all ancient civilizations, the making of religious objects of art was considered holy, a parallel to an offering to the Divinity.

Aaron fashioned the Golden Calf. The Exodus narrative indicates he may have been one of the rare artisans among the Israelites capable of such skilled sculpture and metal craft. But it could also be that the people wanted Aaron’s authority and blessing more than merely his skill. Certainly, the alibi that Aaron delivers to Moses as to how the Calf simply “formed itself” is laughable. It may be that Aaron was completely ignorant of the metal caster’s art; that he merely supervised those in charge of the actual casting. But looking yet closer, a craftsman trying to extricate himself from a supreme embarrassment might very well speak as Aaron, using a literal description of the process as an excuse. In point of fact, in the casting process, the artisan does not fashion the work by his own hand. The molten metal fashions itself into the sculptural shape by following paths laid out for it in the mold. In a very literal sense, it “formed itself.”

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61 Exodus 34:1.  
62 Exodus 26, 27.  
63 Exodus 25: 31-40.  
64 Numbers 21:6-9, Brass serpent (Nehushtan, Hebrew).  
65 Second Kings 18:4.  
67 Exodus 32:3-4.
phenomenon of “forming itself,” along with molten metal and fiery furnace may have given the casting ritual an aura of magic power to ancient people.

A natural phenomenon unfolds with precision. What it is that happens, how it happens, and when it happens are calibrated each to its purpose and meaning. It is never casual or routine but embodies always and within each moment its own uniqueness. Even though it follows a general pattern, it will never happen exactly so again. Nature is not manufactured but is creation manifest.

The Torah follows the same principle in its laws and statutes and also in the Tabernacle structure and its attendant ritual. Ritual was not to be commonplace in its practice and none of the furnishings were to be routinely made or manufactured.

Thus, everything concerning the Holy Tabernacle was handmade, woven, carpentered, and beaten work: a uniquely created artifact like the leaf of a tree. To this day, Torahs are written by hand, as are all the sacred writings in Jewish ritual objects.68

G. God Speaks Through Art

It was at Horeb that God decided that the arts would be used as the vehicle to plant His spirit into all the people. Art, craft, music, and poetry: these speak even to those not yet concerned with holiness or morality. When properly used, the arts could prepare men’s souls to receive God’s word and message as a cultivator which breaks up the soil and prepares it to nourish the seeds of plants.

Art is not artifice though it is often confused with it. True art imitates or echoes reality. The highest art echoes and points to the highest reality but always by using the familiar voices of man rather than of God. The arts can speak to man because their voices are of our own senses. The task of Moses was not merely to

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68 The prayers are rolled up inside phylacteries (tefillin), mezuzahs, and marriage contracts.
receive the Torah and deliver it to Israel but to teach it to all Israel. As part of this task, Moses needed to design art forms that served the One Unknowable God.

Pattern, order, and repetition speak to us of the majesty and power of God, but it is individuality, expressed only through personality that speaks to us of the transcendent virtues of mercy, compassion, and lovingkindness, (hesed, Hebrew). It is only through intimacy that these virtues can be activated and only through individuality can intimacy occur.

We quite literally pass our existence in the glory of God. This is not meant in a mystical sense, but in the context of demonstrated reality which our minds can observe but not fully comprehend. It is this infinite reality which bathes the universe in His Presence and places us every moment in the Shadow of the Divine.
Chapter 4
When Gods were Equal, Men were Not:
Israel as a Classical Civilization

“And thou shalt speak and say before the Lord thy God: ‘A wandering Aramean was my father’...” 69 A classical civilization is a people unified by its own language, culture, and belief system so that these permeate through all its institutions and activities. Its people see themselves as bound by a cosmic order greater than themselves and apart from other nations. Bound by a system of universal law outside of and beyond human control, they see themselves as having been ordained by that cosmic law. With its beliefs and institutions, their civilization has a vital role to play in the furthering of history by reaching beyond themselves to all mankind. It possesses a universal destiny and a permanent, particular land as opposed to a mere personal history of its own society in a permanently nomadic existence. A people’s awareness of their unique origin and ultimate purpose gives rise to those distinctive accomplishments within a singular culture which speak universally to what is in a word, civilization.

The Jewish people have never ascribed to themselves any special virtue for having been “chosen.” All that God has promised and revealed to Israel has been from the beginning ascribed solely to the infinite mercies of a loving God. Hence Israel, or Judaism, has no interest in making a Jewish world, or in making people Jewish. The mission of Israel is to bear witness to God, to serve Him in a

69 Deuteronomy 26:5.
manner that the knowledge of God spreads to all people and cultures. Israel was never meant to be an all-conquering empire, but rather the stream of life-giving water that flows into the rivers of nations.

A. Life in Ancient Israel: The Biblical Vision

Daily life during the Exodus became a great school for Israel. The routine tasks they did, the work to maintain material existence, became subsumed to their learning about God and how He would be served. They were bound in memory to their ancestral origin and fresh from the Egyptian bondage which gave them all a tragedy and deliverance in common. These uniting bonds could form a union which hopefully would override all the individual differences of material fortune.

The vision was to carry this God-centered concept into Canaan and there form a civilization based upon and dedicated to the knowledge and servitude of God. Whether priest, king, soldier, herdsman, farmer, or bondsman was to be of merely an incidental importance, an act of fortune; overridden and subservient completely to the integrity of one’s individual subservience to God. Thus, the religious commandments and Holy Days overrode all considerations of individual rank, power, wealth, or occupation. They rested upon king and laborer, priest and bond slave alike.

B. Conceived In Liberty: The Birthday of Israelite Civilization

A wandering Aramean was my father, and he went down into Egypt and he sojourned there few in number; and he became there a nation, great, mighty, and populous. And the Egyptians dealt ill with us, and laid upon us hard bondage. ...And the Lord heard our voice... And the Lord brought us forth out of Egypt with a mighty hand and an outstretched arm, ...

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70 Deuteronomy 26:5-8.
Abbreviated above is the declaration every worshipper gave before the High Priest when he gave, "the first of all the fruits of the ground ... that the Lord thy God giveth thee, and thou shalt put it in a basket, ..."\(^{71}\)

The singular event of deliverance from Egyptian bondage more than all else, save the Sabbath, came to define and to differentiate Israel. Its civil legislation, its moral laws, its very soul is defined by it. The beginning of the year\(^{72}\) and commencement of Solomon's Temple are dated therefrom.\(^{73}\) Its commemoration in the Passover service is the ongoing birthday party of the Jewish Nation.\(^{74}\)

The essence of a free and moral society is that no person is to be treated without honor and that every person is responsible for elevating his feelings to higher realms of understanding and goodness. No person is to be deprived of dignity or to expect degradation from his fellow man, either in life or in death. From this principle derives the radical biblical laws concerning morality toward the criminal, the slave, the poor, the hired man, the widow, the stranger, or the woman taken in battle: all persons who find themselves in a condition of helplessness either before others or society. This same principle of holiness governs the marital relationship. It also establishes the Sabbath: the day of rest and holiness that goes mandatorily and majestically through every single layer of society and every institution extending into the earth and the animal kingdom. This idea even extends to governing domestic animals, cultivation, and harvest, and down to the forbidding of the disturbance of a bird's nest that is in the way of one's plow.

The slave, the laborer, the stranger, the widow, the orphan the poor, all those without power, were treated as the despised of ancient civilization as they are today. The Torah changes their condition by bestowing the means and the

\(^{71}\) Deuteronomy 26:1-4.

\(^{72}\) Exodus 12:1-2.

\(^{73}\) First Kings 6:1.

\(^{74}\) Exodus 12:14.
responsibility to attain holiness\textsuperscript{75} to every person regardless of their social or economic status. This elevation of feeling and democracy of labor must not be confused with the Marxian, or for that matter, the capitalistic worship of labor or productivity. In modern economic systems, it is his work which gives the laborer his dignity. However, the Torah protects the dignity of labor because it is performed by human beings who are created in God's image and who belong to God, not to man, and who are commanded to be holy. Man's dignity is God-given and inalienable. It does not derive from labor or from any government, economic system, or social class. God created the world in six days, but only the seventh day did He proclaim as holy. The Sabbath day is the antipodal event to Egyptian bondage and the divine response to all human degradation justified by human institutions. The Torah extends the benefits of various institutions throughout all levels of society, the most important example being the Sabbath, day of renewal, when God Himself abstained from production. The lesson should not be lost that the Sabbath proclaims for all men and times that the highest worth of an individual does not derive from his productivity weighed in human scales, but from our origin in God's Hand and our obligation to serve Him.

\textit{C. Civilization Without an Aristocratic Ruling Class}

Not a single likeness of a judge, prophet, priest, or king survives from ancient Israelite civilization; not a statue fragment or even a coin commemorates a man. This lack of archeological evidence is also a statement about art. Art must not serve human power or glorify persons. High art was to be exclusively at the service of Israel's God. Such a definitive distinction between the ruling powers of man and the Divinity was not made by any other civilization.

\textsuperscript{75} elevated feeling through morality and piety
The classicism inherent in ancient Hebraic civilization and apparent in the sacred writings of the Jews presents us with yet another anomaly of the Judaic character. Beginning with the Exodus period, wherein the framework of Israel's future societal existence is laid out in detail, to its final days prior to the Roman exile, Jewish life never develops a true aristocratic mentality. From the days of the kings onward, the structure is set up and the tendency is present to develop those attributes of aristocracy in evidence everywhere from ancient times, even in the Roman Republic on to our modern times.

Most noteworthy among aristocratic attributes was the clear sense of entitlement to rulership or to respect: a disdain for hand labor, for that which causes sweat or getting dirty, i.e., handicraft, farming, etc, and, most insidiously and ultimately the most ruinous, a sense of being fundamentally and forever set apart from the rest of one's people by inherited descent. The aristocrat adores, praises, protects, and is entitled to possess and to use the labor of others, but labor itself that is labor of the hands that which engages or soils the hands to make the "useful" everyday things is beneath him. However, warfare and wise statecraft are his true occupations as well as guardianship of the philosophical underpinnings of the social or public order.

Therefore, throughout the ages we see the similar division of people by civilization after civilization into the same categories of rulers: priesthood, warriors, chiefs, and the land-owning classes from whom these top categories are chosen. Then, steeply down beneath these are the laborers of all kinds: agricultural, artisan, merchant, and, differing only in not being paid for their labor, the slaves who in the ancient world often performed the same work as the other laborers beneath the land-owning class.

One must study the laws in the Torah to understand how thoroughly and radically, even by relatively modern standards, Israel abrogated into

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76 In order to maintain a rough consistency in the usage of three separate reference words, the word Hebraic refers to the entire corpus of Jewish history, lore and experience. Israelites refers to the ancient world of Israel in the biblical period. Jewish or Judaic refers to the post-biblical from Greco-Roman to our modern world, also called Rabbinical Judaism.
insignificance every one of these oppressive attributes of aristocratic civilizations. When we consider that these very attributes were necessary in the eyes of all classes of people for the establishment of orderly and pleasing societies, then we can appreciate the radical departures of Judaic legislation from the norms of other nations.

From the point of view of conventional civilization, it would seem that the aim of the Jews was to establish chaotic societies and tear down natural order. Through the ages, the hatred against the Jewish people has been based upon the challenge that their societal structures and beliefs posed to the aristocratic concept of privilege by birth and its inherent virtue.

The Torah was given to a society of herdsmen, farmers, builders, and artisans and its imagery in poetry, in symbolic ritual, and moral exhortation is expressed in metaphors derived from this primal fact. Both the Torah and prophetic literature are addressed to man in the civilized state, not the primitive; the difference being that the city-state is based upon abstract concepts of knowledge derived from nature. The prophets continue the herdsman-builder-artisan imagery as well as the Torah vision of a non-aristocratic civilization. Had the Torah been revealed later, at the end of the Exodus wanderings, it would have been revealed to a warrior culture. Still later in the time of Saul-David-Solomon, Israel would surely have twisted its laws to accommodate an aristocratic culture similar to all those around her.

For a true understanding of the formation of the Hebraic temper against aristocratic privilege and a vision of what a Hebraic civilization was to be, one should read the weekly portion of the Torah Vaetchaman. This most central passage is the whole Torah in miniature, a summary of Israel’s history and its formation, as well as the Ten Commandments and statutes. It is full of majestic imagery, exhortation, and poetry. In these chapters, the reader can trace how the foundation of Israel’s particular God concept and mindset was laid down and set forever.

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77 Deuteronomy 3:23-7:11.
The division of Canaan among the tribes made every Israelite a landowner. The Levites, which included the priests, were forbidden to acquire land; they were given land around cities scattered throughout Canaan. The Law of the Jubilee, in which land that was sold reverted back to the descendants of the original owner in each fiftieth year, insured in perpetuity that there would never be a large landless class in Israel.  

The Sabbath, the division of the land to all the people, the limited land ownership of the clerical class (Levites), and the Jubilee insured Israel’s uniqueness from all other civilizations. Then, with the establishment of the Davidic Kingdom when Israel reached her peak as a military power, the familiar pattern of empire conquest never developed.

Even in decline, Israel never passes through those phases in which a class system of royalty, warrior nobles, and a landed clergy exploit an ever larger number of the people who are then reduced to serfdom, slavery, or service in armies of predatory conquest. The book of Kings II recounts Israel’s struggle against the above tendencies in the stories of Ahab, Jezebel, and Elijah’s contest with the priests of Baal. In these episodes, it was foreign elements which seduced Israel.

These same Israelite institutions may incidentally explain why Israel never developed a powerful navy and merchant marine. The Sabbath is virtually impossible for sailors, and to labor on one’s own land is as strong an incentive not to wander far as it is not to plunder.

As Moses predicts in Deuteronomy, Israel is first seduced by prosperity and idolatry, then falls into what appears to be a mutual exploitation of everyone by everyone, neighbor against neighbor, as Jeremiah says, “And they deceive everyone his neighbor, and truth they speak not;...”

Israel’s final military defeats are the direct result of her self-weakening through desertion of her God and His commandments, just as the prophets

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78 Leviticus 25:8-13, the Law of Jubilee.
recorded. While the prophetic writings deal primarily with Israel’s crises of decline, there had to be long periods in those four hundred years from Solomon to the Babylonian Exile, and again for another three to four hundred years until the Greco-Roman conquest of Judea, that Israelite society worked well within its own religious-spiritual-social and economic institutions to the benefit and happiness of those within her borders and the consternation and amazement of those without.

Most fundamental in the Jewish belief system is the curious lineage of the Jewish people. It militates forever against the formation of the aristocratic temper and its acceptance by the people. Not of gods born, nor a warrior’s cult or a priestly caste, but from herdsmen came Israel’s earliest patriarchs, and, as herdsmen in supplication, they entered Egypt. “And Pharaoh said unto his (Joseph’s brethren) ‘what is your occupation?’ And they said unto Pharaoh, ‘Thy servants are shepherds, both we and our fathers.’”80 Israel began as a family of landless shepherds and, from this they were reduced even more to slaves, the lowest estate in all of mankind’s civilizations. This fact of slavery is never denied but by commandment held up to every generation of Jews. The liberation from Egyptian bondage by their God is central to both the understanding of the Judaic soul and temper and virtually all the legal legislation in the Torah, prophetic writings, oral law, and subsequent rabbinic rulings. Simply put, those rulings eliminated the master-slave relationships from every human encounter, from king to people, people to servant, slave to master, captive to captor, bride to bridegroom, and even man to animal. No party to a relationship is left entirely helpless before the arbitrary power of another. By holy law, the more powerful cannot wantonly use, oppress, or destroy them.

From the time of Exodus, the God of Israel is described as the Deliverer from bondage in Egypt. After Creation, this is His most important attribute. This description is in the first of Israel’s Ten Commandments. “I am the Lord thy God who brought thee out of the land of Egypt, out of the house of bondage.”81 The

80 Genesis 47:1-3.
81 Exodus 20:2.
closest Israel comes to a physical description of the One is the metaphor, "With a mighty hand and an outstretched arm I brought you out..."82 The Torah forbids the return of a runaway slave to his master and commands safe haven for the stranger.83

No other civilization pays homage to a bondage-hating God, and no other than its exodus experience can explain Israel's fundamental departure from the rest of the ancient world, nor the growth of social justice and democracy in the Western world.

In a nation where the land is divided by tribe rather than by privilege, the first kings of Israel emerged from the farmer, Saul and the shepherd, David. One could develop an interesting thesis over the differing temperaments engendered by farming as opposed to shepherding. Saul, the farmer had perhaps a stronger sense of entitlement by way of land ownership and possession, whereas David, the shepherd saw himself more as a protector of the helpless.

In times past when Saul was king over us, it was thou that didst lead out and bring in Israel, and the Lord said to thee: thou shalt feed My people Israel, and thou shalt be prince over Israel.84

The aristocratic tendencies in Saul were pronounced, but absent in the more lyrical personality of David. Saul was brave and essentially noble in character, but there was a grim edge to his personality, and a dark determinedness to hold on to what he wanted and saw as his own. The rebuke by Michal, Saul's daughter to David, her husband for his dancing so wildly before the people when the Ark is triumphantly brought to Jerusalem is the response of a personality that has inherited a strong sense of place above the rest of her people. In David's rebuke to Michal, we see a king who does not put a sense of entitlement between himself and his people.

... 'How did the king of Israel get him honor today, who uncovered himself today in the eyes of the handmaids of his servants, as one of the

82 Deuteronomy 5:15.
84 Second Samuel 5:2.
vain fellows shamelessly uncovereth himself.' And David said unto Michal: 'Before the Lord, who chose me above thy father, and above all his house, to appoint me prince over the people of the Lord, over Israel, before the Lord I will make merry. And I will be yet more vile than thus and will be base in my own sight; and with the handmaids whom thou hast spoken of, with them will I get me honor.' And Michal the daughter of Saul had not child unto the day of her death.\(^85\)

Suffice it to say, both occupations, farming and shepherding, were not done with clean hands, nor were they the choice of ancestry for the rulers of other civilizations. But the importance of these ancestries was immense for the development of civilization in the West. It was the image of the shepherd and the many other professions of the ordinary man that also formed the basis of Christian theology and its artistic expression.

The question of the possibility of a classical civilization without an aristocratic temper can be answered in the affirmative. One can even say that the thrust of Hebrew prophecy was to establish such a society while combating the two enemies of Judaic civilization: the tendency in all societies to divide between privileged few and oppressed many and the forms of idolatry that fed into such a process of oppression and degradation.

But the above does not yet give us the sense of the exact kind of society Israel was to strive to be. To discover this we must now examine what Judaic thought has in common with all classical civilization.

D. "\textit{Is not the good also beautiful?}" - Plato

The first characteristic or overarching principle of a classical civilization is its belief in itself as part of a destined cosmic order and that it plays a role of importance in the cosmic order. The condition of classical civilizations is that they have a point of origin in the ordered unfolding of creation.\(^86\) For Egypt and

\(^{85}\) Second Samuel 6:20-23.

\(^{86}\) The models of high classical civilizations used here are the ancient Egyptian and Greek. One could use others, Roman or perhaps even Pre-Columbian American.
Greece, as for all others, that origin was in myth primarily, and partly history. For Israel, it was only in history as Judaism has no mythology.

The historicity of a noncorporeal, loving God is the overarching principle, the basis of moral law, and underpins the sanctity of that law. That God creates, propels, or deters cosmic order underlies the religious conception of "good and evil," as opposed to the modern concept of "legal or illegal," which connotes only a local and temporary view of justice.

Perhaps the second greatest characteristic of a classical civilization is the unity of knowledge. Modern civilization divides knowledge into separate, distinctive camps that in ancient times would have blended and flowed into one stream. Art, science, theology, numerology, and architecture, while practiced by specialists, nevertheless partake of each other, are seen and used as parts of the same body underpinning the cosmic order. Thus a pyramid or temple embodies virtually the entire corpus of knowledge of ancient Egypt or Greece.

Hidden in their proportions are their number systems. In turn, their canons of beauty reflect the eternal laws of the cosmos. History and mythology are in their decorations. The sacred objects of worship are at their core. Ancient man got his education and the sense of who he was and his culture from the sacred architecture of his cities. In this educational task, both the Tabernacle of the Exodus and the Temple in Jerusalem share with the art and architectural works of other civilizations of antiquity.

The sacred architecture of the ancients was designed to be a man-made, earthly reflection of the eternal cosmic order: an idea reintroduced into the great Renaissance architecture from classical sources, and emulated again by Thomas Jefferson in his architectural designs. The idea of an orderly and just government being a reflection of a just and reasonable deity is both classical and Hebraic, and this principle was made manifest in Jefferson's architectural designs as in his philosophical and political thought.
Central to empire building also is a monumental and exportable architecture and visual imagery. Large in scale and physically exciting, they must be immediately intelligible to a diversity of peoples. Their message is always one of intimidation, of power beyond question, as a force of nature made manifest in form and in images of things. Such manifestation brings a larger dimension to Israel’s prohibition against graven imagery, making its civilization at one and the same time, incapable of the conquest of empire, and immune to being assimilated to the conquest of other nations.

All art in ancient classical civilization was religious, if not in its actual use then at least in its conceptual base. Thus portraits such as statues, coins, commemorative steles of rulers, priests, and other notables were direct extensions of the deities that upheld the cosmos. Temples, tombs, the plays of Greece, or the epics of poetry were likewise reflections of divinity. Secular art, as we understand it today, would not be comprehended by the ancient mind.

We see these characteristics in Israel’s history too. The divine revelation of law, the anointing by sacred ritual of priest and king, and the lack of a concept of secular art are all subsumed by the religious or, more accurately by the sacrosanct. To this day, Jewish traditional religious life retains all the classical elements: divine election to a place in the cosmic drama; revealed law and ritual; no distinction between the sacred and secular; the oneness of all knowledge; and no secular art forms.

Orthodox Judaism is likely the nearest we can come in the modern world to experiencing the unity of a classical mentality and civilization. But what is most unique in the Hebraic civilization is its refusal to develop an aristocratic art, either visual or poetic, that would have left us some visible record of specific physical features of kings, priests, prophets, or even common folk. There is not a single commemorative stone or temple to an Israelite military victory, nor a single statue or coin of an Israelite king, queen, or priest. No likeness of Israel’s most revered personages, the Patriarchs or Moses, is to be found from the biblical
period. From that time, as in today's orthodox community, all art is confined to the narrow religious sphere, deriving from the conceptions of the Tabernacle and its service as described in Exodus and to the carefully governed transcribing of holy documents. It stops short of "man worship" or the celebration of the feats of any individual heroes. In the history of Israel, the only hero is God. We can say that Israelite civilization refused to develop the hero personality concept as we see it in other classical civilizations.

Such a restriction in its art was also a major element in the Israelite civilization's refusal to develop into a truly aristocratic society. Central to aristocratic civilization is the hero concept or "superman," the one highly endowed by grace, valor, and virtue so beyond the usual that they are deemed "divine" and better than the rest of us. The god-man, man-god from Gilgamesh to Alexander, to Julius Caesar, and the warrior-god-man of Homeric epic are distinctly absent from the tone, if not exactly the deed of Hebraic revelation and literature. The great men and women of Israel are seen not as individual heroes but as part of a temporal continuum of service to the Eternal God. They are human beings pointed faithfully in the direction of God, who in turn point others in God's way. Indeed such is the charge or "chosenness" given to the entire people of Israel. Whereas David is unarguably a warrior hero, an Odysseus-like character who overcomes all obstacles, his adventures never take off into the mythological. Samson, in the Book of Judges, would be a good choice for the Jewish hero who most resembles the "wily Odysseus." Superhuman in strength, Samson is also famed as being a man of cunning, skilled in the use of riddles and ruses. Yet, his erotic conquests lead him to destruction and therefore, among his own people he is viewed as a failed hero.

Reading the Bible does not evoke the usual images of classical civilization: the beautifully armed and robed warrior kings and their priestly entourage, but rather that imagery which comes to us from Christian art: images of shepherds, fishermen, and carpenters filled with the idea that service to God means service to fellow man. It is a figurative imagery impossible to the mindset
of the ancient aristocratic civilizations and inconceivable before Hebraic civilization developed.

Moses and the Patriarchs would manifest themselves physically in the Hebraic mind only as shepherds or as herdsmen, which were lowly occupations in the ancient mindset. Such were the forebears and leaders of Israel. Their greatest king, David, manifests himself most touchingly once again as a shepherd and a musician calming his flock.

In the context of a holy or sanctified civilization versus the aristocratic, one cannot overlook the Sabbath, Israel’s quintessential institution. The seventh day of rest and spiritual renewal is the touchstone and heartbeat of Jewish civilization. The Sabbath is the prime rule and the module of which all other holidays are ceremonial magnifications.

No living being, neither man nor woman, Jew or Gentile, or even beast of burden, was to be condemned to unremitting toil. It was the first and final insurance against the oppression which shadowed all other civilizations. What prepared Moses to receive such a law and, this people to accept it was the unremitting memory of involuntary servitude and an invincible faith in the divine worth of every human personality. Only herdsmen, builders, and artisans brought out “from the Iron Furnace of Egypt” with the primal memory of its bondage could have accepted and institutionalized so ultimately anti-aristocratic a gift.

Through the Sabbath, the seventh day, the number seven moves from a mathematical mystery and an aesthetic canon of beauty and harmony into the sphere of morality. In the vocabulary of the artisan, it means that one’s very life be crafted with goodly materials and proportions so as to reflect and echo the Divine.

What form of visual imagery could possibly evolve into a figurative, heroic portrait art in a society which thus conceived its heroes and origins? Not

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87 Deuteronomy 4:20.
gods, but the words of shepherd patriarchs announce Israel's civilization to Pharaoh: "Thy servants are shepherds both we and our fathers."\textsuperscript{88}

Of these formative laws that so distinguished Israelite civilization from all others, and would so elevate Western civilization, only one, the Sabbath, could be practiced in exile. The others could be in force only when Israel inhabited its divinely ordained borders.

\textsuperscript{88} Genesis 47:1-3.
Part II

The Tabernacle Structure, Vessels and Meaning

The entrance curtain to the Tabernacle complex stood before a 20 cu\textsuperscript{89} opening through which the Outer Court was entered and exited. Inside the first square of the Outer Court stood the 10 cu long ramp directly abutting the Outer (copper or brazen) Altar of Offering which stood 3 cu high and was 5 cu square. On this Altar of Offering, all animal offerings took place and the white smoke of these offerings curling heavenward was visible to all Israel encamped around the Tabernacle. This altar stood 10 cu distant from the veil of entry to the Tent of Meeting. To the left in front of the entry veil to the Tent of Meeting stood the laver, where the High Priest washed his hands and feet before entering.

The entry veil of the Tent of Meeting opens into a 30 cu space with the Holy of Holies at its western end, covered by its own thin veil. This 10 by 10 by 10 cu space was the most sacred space of the complex. Protruding through its thin veil could be seen the staves of the Holy Ark of the Covenant.

The outside of the 30 by 10 by 10 cu Tent of Meeting was made of gold plated acacia boards on top of which were placed curtains that overlapped the sides, front, and back of the structure. Being 10 cu in height, it stood twice as high as the curtains of the Outer Court, about 8 ft above them. A good part of this solid gold-plated structure would have been visible to the encampments beyond the complex.

\textsuperscript{89} 1 cu equals 20 inches or 1 and 1/2 feet approximately.
Standing 10 cu in front of the veil before the Holy of Holies was the diminutive gold-plated Altar of Incense from which the High Priest made incense offerings in front of and once a year, inside the Holy of Holies. Directly before the veil hung the Eternal Light, the ever-burning lamp, the \textit{Nir Tamid} in Hebrew.

Near the Altar of Incense, the seven-branched lamp stood to the left (south side) midway or 5 cu between the altar and the Holy of Holies. This lamp (menorah), symbolic of Israel’s covenants, was kindled in the evening by the High Priest. Directly across from the lamp, on the right or north side, stood the Table of Showbread upon which twelve unleavened cakes were placed from Sabbath to Sabbath.

An invisible offset square can be seen formed by the location points of these four elements comprising the Tent of Meeting: the Altar of Incense, the Holy of Holies, the seven-branched lamp and the Table of Showbread.

The above completes the Tabernacle description and its lists of furnishings. Mention should be made however of two other elements. The robes of the High Priest, and the other priests also, had a white, blue, and gold dominance of color strongly evoking the coloration of a beautiful sunlit, peaceful spring day at midmorning. This white, blue, and gold coloration is seen often in many churches and in synagogues in Israel. It is a coloration seen often in Christian religious paintings, most notably perhaps in the works of the late Renaissance painter, Tiepolo. Most restful, joyous, and hopeful is this color combination of the heavens.\footnote{Exodus 28:2-6, 31:33-34, 36-39, 40-43.}

The tefillin and the threaded prayer garment (tallit), the two personal ritual objects of Jews have their origin in the same biblical texts as does the Tabernacle.

The prayer shawl is wrapped around the worshipper as a robe might be draped around the head and shoulders of a priest.\footnote{Religious Jews wear an undergarment daily from which the four mandated cords (tzitzit) protrude.} The ritual of the tallit and tefillin derive from Israel’s central prayer, the \textit{Shema}, and portions of other texts
that actually mention the tefillin. The two tefillin are cube-shaped boxes containing the above prescribed prayers rolled up inside. One is placed on the arm opposite the heart and the other exactly above the forehead. Rich in their overlapping symbolism, they represent historical memory, eternal covenant, and generational continuity and, as will be shown, evoke the presence of each worshipper before the Tabernacle altars and even beyond the veil into the Divine Presence.
Chapter 5
The Shape of the Holy: The Moral Dimension of Geometry

Whoever has seen the beams of sunlight breaking out from behind a cloud has witnessed the origin in nature of the unshakable hold on the human imagination of the pyramids of Egypt. From its point of origin, the orb of the sun moves its beams with implacable straightness like a veil across the heavens flowing down to earth. The triangular formation of these golden beams of light is a natural metaphor of the rule of law over the physical universe; reflected likewise in the precision of shadows cast by the sun upon the objects of earth. The shadow was also an important metaphor in Egyptian art for the presence of the divine. The lapis lazuli (blue) image of a ram on the temple wall was a metaphor for “the shadow of the Divine.” The meaning of the Hebrew name Bezalel, chief builder of Israel’s sacred shrine is “In the Shadow of the Divine.”

The sacred buildings of all ancient cultures from Stonehenge through the Western Renaissance were designed to make various connections between the eternal cosmic time of the heavens and the transitory struggle of life on earth. To connect our journey here on earth to an eternal meaning is the primeval impulse from which man’s religions originate. The need for this connection is the universal origin of our religious nature, of our being created in the image of God. The primary ways ancients made these connections was by orientation to cardinal points; to heavenly objects and phenomena; and by geometric patterns and
proportion that are the same as later developed into the science of navigation.
Man’s search for his place in creation thus develops alongside his search for
direction for his destinations on Earth.

A. Salt: The Crystal Form of Eternity

Salt is an ingredient of the “meal offering.” The Rabbis tell us that salt,
being a preservative, is a metaphor for eternity. One could also deduce its
relationship to tears which connote true repentance. Salt and tears are also
cleansing, an obvious parallel to repentance.

It may be of interest that salt is also a natural crystalline form and, under
magnification, it is a cube, the geometric metaphor for eternity and the same form
as the Holy of Holies, the veiled space that contained the Ark of the Covenant.

This connection was probably observed by our ancestors, if not by
magnification then perhaps by shadows cast under very bright sunlight by grains
of salt on smooth, perhaps shiny surfaces such as a brass or copper pan. Shadows
are natural magnifiers and the observance of shadows was an integral part of the
daily, seasonal and ritual life of the ancients. The poetic metaphor of shadows is
profuse in biblical writings.

B. The Tablets of Testimony Placed in the Ark of the Covenant

The two sacred Tablets of Testimony when held or placed together formed
a square, the symbol of eternal covenant.92 This covenantal square would likely
have been the size of a single royal cubit, close to 20 in square. Halved, each
tablet would have been 1 cu tall and a ½ cu wide93 thus forming a double square
or a double golden mean rectangle. Each tablet by itself would echo the double
square Outer Court of the Tabernacle.

92 This is my own thesis. No measurement is given in the Torah for the Tablets.
93 20 in height x 10 in width
In their height of 1 cu, the Tablets also replicate my estimate of the 1 cu height of the two cherubim atop the lid of the Ark cover, standing face to face. As with the sacred Tablets, the Torah does not give the dimensions of the two cherubim, omissions almost certainly of choice. Of all the objects that could easily be replicated for idolatrous veneration, these would have ranked first.

Reason can support the theory that each of the two tablets in themselves make a golden section rectangle made up of two right triangles set hypotenuse to hypotenuse. When both where held together, they formed a square. This right triangle shape was used by the Egyptians to determine the height of a pyramid.

The traditional form of the Tablets appears rounded at the top. It is true that such rounded Tablets are seen in Egyptian art, particularly in the cartouche of the Pharaohs. These sacred cartouches would certainly have been equal in rank to the Tablets. Also one could argue that the Ten Commandments gave name to the formless God. Thus they act as a cartouche in a form familiar to the Israelites.

While the rounded top has an aesthetic appeal, one can argue in favor of the rectangular form for two reasons. First, unlike other sacred stones and insignia the Tablets were not to be everyday sights in everyday places. The Tablets were shown to the people only on special occasions, i.e. when breaking and setting up camp.

This brings us to the second reason. The decorative aesthetic element is again played down in favor of the moral. Every time the tablets are seen, they must be a forceful reminder to the vast multitude, (who would never actually read them) of Israel’s special covenant and unique, formless God. The tendency to worship objects must ever be deterred. None of the above would be served by reminding the Israelites of the sacred cartouches used by their former idol-worshipping taskmasters.

Also, the rectangular and square shapes are consistent with the form shape vocabulary used throughout the Tabernacle complex. The Tablets themselves

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94 Also my own thesis as the Torah gives no measurement for the cherubim.
embody that entire form vocabulary to the point of being the Tabernacle’s symbolic origin.

This theory fits the internal logic of the meaning of shapes in the Tabernacle vocabulary, and strongly reinforces the important devices of doubling proportions and deflection used throughout the Tabernacle’s construction. Deflection is the term used to denote the frequent use of aesthetic abridgment, or downplay in Jewish art in order to “deflect” the visual from exciting the impulse to worship a sacred object. Jewishly speaking, it can be characterized as the circumcision of the aesthetic.

A doubling of proportion and deflection is carried out most prominently in the two Tablets of the Testimony, the most sacred objects in Judaism. The size of the Ark was 1 1/2 cu by 2 1/2 cu. The royal cubit was close to about 20 in. The ends of the Ark were square. These dimensions would easily contain the two Tablets in a variety of positions. The Ark of the Covenant also bears a striking similarity to the Porch of the Maidens, part of the Parthenon complex on the Acropolis of Athens, built some 800 years after the Exodus.

The Erectheum was built in 421 B.C.E. in Athens. The two structures are vastly different in scale but exactly the same in their proportions. The Ark and the Erectheum also confront the viewer in similar fashion with their wide side facing forward, as do even the statues on the narrow sides of the Erectheum. This wide side facing front position was how the Ark was placed in the Holy of Holies and so it faced the High Priest. It is also the position in which the Ark was borne before the people when the Israelites journeyed or went into battle. One must imagine God’s spirit seated on His thrown and borne aloft, hidden behind the outstretched wings of the Cherubim and facing forward like a king leading his people.
Fig. 9. Comparison of Proportions: The Equal Proportions of The Ark of the Tablets and the Porch of the Maidens

If the cherubim are 1 cu in height, then the elegant proportions of the Ark of the Tablets are enlarged to building size and scale 800 years later in the Porch of the Maidens on the Acropolis in Athens. Note the equal width to height ratios. ABCD of the Ark equals IHCD of the Erechtheum. CEDF of the Ark equals CADB of the Erechtheum. The molding of the Ark corresponds to the molding of the Erechtheum.
The writing engraved in these tablet borders would echo the oblong rectangle of the Tabernacle's Holy Place, being roughly divisible into three squares—as are the handwritten Torah portions to this day, often comprised in the number of their lines (42, 49, two multiples of seven). Placing the Tablets together forms the square, the shape of the Holy of Holies, and the geometric metaphor of eternity and divinity. Once more, we arrive at the sacred form vocabulary as is found throughout the Tabernacle's structure and the ritual forms derived therefrom. The rectangle, the oblong, and the square go back to the Egyptian temple and furnishings with its outer court, hypostyle hall of columns, and square holy of holies. The metaphorical shapes of nature's harmony through moral law, the human body, and the universal harmonics of geometry must be successfully melded for holy living.

The harmonious shape of each tablet may at first glance seem to violate the principle of deflection through doubling, but a golden section rectangle, harmonious and pleasing as it is, is much harder to fix in the mind than a square. It is the square, that most unnatural of forms, which is most readily fixable in the mind and is the father of all the others: the right triangle, the golden section, the rectangle, the oblong, and the pyramid.

The Tablets of the Law together form a unity, a geometric echo of the eternal. But because they are made up of two distinctly separate forms, the square is thus broken physically and cannot of itself be worshipped as a physical object. The principle of wholeness is central to idol worship and to ancient thinking. It is carried over into the moral sphere by Judaism. The square is thus given one of its most dramatic and ingenious uses as a deflection to the worship of a corporeal image and at the same time, a symbol of eternal covenant by employing both the negative and positive effects of brokenness and wholeness. By such decisions, Moses, the teacher, raises Israel's consciousness beyond the temptations of idolatry.

As for the cherubim atop the Ark, they were ever visible to the Israelites on their journeys. Inside the Holy of Holies, they were seen through a veil and
they created an arresting image. But their double (mirror) image and their facing inward towards each other, rather than outwards, towards the people creates sufficient aesthetic distraction to break the spell of the single focus frontality necessary for object worship. The adored object, to excite worship, must be seen face to face.

C. Materials Used for the Tablets of Testimony

The material of the Tablets was a white limestone of the type used as facing on the pyramids of Egypt. This white, light-reflecting surface would have been familiar to the people in associations with sacred forms. The use of a facing stone for all to see rather than a precious material for a select few, symbolizes the law being for all the people—the whole nation. It is a stone rapidly and easily worked, kin to marble chemically and in geologic formation. It is common enough not to be precious, yet it is permanent. It is the most fitting material and it tallies with the democratic ideals of Judaism as well as with the rapid preparation Moses was commanded to make. Both the first and second tablets were of the same material and dimensions.

"Prepare two tablets like unto the first, and be ready in the morning..." None of this stone’s characteristics would have been lost on the Israelite craftsmen freshly out of Egypt. The implication of a second chance, of forgiveness would not have been lost on these recent stone masons, artisans, and builders.

D. The Moral Dimension of Geometry

Geometric forms and numbers, like letters, lines, and angles do not depend on scale for their value. They retain their intrinsic meanings no matter what size

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96 J.A. Hammerton, Wonders of the Past Vol. I (New York: Wise and Company, 1948), 455. Illustration and caption facing page 455 (see photo caption), "... the pyramid of Chephren (center) part of whose limestone casing remains at the summit."

97 A thesis of my own as the Torah does not mention the type of stone used for the tablets.

98 Exodus 34:1.
they are written or drawn. "Little" means small, and "big" means large, irrespective of their size in print. The same is true of geometry, i.e. squares, triangles, circles, lines, and angles. They retain equal value as geometric forms regardless of their scale. Letters, geometric shapes, and numbers are free from physical limitation, and yet conceptually can give form, relation, and governance to physical matter. This freedom and power is what makes these manifestations divine-like. They are able to intrude upon but yet be free from the material universe: attributes analogous to the Divine Spirit, the human soul, and the moral impulse. Therefore, the ancients saw the hand of the Divine in numerical relationships. Likewise, the Divine reveals Himself to Israel with spoken words of abstract letters. The attribute of speech was considered by both Egyptians and Hebrews as one of the attributes that distinguished man from the rest of nature. "The speaking spirit" or "spirit that speaks" was both an Egyptian and Hebrew designation of the human being’s kinship to God.

And the Lord spoke unto you out of the midst of the fire; ye heard the voice of words, but ye saw no form, only a voice. He declared unto you His covenant... even the ten words and He wrote them upon two tablets of stone.  

There is a further analogy between geometric form and the word, number, and letter and the life of man. The concept of the equality of all men before God and His law originating in the Torah is analogous to these abstract forms in the sense that achievement, wealth, or social standing which are attributes of scale do not increase or lessen a person’s intrinsic value. Possession of a soul, the analog of spirit moving matter, is the single and paramount distinction at the basis of Torah legislation.

99 Deuteronomy 4:36 “... and thou didst hear His words out of the midst of the fire.”
100 Deuteronomy 4:12-13.
101 In both Hebrew and Greek, letters of the alphabet are used to express numerical values.
In the biblical view, the worth of moral action (mitzvot, Hebrew)\(^{102}\) is like the letter, the word, the number, and the geometric form in that each retains its intrinsic value irrespective of its scale. For example, "big," "little," and "two-four," the square or triangle, each retains its meaning and form irregardless of size or scale, preciousness or humbleness of material or to whatever it is applied. A pyramid paperweight on a desk is as much a pyramid as the Great Pyramid of Giza. "Little" always denotes smaller than "big." "Two" always denotes a twoness and four a four-ness.

"He who gives charity in secret is greater than Moses," says the Talmud.\(^{103}\) While it is recognized that we cannot attain to the scale of Moses' service to God, there is nevertheless a geometric relationship between giving charity in secret and the entire 40 years of Moses' service to God. As high as was the service of Moses, he had hoped for the reward of entering the Promised Land with his people, whereas in giving charity in secret, there must be no desire for reward in the calculation of the form or geometry of the giver's heart. The line, the angle, and the shadow will surely reveal it. The divine measure is as true as the builder's square. It is not the grandeur of appearances, but the line and the angle are the measure of value and truth, and determine whether the house shall stand or fall.

In this integrity of geometry we find the biblical definition of sin (to stray from the straight line), and of repentance as well (Teshuvah-Hebrew) meaning literally "turning" (away from the wrong direction and back to the line). "And it shall be unto you for a fringe, that ye may look upon it and remember all the commandments of the Lord, and do them, and that ye go not about after your own heart and your own eyes which ye use to go astray."\(^{104}\)

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\(^{102}\) Cohn-Sherbok, The Blackwell Dictionary of Judaica (1999), 86. "Charity (tzedakah), The rabbis stipulated that the highest form of charity is that in which the donor and recipient are unknown to one another."

\(^{103}\) Numbers 15:38-39, Part of the Shema prayer recited three times daily.

\(^{104}\) Numbers: 15:37-41.
E. The Builder’s Code

All the proportions of the Tabernacle and the Outer Court were established with a small vocabulary of forms based on the square and its half square. So also were the proportions of its primary appurtenances: its two altars, the Table of Showbread, and the Menorah. These all were derived from the square and its cube (the Holy of Holies), the double-square rectangle (the Outer Court), the square and a half (the Ark of the Covenant or Tablets), and the man-shaped triple cube room (Tent of Meeting).

The Ark of the Tablets, also called the Ark of the Covenant, was also built by these shapes and proportions. The Ark of the Covenant and the Tablets therein constitute in themselves the entire body of primary shapes and proportions from which all the elements of the complex, the Tabernacle (Mishkan), its Outer Court, altars, Table of Showbread and seven-branched lamps derive their proportions.

This small vocabulary of four forms, their ingenious proportional relationships, and their universal effect on the human psyche have extended their influence upon the bedrock forms of traditional Jewish liturgy. This includes the shape of the Torah scrolls and their written sections, the number of lines per section and the spaces between the sections.

The triangle and pyramid, so prominent in the Egyptian culture, has no place in the entire liturgy and art forms of Jewish civilization. Only the ramp by which the High Priest ascended to the Altar of Sacrifice is an exception, and this is a right triangle directly derived from the ramps used in Egyptian temples for ascent to the sacred altars and rooms of their tombs and temples. It is not the standard equilateral triangle of slanting sides that form an Egyptian pyramid.

The association of the pyramid with sun-worship, tombs, and cults of the dead precluded their use in the Hebraic pantheon of forms. Additionally, the triangle’s associations with fertility both of female (pointing downward) and male (pointing upward) genitalia going back far into prehistory and continuing into the early civilizations made it unsuitable as a holy form.
Where do these shapes and proportions come from and what exactly is their hold upon our psyche and why? To begin our understanding, we can narrow the three basic forms or shapes down to one: the square or cube, from which all the others can be derived.

F. Square and Cube: the Father of Forms

Made up of four right angles connected by straight lines, the square, and its derivative the cube is the most rigidly balanced shape imaginable. Furthermore, the square is an abstract conception of the human imagination, as it does not occur in geometric perfection anywhere in nature. The square, or the perfect balancing of right angles, takes place only in the mind as an abstraction. Other geometric forms such as triangles, rectangles, circles, and spheres have close analogies in nature such as in crystalline rocks and other inorganic forms. But when we come upon a perfect square, or any derivative thereof, we know that we are in the presence of something outside of nature and extraneous to it in a fundamental way. It is their perfection in squareness and not merely their scale that is responsible for the awesomeness of the great pyramids of Egypt.

The square relates to the number four as a visual representation. Four was sacred to Egyptian culture. The sacrosanctness of four may relate directly to the Hebrew use of the Tetragrammaton, the four-consonant word (Yahweh) as representative of the name of God. Considering that Hebrew words have their root in three consonants, the use of four consonants for this most significant name may have its roots in the same numerical connotation of four, which was sacred to the very Egyptian society in which Israel was held bondage. Both the number four and its visual metaphor, the square, were symbolic of eternity to both Egyptian and Hebrew civilizations at the time of the Exodus.

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105 Giedion, The Eternal Present (1957), 348. The symbolism of the square.
The location of the sacred objects within the Tabernacle sets up a pleasing spatial relationship that is highly aesthetic. The entrance is along a line at its center point which is also the center point of the entire Tabernacle structure. The Altar of Incense occurs at the midpoint of a square inside the Holy Place: a configuration that recalls the proportion of the Outer Court, a rectangle divisible into two squares. The altar itself is a square ("foursquare"). The Menorah and Table of Showbread are in the second square midway between the Altar of Incense and the veil of the Holy of Holies but to the sides. At the center of the Holy of Holies square is the rectangular Ark of the Covenant.

Fig. 10. Location of Sacred Objects in the Tabernacle's Tent of Meeting

The location of the sacred objects within the Tabernacle sets up a pleasing spatial relationship that is highly aesthetic. The entrance is along a line at its center point which is also the center point of the entire Tabernacle structure. The Altar of Incense occurs at the midpoint of a square inside the Holy Place: a configuration that recalls the proportion of the Outer Court, a rectangle divisible into two squares. The altar itself is a square ("foursquare"). The Menorah and Table of Showbread are in the second square midway between the Altar of Incense and the veil of the Holy of Holies but to the sides. At the center of the Holy of Holies square is the rectangular Ark of the Covenant.
Fig. 11. Ark, Altar, Lamp and Table: Spatial –Symbolic Relationships to Each Other and to the Tent of Meeting
We now have the answer to our two questions. The Tabernacle shapes and their proportions were derived from Egypt by the Hebrews of Exodus. There is no question that the Hebrews, being slaves, and Moses, being an adopted prince, had intimate knowledge of all manner of Egyptian art and workmanship and the aesthetic-religious principles that undergirded the unequaled artistry. Wherever we overlay a concept embodied in the structures of the Tabernacle upon its Egyptian predecessor, we find a perfect concordance of shape to meaning and meaning to shape.

G. The Shape of Eternity

The square and cube are aesthetically metaphorical for the concept of eternity, and that is why the cube form was chosen for the Holy of Holies of the Tabernacle, just as previously the cube-shaped room was the Holy of Holies in Egyptian temples and tombs such as Queen Hatshepsut’s Mortuary Temple. It is why the bases of pyramids were laid out in as nearly a perfect square as was then possible to physically execute. It is also why pyramid-tomb, Temple and Tabernacle had their sides oriented to the cardinal points, the most sacred of which pointed west towards the setting sun. Egyptian altars, like those of the Tabernacle, were “foursquare” and reached by ramps which were enlarged right triangles.

The double-square Outer Court of the Tabernacle is a portable accommodation of the Hypostle Hall or pillared courtyard of the Egyptian Temple. The Outer Court’s slightly higher entrance, or vestibule curtain at its eastern end, is likely derived from the great pylon gateways of Egyptian temples.

As to the shape of the Tent of Meeting, its parallel to Egyptian liturgical art is most interesting and significant. The elongated shape of the Tent of Meeting, the main sanctuary of the Tabernacle complex is unmistakably anthropomorphic. Its 10 by 10 by 30 cu proportion is suggestive of a coffin in which a human body resides. Nut, the Egyptian goddess of the sky is painted on

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106 Exodus 2:5-10.
the lid of the sarcophagus of Seti in his mortuary temple at Abydos. "Nut swallows the sun each evening and gives birth to it each morning. Eternally between her mouth and her vulva, it undergoes a daily renewal of life..."107

The elongated figure of Nut outstretched across the sky is seen often in Egyptian temple imagery. In the above example, her painted image hovers, like the heavens, above the body of the Pharaoh with whom she was here interred. It suggests a connection to the Israelite Tent of Meeting in terms of structure and religious purpose. Though vastly changed in meaning and use, and devoid of all imagery, the Israelite Tent of Meeting offers a pathway narrow and long from east to west to the daily, divine renewal of life.

For the Egyptian, death, not life, was perceived as the gateway to eternity. The Hebrew religion reverses this concept, determined to eliminate the death cults of paganism. But in order to bring such a deeply ingrained belief system to an end, the Egyptian metaphors had to be used and modified. The forms and materials were familiar to the Israelites and would have been held in awe by them. By careful choices of deflecting attention away from forms while at the same time attracting attention to them, the Tabernacle’s builders prevented the natural reverence for the aesthetic from turning into idolatry or object worship. In doing so they laid the groundwork for all future rabbinical decisions on what is and is not permissible in Jewish liturgical art and customs of worship.

H. Egypt’s Human Proportion: The Tabernacle’s Moral Order

The body shape of the Tent of Meeting with its length divisible into three square spaces was most probably derived from the Egyptian “square grid: used to

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107 Giedion, The Eternal Present (1957), 130-134.
The rim (crown) along the leg supports and seat were also made around the top of the Ark and the Table of Showbread.

These rectangles continue to subdivide into a golden section rectangle.

Carved cedar chair from Tut’s Tomb

Fig. 12. Concordance of King Tut’s Throne and Mercy Seat of the Ark of the Covenant

King Tutankhamen’s wooden throne (1350 B.C.E.) is as rich in proportion as in ornament. The spaces between the leg supports, armrests, and from the armrests to the top of the chair back are equidistant and divisible into smaller squares. The geometrically and ornamentally rich throne of King Tut exhibits virtually the entire code of the Tabernacle and Ark as the throne of God or God seat. The Mercy Seat above the Ark is enfolded in wings as are the throne armrests. The combination of square proportions, the divisions into golden section rectangles (implied rather than explicit in Tut’s throne) and the connections of all these to the person of Pharaoh, regarded as god incarnate in Egypt, hints strongly of Egyptian royal furnishings being the origin of forms for the Tabernacle.
determine... the absolute proportions of the human body."¹⁰⁸ "The units of measure upon which all proportions were based were the hand and arm: that part of the body which produces and creates things."¹⁰⁹ Based upon the square grid, "the human body is the old canon measured 18 squares; i.e., 18 fists or 4 cu or 6 ft (a foot comprises 3 squares)..."¹¹⁰

The grid produces a width at the shoulders equal to two human feet, or six squares of the grid to a height of eighteen squares. Drawn by inches (or counted from the grid), this produces a rectangle 4 ¾ inches long and 1 ½ inches wide— a long rectangle divisible into three equal squares, the same as the Tent of Meeting in the Tabernacle Complex.

"The outstretched hand and arm was another favored gesture throughout Egyptian art. From this was derived the decisive linear measurement: the cubit."¹¹¹ This favored Egyptian gestural image from which derives the cubit acquires its moral dimention as it enters the Hebrew bible (Torah). In its image form as a symbole of divine power in Egypt, it would have been seen by generations of Israelites. It suddenly becomes the favored poetic metaphor of Israel’s God.

And we cried unto the Lord, the God of our fathers, and the Lord heard our voice, and saw our affliction, and our toil, and our oppression. And the Lord brought us forth out of Egypt with a mighty hand and with an outstretched arm, and with great terribleness, and with signs and wonders.¹¹²

For whatever aesthetic reasons the Tent of Meeting might otherwise have had for its figurative proportion, the metaphoric image of Israel’s redeeming God was also there.

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¹⁰⁸ Giedion, The Eternal Present (1957), 487, illustration 313.
¹⁰⁹ Giedion, The Eternal Present (1957), 485.
¹¹⁰ Giedion, The Eternal Present (1957), 486 ("foot, feet" means human foot).
¹¹¹ Giedion, The Eternal Present (1957), 486.
¹¹² Deuteronomy 26:7-8.
I. The Golden Section Rectangle

Another most important variation upon the square module is the square and one-half. A prime example of this is the 1 1/2 cu by 2 1/2 cu measure of the Ark of the Covenant. Using a 20-in cubit, this measurement yields a box 30 in in height and width by 50 in in length. The three-to-five ratio in this measurement corresponds to a golden section rectangle. It is the same ratio seen in a common three-by-five inch index card.

It must be understood that the Ark was carried with its long or lengthwise dimension forward, allowing over 4 ft of distance between its bearers. Also, the poles or staves were at the bottom of the Ark so that when it was borne in procession, it was raised up above the heads of its bearers, making it easier to carry but also placing it well above the people. King David’s placing the Ark on an oxcart was a disrespectful mode of transport and must be considered part of the reason for his subsequent difficulties.

And they set the Ark of God upon a new cart,... And when they came to the threshing floor of Nacon, Uzzah put forth his hand to the Ark of God, and took hold of it, for the oxen stumbled. And the anger of the Lord was kindled against Uzzah; and God smote him there for his error, and there he died by the Ark of God.

So sacred an object must not be transported like goods of commerce, but like royalty. It must be borne upon the shoulders of servants, and like the patriarch Jacob borne to his final resting place upon the shoulders of his sons.

The measure of a square plus one-half of that square creates a golden section rectangle, the shape of a harmonious proportion which is ever pleasing to the viewer or, as when used in architecture, to the inhabitants.

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113 Exodus 25:10-22.
114 Second Samuel 6:2-3 and 6-7.
The addition of the Ark cover and Cherubs reversed the front and side proportions of the Ark of the Tablets. The result is that the Ark presented a vertical view from its sides and a horizontal view front and back that results in a six square front-side ratio (a golden section rectangle).

The square and golden section rectangle were later used in classical Greek architecture. The exact proportion of the Ark of the Covenant, which must include the Cherubim of the Ark Cover, occurs once again in a larger architectural scale in the elegant "Porch of the Maidens" on the Acropolis in Athens, some 800 years after the erection of the Tabernacle. It is now known that the ancient Egyptians knew and used the golden section and that the Greeks learned of it from the Egyptians. A shard engraved with the Pythagorean Theorem has been found in the
Near East, dated at 1600 B.C.E., well before even the earliest estimates of the Exodus at around 1500 B.C.E.\(^\text{116}\)

**J. The Expressive Use of Forms**

The use, interplay, and counterpoint of these four basic shapes (the square-cube, the double square, the square and one-half, and the triple square) gave meaning and emphasis to the Tabernacle, which was clearly understood by the people. As in classical architecture or in any great architecture, there is nothing random, casual, or gratuitous in any of the proportions, structures, colors, or indeed, any elements of the structure of the Tabernacle. One must regard it in its aesthetic structure to be perfect in form. In it's relation of form to meaning, it is equal to any of the greatest artistic works of ancient Egypt or Greece. If this is the case and if the Tabernacle's influence is indeed as pervasive as here stated, then Israel as a nation began not as a primitive band of nomads, but as a classical civilization with as complete a repertoire of expressive and aesthetic forms and objectively coherent canons of beauty as any of the great civilizations of history.

The square-cube shape, while not as aesthetically pleasing as the rectangle, nevertheless is the most arresting to human attention. Man's abstract ability to distinguish the geometric from the organic makes possible our ability to create and to feel the music of the beautifully proportioned and respond to the inaudible speech of aesthetically measured spaces. An animal can know its turf or the extent of its hunting ground but no being but man will respond in awe to the space-form complexes engendered by geometric abstraction. Animal life from the cockroach, the dog, and to the ape, is unaware of these and will carry on all their biological functions in these spaces as irreverently and as instinctively as in their wild habitat.

\(^{116}\) Giedion, *The Eternal Present* (1957), 473.
The double square and the square and one-half give us geometry but with a pleasing sense of relief as they are aesthetically relaxing shapes. Strangest of all is the triple cube or “man-shape,” not only because it appears to be derived from the human body, but also because it is faintly reminiscent of a human form if we imagine that form reduced to its abstract essence being similar to a coffin. The triple cube form is not as geometrically arresting as the square, nor as aesthetically harmonious as the double square and square and one-half. Indeed, its power over us lies precisely in the fact that it seems to hover between the geometric and the organic, always calling to our subconscious its likeness to our
own bipedal form and the elongated body shape of *Homo sapiens*. The Egyptians believed their boats also to be living things. Most likely then, their temples, tombs, pyramids, and statues were also thought to be living beings. This is not necessarily a notion of superstition or even idolatry. Aesthetically there is a life enhancement quality in art to use the famous art connoisseur, Bernard Berenson’s phrase. It is created in the well-crafted, harmonious, or expressive blending of forms, spaces, and colors. Superstition and idolatry enter the mix only because they ascribe false and nonexistent qualities and powers to forms of art.

To the ancient mind, geometry and artistic workmanship were reflections of the divine will which governs the universe. This belief was real to the ancients and the ancient Hebrews. It was known to prophet and priest as well as to the common people as it was to all other high, ancient civilizations. The arts were God’s laws revealed in forms that man could understand. The Greeks called song or melody “truth.” To the Hebrews, the Creation becomes God’s primary avenue of revelation.

**K. The Modern Equivalents of the Ancient Forms**

As to the proof that the effect of these forms upon human beings is both universal and eternal, we only have to look about us and we shall see them everywhere in use. Their purposes are sometimes utilitarian, sometimes profane and vulgar, but alas, almost never divine.

For instance, the shapes of traffic signs are employed virtually in order of rank in which they appear in the Tabernacle and in ancient Egypt. Paying attention to traffic signs can become a religious experience. There is more in them than their text. Warning signs are square, sometimes supported at the corner rather than side, forming a diamond, but nevertheless still a square or double pyramid. Speed limit and school zone signs are triple squares. Sometimes we see combinations: i.e. the triple square with three circles (red, yellow, and green) upright within a square diamond. In the traditional vertically suspended tri-
colored traffic light, we see a reproduction of the Holy Place itself with its tri-square man-shape derived from the ancient coffin shape of the Holy Place.

Our gas stations also vie for our attention with exactly the same forms. Exxon is written across a double square divided by colors into two oblong rectangles, the upper one which bears the corporate name, being the triple-square man-shape. Most ironic of all and perhaps the most fitting commentary on our particular era is the “Self Serve” sign with the word “Self” inscribed upon a perfect square, the symbol of eternity and divinity, the Holies of Holies to the ancient world. All the gas stations use these same shapes for the same words. Gasoline prices and service may vary, but, like divinity, the geometry of sales is one.

On a smaller scale, we can examine a modern covenantal sign, our credit cards. They are all of a single size and all golden section rectangles of a square and one-half like the Ark of the Covenant and ancient ossuaries, the 1-1/2 cube-sized stone coffins used by ancients to bury the bones of their dead. Such an ossuary of wood may have held the bones of Joseph on its forty-year journey back to Canaan. The same Hebrew word, *Aron*, is used both for the “ark” of Joseph and the sacred Ark of the Tablets.

Or consider cash, the dollar bill will still measure out to the triple square man-shape and continue to do so irrespective of inflation. One reason the dollar looks like serious money is because it has this serious shape. Compare your dollar to the silly looking Monopoly-size money of many other countries. On a scale in between our money, credit cards, and the huge gas station signs, a trip to the supermarket can be spiritually enlightening.

The modern designer confronts the problem of arresting our attention with ancient yet aesthetically efficient containers. You will rarely see a product packaged in a triple square box though milk and orange juice, life givers both, come close to the triple cube. Cereals hover at the square and one-half or near the double square super-saver size, both to arrest and grab our attention. Cigarettes in the cardboard containers are textbook lessons in golden section design, their flip
tops opening precisely at the golden section points of their length-to-width ratios. Certain spice brands come in golden section rectangular tins or else in the perfect squares of eternity, subliminally emphasizing perhaps the use of spices to preserve foods for a long time if not quite forever.

Check the height to width to depth ratios of your favorite dresser, table, or armoire. From here the trail is endless, for everything man-made is designed for arresting the attention. Only a few shapes work best, and those who are educated in design know what they are, either by trained instinct or by conscious knowledge.

In an age that everywhere scorns the holy, an alert sensibility can yet perceive that they are surrounded with holiness, for the majestic forms that guided the birth of monotheism proliferate around us disguised as fallen angels in service to a blind and spiritually wounded world.

L. Crystalline Formations

It is in the formation of crystals that we can see nature's prototype of the geometric vocabulary. Whether enlarged or shattered into bits, the crystal retains its identifying characteristic form, an interesting metaphor for the unity of the moral laws, which shape both individuals and communal life. The geometric form, like the written word, letter or number, likewise retains its meaning whether printed small or large; a phenomenon opposite that of organic or living matter. For instance, a mouse the size of an elephant is frightening, while an elephant as small as a mouse loses all majesty.

It is in this opposition of the crystalline versus the organic that the ancient mind, including prehistoric man, would have seen a metaphor: a tension, juncture, or meeting point of life and death with eternity. The organic changes and disintegrates as opposed to that which retains its state of perfection.

In choosing the pyramid rising from its square base, the Egyptians selected the most architecturally stable of forms which are seen in crystalline formation to represent eternity. This form with its square base, giving rise to triangular planes,
contains also the entire geometric vocabulary of the Egyptian tomb and temple architecture.

In the amethyst stone formation, we see a crystalline formation of the square forming a double pyramid. This amethyst stone occurs as the third stone in the third row of the breastplate of the High Priest (the Ephod).\textsuperscript{117} Like other stones used in the breastplate, the amethyst has the property of letting light pass through it. It has a white, quartz-like coloration and a purple color at the tip of its pyramid formation. Doubtless there are differently colored amethysts; its crystalline formation makes it most important to this thesis.

The stones used in the Ephod or breastplate of the High Priest represented each of the twelve tribes of Israel. Their settings are equal in size, shape, and spacing, but the stones themselves are uncut. Only at their surfaces were the stones brought to a polish to reveal their natural coloration and reflect light. Crystal form and color being of equal importance, it should be noted that the stones used in the Ephod are a mixture of crystalline stones and non-crystal or swirling, free-flowing formations such as the agate, which is the second stone appearing in the third row of the Ephod.\textsuperscript{118}

The significance of this mix of translucent crystalline and more opaque free-flowing designs as well as the actual color in the stones selected for the Ephod can only be guessed at, but it was not likely to have been a result of random choice anymore than anything else connected with the Tabernacle or with ancient art in general. In the Israel Museum of Art and History in Jerusalem, there are Egyptian scarabs and other sacred symbols of ancient Egypt carved from these same semi-precious stones used in the Ephod.

The foundations of our modern science and technology were laid down from works of art such as these that combined artistic imagination with empirical observation and craft skill. The mentality of art is precisely what is now most needed to appreciate such analogies as described above. It is the symbol-forming

\textsuperscript{117} Exodus 28: 15-20.
\textsuperscript{118} Exodus 28:19.
mentality, moving as it does towards wholeness, syntheses, and layered meanings that can lead us back to a rational or reality-based sense of the divine dimension. We are otherwise swinging between the two poles of nonsensical magic: the attribution of power where none exists, a characteristic of the pagan mentality even today, or that most prevalent rationalism which attributes creation only to mechanical force and views man and nature to be purely the result of accidental and purposeless power.

Even today, we can appreciate the beauty of metaphor given us by that opposition of the crystalline, non-living mineral substance with living, animate organisms. As our science probes ever deeper into the origin of life from inorganic matter, we may again find ourselves with a view of life closer to that uncertainty of our prehistoric and ancient forbears than to our nineteenth century pioneers of rationalism and science.

This very mystery of the conjunction between the organic and crystalline, between transient life and eternity, may hold a key to the vast significance of the golden section which is a mathematical irregular. It defies symmetry and the geometric, yet is derived by mathematical procedure, a kind of reversal of the geometric or symmetrical form arrived at by the organic, elbow-hand of man, the royal cubit of ancient Egypt. It has a connection with the number seven. Found in living things such as in the chambered nautilus, the golden section can be derived from the crystalline cube, visually, audibly (in music), and numerically. The golden section connotes harmony or completeness, the prerequisites of perfection. Its analogy to gold, or as the Greeks called it, the golden mean, is most correct.

M. The Chambered Nautilus

Perhaps it is fitting to end the geometric journey with the chambered nautilus, a sea creature whose spiral shell is one of the most beautiful natural forms. A perfect golden section spiral forms its outside. Inside, the chambers of its growth for which it is named, are divisible into the square and one half spatial dimensions, the same golden section rectangle of which the Tabernacle complex
and the Ark of Covenant were formed. Now the chambered nautilus is also one of the oldest creatures, having changed not at all from its fossilized ancestors, save in one respect. The chambers of the fossilized ancestor are closer together, therefore more numerous than its modern descendants.

These chambers develop by the monthly lunar cycles, one cycle to one more chamber. Scientists studying this phenomenon concluded that the only explanation for the fossil nautilus chambers could be that the moon came around sooner in those early times; in other words, the months were shorter then. This means that everything in the cosmos was closer together, and has been growing farther apart. The conclusion was that this gives physical proof supporting Einstein’s theory of an expanding universe. From truth comes beauty and from beauty, understanding.

In this ancient creature, a living being was mated to a geometric perfection. Its wandering, organic element, its boneless flesh perishes in a day. But its measured spiral castle, its inward staircase unwinding in perfect numbered order passes not away.
Chapter 6
The Fleeting Colors of Eternity

From the rainbow in Genesis to the Tabernacle curtains and priestly robes in Exodus, color connotes covenant. Even the "coat of many colors" in the Joseph story, which so aroused the jealousy of Joseph's brothers, is known to have signified Joseph as Jacob's favorite. The covenantal use of color predates the Bible and the choices of color are bright. In scripture, the choices of color are always bright, energetic, and relate to the sky or heavens but not to the earth. The energized colors seen in the mating season of animals, birds, insects, and plants become God's heavenly metaphor of covenant with mankind.

The evanescent, fleeting attribute of these bright, heavenly colors, the heavenly triad of blue, purple, and scarlet (with threads of gold interwoven) while scarce on earth are expansive, yet formless in the sky. They become metaphoric of God's fleeting encounters with Israel's patriarchs and prophets. In contrast, the earth colors, unseen in the heavens, save in dust storms or drought when earth overtakes Heaven, are the colors of the stony expanses of earth and mountains, the material of graven images and the iron tools used to make them.

A. Color as Covenant: A Biblical Theory of Color

The first mention of color in the Bible is the rainbow: a symbol of God's covenant with Noah to never again destroy the earth by flood. The rainbow combines the colors of both earth and sky. Yellow and light green are colors of
growing plants and are seen only rarely in the sky. The colors of earth are rare in the sky but significant; pale green in a cloudy sky usually indicates ice; dark green means damaging hail. Blue, purple, scarlet and gold are confined mainly to the heavens. When seen on earth as in flowers, birds, and insects, they are confined to the most fleeting of forms or, in the case of wildflowers, to the briefest expanses of time. Only in the rainbow are the colors of earth and Heaven, united in peace, and span the heaven as if to say that never again will the heavens be turned so utterly against the earth as to disrupt the seasons and day and night.\textsuperscript{119}

In the story of Joseph, color is mentioned again in Jacob’s bestowing the “coat of many colors” upon Joseph, his most favored son.\textsuperscript{120} This sign of favor and lordship explains the jealousy of Joseph’s elder brothers. We know today that such coats were in those times a symbol of rank and power. They were titles of inheritance, of covenant.

The last and most detailed mention of color in the Torah begins with Exodus 25:3-8. “And this is the offering which ye shall take of them: gold and silver, and brass, and blue and purple and scarlet... and rams’ skins dyed red” Along with its catalog of materials, this mention of color also proves to be covenantal. God now chose Israel to be His own people, set apart to serve Him.

Blue, purple, and scarlet are the fleeting colors of eternity. Blue, purple, and scarlet echo colors seen always in the sky, especially in morning and evening, the times specified for prayers. These colors represent great energy as they interact with one another. Blue especially is an ever-present reassurance of God’s presence. Interacting with white clouds and golden sunbeams, this sacred triad echoes all the colors used in the Tabernacle and its priestly ritual. Evanescent-like veils and without coherent form, heaven’s colors are a perfect symbol of the presence of Israel’s God and His covenant with Israel.

\textsuperscript{119} Genesis 8:22.
\textsuperscript{120} Genesis 37:3-4, 23-24.
B. The Covenantal Colors: Blue, Purple, and Scarlet

If color is symbolic of covenant in the Hebraic liturgy, then the logical question from an artistic or aesthetic view is: why these colors?

Before we answer, let us think back to the rainbow. Its seven spectrum colors combine the blues, purples, and red-orange of the heavens with colors of the ripening things of the earth in yellows, yellow greens, and deep green, the plants upon which earthly life depends. As stated above, greens and yellow greens are rarely seen in skies except in the most threatening weather conditions. Nor are large masses of blues, purples, and reds seen on the ground except in the most delicate of plants, and those only for a short duration. In the sky or heaven, the system is reversed. Blues, purples, and red are common over vast expanses of both time and space, whereas greens and yellow greens are seen rarely. In the rainbow, we witness a harmonious combination of heavenly and earthly color, symbolizing that henceforth there will be a unity or harmonic response between the two. Never again will heaven wage a war of total annihilation against earthly life.

The shape of the rainbow is that of a fully drawn bow. It represents a mighty bow of the light of God who reached down with his outstretched arm and, in a gesture of peace, touches the ends of His bow down to the ground as did the Native Americans of the Plains when they made peace. Maimonides makes a similar analogy to the rainbow in his writing.

Nature reserves the brightest colors for its most delicate or short-lived or smaller forms, equally so for the animate and inanimate. Flowers, plants, birds, butterflies, sunrises, and sunsets are great examples: always the more spectacular the array of colors, the shorter their duration. This is particularly true of the rainbow, the largest combination of all colors and yet the most fleeting, depending as much on the angle of view as on the slightest shift of cloud mass or light. The larger and more permanent forms oppositely are the least bright in color: to name a few, the relatively long-lived elephant, the trunks of trees as opposed to their changing foliage, the long-revered and worshipped bovine, also dun colored and
huge and the great rock masses of mountain ranges. Life’s dormant forms such as eggs and seeds are also a duller range of colors.

The rainbow is the most fleeting of signs. The brighter the color, the more easily it fades away. For Israel, whose every metaphor has a moral meaning, there is a message. The glorious light of God’s covenant can never be taken for granted. He doesn’t reveal himself in a stone idol but in fleeting gestures of short duration. Even the parting of the Red Sea lasted only a short time, and so to, the revelations at Sinai. Unless Israel keeps the commandments of its God as revealed in His Torah, the light of the covenant will flicker out in Israel.

Herein lies an essential difference between idolatry and Israel’s moral monotheism that can explain at least one aspect of the temptation of idolatry to ancient Israel as well as to Western civilization today. Idols are made of static materials; their essential sign is of no visible change. They are unaffected by human beliefs or acts, exactly as earthly rulers and civilizations like to appear. But the high moral standard demanded by biblical command is like the beautiful and living and the energetic flowering colors, a stance difficult to maintain: fleeting if not given constant attention and care. Man must be aware of his angle of vision, lest he lose sight of God’s sign. Man must put himself in the right place in his heart before he can find God. The metaphor of angle and direction, also part of the vocabulary of the builder, is used in Israel’s holiest prayer, the Shema to counsel against straying from God’s path.

... and that they put with the fringe of each corner a thread of blue. ...And it shall be unto you for a fringe, that ye may look upon it and remember all the commandments and do them; and that ye go not about after your own heart and your own eyes after which ye use to go astray...  

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Sin can be visualized biblically as beginning in a slight miscalculation of angle from the true, which then becomes more distant, greater in scope as the person continues to follow the guesswork of his own eyes.

121 Numbers 15:38-41.
Blue, purple, and scarlet, referred to here as the heavenly triad, are in some measure ever-present in the sky, but only fleetingly on the earth. It is noteworthy that there are few, if any idolatrous images made in the likeness of the brightly colored natural forms mentioned earlier. There are no mighty gods in the form of flowers or moths. The bird and snake idols are notably of the more powerful and duller-colored hawk variety and the most venomous snakes whose colors blend into the earth. Power worship is central to idol worship, whereas light becomes the God metaphor of Israel.

Aesthetically, blue, purple, and scarlet are the most energized of colors. If we add to this triad the other sky colors, the golden yellows and whites, we have before us the entire color spectrum of the Tabernacle, its furniture, utensils, and the priestly robes, as well as its gold-threaded curtains of blue, purple, and scarlet. It is these colors which, catching the first light of dawn, the Tabernacle reflected back to heaven and to all Israel throughout each day, from sunrise to sunset. For 487 years, its simple yet majestically ordered geometry formed a jewel, “a piece of heaven fallen to earth.”

In the fourth year was the foundation of the house of the Lord laid... And in the eleventh year was the house finished throughout all the parts thereof...so he was seven years in building it.123

From First Kings 6:1 “…in the four hundred and eightieth year after the children of Israel were come out of Egypt... he (Solomon) began to build the house of the Lord.” By adding 480 years from First Kings 6:1 and 7 years from First Kings 6:38, I arrived at the sum of 487 years that the Tabernacle served as the shrine of Israel. One could deduct one year to allow for the building of the Tabernacle.

The colors not chosen for the Tabernacle are also of a metaphorical importance. Greens and yellow greens are all of the earth and have definite forms. These forms of nature’s living things lend themselves to image worship. Idolatry

122 First Kings 6:1, and 37-38.
123 First Kings 6:37-38.
favors distinctive, literal forms that are frontal to the viewer. Certain crops such as corn are of long standing in man's idolatrous pantheon.

The heavenly triad is an ever-changing, fleeting, evanescent, and formless phenomenon. None of the rain gods of ancient civilizations were cloud-shaped. Evanescence, as stated before, goes against the grain of power-worshipping idolatry.

Now we can piece together the Tabernacle's aesthetic use of color and weave it into the fabric of Israel's introduction of monotheism into an idolatrous world. For nearly five hundred years, this little structure, the Tabernacle with its attendant rituals, was the only lamp of moral monotheism in all the earth. At the time of Exodus, God's candle is lit amidst the darkness of human civilization.

Imagine for a moment what it must have been like for the Israelites. They were alone now in a desert wilderness, coming out from four hundred years of the awesome and majestic idolatry of Egypt. They are told to abandon all other gods they had known and to worship exclusively an unseeable, unconceivable God. No other people had ever had such a commandment laid down upon them. How reassuring could the two stone tablets that Moses brought down be with only words inscribed on them? Surely God and Moses would need something more to comfort that first generation made up not of patriarchs and prophets, but of ordinary people: herdsmen and farmers, builders, and artisans, who were now to worship an invisible God forever.

Evening and morning, at dusk and dawn (Erev ba boker, Hebrew), those times when Israel is commanded to pray, are when the heavenly triad is the most majestic and wonderful; a sign of comfort and truth that the formless Holy One is ever-present and near.

C. Entering the Tent: Light and Reflection Inside the Holy Place

The light inside the Holy Place would have been a light gray-blue, a cool light, almost neutral as at sunrise and at dusk before the sun goes down. This gray-blue atmosphere would also serve to cool the interior. Throughout the day,
this light waxed and waned but always formed the excellent background for the
dazzling radiance of the curtains, veils, Menorah; and the gold, silver, and brass
ritual objects; and the white linen robe and the blue and gold threaded over-
garments of the High Priest. The Tabernacle’s east to westerly orientation, across
its entire length, would give its interior light day-long stability and neutrality
similar to an artist’s studio with a northern skylight or window while at the same
time allow subtle changes of light as the sun passed over throughout the long
desert days. The translucency of the curtains themselves caused a fine
intermixture of blues, purples, and scarlets to occur as the bright desert sun passed
directly overhead over the length of the Tabernacle. This illumination would
create a cool, gray mist of light: a light exactly opposite in feeling from the warm,
hot, or blazing yellow light outside.

This light and the radiant celestial colors it reflected is of a different
character entirely from the progression into darkness of Egyptian tombs but in
their temples it very well might have been a quality. 124

In modern houses of worship, the radiant colors of stained glass windows
reflect their colors upon worshippers standing near them, wrapped in their white
talits. The colors of the curtains and veils acted in the desert sun very much like
stained glass and would also have reflected their heavenly colors upon the white
vestments of the priests, and upon their hands and faces and upon the furnishings.

The curtains and veils gathered, emitted, and also reflected the light of
their colored threads. These wonderfully made curtains, laced with threads of real
gold, reacted to light as a combination of shades and stained glass, emitting and
reflecting light in infinite variation and subtle splendor. Their auras must have
moved about the Tabernacle interior in various, and perhaps predetermined
patterns, going at some point to the Altar of Incense, the Table of Showbread, and
the Holy of Holies. The effect would have been like swimming underwater in a

124 "...from the beginning to the end, the Egyptians felt the need of a dimly lit, half-dark
space." Giedion, The Eternal Present (1957), 510.
crystalline pool, seeing flashes of sunlight illuminating iridescent plants, minerals, and all manner of living things.\(^{125}\)

Like glowing embers and coals that wax and wane in brightness from every breeze, so the curtains of the Tabernacle and the veils emitted their colored light in echo with the strength of the Sun as it waxed and waned throughout the day.

The blue, purple, scarlet, and gold threaded curtains above the golden altar, Menorah, showbread, Ark, and vessels would generate a rainbow effect in the bright desert light. Considering that they were of the finest materials as well as workmanship, the sight would be of an iridescence of unimaginable vividness to anyone unfamiliar with fine hand-woven and dyed materials and beaten gold work. Cool yellows and greens of the rainbow, the invisible complements of the actual reds, blues, purples, and warm golds would vibrate before the viewer. This would not be in the crude manner of Hollywood theatrics, but in the mellow and rich manner of true art: a gentle yet dazzling reminder of God's heavenly covenantal symbol. As for the white plaited and patterned curtains surrounding the Outer Court, their effect would have been confined to dazzling flashes of light and the complimentary blue of their shadows. Being constantly in motion from any breeze in the desert, these outer curtains would present a kaleidoscopic display of endless change in the play of light across their richly patterned surfaces. The impressionist paintings of Monet, who was obsessed with the play of light over forms, are a good metaphor of the effect if one can imagine oneself actually inside his paintings.

\[D. \text{ The Geometry of the Curtains: Their Transmission of Colored Light}\]

It is inconceivable that a windowless structure like the Holy Place could function without light and circulating air. From all that we know and understand

\(^{125}\) Steinberg, *Mishkan and Holy Garments* (1991), 53. The Rabbis of the Talmud speculate that the veils and curtains of the Tabernacle complex were embroidered on both sides with images of animals, both earth and sea dwelling. For the Outer Court, see Exodus 27:9.
about traditional Jewish ritual, the use of light must also have been a central factor in the operation of the Tabernacle and its attendant rituals. The darkened inner chamber with its tomb-like effect of mystery associated with the death and

![Diagram of Tabernacle with labels for Sealskin (Badger), Red Ram Skin, Goat Hair Fine Linen, Shade, Laver producing cooling effect, and Altar of Sacrifice.]

**Fig. 15. Placement of Tabernacle Curtains During the Encampment of Israel.** Protection, cooling and light are provided using the layered construction methods of Bedouin tents, while retaining and extending the geometry of the Tabernacle into the surrounding space both outward and upward. The west side of the Tabernacle was 20 cu (33 ft approximately) away from the veil of the Outer Court. The largest curtain (rams hide) stretched would extend over the full length and width of the Tent of Meeting as it was 30 cu long and 10 cu wide, the same dimensions as the Tent of Meeting. The other eleven curtains were hung lengthwise over the width of the Tent of Meeting.
resurrection of the image-gods of Egypt is explicitly rejected in every way by Judaism and is expressed in the structure and use of the Tabernacle. Light, the first of God’s creations, is the metaphoric operative engine of Jewish ritual, prayer, and literature.¹

How then did the Tabernacle let light in? That the four layers of curtains¹²⁶ (fine-twined linen, goat’s hair, ram skin dyed red, and sealskin¹²⁷) lying flat one atop the other could somehow allow the admittance of light and cooled air is impossible. In the heat of the desert, this would create only the most stifling pitch-dark dungeon, very like being in a windowless attic in the heat of summer.

A further question arises as to what was the purpose of these curtain layers? The first purpose is obviously decorative and the second is protective: to shield the Tabernacle from the harsh natural elements.

The genius of the ancient world is most clearly manifest in the demonstrated ability to solve its technological problems by means of design through art. Inversely, our modern civilizations use mechanics and costly sources of energy to make possible a level of physical comfort often with a minimum of art and fine design.

The unified vision of the ancient mind made possible the solution to complex, multifaceted problems by simple ideas ingeniously applied. A mind that does not separate everything into compartments is capable of this invention, which is the application of old knowledge to new problems. Of the technological mind, the reverse is often true: new knowledge is applied to old problems, often creating still newer problems. For our ancestors, art and design became technology. Making buildings was holy.

The progressive size of the Tabernacle curtains insured that the stronger, more durable ones covered those more decorative and delicate. The three curtains

¹²⁶ Exodus 36: 8 and 14 and 19. Smaller curtains of each material were sewn or clasped together to form single layers covering top and sides of the Tent of Meeting.
¹²⁷ Hertz, Pentateuch (1941), 332. "...porpoise skins."
resting on the top of the fine-twined linen roof were raised above it, and then one above the other, forming a progressive series of three canopies. Abraham must have used these devices and we still see them in use today in the tents of the Bedouin. This operation could be done quite efficiently by a tent-dwelling people, especially as the curtains were already in proper order. This progression of canopies would serve a number of practical and aesthetic-symbolic purposes. With poles, ropes, and pegs, the separate curtains could have been raised up one above the other, leaving spaces between to remove rising warm air while drawing cool air from the entrance, not unlike a chimney. Here again breezes wafting across the curtains would also enhance the movement of color. Light too would enter through the spaces between the raised curtains.

Laterally, the overhanging curtains would extend a large area of shade completely around the Tent of Meeting, engulfing the laver of water into its shade. Under direct sunlight, the water in the laver would have evaporated too rapidly. The upward extension of these protective canopies, with a space between each one, would make the exact location of the Tabernacle visible to the Israelite tribes encamped around the outside of the high curtains of the Outer Court. Perhaps the dark sealskin covering would have been removed, leaving only the red ram skin visible, but more likely and more practical as well as aesthetic, this dark protective curtain was stretched out to its corners, allowing no overhang or bang.

Then the corners of the red curtains were allowed to hang over, forming a red band visible to those outside. The curtain of goat hair may, like the sealskin curtain, have been stretched to its corners, thus not obscuring the now visible, but fully protected curtain of fine-twined linen immediately above the Tabernacle.

This curtain of goat's hair is of uncertain practical value. Certainly it helps with the cooling effect and maintains the symbolic integrity of "four" separate curtains. But why is goat's hair chosen as opposed to goatskin? The special coarseness yet slippery texture of the hair of a goat would make a curtain of unusual repellant or resistant quality, creating a thick padding but one which
allowed for some air circulation when laid flat underneath the two skin coverings above. Such a curtain would be an ideal protection to the delicate and dyed linen curtain of sacrosanct character beneath it. It would also protect the “fine-twined” curtain from the leaching out of any dye or oils from the curtains above it because of weathering. Of all the curtains, the goat’s hair would be simplest to clean, the most resistant to many cleanings, and probably because of its special purpose, have been cleaned most often. Aesthetically and symbolically, the above arrangement preserves the number four so central to Egyptian and Hebraic conceptions.

In “raising up the Tabernacle,” these canopies may have been the first operation, after the setting up of the Tabernacle’s exact location, just as the circus tent goes up first so that its protection and shade allows the orderly progression of the rest of the work. However, it must be assumed that to the Israelites, the raising of these canopies was the first manifestation of God’s promise to protect them in their new encampment; they were secure once again as they were again dwelling in the shadow of the Divine.

The Bedouin wears a black outer garment but not because it is the most comfortable. White would reflect more heat but it also absorbs the unhealthy rays of the sun. White reflects heat, but allows the harmful rays to penetrate. So the dark outer curtain of sealskin most likely was raised up to form the top canopy. In Israel, one can still see the tents of the Bedouins with their dark outer covering while inside hang white curtains suspended as a ceiling above the inhabitants and a space of air between it and the dark outer covering. Exactly the same purposes were served by the same means and principles in protecting, cooling and lighting the Tabernacle.
Fig. 16. Layout of Curtains

This shows the overlap when placed over the Holy Place. Each curtain was 28 cu long and 4 cu wide. Each divided into seven squares making eight seams, all invisible of course to the casual view. Many of the Tabernacle’s measurements are divisions of 4 and 7, the same as the lines of a Sefer Torah portion. They are divisions of seven: i.e. 42, 49, 63.
There were eleven curtains this size sewn together. The length of one curtain (28 cu) became the width of all eleven curtains when put together. The eleven curtains together form a harmonious rectangle such as those used in ancient architecture. Front and rear (east and west) overlap of curtains was 7 cu, totaling 14 cu. The sides (north and south) overlap was 9 cu, totaling 18 cu. The eleven curtains are each 4 cu wide for a total of 44 cu in length.

Shade and the circulating air between the layers of curtains create a natural power-free air conditioning system. Their various intensities of color and texture from light underneath to darker above, kept out the sun’s harmful rays while also
deflecting the ground’s heat upward with each breeze, or even the faintest whiff of circulating air. Because their shade also encompassed the water-filled laver, there was a further cooling effect. The naturally occurring breezes, blowing across this shaded pool of water acted as a cooling sea breeze in miniature, blowing much of its coolness into the Tabernacle’s Holy Place.

Most importantly, this same procedure completely solves the problem of lighting the interior of the Tabernacle. We can now visualize what must have been the most physically comfortable and aesthetically beautiful dwelling of the Israelites in the desert. It is doubtful that any dwelling in Israel during the period of Judges would have exceeded its physical beauty and comfort. In this structure, we have the physical comfort of a fine masonry building of thick walls, high ceilings, and windows such as have throughout antiquity made comfort possible in the heat of the Levant.

Let us consider too that wood, from which the walls of the Tabernacle were made, is also a poor conductor of heat, and that the burnished gold that covered these acacia wood walls would, in its polished state, have reflected more heat than they absorbed.

One can experience this entire process in nature by simply stepping underneath a palm tree on a very hot day. The shade of a palm tree, especially the date palm, will be cooler than that of other trees of equal size. Its shadow turns bluer in color as the sun waxes hotter. Looking upward into its glorious canopy, one sees in its golden dates and fan-like leaves, green colors varying from yellow to pale blue. The little broken-edge chips of blue sky peek through the wafting leaves creating in nature a cathedral window of stained glass, and also the succot, the fragile structure used by Jews to celebrate the Fall harvest after the Sabbath. Sukkot is among the oldest of Israel’s holidays commanded almost immediately after the Israelites exit Egypt. This structure’s roof must be open to the sky.

Similarly as in a succot, the filtered lights of the changing colors descend downward into the Holy Place and Tabernacle complex through its blue, purple, and scarlet curtains of fine-twined linen, their golden threads reflecting against the
blue desert sky. Blue, red, and purples become more blue then more purple, dancing in an ever-changing infinitude of the most subtly nuanced colors and colored lights, wafting in the breeze like so many sheltering wings, like the wave offerings of the High Priest. The warm air is pushed ever upward through the spaces of air between the curtains, thus cooling the air.

The palm tree needs the high outside heat for its growth but the budding dates, ranging in color from newly hatched chicken yellow to a deep sunset gold, would wither in such intense heat. So the tree creates a second protective climate for its offspring. Taking advantage of the slightest current of hot air or breeze, it waves its wing-like leaves to create a second, cooler climate for its children. The porous wood trunk conducts virtually no heat and is mainly a huge conduit or laver of water. The leaves of the palm tree act as the curtains of the Tabernacle in their physical function and in their aesthetic beauty while its trunk serves as a great laver of water.

E. Color and Light Inside and Outside the Tabernacle

The same colors in the cloth of the veil of fine twined linen with threads of gold are used for the entrance curtain of the Outer Court as for the inside of the Holy Place or Tent of Meeting. It is unusual for a house or a building to have the same finish exteriorly as on the interior. There are at least two reasons for this. The echo of the fleeting colors of eternity would shine forth toward all the people just as it did on the priests and elders who entered the holy Tent of Meeting, as well as on the Ark of the Covenant in the Holy of Holies. Each person was conceived as equally holy before God and metaphorically, inside the Holy Place with the High Priest. The outer decorations of ancient temple architecture serve the same purpose as the above, to allow the vast gatherings not allowed entry to yet be participants.

The Outer Court was half the height (5 cu) of the Holy place (10 cu high) inside. Its light and shadow would have reflected on the ground inside the Court. The rabbis are unsure exactly which scarlet (wine or bright red) or blue (or
purple) was used in the tent and entrance curtains. It could have been a mixture. Several colors of red, blue, and purple in each field of blue, purple, and scarlet would enrich the entire ensemble as light struck the curtains. They were mixed by the viewer’s eyes in the same manner as impressionist paintings juxtapose daubs of color, similar and non-similar, to create rich vibrations of color in the eye of the viewer. The same concept has been used for centuries in tapestries and oriental rugs. This theory of implied color was used within the weave of the curtains. It was also in the reflected lights of the gold and silver vessels as they reflected overtones of compliments, and the other colors of the spectrum onto the curtains. If resting upon blue cloth, the gold vessels would reflect greens and yellows and bright yellows. Colors would be dancing from all directions likewise from all the curtains, the various gold vessels and silver appurtenances.

F. Robes: Color as Nobility

The colorful or richly patterned robe was the symbol of rank in the biblical world as was the staff. Joseph’s “coat of many colors” carries this meaning, as do “Thy rod and Thy staff, they comfort me.” Clothing the Tabernacle in these colors was like clothing God in a coat of “many colors” so as to elevate Him. The robe had the same connotation of rank and nobility in ancient Egypt. We have King Tut’s royal robe, made of checkered squares of gold and black thread. Were the black threads originally black or purple or blue? The “rod” and “staff” are in the hands of King Tut’s gold sarcophagus image as they appear in the images of other pharaohs.

Thus, the curtains of the Tabernacle and the Ephod of the High Priest take on heightened meaning. When the priest puts on the Ephod and takes it off, these are moments of high portent. David wraps himself in the Ephod at the moment of indecision. In the blue, purple, scarlet, white, and gold, which echo the colors

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129 This imagery was originated from Carla Suson, my editor.
130 First Samuel 30:5-8.
of the sky from evening to morning to dusk, we view the heavens as the majestic robe of God. Rabbinic literature often refers to the heavens and to day and night as "curtains." The evening prayer describes the Lord as "..., rolling away light from before darkness and darkness from before light."\footnote{Prayer Book for Jewish Personnel in the Armed Forces of the United States, (1958) Page 93. Evening Service for Weekdays.}
The unique quality of Israelite art as manifested in the Tabernacle complex lies chiefly in its creation of a unity of imageless geometric forms and spaces derived from ancient Egyptian sacred art and architecture. Yet these forms were designed to be competitive with images laden with theatrical religious rites of surrounding cultures. Such a unity could only be accomplished by art that is both abstract and suggestive of organic life including the human form. In its materials, craftsmanship, and design, it required levels of artistry of the highest order. To create from the old methods an art and ritual expressive of a single, unique, formless, and loving God for the first time in history was a task involving the most serious and painstaking weaving of the philosophical moral with the symbolic and aesthetic.

In Israelite art, there emerges no symbol of earthly power or might. Nothing exists like those art forms symbolic of the empires whose art is defined by imagery such as the demon or warrior gods that dominate the worldly empires. Even the lion, symbol of Judah, does not appear in ancient Israelite liturgical art and later only as a minor decorative element but never as a temple guardian. In creating an art and ritual reflective of the one covenantal God, formless yet all-powerful, eternal yet loving and personal, ancient Israel gives monotheism its
earliest visual expression. Herein lies its originality and the Israelite contribution to world art.

A. The Menorah: An Example of the Working of an Israelite Aesthetic

In the Menorah, we have the object of Jewish origin that presses more closely than all others against the boundaries of idolatry. The most unique art object in its canon, it is totally of Jewish origin, and the most direct and powerful in its aesthetic appeal. What could prevent this object from becoming a venerated form before which people would be tempted to pray or to regard as having magical powers?

Fig. 18. Profiles of the Lamp in the Tent of Meeting.
This illustration places the branches of the lamp both parallel and perpendicular to the Holy of Holies. It also illustrates a rabbinical difference of opinion as to whether the branches of the Lamp were straight (Rashi and Maimonides) or curved (Ibn Ezra).

In this object we see again how deliberate restraint of the aesthetic was made to lead to innovation in aesthetic form. While viewed frontally, the shining gold Menorah was an intimidating and majestic form suggestive of a sacred tree. But it was not large, being only about 4 ½ to 6 ft tall. Rabbinical opinion differs as to whether the lamp's branches were parallel to the Holy of Holies or perpendicular. Viewed from the side, it immediately lost all its majesty, becoming
little more than an unimpressive, golden staff, with a specified number of bulbous flowers. It had no body in the physical or sculptural sense that is demanded of the image-idol.

The wood staves of the Ark protrude from the veil of the Holy of Holies. The shafts are 11 cu. long or about 18 ft.

The Ark is at the center of the square of the Holy of Holies.

The Altar of Incense at the center between the entrance and veil before the Holy of Holies.

Entrance to Mischan

Table of Showbread

Menorah and Showbread along the midline of the second square but to the sides, left or right

Fig. 19. Placement of Furniture in the Tabernacle

Furniture placement inside the Tabernacle was in exact spots. The Menorah evokes a symbolic relationship to a human body whereas its flames evoke the passions of the human heart.
So when placed in the Tabernacle, forward of the Altar of Incense and to the left side of the Holy Place, anyone approaching from the center of the Holy Place, which is exactly where they would be, would view the Menorah simultaneously from its front and from its side. Immediately demystified, the Menorah becomes another example of the aesthetic form deflected from glorying in itself at the very moment of its climactic impact.

B. Mirror Image Fires of Covenant

And there shall be six branches going out of the sides thereof: three branches of the candlestick out of the one side thereof, and three branches out of the other side thereof; ... (It continues with description of knops, flowers and cups made like almond blossoms)\(^\text{132}\)

And see that thou make them after their pattern which is being shown thee in the Mount.\(^\text{133}\)

The most obvious symbolic feature of the seven-branched lamp is its construction in replicated halves as a mirror image. By reflecting its two equal halves, separated by a single dividing line, its design is the paired symbol of covenant seen throughout the Bible. In this regard, the lamp replicates both the human body and the vertebrate animals used as offerings on the altar. The symbolism of the halves denotes covenantal agreement equally binding between two parties, evoking the “covenant of the halves between God and Abraham\(^\text{134}\) and finally the two tablets of the Law, the covenant at Sinai between God and all Israel, His people.

The Menorah was placed in the leftward side, to the south in the second part of the Tent of Meeting before the Holy of Holies. The lamp’s placement in the body of the Tent of Meeting imparts to it a symbolic relationship to the human heart.

\(^\text{132}\) Exodus 25:32.
\(^\text{133}\) Exodus 25:40.
\(^\text{134}\) Genesis 15:5-20.
By placing the Altar of Incense 10 cu eastward from the veil of the Holy of Holies, it rests upon the undefined or invisible border of a square equidistant from the veil of the Holy of Holies and the entrance veil to the Tent of Meeting. Again, an invisible square defines a geometric symbolic relationship unifying all the spaces of the Tent of Meeting with its most sacred contents.

A 10 cu invisible offset square also emerges from the placement of the Altar of Incense at points 5 cu equidistance from the four cardinal points defined by the placements of the veil of Holy of Holies, altar, lamp and Table of Showbread.

This placement of the sacred furniture gives us a striking example of echoed proportions. From the entrance veil of the Tent of Meeting to the lamp and table, a square and one half proportion appears equal to the front façade of Solomon’s Temple. This 15 cu by 10 cu rectangle is a half scale model of the Temple’s 30 cu by 20 cu frontal façade. The same proportion is repeated again in the distance from the Lamp and Table to the back of the Holy of Holies. With this design, Solomon’s Temple gives us a symbolic view of the continued ascent of the High Priest as he entered the Tent of Meeting even as it evokes the memory of the earlier structure.

In Exodus 25: 31-40, we learn the details of its construction and that it was to be hammered completely from a single ingot of gold “...the whole of it one beaten work of pure gold.” At 18 handbreadths in height, the lamp stood approximately 4 ½ ft to 6 ft depending on whether the handbreadth measure used 3 or 4 in. Hammered from one talent of solid gold, it weighed about 100 pounds.

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Fig. 20. The Menorah as a Map to the Tabernacle

The lamp's central shaft, its branches and its knops, cups, and flowers intersect the entrance to the Outer Court, the ramp of the Alter of Offering, the Alter of Offering, entrance to the Holy Place, Alter of Incense, and Ark of the Tablets inside the center of the Holy of Holies.
C. Forms of the Lamp

The familiar view of the Menorah is almost universally as having curved branches arching upwards from its central stem. However, there is another conception of the lamp's form put forth by two of the foremost Rabbinic authorities: Rashi and Maimonides. 138 In their conception, the branches extended in straight, diagonal lines out of the central stem, forming a triangle instead of a series of arches. As both the arched branches and the diagonal branches have rabbinic authority, both versions appear in the illustrations for comparison. 139 Since there is no dispute as to the general proportions or number of branches, the symbolic-geometric relationships work equally well in either case.

Except for the central stem of the lamp, my illustrations omit the placement of knops, cups, and flowers on the six branches. As to the five knops and their placement along the central stem between the base of the lamp and its seven lamps on top, traditional opinion agrees as to their number and exact placement. From this I have come to the supposition that their placement is at key points corresponding to key points in the Tabernacle structure such as:

- the entry to the Outer Court,
- the ramp of the Altar of Offering,
- the Altar of Offering,
- the entrance to the Tent of Meeting,(and inside the Tent of Meeting)
- the Altar of Incense,
- the entrance of the Holy of Holies,
- the Ark of the Tablets.

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139 See Appendix B.
Fig. 21. Lamp as Embodiment of the Mishkan

If one superimposes the Menorah over a drawing of the Tabernacle, the same geometric relationships become clear. The lamp's central shaft, its branches and its knops, cups, and flowers intersect the main points of the Tabernacle. Is there a connection between these converging points and the seven covenants between God and Israel recorded in the Torah? Notice the generation of four double squares generated by the proportions of the Outer Court and its intersecting points with the lamp.
The five sets of knops, cups, and flowers along the central stem form a line or rope whose decorations occur at key points, creating a coded map for the layout of the most sacred elements of the Tabernacle. In this regard, the central stem of the lamp forms a symbolic “knotted rope” used by the ancient Egyptians for laying out canals as well as the corners for pyramids, temples, and palaces. Very likely Moses used such a rope in laying out the Tabernacle. Such laying out of sacred buildings would have been accompanied by great ceremony as the Egyptians sacrificed an offering at every corner laid out for a sacred building.

D. The Tripod Base

A telling feature of the lamp agreed upon by virtually all rabbinic authorities is that the lamp rested upon a base (some say round, others say square) from which three animal feet extended forming a tripod support for the lamp. As to which animal’s feet were used, there is no definitive opinion. Goat, ram, or the lion would all be good candidates. What is most interesting is the rabbinic agreement on the tripod concept instead of the more logical and more stable support of four feet. In this agreement, one again sees the consistent Judaic tendency to diminish or deflect the aesthetic impact in sacred art in such a manner as to make an object less likely to become an object of devotion, i.e., idolatry.

Strictures against full figure statuary as opposed to a bust, or hands with four instead of five fingers in traditional Passover Haggadahs reflect this consistency of aesthetic diminution. Of all the elements making up the Tabernacle, the covenantal Ark with its cherubim cover, the sacred Tablets, and the seven-branched lamp were the most likely objects to be subjected to idolatrous veneration. The Menorah particularly has about it a resemblance to a living being, a sacred pole or tree (asherah, Hebrew). But with three feet instead of four, it looks like an animal with a part missing, or somehow a misconstrued form, blemished and therefore unfit for veneration in the manner of idols. Brokenness rendered god statues unusable for worship. In choosing where and how to

diminish visual elements evocative of idol worship yet retain an object's power and beauty, Israelite art demonstrates its most profound insight into the realms of aesthetics and symbolism.

Fig. 22. *The Menorah as a Map of the Tent of Meeting*

Notice the generation of four double squares created by the proportions of the Outer Court and its intersecting points with the lamp. Its base coincides with the entry veil to the Tent and its tripod feet rest at the Altar of Offering in the first square of the Outer Court.
Menorah's square base with its tripod of hooved animal feet bear relation to the Altar of Offering and the animals consumed thereon. Though the Menorah's feet are not described in the Torah, a reasonable premise would be that the feet were of the cloven-footed animals used for offerings, particularly the ram or goat as these recall the two primal covenants between God and Abraham: the Covenant of the Halves\(^{141}\) and the Binding of Isaac (\textit{Akedah}).\(^ {142}\) Its animal feet are appropriate because the Menorah, like the Altar, is an instrument of sacred fire. Rising from its square or cube form base, supported by feet of animals of offering, the entire seven-branched lamp becomes an image of the Altar's sacred fire.

In the structure of the Menorah we see a perfect fusion of aesthetic beauty drawn from observing creation's example but combined with the Israelite aesthetic innovation of deflection from the temptation to idolatry. The Menorah is a unique liturgical work of both great symbolic depth and a culmination of monotheistic religious and aesthetic expression.

\textit{E. Summary of Covenants Embodied in the Lamp}

The seven covenants symbolized in the seven-branched lamp:

- The six days of Creation\(^ {143}\)
- God hallows the seventh day\(^ {144}\)
- The Flood and the Rainbow\(^ {145}\)
- Covenant with Abraham\(^ {146}\)
- Binding of Isaac\(^ {147}\)
- The Burning Bush where God reveals Israel's deliverance to Moses\(^ {148}\)
- Revelation at Sinai and the Ten Commandments\(^ {149}\)

\(^ {141}\) Genesis 15:9-18.  
\(^ {142}\) Genesis 22:9-18.  
\(^ {143}\) Genesis 1:31.  
\(^ {144}\) Genesis 2: 2-3.  
\(^ {145}\) Genesis 9: 8-17.  
\(^ {146}\) Genesis 15: 7-20.  
\(^ {147}\) Genesis 22: 1-19.  
\(^ {148}\) Exodus 2: 1-10.  
Fig. 23. The Menorah as Embodiment of the Tabernacle's Sacred Spaces. The segments of the menorah are positioned in such a way as to represent the layout of the Tabernacle.
Whereas the Menorah is a map of the Tabernacle, it also is a moral reminder of seven covenantal historical events between God and Israel. Except for the last, the revelation of the Decalogue at Sinai, the covenantal events would have been known to Israel, the children of Jacob, before they went into Egypt. These are embodied in the seven-branched lamp and form, including the revelation at Sinai, the covenantal core of Judaism.

1. The Six Days of Creation

2. God hallows the seventh day.

"And God blessed the seventh day, and hallowed it; because in it He rested from all his work which God in creating had made."\(^{150}\) The seven lamps and their branches are an obvious reference to the Creation chapter in Genesis as well as a symbol of the sacred seventh or Sabbath day consecrated in the Decalogue at Sinai.

3. The rainbow is a symbol of God's covenant with Noah, his descendants, and all mankind.

I have set my bow in the cloud, and it shall be for a token of a covenant between Me and the earth.... When I bring the clouds over the earth. ...and the bow is seen in the cloud, that I will remember my covenant which is between Me and you and every living creature of all flesh;\(^{151}\)

These covenantal passages establish the groundwork of a universal, loving, and merciful God in Judaism.

As a symbol of the rainbow covenant, the arched branches are more fitting than the diagonal branched concept, which here becomes problematic. Maimonides comments on the rainbow's position in the sky with its two ends

\(^{150}\) Genesis 2:3.

\(^{151}\) Genesis 9:13-14.
downward toward the earth as if God, the warrior, is making peace with the earth by inverting his mighty bow and touching it to the ground.

Whether arched or straight—both lamp concepts with their seven lights would still embody the seven spectrum colors seen in a rainbow—red, orange, yellow, green, blue, indigo, and violet. The fact that green inhabits the center of the rainbow and would therefore occur at the central stem of the lamp is symbolically significant. Of all the colors in the rainbow, only green does not belong to the heavens but to the earth where it always connotes life and its rebirth in spring. For purposes of agriculture, the cessation of rain is just as necessary as its falling since harvest can only proceed on dry crops. The rainbow is a sign of God's beneficent contract between Himself and mankind, heaven and earth. "While the earth remaineth seedtime and harvest, and cold and heat and summer and winter, and day and night shall not cease."152

4. The Covenant of the Halves153

In these words of Genesis between God and Abraham, we are given a summary of Abraham's past, his personal destiny, and a prophecy of the future destiny of his descendants, their bondage in Egypt, God's promise of redemption, and finally the inheritance of Canaan. A wonderful awesomeness and grandeur suffuse these covenantal passages. It is the first of the covenants wherein God's speech and fire conjoin; a pattern that recurs with increasing import and intensity. For symbolic interpretation in relation to the lamp, look at the offering itself from which it gains its name:

"And He said unto him: 'take Me a heifer of three years old, and a she-goat of three years old, and a ram of three years old. . . .' and he took him all these, and divided them in the midst, and laid each half over against the others; . . ."154

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152 Genesis 8:20-22.
154 Genesis 15:9-17.
Three cloven hoof animals, each three years of age, are chosen and cut in half. This passage conveys mirror images of three animals and their age, which are halved and placed “over against the other” so that each half lies directly across from its counterpart. Then, in Genesis 15: 17, a fire passes between the pieces and consumes them as if it were a central stem passing between its halves. The mirror image design of the seven-branched lamp is an ideal visual expression of this covenant. Even the tripod feet supporting the lamp can be considered part of the symbolism in this covenant. The covenant of the Halves in Genesis 17 alludes to that ultimate future covenant at Sinai—at the smoking mountain on fire like a furnace. The generation of artisans who had made the lamp were themselves witnesses to the fulfillment of this culminating covenant described in Exodus 19: 17-18.

And Moses brought forth the people out of the camp to meet God;... now Mount Sinai was altogether on smoke, because the Lord descended upon it in fire; and the smoke thereof ascended as the smoke of a furnace...

The majestic scene culminates in Exodus 20 through the revelation of the Ten Commandments in which the seventh day is made the sacred Sabbath forever.

Prior to the Sinaitic Covenant are two events that must be addressed: The Binding of Isaac, which is the covenantal event establishing the destiny of Abraham and his Israelite descendents,155 and God’s call to Moses at the Burning Bush.156

5. God’s call to Moses at the Burning Bush

In this intimate encounter, quite lengthy for a biblical dialogue, Moses is addressed by God to be His messenger of deliverance for His people. The ebb and flow of Moses’ hesitancy and questioning is a wonderful expression of uncertainty before a momentous decision. Again it is a dialogue in the midst of a fire, which is reminiscent of the “Covenant of the Halves” and a prelude to the

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"mountain all on smoke" at Sinai in which Moses is no longer the hesitant shepherd reluctant to let go of a good but routine life. In the later scene, Moses walks directly up the Mount into and past the smoke and the fire to receive the Commandments from God's hand.

The seven-branched lamp is a perfect symbol of a plant that burns but is not consumed. The Burning Bush episode can be linked to the lamp's symbolic motifs because of its obvious resemblance to a plant with stems growing out of a central branch. There are actually such plants in Israel. This plant variety "is a type of sage (salvia) called moriah in Hebrew." Biblical description of the lamp speaks of its botanical elements; "branches, calyxes, petals, and cups," and ancient Jewish sources hint at a direct relationship between the Menorah and a specific plant.

A number of plants are used in Jewish festival services such as the fall harvest Feast of Tabernacles. The only plant specifically mentioned as a part of the lamp however is the almond blossom. This blossom, its bud, and flower, are an integral part of the lamp. Rabbinic authorities see the significance of the almond blossom in that it is the first edible fruit to ripen in spring in Israel. It is another example of the lamp's importance as a symbol of renewal and forms yet another link with God's promise to Noah after the Flood.

6. The Binding of Isaac

The lamp's symbolic connection to the "Binding of Isaac" is more tenuous than to the other covenants with Israel. Yet there may be some symbolism in its plant-like form and the rescuing event that takes place at the critical moment when God stays Abraham's hand. The ram caught in a thicket is substituted for

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158 Exodus 25: 36.
160 Leviticus 23:39-44. Tabernacle (booths, sukkot in Hebrew) "And ye shall take you on the first day the fruit of goodly trees, branches of palm trees, and boughs of thick trees, and willows of the brook, and ye shall rejoice before the Lord your God seven days" Leviticus 23:40.
Isaac. Can we see in the seven-branched lamp some combination of a thicket of plants, the geometric curves of ram's horns, and the flames of fire, which recall the burnt offering, which culminates the event?

The repetition of these interweaving covenantal themes with their diminution and magnification, similar animal and fire manifestations, the use of the harmonic number seven and their intimacy in combination with majesty echo a repetition of theme and melody, diminuendo and crescendo that call to mind a construction more akin to classical music than to prose or even epic poetry.

To an ancient people whose primary source of knowledge was not from reading but from direct sensory perception, the abstract patterns of geometry underpinning natural forms, could suggest many phenomena and ideas simultaneously. Indeed this simultaneity of experience offered by the visual symbol is the single and chief superiority of the visual symbol over the spoken or written word. A cross, a star, a flag, or a gravestone evoke a multitude of memories and themes specific and general, collective and personal. No army has ever marched into battle following a book. Even ancient Israel, when following the Ark of the Tablets from camp to camp and into battle, was not led by the words written in stone but by the memories of God's redemptive power symbolized by the Ark itself.

The Tabernacle of Exodus is the first recorded effort of the use of aesthetics in opposition to all forms of nature worship or idolatry. To make aesthetic forms in homage to the formless God is a vast undertaking. It demands not only new forms but changing the relationship of familiar forms. Every kind of altered juxtaposition of form and space can alter meanings for those sensitive to the messages of shape and pattern. The geometric golden section proportions and relationships common to so much ancient art and architecture are also evident in the seven-branched lamp.
Fig. 24. The Menorah with Golden Section Rectangles
The seven-branched lamp in its own rectangle is superimposed over the Tabernacle with a golden section spiral running through both lamp and Tabernacle at significant points. Note the division of branches, both straight and curved, into the golden section rectangles made up of six squares each. Horizontal squares mirror the Outer Court. Vertical squares mirror the Tent of Meeting (Holy Place).

This evidence of conscious artistry appears in ancient Israelite art but not as overwhelmingly as in ancient Greece, more than 800 years later, nor in the grand scale of Egypt, a thousand or more years earlier. In keeping with its characteristic deflection of the aesthetic in deference to the divine and the divine
teaching, the flame arising from the lamp’s golden stem and paired branches is a materialization of the voice of Israel’s covenantal God that speaks to the human heart in “the still, small voice.”\textsuperscript{162} The voice echoes from Noah to the patriarchs, to Moses, to the prophet Elijah, to be expressed finally in Zechariah’s vision of the seven-branched lamp taking oil from olive trees. In the seven flames appear seven words: “\textit{Lo B’khayil v’lo B’koakh ki im b’rukh’i}.” “Not by might nor by power but by My spirit.”\textsuperscript{163}

\textbf{F. Motifs, Materials and Workmanship}

In the complexity of its symbolism, the Menorah may well be the richest symbolic object in all of art. Aesthetically, it is as beautiful as any work of its kind that is of a decorative, religious nature. Certainly it is unique, having neither precedent nor antecedent in the art of any other civilization. The Menorah, especially in its arched or curved configuration, is the only liturgical object the Israelites made which cannot be traced in origin to the artistic forms of Egyptian, Mesopotamian, or to any other civilization, nor does it appear in the art of later civilizations. Unique to the Jewish people, the Menorah appears to have neither ancestor nor descendants in all the history of art. Its appearance on ancient Israelite coinage establishes the lamp as Israel’s most beloved symbol.

The knop and flower motif specified for the branches of the lamp\textsuperscript{164} can be traced to the budding and flowering columns of Egyptian temples which symbolize growth and renewal, “as a grouped collection of budding or flowering stalks...”\textsuperscript{165} Like the Egyptians, the Israelites also wove the designs of important and symbolic plants into their religious art. As stated earlier, the almond bud and flower is the earliest food plant to ripen in the spring in Israel (Canaan). As the lamp was kindled in the evening, the seven lights of the lamp were also symbolic.

\textsuperscript{162} First Kings 19:12.
\textsuperscript{163} Zechariah 4:6.
\textsuperscript{164} Exodus 25: 33-40.
of the luminaries in the evening sky: moon, stars, and the seven planets known to the ancient world.

Its only resemblance or kinship to any other object may be its superficial resemblance to the ancient Egyptian ankh sign. The ankh sign is almost as rich in its geometry as the Menorah but their kinship may also lie in the meaning of the ankh. The ankh sign is a symbol of “life” or “long life” and it is interesting that the numerical measurements of the Menorah also embody this meaning. Eighteen is the numerical symbol in Judaism for “life” because it is the sum of the letters forming the Hebrew word for life. Because the Hebrew numerical system is derived from its alphabet, the symbolic intent of the Menorah’s “eighteen handbreadths” measurement may be assumed.

The Menorah was made of solid gold, the material with the most God-like characteristics: permanence, unchangeableness, and imperviousness to harm from time or elements. Of equal importance however, is the manner in which it is made of “beaten work.” Here again, how the “thing” is achieved is as much a part of the work as its final appearance and use. Shaping metal by beating it with hammers is an arduous and painstaking labor demanding as much of will and dedication as of skill from its practitioners.

Yet in the characteristics of beaten metal work, there are moral qualities that would not have been overlooked by the ancient mindset. Many of these aspects of beaten work reflect Judaic values, being almost perfect metaphors for some of Judaism’s most basic precepts. It is for these reasons that all the holiest objects of the Tabernacle service were to be made of beaten gold.

The craftsman of metalwork knows that no form of metal work has the structural integrity and physical strength of beaten metal. It is solidified in its compressed molecular structure by each blow of the craftsman’s hammer, even as it expands in size. Even today, the hand-forged blade is the most highly prized, as it was and is now in every civilization.

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166 Each Hebrew letter has a numerical value as did ancient Greek letters.
G. Hammered vs. Cast Metal

There are lessons to be drawn from a comparison with cast metal, which must have a hollow core. The finish or patina is not derived from the actual working of the metal but by chemical and polishing techniques.

Foremost is the fact that the Golden Calf was of cast metalwork. It was necessary to separate the gold work objects of the Tabernacle from this supreme blasphemy of Israel. It could not be done by choosing a baser metal in substitution for gold, but rather by a vastly different form of workmanship. Also, it should be recalled that Moses pounded or hammered the idol into fine powder as part of the destruction ritual of the Golden Calf.

Also, there is about the casting process, an element of mystery very conducive to idolatry. No one who has ever worked metal in the casting process can escape the mystical thrill of its effect. There is an intense ritual about the entire process. The molten metal is heated in the furnace until the perfect time, the moment of pouring. Everyone involved is gathering about the fiery altar of the smelting furnace. The Golden Calf, it should be remembered, was made in front of all the people. Then, with a precision bordering on the sacred in its solemnity, the molten metal is lifted from the jaws of Molech, the fiery furnace, and borne aloft in a bucket by men suspending it on staves, exactly as a sacrifice and as the Ark of the Tablets. Carefully, the metal is poured into the mold, the egg, or womb from which it will emerge magically transformed. Hot gases are released; smoke fills the air, sometimes red-hot metal flashes out and drips like blood before it hardens. The scene is a miniature of a volcano, even of Sinai when covered by the darkness and smoke and flashing lightening of the revelations of God’s voice, “…and the smoke thereof ascended as the smoke of a furnace…”\textsuperscript{167}

When the cocoon is broken open, the graven image emerges, exactly like any newborn of the animal kingdom: ferocious and unfinished in appearance, covered with scales and bound with cords by which it took on flesh and breathed out smoke and fire. Its sprues and vents, like an umbilical cord, must now be cut

\textsuperscript{167} Exodus 19:18.
and the newborn is filed, polished, and finished. To see the image emerge from its mold affects all who see it no matter how many times they have seen it or done it, or how much of any kind of education they have had. People cheer and the excitement of a spectator sport consumes us even as we break apart the mold and, when we examine the image, if it comes out whole, it was as when Joseph appeared to the Egyptians and they bowed down and said, "Abrech."168

The casting process is unmistakably evocative of death and resurrection found throughout ancient pagan religions. In casting, a form passes from a material, less permanent and less precious to its transformation. Indeed, it is resurrected into a material far more permanent and prized. Its form is the same, but wax or clay has become bronze or gold. It is interesting how the process itself also alludes to death. The temporary wax form drains out like blood, and vaporizes like flesh into dust, as the mold is heated to receive metal, the new, permanent body. The notion of resurrection, or the passage of man from earthly to eternal life, may have been reinforced by the casting process. We cannot ignore the influence of process on the minds of the ancients. The form of the Calf, emerging in its golden splendor, magically transformed in the fiery furnace from the base material of its origin, must have presented an awesome challenge to the plain stone tablets carried by Moses, their words not even visible to the masses of Israel.

How altogether different is beaten work? First of all, it is greater in strength, having the same if not greater strength at its core or heart as at its surface. For this, the process is itself a metaphor on that integrity demanded by the Torah, that the work of our hands reflect the feeling in our heart. The process of hammered work is void of illusion or any suggestion of magic. One sees all that is happening and knows how and why. The hammer presses the metal into shape not unlike the pressing of clay or dough into a desired shape. As tedious

168 Cohen The Soncino Chumash (1947), commentary 43, 258. Genesis 41:43. Abrech, rabbinical opinion offers several translations of this word, "father to the king," and "let all bend the knee before him."
and loud to watch as it is to do, people seldom gather to watch the creation of a
hammered work from beginning to end. In comparison to casting, the spectator
value of hammering metal is nil.

But how is it different for the craftsman who is creating the work? His
feelings are full of excitement and joy, knowing that each blow leaves its indelible
print on the metal, to shape it, to strengthen it, to finish its surface. The slightest
angle or twist of his wrists, analogous both to Torah scribe and Torah study, has
its definite meaning in the final scheme of the work. It is a labor that continues
daily over a long time, unlike casting which is the labor of the moment. The work
of the caster climaxes in a dramatic crescendo, while that of the hammersmith
finishes, as simply as it began, with the tap of a hammer. The evil deed, like cast
metal, is done in the flash of a moment, but goodness takes a long, quiet labor to
bear its fruit.

The cast work has a secret life fitting for an idol like the Golden Calf. Its
inside is vastly different from its outside. Break open a cast object and one finds
its insides are like that of a living thing: hollow, dark, rough, cavernous spaces
full of supporting structures, the whole giving no sense of its outside form.

The cast form is also in its process analogous to conception and birth. The
molten metal pours into the mold vessel like semen, and a newborn image is
midwifed into existence. The shell of the mold, its womb, must be carefully
opened and the cast form, like the newborn, makes its entry whole, flawed, or in
some cases aborted altogether. It is covered with grime from the mold. It is bound
in the umbilical cords of its own metal—flesh, its vents, which allowed gasses to
escape, and its sprues like veins and arteries, guided the molten blood to the
proper points for dispersion. These all must be severed and removed, and their
scars finished over.

In contrast, the hammered work is the same on its inside as outside, as the
spirit of man is supposed to be. The Tabernacle had the same colors and materials
inside as out. The cast form is like flesh and blood that passes away, while the
hammered form is within and without similar to the spirit of a righteous person.
The metal caster places all his hope and skill in the outcome of a single, climactic event. In contrast, the hammersmith is a lone workman possessed of a long vision. In his inherently undramatic and lengthy labor, he puts his trust in a work that to an outsider appears to be an eccentric and unnecessarily laborious ritual, but the one practicing trusts to the final fulfillment of a vision. The hammersmith’s work is metaphorically like the man of quiet faith, like Abraham.

Are there not analogies here to the ongoing practices of Judaism? The hammersmith works as a religious Jew prays, on a daily basis, undramatically. To the stranger, the religious service of traditional Jews appears confused, devoid of feeling, perhaps, often loud or cacophonous, like the workshop of the hammersmith. Yet as if in ratio to the lack of drama his work inspires in the outsider, the traditional prayer service of the religious Jew fills him with meaning and clarity, calmness and well being, knowledge that he is part of God’s eternal purpose.

Its complete lack of mystery, its perfect structural integrity, and its demand for continuous labor rather than the peak moment of a sacrament or rite made “beaten work” the chosen process for the creation of the Menorah and other holy vessels.

How exactly might the Menorah have been made? Perhaps the metal was poured into an open sand mold just to establish its basic shape. This truncated and pitted mass would awe no one, but would facilitate the labor of the hammersmiths.

From this massive, short and thick-bodied Menorah, the artisans would draw forth the beautiful proportions and shapes of the final work perhaps hammering to the chanted rhythms of Psalms, much as sailors rowed and did their labors to the tunes of sea chanties. In an atmosphere surrounded by the teachings of God sung to poetic beats, the artisans and people together could watch their holy objects emerge in a rhythm and continuity that reflected the daily reality of their lives.
H. Polishing by the Hammer: Finish and Effect

The final surface of the Menorah could have been left with tiny hammer marks, a surface similar to that of a many-faceted diamond. It would refract light in a similar way. But this kind of surface would appeal more to the modern aesthetic. Speculation is that the Menorah was hammered to a perfectly smooth surface, that there was no mixture of hammered and smooth surface. Furthermore, the form of each branch may have been cube-like, or square through its diameter.169 This should not be confused with the overall shape of the lamp. The cube-like branch, rainbow form, and organic buds and flowers make a highly aesthetic combination, and also are consistent with the geometric vocabulary of the Tabernacle.

The Menorah’s base could have been a “box” supported upon three gold ram’s feet and hooves.170 Protecting shoes of lesser metal than gold, probably silver would be under the three golden hooves.

Because of the method and material of its manufacture, the overall effect of the Menorah’s beaten surface would have an aura of incredible depth and radiance, as if its glow and shine came from deep within it. Equally lovely and varied would have been its reflection and refraction of light, from its lamps at eventide and from the natural light of day. Indeed, such would have been the intent of its makers. It may be that this majestic work, as significant as it is beautiful, will someday be found intact.

The Tabernacle of Exodus is the earliest religious edifice known to have arisen completely from freely donated materials and labor. The making of it entailed no levies of men or slaves. It was made by a generation of artisans and herdsmen emerging from generations of bondage, untutored in both the joys of liberty and the blessings of the law and condemned to die in the wilderness of their wanderings.

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169 Steinberg, The Mishkan and the Holy Garments (1991), 38. Some rabbinical sources state the branches were “round.”
170 Steinberg, The Mishkan and the Holy Garments (1991), 34. According to rabbinical tradition, the hooves would form a tripod.
Nonetheless, they achieved in this work their single legacy to their progeny who would enter Canaan and history. Only in this singular act of religious artistry were they the equal of Moses and Aaron in faithful obedience to Israel’s God. In all else they fell short, and were ordinary men and women. It is a touching scene to contemplate this great and pure work borne lovingly back to their homeland by a more fortunate generation raised in freedom and in the teachings of their God.
Chapter 8
The Laver, the Altars, and the Table of Showbread

The imitation of ancient Egyptian sacred forms is most obvious in the two square altars, the outer Altar of Offering and the inner Altar of Incense. Egyptian altars were squares and so too were the altars of the Israelites. Although square in shape, these altars were not cubes. They have a height to width ratio corresponding to the mathematical harmonies or golden section used throughout sacred Egyptian, Israelite, and Greek architecture and furnishings.

At this juncture, we may ask the question that pervades the entirety of the scriptural text that describes the Tabernacle’s construction in such finite detail. Why was the manner of the Tabernacle’s creation put in writing in Israel’s most sacred text, the one text that was to become the common knowledge of all the people?

To this question there can be many answers, but their importance must be weighted against the fact that no other literature or liturgy of antiquity ever made so public the knowledge of the construction of its sacred forms. History reveals an opposite tendency, to keep secret that knowledge which pertains to the most sacred. Intimate knowledge of the holy was only known by a few. Why this incredible break with history on the part of ancient Israel? Indeed its publication in the Torah may be the most remarkable, even revolutionary element of the Tabernacle’s innovations. Certainly publication made possible its future influence.
But for the Israelites, this publication accomplished at least two things. One aspect fundamental to all religions, the teaching of reverence, and the other, fundamental to Israel alone, which was the stripping away of all pretense to magic and to supra-human awe of special human beings from Israelite teaching. Only God possesses what is forbidden to be known by man. In this detailed publication of the Tabernacle’s making and its innermost rituals as carried out by the high priest, Israel opened the gates connecting knowledge to religion. The priests of all societies were the learned; Israel was to be the “nation of priests.”

The significant details that are omitted also by choice are of equal significance to what the Torah included about details of the Tabernacle and its furnishings. For the two cherubim atop the Holy Ark, the two Tablets of Law inside it, and the Menorah, no measurements are given in the Torah. It is inconceivable that the measurements of these most sacred objects are omitted through oversight. Their omission is another example of a choice dictated by the Judaic dialectic that rules throughout Jewish liturgical art, the modification, turning aside, or withholding information that could lead to image worship and idolatry. Withholding the precise measurements of these most venerated forms, which the common people would never see up close, ensured that their replicas would never proliferate among the people. But as we shall see, there are other withheld measurements and for a different reason.

A. The Laver

Placed between the Altar of Offering and the entrance curtain to the Tent of Meeting was the laver. Here the High Priest bathed his hands and feet prior to ministering an offering on the Altar of Offering and before entering the Tent of Meeting. The laver was made of brass “...of the mirrors of the serving women that did service at the door of the Tent of Meeting.” These serving women were maidens who served until they married or until a prescribed age. It would likely be an honorific rather than mandatory service.

171 Exodus 38:8.
Whereas the altars and table are rectilinear, the laver was round, like a bowl or bathing tub, and is the only rounded form of all the Tabernacle's main furnishings and architectural elements. The priestly washing ritual as stated in the Torah is a ritual command but the symbolism involved in this feminine, earth-shaped pool and its sacred cleansing ritual is immense. It was made from the mirrors of young women that once reflected their individual images. The large bowl full of fresh water transformed the mirrors into a giant mirror of heaven, the habitation of the unseen presence of the One. This makes another connection between the earthly temporal and the eternal Divine. And as he bathed, the High Priest would see his own reflection in resplendent array cast against the Divine curtain above. In his heart, and in the minds of all who aided and witnessed his action, would be the image of the bride preparing to enter the nuptial chamber of her beloved. As the metaphoric representative of Israel is the bride of God, this simply notated ritual command is replete with visual grandeur and symbolic significance. A mirror, the most personal instrument of a woman's intimate assessment and intense preparations, in those times held in her hand as she examined her image before presentation to her betrothed, is embodied in the high priest's washing ritual of the laver. One is put in mind of Rembrandt's great BathSheba painting. Perhaps the only nude that has the impact of a portrait. There she sits, with her full, rounded feminine forms helpless in her nudity, reflecting humility and acceptance of a duty as her maidservant prepares her. The large empty space around her is bounded by the square geometry of a painting as square as an altar, summoned too as she was by an unknown presence of power and majesty.

The fascination of reflected forms is endemic in the painter's art. Whateoever mirrors an image is magical, as it transcends the physical in the same way, as a shadow is a form without substance. After all, the mirror is the most masterful painter, proving over and over that whatsoever is physical in color or form and the space it inhabits can be recreated in full with its colored substance on a surface essentially without a body. Who can measure the thickness of a
shadow, or the depth of a reflection upon the surface of water, and how deep inside the glass of a mirror is the face that it reflects? The mirror concept, or light refracted into form, is a metaphor for the soul. With this concept, one can understand God creating man in “His image.” How shall the formless God create a man “in His image”? He put in man a mirror or a soul, that if properly directed, could reflect the light of the Divine, or if he chose could reflect only the urgings of earthly desire. So when Moses came down from the Mount a second time bearing new tablets and a renewed covenant his face “sent forth beams of light.” The soul of Moses was like a near-perfect mirror; no speck of sinful dust marred its clarity, no defect of character distorted the shapes it reflected. For forty days and nights and in the cleft of the rock as God passed before him, he was exposed to the light of God. And when he came down “...his face sent forth beams of light...” as a mirror pointed at the sun can blind the eyes. And the children of Israel saw the face of Moses “... and Moses put the veil back upon his face."

On many nights, the laver would have caught the moon in its depths and it would flicker there like the highlight in a great eye, gazing heavenward. Very likely, because Jewish Holy Days are designated by the lunar month, the laver may also have served as a calendar or an aid to calendric observation. Its round form was already an echo of the moon’s form and its bowl-shape an echo of the hemisphere of heaven above. Could the form of the moon’s four phases (or faces) and the place in the laver where they flickered be the key to making important liturgical calendric calculations? The laver then, would qualify as an instrument of Divine navigation by night, and Divine preparation by day.

Unlike the “...molten sea...” the great laver of Solomon’s Temple, which was 10 cu from brim to brim... the laver is another of the Tabernacle’s

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172 Exodus 34:29.
173 Exodus 34:30-35.
174 Exodus 34:34-35.
175 First Kings 7:23.
176 Kings 7:23.
major furnishings for which the Torah gives us no measurement. This omission is very likely for the same reason as it was for the lamp, the cherubim, or the Tablets, which have the propensity to evoke image worship. It is hard to conceive of the laver as posing any such threat, it being so ordinary a form, merely an enlarged bowl whose dimensions alone distinguished it from an ordinary wash basin. The hint of a reason may be found in the ritual of the half-shekel described in the passage immediately preceding the command to make the laver. Moses is about to take a census of all the Israelites and, to prevent a plague; every male must pay a ransom of half a shekel. The rich can pay no more and the poor can pay no less. Throughout biblical literature there is uneasiness, a trepidation regarding the counting of Israelites. Hundreds of years after this passage, King David is reprimanded for taking a census. There is much rabbinical opinion about this seemingly irrational fear. "Anything that is numbered is subject to the influence of the evil eye and its calamitous consequences." In King David's case, it is sometimes seen as a lack of trust in the power of God by in effect counting more on man's power or the power of numbers.

I would like to offer here what is an opinion of my own, as I do not recall hearing or reading it anywhere. Numbering is an act done with regard to property, as with cattle, horses, and slaves. At this time, Israel was only recently redeemed from being the property of Egypt. The entire Torah legislation can be summed up in a phrase Lincoln uses in his antislavery speeches, "there can be no property in man." A census, a counting of man, then arouses in the Israelite mind and covenantal memory a frightful and utterly abhorrent relationship. As to the decision not to publish the dimension of the Tabernacle's laver, it is an insight of sensitivity to the property of materials and their prior use. This sensitivity is very real to the mentality of craftsmen and artisans and, in a universal sense, to all who possess heirlooms or cherished objects.

177 Cohen The Soncino Chumash (1947), 540. commentary on Exodus 30:12.
178 2 Samuel 24:10.
Those mirrors of brass, which formed the laver, were chosen purposely from the living women who served at the Tabernacle’s Tent of Meeting. Every ounce of that brass was once held in a living hand and once reflected an individual human image, a metaphorical likeness of God, and the image of a human soul that once reflected light. The mirror of a woman was not merely a tool, an extension of the hand for work. It could not be numbered even in sum, as a sum is divisible into individual numbers, and man, like God, cannot be measured as to ultimate value. These particulars did not pertain to the brass from which King Solomon made the molten sea, the 10-cu laver of the Temple.

This bridal chamber symbolism of the Tabernacle shall become ever clearer. From its very beginnings in the offerings brought by the Israelites in response to Moses’ call for precious metals, fine cloth, and dyes of all kinds, we can see a vast symbolic enactment of the bride delivering her dowry to her betrothed. 179 “So the people were restrained from bringing…” “For the stuff they had was sufficient for all the work to make it, and too much…”180 This most caring and heartfelt outpouring of generosity by the people is described in detail in Exodus. The Bible is the history of a people that dwells in covenantal time, or a species of time beyond natural, or even cosmic time. The Tabernacle structure is its visible manifestation. It has no parallel in the later account of the building of Solomon’s Temple because that Temple was not primarily a nuptial chamber. The Tabernacle is not only a symbolic construction but also a marker in time, the time of Israel’s actual betrothal and marriage to God. The Tabernacle is the chuppah181 of Israel. Like the succot from which it almost assuredly originates, the Tabernacle was meant to endure for a season and like the wedding canopy to be remembered forever. Its fragile and portable nature, so perfect for what it needed to be, could not have sustained the classical pinnacle of Israel as a mature

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179 Exodus 35:20-29.
180 Exodus 36:4-7.
181 wedding canopy
civilization permanently sited in its own land. But in Solomon’s Temple, in shape and proportion, the Tabernacle’s memory was embodied.

B. The Outer Altar of Offering and the Inner Altar of Incense

By their placement in the Tabernacle structure, both altars delineate hidden squares. The beginning of the ramp of the Altar of Offering is at the center of the first 50-cu square of the Outer Court.\(^{182}\) The center of this first square of the Outer Court is exactly 50 cu from the Ark of the Tablets at the center of the second square of the Outer Court. If we accept the view of the ramp being placed in a straight line going from east to west,\(^{183,184}\) a hidden square that begins at the foot of the ramp and ends at the Ark of the Tablets can be seen in this illustration.

In either placement, the high priest begins his ascent to the Holy of Holies when he first places his foot upon the ramp. A southern ascent does not alter the 50 cu distance, but it is less aesthetic, bearing in mind that, in the Jewish artistic dialectic, the more aesthetic appearing solution is not always the most correct. But with the ramp and altar in a straight east-to-west line, the intriguing hidden 50 cu square is generated, forming a beautiful geometric and symbolic unity between the ascent of the priest to the altar and on to the Holy of Holies, the most sacred space of the Tabernacle complex. Without the ramp, the Altar of Offering by itself is 30 cu from the Ark of the Tablets, repeating the dimensions of the Tent of Meeting and setting up a three-to-five ratio between the altar’s 5 cu square surface and its 30 cu distance from the Ark.

The 5 cu square of the Altar of Offering, beginning a multiple of five, is the same proportion as the 50 cu square of the Outer Court in which it rests. The

\(^{182}\) Steinberg, *The Mishkan and the Holy Garments* (1991) 99. “The ramp matched [the width of] the altar exactly.” He adds that the altar was situated ten cubits away from the Sanctuary, aka Tent of Meeting. If, according to Rabbi Yehudah, the ramp was ten cubits long, we have merely to add up the numbers. Ten cubits from the entrance to the Tent of Meeting begins the five-cubit altar. Add the ten cubit long ramp and we get twenty five cubits from entrance to the Tent of Meeting to the beginning of the ramp which is then in the exact center of the first square of the Outer Court.

\(^{183}\) Some views state that the ramp was ascended from the south side of the Outer Court.

\(^{184}\) Steinberg, *The Mishkan and the Holy Garments* (1991) 97. “The ramp was to the south of the altar.”
Fig. 25. *Floor Plan of the Tent of Meeting and its Placement of Furniture*  
Ark, Alter of Incense, Menorah and Table of Showbread
Fig. 26. Altars, Ark, Lamp and Table, Geometric-Symbolic Relationships to each other and to the Tabernacle

The ramp to the Altar of Offering was 10 cu long by 5 cu wide and was separate from the Altar of Offering, which was 5 cu square and 3 cu high. There are two traditional views regarding the placement of the ramp by which the High Priest ascended to the Altar of Offering which was outside the Tent of Meeting.
symbolic significance of the great number of multiples of five generated by the interaction of the two altars with the Tabernacle's architectural elements have yet to be understood but they cannot be overlooked. A partial list is the 5 by 5 cu space between the poles supporting the surrounding curtains of the Outer Court, and the 20 cu long screen that forms an entrance gate to the eastern end of the Outer Court.
And thou shalt make the altar of acacia wood, five cubits long, and five cubits broad; the altar shall be four-square and the height thereof shall be three cubits. And thou shalt make the horns of it upon the four corners thereof...\(^{185}\)

The 3 cu height of the Altar of Offering with its 5 cu square surface causes it to embody within itself the three to five golden section ratios that are also embodied in the 30 cu length of the Tent of Meeting and the 50 cu square of the Outer Court that contains it. The altar’s 3 cu height is a tenth part of the Tent of Meeting’s length, whereas its 5 cu square is a tenth part of each of the two squares of the Outer Court. In sum, the Altar of Offering is a solid form embodiment of all the Tabernacle spaces. And conversely all the Tabernacle’s spaces can be said to emanate from the Altar of Offering.

As we shall see, the small Altar of Incense inside the Tent of Meeting also introduces a relationship of multiples of three and five. We now have between the two altars and their spaces an endless generator of three-to-five ratios, the ratio of the golden section rectangle. From its center, the Altar of Incense is exactly a 10-cu square from the veil before the Holy of Holies.\(^{186}\) 5 cu forward of the Altar of Incense is the Table of Showbread “toward the northern wall of the Mishkan. The Menorah is opposite, toward the southern wall of the Mishkan”\(^{187}\) This geometric relationship is of great symbolic significance linking both outer and inner altars to the sacred Ark of the Covenant.

The Altar of Incense, table and Menorah are 5 cu distant from each other forming an offset invisible square whose westward corner or “horn” would touch the veil before the Holy of Holies. The table and lamp rest on the center line of the second square of the Holy Place and generate another 10 cu invisible square, which intersects with the Ark of the Covenant at the center of the Holy of Holies. Thus the altars, table and lamp, all the furnishings of the Tabernacle are in geometric touch with the Holy of Holies and the Holy Ark of the Covenant.

\(^{185}\) Exodus 27: 1-2.


\(^{187}\) Exodus 26:35.
Fig. 28. Ark, Altar of Incense, Lamp, and Table Spatial-Symbolic Relationships in the Tent of Meeting.

The two altars interconnect spatially with each other, with both squares of the Outer Court and with the inner chambers of the Tent of Meeting and the Holy of Holies by replicating, in space, the invisible shadows of their own dimensions.
The participants in the Tabernacle's ritual must have felt some bracing, deeply aesthetic awe to have been surrounded by such finely calibrated variations of similar shapes, so finely wrought and set apart each from the other in spaces so precisely measured. The analogy of the diamond is most appropriate here and more so if one could imagine a cut stone that was colored like stained glass. The Hebrew word for “facet” by which the cut stone refracts light is the same as for “eye,” the chief part of a face. For this ancient people, so attuned to the effects of forms, colors, and spaces, it would have felt to them that they were inside the diamond, inside the kaleidoscope looking out into a world of endlessly refracted combinations of similar shapes and colors interacting without end.188

Certain paintings so create spaces around forms that one has the sensation of being spiritually inside them, spiritually because not for a moment are we fooled in the physical sense. Always great art is an intellectual pathway to the emotional, the same as written language evokes physical emotions without ever deluding our immediate senses. Thus no animal is ever distracted by the visual aesthetic no matter how powerful. They have not the spiritual eyes for it anymore than for language. The great artist, Matisse once said, “I want to paint spiritual spaces.”

C. Symbolic and Aesthetic Relationships

The proximity of colors and distances between forms generate aesthetic dialogues. At precise intervals, colors enter a conversational zone with each other as much as we do when we approach friends. At a precise interval, colors enter into conversation, more or less intimate in a ratio determined by precise distances. If the distance is close, the colors begin to reflect each other, or even to mix exactly as lovers feel at one in each other’s nearness or embrace. The same is true of forms and their repetition, spaces and their repetition, and their spatial nearness

188 Giedion, The Eternal Present, (1957), 477. “It is in the nature of the golden section that it automatically introduces a continuity of proportions and an infinite series of harmonic reflections.”
or distance from each other. In this maneuvering of means and materials lie the higher attributes of all the arts in all times and in all places. Because those means and their maneuverings act in response to spiritual and biological connections embedded deeply in our human being, the aesthetic weaves seamlessly into the symbolic. Herein lies the connection between ritual and art, belief and symbol.

Looking at the illustration of the three forms for which precise measurements are given: the Altar of Offering, the Altar of Incense, and the Table of Showbread, we can see at a glance that they are already geometrically related to each other. Also, they are proportional in size and shapes, related to the spaces that they were assigned to be in.

The Altar of Offering begins in terms of its placement with the base of its ramp, which would be the first step of the High Priest’s ascent to this altar and towards the Holy Place and to the Ark at the center of the Holy of Holies. The ramp of the Altar of Offering was placed in the center of the first square of the Outer Court. Rabbinical tradition also places the ramp at the south side of the altar facing north. Such a placement eliminates the aesthetic concept of the “hidden square.” As for the Altar itself, its 5-cu square surface and base reflects exactly its geometric multiple, the 50-cu square of its half of the Outer Court.

There are no measurements given in the Torah for the ramp. The Ramp derives from the biblical passage stating the need for modesty by the priests and that he therefore not use stair steps to ascend to the Altar. “Neither shalt thou go up by steps unto mine altar, that thy nakedness be not uncovered thereon. ... do not climb up to My altar with steps.” Authorities agree as to the ramp’s being the same width and height as the Altar, but there are great differences of opinion as to its length and placement.

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Fig. 29. Comparison of Altars of Incense and Offering and the Table of Showbread
Looking at the illustration of the three forms for which precise measurements

There are two views as to the ramp’s placement next to the Outer Altar. One view centrally along the east to west axis of the Tabernacle creates a hidden 50 cu square that intersects the Ark of the Covenant at the center of the Holy of Holies. Another view places the ramp to the south of the Altar so that the High Priest ascended to the Altar facing north. This arrangement sets off an entirely different configuration whereby ramp, altar, and Ark are intersected at the center points of hidden squares of 25 cu each and by half-squares at some points. This latter view may be the more generally accepted by Jewish authorities. More modest, the indirect manner of the priest’s approach to the Holy Place gives it
great credibility from a Judaic point of view. Both views generate a similarity of geometric symbolic connection between the Altar of Offering and the Holy of Holies.

Standing inside the 30-cu by 10-cu high Tent of Meeting, the Altar of Incense is likewise a reflection of the long, narrow body shape of its inhabited space. Being 2 cu long and 1 cu square, it is also a reflection of the Outer Court’s two squares. The third square of the Altar of Incense is also here with its top surface, the one upon which the sacred incense was set to burn. Because this altar’s surface is a square, it is in an intimate symbolic dialogue with the Holy Ark of the Tablets inside the cube space of the Holy of Holies behind the veil.

Both altars, because of their locations, generate “hidden squares,” reflective of the spaces they occupy. The Altar of Offering generates a hidden square the exact size of the 50 by 50 cu square it inhabits, and the Altar of Incense generates a “hidden square” exactly the size of the 10 by 10 cu square of the Holy Place square that it inhabits. Most interesting is how both of these hidden squares or unmarked spaces form a geometric relationship between the altars and with the Ark of the Covenant at the center of the Holy of Holies. The invisible square space generated by the Altar of Offering is exactly 50 cu, the size of each square of the Outer Court. The western boundary of this hidden square cuts exactly across the Ark of Covenant located in the center of the Holy of Holies.

So too, the placement of the Altar of Incense generates its 10 by 10 cu “hidden square” whose western boundary likewise intersects the veil before the Holy of Holies. Thus both outdoor and indoor altars converse spatially with the Ark of the Covenant. As for the Altar of Offering by itself, without the ramp, its placement puts its western edge 10 cu from the veil of entrance to the Tent of Meeting, and 20 cu from the veil of the Holy of Holies, or exactly 30 cu of an invisible replica in space of the Tent of Meeting.

In sum, there are meaningful reflective spaces unmarked, but present relating the outside Altar of Offering to the significant points inside the Tent of Meeting and both altars geometrically to each other. Provided we include the
surface square of the Incense Altar, its three squares form a three-to-five, golden section ratio to the 5-cu square Altar of Offering outside the veil. This ratio between the altars is itself an unmarked replication of the thirty-to-fifty or three-to-five ratio of the Tent of Meeting, which is 30 cu long and sits in the 50-cu second square of the Outer Court.

D. The Table of Showbread

Three objects appear to have no geometric repetition of themselves in the Tabernacle complex but stand apart from both all other Tabernacle forms and from each other. They are the Ark of the Covenant, the Menorah, and the Table of Showbread, a fact that nevertheless does not prevent their various shapes from interacting with the Tabernacle’s geometry aesthetically or symbolically. Both the Ark and the seven-branched lamp are dealt with in other chapters. What remains is the Table of Showbread, called showbread (literally “bread of the faces”) since it had surfaces facing the sides of the sanctuary.\(^{191}\) It is spelled “shewbread” in some older texts.

The Table of Showbread\(^ {192}\) was of two distinct parts, a table of standard height, 30 in or 1 1/2 cu, 40 in long (2 cu) and 20 in wide (1 cu). For the second part, no measure is given in the Torah for the two tiers that held the twelve loaves of unleavened bread representing each of the twelve tribes.

The table was placed on the north side of the Holy Place to the right and forward of the Altar of Incense, exactly equidistant from the altar and the north wall of the Holy place.\(^ {193}\) The seven-branched lamp stood opposite the table and left of the altar forward in the same place but equidistant between the altar and the

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\(^{191}\) Steinberg, The Mishkan and the Holy Garments, (1991), Rashi, pg. 25 and 26. Two opinions, R. Meir and R. Yehudah. According to R. Yehudah, the height of the shewbread tiers was fifteen handbreadths. A handbreadth is about 4 inches, so 15 handbreadths equal to 60 inches or 3 cubits. This replicates the height (3 cubits) of the Altar of Offering, forming yet another relationship.


\(^{193}\) Steinberg, The Mishkan and the Holy Garments, (1991) 83. “Positioning the Table, the Menorah, and the Golden Altar,” Shown here are two rabbinic views of their placement. See Fig. 25 and Fig. 28.
south wall of the Holy Place. The total configuration of these placed objects would have formed a diamond-shaped square space one quarter the size of the second 10-cu square of the Holy Place they occupied. This square space of 5 cu is the size exactly of the surface square of the Altar of Offering in the Outer Court. It is another “hidden square,” a space echoing the form of the sacred Altar of Offering.

This relationship of space seems intended to reflect the outer Altar of Offering. It is no mere coincidence that its offset shape with each one of its four corners intersects the centers of four sacred points:

Fig. 30. Floor Plan of Outer Court and Tent of Meeting
• the center of the veil of the Holy of Holies (west),
• the Altar of Incense directly to its front (east),
• the Menorah to its left (south), and
• the Table of Showbread at its right (north). 194

The corner mentioned in early chapters had great symbolic significance to early religions, certainly to Egyptian and Israelite civilization. We see the vestige of that symbolism in our own day in the ceremonies of laying the cornerstone of a new building. When laying out his pyramid or temple, the Pharaoh made an offering of a bullock (the head) at each of its four corners. 195 Recall now that Israel's altars specify a raised point, "a horn" at each corner and that both of the holy altars had the blood of sin offerings sprinkled on their corners by the High Priest. 196 The third portion of the Shema, Israel's central prayer, reflects also the importance of the corner. Perhaps these very corners enumerated here:

...Speak unto the children of Israel, and bid them that they make them throughout their generations fringes in the corners of their garments, and that they put with the fringe of each corner a thread of blue. And it shall be unto you for a fringe, that ye may look upon it, and remember all the commandments of the Lord, and do them; and that ye go not after your own heart and your own eyes, after which ye use to go astray... 197

The Shema prayer is a powerful compendium of biblical passages, and should be read in its entirety as it summarizes Judaism, its history, its law and its relationship to God.

E. Measurement of the Un-measured: the Two Tiers of the Table of Showbread

While the measurements of the Table of Showbread 198 do not replicate other Tabernacle elements either architectural or ritual, they certainly generate

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196 Leviticus 4: 4-7.
197 Numbers 15:37-41.
198 1 cubit (20 inches) x 2 cubits (40 inches) x 1 ½ cubit (30 inches)
geometric repetitions and relationships of significance. Its overall 1-1/2 cu height to a length of 2 cu is a golden section rectangle and a popular standard size canvas proportion. The table’s 1-1/2 cu height is also the same as the 1-1/2 height and width of the Ark of the Covenant. The 2-cu length to 1-cu width of the Table’s top surface is clearly an echo of the double square of the Outer Court.

These three box shaped objects, the two altars and the table, so simple in their geometry yet precise in their placement, throw out flashes of geometric concordances relating to each other and to all the other structural elements of the Tabernacle both inside the Holy Place and the Outer Court surrounding it. Like the mirrored glass in a kaleidoscope, the Tabernacle furniture’s replicated surfaces and spaces interact continually in a never exhausted vocabulary of symbolic form-space connections. It is well to recall also that “corners’ and “gates” had a symbolic richness to the ancients, as can be seen by their many appearances in Scripture. They were not the mere mechanical ends and means of construction as they are to us today. They denoted significant change either in direction as with corners or dimension as with gates. Gates and corners are part of man’s path in his ascent to the Divine Presence. They are separators, distinguishers, and points of reference. The literal meaning of “holy” means “to separate,” “to make distinctions or judgments” between sacred and profane, common and uncommon, good and evil. The famous writer, Robert Louis Stevenson wrote of his fascination with doors, his wonderment as to what lies beyond them. Are not the covers of a book its gates, and the curtain that opens a play its veil?

F. Separated Parts: The Ramp of the Altar of Offering and the Two Tiers of the Table of Showbread

It may seem strange to end this chapter with objects so separate from each other in their appearance, in their placement and in their ritual use. But, as will

199 Exodus 25:10-11.
200 kodesh in Hebrew
become clear, they have relationships to each other. The most indisputable first relationship is that both the Altar and the Table have prominent appendages absolutely essential to their ritual but for which Scripture gives no measurements.

For the size of the ramp that elevated the High Priest to the Altar, and for the two tiers that held the twelve loaves of showbread, we must rely on rabbinical interpretation, a source that aside from the one-ness of God and the Ten Commandments is almost never of a single opinion. In this text we deal with two authoritative opinions on these objects and have chosen the one that most fits the reading of the aesthetic-symbolic deductions of this study. In the case of the ramp of the altar, a single deviation from rabbinical sources has been taken (other than perhaps the means of lighting inside the Holy Place). In both instances, we are guided purely by logical means to attain logical needs that in no way seem to violate the biblical text or the symbolic-aesthetic relationships upon which both scripture and rabbinical opinion could agree.

Proceeding to the ramp/altar combination, it is important that we not confuse the 5-cu height of the curtained fence of the Outer Court with the height of the boards of the Tent of Meeting or Holy Place whose height is 10 cu. There is a beautiful interaction between the ritual of the High Priest and his visibility by the hosts of Israel gathered outside the Tabernacle. The height of the Outer Court and that of the altar and its ramp make this visibility possible.

For purposes of visualization, let us consider that the Altar of Offering was, in its function, an outdoor grill similar to the ones used today for family cookouts. Its 3-cu height would make it almost exactly 60 in high, or twice the height of a standard table, desk, outdoor grill, and exactly twice the height of the Table of Showbread, which was 1-1/2 cu high, or 30 in. This table height is convenient both for sitting and, in our case, especially for performing tasks while standing, as did the Priests.

My problem with the standard opinion of a ramp going slant-wise to the very top of the altar is that it seems extremely awkward and even dangerous.
Rabbinical opinion visualizes a narrow walkway around the top of the altar.\textsuperscript{201} Such an arrangement would have the High Priest standing full length above the grill of the altar, right above the flames with smoke constantly in his eyes, nose, and underneath his garments. Furthermore, he would have to bend completely over at the waist to lay down the offerings, an altogether irritating, ungainly, and dangerous gesture over an open flame. Imagine a person grilling the family meal with his feet at the same level as the grill and his body full length above it. Furthermore, this arrangement would have made it virtually impossible and again ungainly in the extreme, for the High priest to be easily assisted in his duties. Worst of all, the only alternative with the standard ramp would have the High Priest performing his duties at an awkward slant or else leaning forward over the altar while holding heavy animal parts, an exercise quickly tiring and dangerous.

Rabbinical opinion does not dispute that the width of the ramp was the same as the altar\textsuperscript{202} but there are at least two opinions as to its length. Rabbi Yose believed the ramp to be 30 cu long\textsuperscript{203} and Rabbi Yehudah believed it to be 10 cu long.\textsuperscript{204} While either of these lengths would work for the ritual of the altar, the 10-cu length of Rabbi Yehudah was chosen here because it relates the altar service to the center points of both squares of the Outer Court and to the Ark of the Covenant inside the Holy of Holies.

A ramp 10 cu long but which is only slanted to its midpoint and then becomes a level, 5-cu square, solves all our problems of function and works aesthetically and it enhances symbolism. At its 5-cu midpoint, the ramp is 1 ½ cu or 30 in high at the point where its level platform begins. The High Priest now has a level space equal in size to the altar itself.\textsuperscript{205} This level space raises his feet exactly to half the height of the 3 cu high altar. He would then be standing above


\textsuperscript{204} Steinberg, The Mishkan and the Holy Garment, (1991) 99. 10 cu, 16 ft, 6 in “According to Rabbi Yehuda, ten cubits.”

\textsuperscript{205} 5 cu or 100 in
a surface 1 ½ cu above the altar, the same as our outdoor grill, the comfortable height of a standard table. Moreover, the large square base allows for unhindered movement and room for assistant priests.

Nearly 6 ft tall, a priest, standing on a base 30 in high, would reach a height from ground level of a 100 in or 5 cu; the same dimension as the square of the Altar and the height of the fence of the Outer Court. The miter of the High Priest, judging from the high crowns of the Pharaohs, could easily have been 1 cu high. While wearing it, the High Priest’s figure assumes a height of 120 in or 6 cu allowing the movements of the High Priest’s mitre to be followed above the 5 cu height of the fence around the Outer Court.

Wearing raised platform shoes, a likely possibility, which would be stepped into upon reaching the flat platform of the ramp, the priest’s shoulder and perhaps his upper arm become visible. Such a configuration makes visible to all outside the Outer Court every gesture of offering required of the High Priest by the Levitical ritual liturgy. Furthermore, it plays down the body of the High Priest, showing only the upper parts of head and shoulder as well as arms and hands when raised to shoulder height. This is in keeping with the modesty required of Jewish liturgical art, which abjures displays of the whole body but allows the portrayal of the upper body: head, hands, and shoulders. The most important symbolic element of the ramp is that, with his first step taken upon it, the High Priest begins his ascent in the name of Israel, into the Divine chamber of betrothal to God.

G. The Tiers of Showbread: the Second Split Square of Covenant

Returning to the Table of Showbread, we come to a sacred ritual form for which neither measure or description is found in Scripture. Only rabbinical conceptions fill the gap and of course they differ in both description and measurement. The illustration and measurements here follow Rabbi Yehudah’s
opinions. His opinions on the geometric results confirm these observations here described. Perhaps, he had knowledge of the power of geometric pattern and its use in symbolic expression as well as a deep aesthetic sensibility. But all the opinions have their logic and often reinforce each other. For example, Rabbi Meir puts a space of about eight inches between the tiers, whereas Yehudah places the tiers against each other with no space between. Rabbi Meir’s view reinforces their symbolism of the Covenant of the Pieces, which were separated by a space. Rabbi Yehudah’s view would reinforce the close together placement of the Tablets of the Law.

Still another opinion describes the tiers as tri-branched frames, somewhat like a three-branched Menorah. It is generally agreed that, whatever their form, the frames rested on the floor and rose up high above the table. There were four side frames of gold, which were notched at the top. They were used as frames.

Rashi explains: “They were notched so that the ends of the rods could be inserted in the notches. There were many such notches cut into the supports for the loaves, and were placed one on either side of each of the tiers of bread. The measurements given here are Rabbi Yehudah’s and the illustration owes its basic visualization to the drawing by Yisrael Ohad Ezrachi.

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208 Steinberg, The Mishkan and the Holy Garment, (1991), 31. “...by the author of Tavnit ha Heichal. Rachbam and Rolbag and perhaps Rashi also concur: “There were fork-like frames at either side of the Table.”
Fig. 31. The Altar of Offering with the Ramp is Surrounded by the Outer Court
The Outer Court is five cubits or 100 inches high. The mitre of the High Priest, and possibly his head also if the platform shoes were used, shows above the fence of the Outer Court and is visible to the people outside. The animal parts of the offerings would also be visible beyond the Outer Court as the High Priest could raise these up.
H. The Table of Showbread's Significance and Symbolism

Wherever the Tabernacle ritual objects are made up of divisions of twelve, as with the semi-precious stones inlaid in the breastplate worn by the High Priest (the ephod) or the twelve loaves of showbread stacked in two neat rows on the tiers of the Table of Showbread, we can be certain that the welfare of the twelve tribes of Israel is being addressed. Indeed, their names are engraved on the stones of the ephod. As descendants of Jacob, whose God-given name was Israel, these twelve tribes are the direct descendents of the last patriarch’s twelve sons. The Book of Genesis comes to its close with the family of seventy souls going into Egypt and ends with Jacob’s body being carried by his twelve sons to his burial place in the Patriarchal tomb in the Cave of Machphelah, in Hebron.212 At this juncture, between the end of Genesis and the beginning of Exodus, Israel commences as a nation and a civilization. The Jewish Bible is the history of a people that dwells in covenantal time; a species of time beyond natural or cosmic time and the Tabernacle structure and ritual was its visible manifestation.

From the floor of the Table of Showbread to the top, the frames or tiers containing the twelve loaves form a wall divisible into three squares another symbolic echo of the Tent of Meeting. From the top of the table, where the showbreads actually begin, there is echoed the double square, recalling the Outer Court.

Since the two tiers form a pair, each of the three squares is broken in half, reflecting the two Tablets of Covenant, which come together to form the square of eternal covenant. In this splitting down the center between the two tiers, containing their six loaves on each side, the two equal tiers of bread with the line of separation between them strongly evokes the Covenant God made with Abraham, known as the Covenant of the Pieces.213 This was the fundamental covenant predicting Israel's bondage, redemption, return to Canaan, and its triumph in nationhood.

212 Genesis 50:13.
213 Genesis 15:4-18.
From top of the tiers to top of the table are implied the double square of the Outer Court.

Implied 3 squares of Tent of Meeting from table to top of each 1 cu. wide board.

Total 4 1/2 cu high from ground.

Width of each tier 1 cu 2 cu Table length.

Tiers 3 cu high.

Table 1 1/2 cu high.

The Table of Showbread shows proportional relationships to The Tabernacle’s architectural elements. The measurements used are according to Rabbi Yehudah. Rabbinical opinion varies since the Torah does not give a measurement for the tiers which held the showbread. According to Rabbi Yehudah, “…the height of the tiers of bread from the surface of the table upward was fifteen handbreadths high. A handbreadth varies from about 2-1/2 to 4 in measured by the width of the palm. Using a 4-in handbreath, the height of each tier from the top of the table is 60 in or 3 cu (approximately).
On the eve of each Sabbath, twelve new loaves of unleavened bread were placed on the tiers. The old loaves were removed and eaten by the priests. Bread is sustenance, the symbol of life's renewal. Unleavened bread is the memorial of the Passover night, that last uncertain moment before midnight that heralded Israel's redemption from bondage in Egypt. The bread and its Sabbath ritual are symbols par excellence of God's eternal covenant with Israel and His sustenance and blessing of the children of Israel, who to this day begin their Sabbath service with a blessing over a pair of two identical loaves of bread. The Table of Showbread and its ritual service is a compact summary of Israel's redemption, covenant, teaching, and nationhood. It was carried on inside the Holy Place, on the right and to the north, before the Holy of Holies.

It is evident that the ascent of the High Priest as he carried out his service, moved in and around a series of squares, both actual and implied and reflected again in the ritual furniture of the Tabernacle. He moved within spaces symbolic of the eternal and covenantal, as a Jew wrapped in his talit with its fringe bearing corners also moves within a sacred square. The symbolically ascending squares in the High Priest's journey can also symbolize a ladder or staircase, which ascends and descends simultaneously, as in the vision of Jacob's ladder.

Your seed will be like the dust of the earth; you will burst forth, to the sea (west), to the east, to the north, to the Negev (south). All the clans of the soil will find blessing through you and through your seed.\(^{214}\)

In this vision may be found one source of the Tabernacle's westward orientation, as well as that of Solomon's Temple. The directional sprinkling of blood upon the Altar of Offering may also be derived from this passage.

The Tabernacle and its ritual should be seen not as an outdated codification by primitive tribes, but as a great compendium of historical memory, covenantal time, moral teaching, and eternal renewal. It is thought out, unified, and put together with a highly sophisticated artistry containing depths of meaning we can only begin to reveal, or to emulate.

\(^{214}\) Genesis 28: 10-15.
Chapter 9

Curtain of Heaven, Boxes of Remembrance:
The Tabernacle’s Influence on Personal Ritual, and Symbols

When my father (of blessed memory) died, the one possession of his that I desired was his pair of tefillin. These are two cube shaped boxes that a Jewish male is required to wear for daily morning prayer except on the Sabbath and festival days. They contain carefully rolled up parchments upon which selected Torah passages are written by hand.

And it came to pass in the first month in the second year, on the first day of the month that the Tabernacle was reared up. And Moses reared up the Tabernacle, and laid its sockets, and set up the boards thereof, and put up the bars thereof, and reared up its pillars. And he spread the tent over the Tabernacle and put the covering of the tent above upon it; as the Lord commanded Moses.²¹⁵

At those two times, evening and morning, the prescribed times for daily prayer, when the heavens echo the colors of the Tabernacle’s curtains, Jews spread out their tallit before them and recite, “Thou art robed in majesty, Thou art clothed in light as with a garment, stretching out the heavens like a curtain.”²¹⁶ As the prayer shawl is draped over the shoulders, it is as if God too, comes close, wrapped in His tallit of heavenly light, in the fleeting colors of eternity to join Israel, His betrothed in prayer.

As the entire congregation of Israel was present at the fiery mount of Sinai when the "ten words" were heard and Israel's covenant with God established, so too the entire congregation, in its various ways, participated in the rituals emanating from that primal covenantal encounter.

Israel's covenantal moments are memorialized in the rituals and structures of the Tabernacle. All the traditional rituals of Judaic worship go back to and are derived from the Tabernacle's rituals as codified in the Torah. The tefillin ritual transforms the worshipper into a consecrated priest entering the Holy of Holies. He is transplanted back in time to the sacral moment of covenant and, at the same moment, physically transformed into an embodiment of the Tabernacle and the Torah.

When he enfolds himself in the tallit, a Jew places himself into a form of eternal covenant. He becomes an everlasting material (in the figurative sense) as was the squared stone block from which an Egyptian royal statue was carved. The tzitzit of blue affirms that he is to be always in the service of God. A religious Jew makes himself bodily and spiritually into the Tabernacle each morning, putting on his body the tallit (the curtain), the body being the oblong shape of the Tent of Meeting.

A. The Judaic Significance of the Tzitzit

As with the form of tefillin, so too the Torah makes no mention of any knots. Only the thread of blue for each corner of one's garment is mentioned. Rabbinic tradition in ritual and ritual object has been formulated and kept with a thoughtfulness and precision that other cultures reserve for their highest art forms and most solemn ceremonies.

The tzitzit of the tallit in each corner and the five knots thereon symbolically pronounce the Name of God in the form of the tetragrammaton. As

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217 Numbers 15:37-41
218 the blue thread in "the corner of your garment" to remind him of God's commandments
one puts his hand around the knotted cords of each corner, he is put symbolically in God's presence.

The four letters of the tetragrammaton are spelled out by the windings or coils between the knots. Each Hebrew letter has a numerical value and often as symbolic meaning. "The number of knots and the number of times a thread is wrapped around the others in the tassel corresponds numerically to the name of God."\(^{219}\) The letters of the tetragrammaton have the following numerical values: \(Y = 10, H = 5, V = 6, H = 5\)\(^{220}\) These letters in Hebrew are pronounced Yod, Hey, Vav, Hey.

The azure blue\(^{221}\) thread wound the coils and would have wound through the knots but since the exact shade of blue was no longer certain or available, all eight threads of each corner remained white.

Gone is any hint or reference to the knotted cord held by the pharaohs, or the perfect corners of sacred Egyptian architecture. But what remains is the number four and its multiple of eight, the reference to corners in the scriptural prayer texts, and of course, the knots, also used by many cultures to number, to mark, to measure and to remember.

The ceremony of "stretching the cord" (knotted at intervals of 3, 4, and 5 to form a right-angled triangle) was performed by the pharaoh himself at the erection of all important sanctuaries. The value laid upon safeguarding the corners of a building is shown by the square holes found by Winlock at the mortuary temple of Mentuhotep at Deir el Bahari.


Fig. 33. Correlations Between Proportions of Tallit-Tzitzit and Pyramid and Knotted Cord and Tabernacle and Pyramid

The knotted cord was used by Pharaohs and Egyptian builders to lay out canals, fields, and sacred monuments (pyramids and temples). The use of half of the baseline to derive the incline corresponds to the "cubit and a half" locked into the Ark of the Tablets.

ABCD = Altars of Incense and Offering
ABCD = Ark of Covenant and Holy of Holies
ABCD = Square corner patch of tallit
ABEF = Outer Court
At each of the four corners of the foundation trench a hole some three feet square was dug. On the appointed day—with the king [probably] present in person,... the priests approached one corner of the temple and placed in the hole the head, a leg and a rib of a freshly slaughtered ox. Beside it they laid some conical loaves of bread... saucers filled with barley, figs, grapes... round cakes, and half a dozen miniature wine jars. All of this was doubtless accompanied by prayer...

B. Tefillin: Sacred Contents in Sacred Forms

Solemn and formal, the tefillin ritual is also the most personal and intimate of Jewish religious rituals. Central to weekday morning prayer, tefillin are a memory bank of the primal structures, rituals, and covenant of the Jewish people. In ancient times, women also practiced the tefillin ritual thus underlining the concept of universal participation.

The Rabbis themselves did in fact stress that public display of tefillin was one way in which one testified to God's lordship and glory, for He could be imagined as wearing them. Tefillin were therefore worn by some Jews every time they ventured into the public domain, and occasionally women too wore them.

Tefillin are sacred objects to Judaism and must be made to a precise code of materials, shape, size, and color. The use of leather from a "clean" animal is self-explanatory. The four central prayers encased in each box are a covenantal summary or coda of the entire Torah. But what is the origin of their cube shape, their precise and beautiful construction? What is the reason for the strictures against embellishment or innovation of shape or color? In short, what is the aesthetic symbolic reasoning underlying their unusual appearance?

It is unknown exactly when their design was first codified or who decided such a form. The Torah verses do not describe tefillin but mention only their use in the ritual itself; whereas the absence of aesthetic commentary on ritual objects is a constant of Jewish tradition. As with all Judaic objects explicitly sacred or holy in and of themselves, the tefillin's sanctity derives from their Torah origin.

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222 Giedion, The Eternal Present (1957): 489.
224 i.e., kosher
and content not from their physical form or materials. The only exception to this general rule would be the Menorahs of the Tabernacle and Temple.

The sanctity of tefillin derives not only from their words inside but from their imitation in structure to a Torah scroll. The lines of sacred text are written by hand, by a scribe upon parchment, each prayer itself forming a square, and carefully rolled up for insertion. It is the tefillin's shape that is fascinating, the very severity of their form, color, and the awkwardness and intricacy of their usage. The windings of leather, the timing of their placement upon the body interspersed with prayers, are of utmost urgency and precision and, to an extent, a discomfort. Everything about tefillin militates against one seeing them as merely beautiful objects, or as an enhancement of our appearance in that physical way which we associate with objects of religious art. Yet they are as beautifully and precisely made as fine jewelry. In some strange way, carefully removing these tefillin from their bag and then from their outer protective cases is to feel a gate opening slowly into a sacred dimension. They raise questions. Why two boxes, one for the heart/hand and another for the head/mind? As with the Ten Commandments, one stone tablet could have sufficed, but two were prescribed.

Why four prayers? It is a number echoed in the four sides of a square which is the prescribed form of the tefillin.

A consistent and unique aesthetic is created through the ages by Judaic culture beginning with the Tabernacle descriptions in Exodus. It is easy to ascribe this aesthetic to a kind of minimalist tradition of deliberate severity of abstraction to avoid graven imagery. Such an assumption would not be altogether incorrect.

225 The words of Torah, sacred writings, prayers particularly if the name of God is mentioned.

226 Non-object exceptions would be sacred places such as Jerusalem, the Temple Mount and the land of Israel.

227 The tefillin of the head is divided into four compartments across its top and vertical sides by incised lines. On its left side is the raised Hebrew letter “shin” with four stems and on the right side is another raised “shin” but with the usual three stems. I have been told that the letter “shin” is symbolic for God’s name. Several other Hebrew letters carry this same symbolic value.
Fig. 34. Placement of Tefillin

Tefillin of the head is called *shel rosh* (lit. of the head). Tefillin of the arm is called *shel yod* (lit. of the hand).

However, the weakness of such an explanation lies in its very simplicity and the literalness of its reading of the Second Commandment. It implies a completely negative approach or rejection of the aesthetic that has come to be the familiar aversion to looking for any contribution to art from the Jewish tradition or its scriptures. The Judaic aesthetic is not simply a negative against the graven image, but a subtle, complex, carefully calibrated positive and intricately woven set of choices, limitations, innovations, and rejections that build up to an aesthetic cohesion as unique, unified, and influential as any in antiquity.
The altars of ancient Egypt were square at the top and base. Their pyramids were constructed upon a square base and, the holy of holies of their temples, the room of the statue of the temple god was a cube form.

Their buildings and statues were oriented to the cardinal points. Priestly offerings were made at the north, south, east, and west corners of their pyramids and sanctuaries. West was the most sacred direction denoting the land of the dead by way of the setting sun. It was also the direction the pharaonic statues faced. For unknown reasons, the number “four” was sacred to the Egyptians and the square was a visual diagram of “four.”

The altars of the ancient Israelites in both the Tabernacle and later Temples were also square at the top and base. Their offerings too were oriented to the cardinal points. When a pharaoh died, the four sacred viscera were removed from his body and placed in four canopic jars. The jars were then placed in a cube-shaped box and interred in his tomb. Egypt was the civilization from which the Israelites emerged, as slaves and as a nation. The Ten Commandments and the four prayers inside the tefillin remind us of that fact.

It is a reasonable assumption that this sacred Egyptian vocabulary of forms would have been familiar to the Israelites and held in some form of awe. It then became the task of Moses to do what all creative teachers have always done: use the familiar to invent new relationships to inspire a new way of thinking. In this case, it meant using a vocabulary of idolatry to teach the thought and language of moral monotheism. The Judaic or Mosaic substitutions, deletions, and additions are almost obvious from a comparative study of Egyptian art and

228 Giedion, The Eternal Present (1957): 348.
231 Leviticus 1: 10-11.
234 Moshe Rabbenu, Hebrew for “our teacher”
the biblical texts of Exodus. Such is the march to individuation of all cultures and art throughout history; the evidence of influence is the proof of underlying innovation.

The very mystery as to the origin of the tefillin’s shape may also have a clue in their apparent Egyptian connection. Any reference to similarity or origin of those sacred objects to the experience of bondage and idolatry would need to “be lost.” Thus the biblical narrative expresses no hint of the symbolic meanings of shapes, colors, or forms or of their origins. No aesthetic references or discourse tells us in the Torah or Talmud why the precise details described for sacred objects are the way they are. As for tefillin, no form whatever is described in the Torah but their physical shape reflects the same culture of forms used to build the ancient Tabernacle, the first shrine of moral monotheism.

As in Egypt, the square is the basic form underlying all the architectural elements of the Tabernacle complex. The surrounding Outer Court is a double square and the Sanctuary within it is a long building 10 cu high, 10 cu wide, and 30 cu long. The Holy of Holies is a cube-shaped room, 10 by 10 by 10 cu. It was the most sacred space in Jewish history.

In the death and rebirth rituals of Egyptian religion can be seen the basic elements of all nature worship which involves the centrality of Eros and Thanatos. All earthly life is parenthecised between the potency of Eros and the mysterious trauma of Death. Yet wherever these forces dominate religion through ritualized worship, their aestheticization becomes irresistible and the spiritualizing power of moral monotheism falters. The centrality of the Torah, a written moral and legal code, cannot be sustained against equal footing with Eros and Thanatos and yet no religion can fail to deal with the latter. Judaism makes its great contribution to religion and to its expression in art, in its resolution of the paradox between the ever intrusive but amoral natural order and the virtually unprovable moral order.

In every ritual, from the burnt offerings at its altars to the prayers and commandments of its daily ritual, one can detect this dialog of the disestablishment of nature as final arbiter of existence and its replacement by the
single transcendent God and His Divine Teaching. Indeed the Patriarchal stories, beginning with the Creation itself and subsequent Prophetic writings establish this same dialog. It is no less evident that this same dialog goes forward in the subtle choices, combinations, additions, and omissions of shapes, forms, proportions, colors, and rituals recorded in those same sacred texts. It is Judaic civilization’s great contribution to art that it created an aesthetic ritual art that subordinates the amoral natural order beneath the centrality of divine order. Thus the Egyptian square shape of altars is retained but, instead of a cube-shaped box containing four jars of primal human viscera, four primal covenantal Torah texts are inserted in a cube. The cube replicates the Holy of Holies, that cube-shaped room with the original two Tablets of the Covenant placed in the Ark.

![Fig. 35. Tefillin of the Hand](image)

When wrapped properly around the hand, the tefillin straps form the Hebrew letters *yad*, *dalet*, and *shin* (ש). They form the word *Shaddai*, meaning “God Almighty”

The two tefillin boxes also echo the two square-shaped altars of the Tabernacle. The altar of offering outside the Sanctuary was for animal and grain (meal) offerings. Four types of offerings were done here; one of which is the
atonement for sin. This altar corresponds to the tefillin\textsuperscript{235} box which is placed on the left arm alongside the heart, the organ of blood and passion: our animal dimension.

On entering the Sanctuary or Holy Place,\textsuperscript{236} we see a second, much smaller altar of gold, the Altar of Incense. Upon this altar, the High Priest burned the sacred incense and, approaching the Holy of Holies, made atonement to God for his own and for Israel’s sins. The Altar of Incense is echoed in the second

\textbf{Fig. 36. Tefillin of the Head}

The tefillin is placed above the hairline defining a space where the top of the head joins the forehead, a space corresponding to the area from which the horns of animals of offering grow, i.e. bullocks and rams. This area may also have given rise to the origin of the “horns” or “beams of light” which shone from the face of Moses (Exodus 34:35). The Hebrew word, \textit{keren} can mean horn, strength or beam of light.


\textsuperscript{236} which only the High Priest entered
tefillin cube,\textsuperscript{237} the metaphorical mind and thought, our spiritual dimension. While both tefillin contain the same four Torah passages, in the tefillin of the head, the passages are inscribed on four separate parchments which are then carefully rolled up, bound and inserted into this tefillin cube’s four separate compartments.

The tablets of Moses are two because a pair symbolized a covenant between the God of this testimony and His people. The two tefillin echo the covenantal theme of the two tablets of the covenant at Sinai. Additionally, by converging upon heart/hand, and head, tefillin express the Torah’s command to subject every part of our physical, mental, and spiritual being to God’s will. As with the two Tablets of Covenant, so also with the paired tefillin, we see that perfect convergence between religious expression and an art aesthetic that is resistant to idolatry. The choice of two equal parts where one could have sufficed, breaks apart that sacred oneness of a visible form that leads to its becoming an object of worship.

The care in making the corners of tefillin to an exacting precision has a symbolic moral significance as well as the commemorative one of remembrance. A corner is a change of direction as well as a structural support. Repentance in Judaism means to turn or change direction away from sin. Teshuvah, the Hebrew word for “repentance” means literally “to turn” or a “turning away” from sin. The Torah warns us in the language of builders to not follow after our own eyes but to adhere strictly to the guidance of the Torah.\textsuperscript{238} Our moral life is to be guided, not by caprice, but by the rule and the measure, the precision of God’s commandments. The abstractness of the square, the right angle from which it is made, and the infinitely fine point of juncture at the edges of directional change

\textsuperscript{237} Quaknin, Symbols of Judaism (2000): 20. shel rosh—of the head, worn on the forehead.
\textsuperscript{238} Deuteronomy 5:29, “Ye shall observe to do therefore as the Lord your God hath commanded you; ye shall not turn aside to the right hand or to the left.”
are given immense significance by the tefillin's outer shape. A building stands on its corners. If the corner is not exact, or is compromised at the joint, the structure is weakened and will collapse under stress.

An artisan splits a block of stone easily by cutting a line all around it perpendicular to corners. Light tapping around the block and at the corner edges will then cause a clean break, splitting the stone as if cleaved by a knife. But without cutting across the corner edges, it is doubtful the break would be clean. Thus the corner is at once the strongest and yet most vulnerable part of a block or building. The analogy follows into the realm of our spiritual life. It is at times of change in our life whether by accident or resolve that we must be strong and at the same time we are most vulnerable and most in need of help. It is in prayer and particularly when we come before God with the resolve to repent, to change our direction that we are at our most vulnerable. We stand at the edge but the edge is invisible, even nonmaterial. Only the eye of the Divine can measure it. Naked in spirit before the mercy of God stood the High Priest before the altar and naked in spirit before the mercy of God stands the Jew bound in his tefillin.

D. The Metric of the Divine Metaphor

"With a mighty hand and an outstretched arm..." The entire system of measurement in ancient Egypt from the proportions of the royal human figure to the dimensions of sacred temples and the pyramids derived from the hand (including fingers) and the outstretched arm.

Israel's verbal metaphor for the Egyptian system of measurement would imply to every Israelite not only God's authority (as opposed to a pharaoh) but also that Israel's God takes the exact measure of all his human subjects. It seems

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239 Numbers 15:38, "...bid them that they make...fringes in the corners of their garments, and that they put with the fringe of each corner a thread of blue."

240 Numbers 15:39, "And it shall be unto you for a fringe that ye may look upon it and remember all the commandments of the Lord and do them that ye go not about after your own heart and your own eyes, after which ye use to go astray; that ye may remember and do all My commandments,..."

241 Deuteronomy 7:19.

more than coincidence that this oft repeated phrase, "with a mighty hand and an
outstretched arm," in its original Hebrew is expressed in a phrase of four
powerfully metered words (rendered here phonetically): (1) v-ha-yod, (2) ha-
hazokoh, (3) v-hazoah, (4) hanto-yoh.243

In wrapping the tefillin strap around arm and hand, the sacred number four
of Egypt is replaced by the four letters of Israel's tetragrammaton, embodying
themselves in the grand metaphor of Israel's God of creation, moral law,
forgiveness, and redemption.

E. Binding and Prayer: The Tefillin Ritual's Sacred and Metaphysical Journey

Enfolding oneself in the fringed prayer shawl, the body becomes an echo
of the Outer Court and its rectilinear shape and curtains. The tallit also forms the
body into the elongated Holy Place within the Outer Court.

Bless Hashem, O my soul; Hashem, my G-d, You are great, You have
donned majesty and splendor; cloaked in light as with a garment, stretching
out the heavens like a curtain.244

As the blue, purple, scarlet, and gold threaded curtains of the Tabernacle
echo the heavens at morning and evening prayer times, the tallit echoes the white
linen robe of the High Priest.

The first tefillin is removed and its strap unraveled. Turning it upside
down, its rectangular base, which is the part that will lay against the flesh, has
notched corners where the strap emerges, suggestive of the horned altars of
biblical times.

The aesthetic underpinnings of Jewish ritual are likewise subservient to
the moral-didactic. The high or charged feeling is not a goal in Judaic ritual
practice. Yet this is not to say that transcendent moments must not happen, that
when following a path of Torah, we cannot enter a holier place, a more sacred
moment of awe and reverence. Placing it on the left arm over against the heart

243 Deuteronomy 7:19.
244 Psalm 104:1-2.
puts the person symbolically before the brass altar of animal offerings outside the Sanctuary or Holy place. "Blessed are You, Hashem, our God, King of the Universe, Who has sanctified us with His commandments and has commanded us to put on tefillin."245

The strap is now wrapped seven times around the forearm. Immediately the head tefillin is unwrapped and placed on the head above the hairline and between the eyes. This is exactly at the line of division where the forehead meets the cranium, where the two horns emerge from sacrificial animals. The worshipper is now in the sanctuary before the Altar of Incense, having obeyed the command wrapped inside the tefillin: “And thou shalt bind them for a sign upon thine hand and they shall be for frontlets between thine eyes.”246 The head tefillin is tightened and the following prayer is recited. “Blessed is the name of His glorious Kingdom for all eternity.”247 The worshipper now stands before the veil of the Holy of Holies. The seven windings of the tefillin of the hand on the left forearm are adjacent to the Menorah, placed to the left of the Holy of Holies.

The head tefillin is put on last because our head is the Holy of Holies of our body, where the word of God enters and exits and is comprehended. As the High Priest entered the Holy of Holies last, so the head tefillin is put on last. As the High Priest had first to exit the Holy of Holies before he could leave the Tabernacle, so the head tefillin is removed first as one exits from prayers. That tefillin are not used during Sabbath is because on Sabbath the Jew dwells in the Holy of Holies in a literal sense, therefore, the symbolic substitute would be out of place. Thus we see the ancient priestly ritual combined with aesthetic orders underlying the Jewish people’s most intimate sacred rituals.

...May You pour goodly oil upon the seven arms of the Menorah, to cause Your good to flow to Your creatures. May You open Your hand and satisfy the desire of every living thing.248

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246 Deuteronomy 6:8
Now the hand tefillin strap is wrapped around the middle finger of the hand, the third finger and then the palm of the hand in such a manner as to form the three Hebrew letters: shem, dalit, and yad which spell out Shaddai.\(^{249}\) The worshipper has become symbolically a re-enactment of the Tabernacle, its curtains, and its altars. They are physically bound to the ancient covenant in many careful wrappings. The black tefillin on the flesh and the white tallit around the body evoke the black letters against the white parchment of a Torah scroll. The worshipper becomes "black fire atop the white fire."\(^{250}\) Like Isaac, he too is bound over to the Lord. The Tabernacle was the bridal chamber of Israel where God came down to dwell in our midst and bind Himself to Israel forever. The worshipper is inside the veil, inside the Holy of Holies where only the High Priest was permitted.

And I will betroth thee unto me forever; and I will betroth thee unto me in righteousness, in justice, in loving-kindness, and in compassion. And I will betroth thee unto Me in Faithfulness; and thou shalt know the Lord.\(^{251}\)

Israel eternally remains His (God’s) betrothed. The wrapping of the tefillin strap around the fingers is in the manner of a groom putting the betrothal ring on his bride’s finger.\(^{252}\)

The leather bottom part of my old head tefillin dating from my Bar Mitzvah has grown translucent from wear upon my forehead. I can see through the leather which has become like a veil and peering inside the cube, I can clearly make out the four neatly rolled and bound prayers suspended somehow in midair like Torahs in the synagogue. Before me in miniature is the veil before the Holy of Holies, with the tablets of covenant or testimony as they are also called.

\(^{249}\) Hebrew: God Almighty.
\(^{251}\) Hosea 2:21-22.
The tefillin ritual is a symbolic covenantal transformation. The worshipper becomes the high priest in the Tabernacle as Israel is betrothed to God.

Now my father's tefillin are much newer. He got this new pair in his old age and they are man-sized and especially finely made. When I put these on, I feel other connections. How, indeed, are we bound in this covenant from father to son, from generation to generation, simultaneously to past and future. We all were there as it is written²⁵³ when God descended upon the mountain, and the mountain was all on smoke and the shofar sounded and He spoke and bound us there to Him and Him there to us forever.

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Chapter 10
Meanings in the Tabernacle Ritual and Daily Existence

A. Rearing Up and Taking Down of the Tabernacle: The Meaning of the Ceremonies of Assembly and Disassembly254

When the Ark of the Covenant was carried in the midst of the people, it was, let us assume for symbolic and aesthetic reason, covered overhead with a series of blue, purple and scarlet canopies and over the Ark itself with a veil of blue, purple and scarlet. Both the canopies and the veils had golden threads. Thus an aura of light255 surrounded the Ark.

Thus the Ark moved, bathed in an aura of light like a rainbow, and was faintly visible in outline through the veil. We can see now a disciplined and skilled people, assembled by Moses in an order of march close to if not exactly approximate to the various sections of Canaan that they256 would eventually occupy. Perhaps it was so. These sheltering canopies are my own supposition derived from covering the head in Jewish ritual law. It is inconceivable that the Ark would be carried unprotected. Neither a bride or a prince would be carried unprotected and no less would be considered for the Ark. With a solemn ceremony, the Tabernacle would be disassembled with the same reverence that went into its assembly.

255 not to be confused with the pillar of fire which is not explainable by aesthetics
256 their descendants
The Tablets, held up by Aaron to all Israel assembled, would be placed tenderly in the Ark, already waiting under its canopies and veils. Probably the Ark of the Covenant was never allowed to be without cover, protected as it were, as a woman's body, as a bride, as Israel's bride, beneath her veil.

Before the Holy of Holies was disassembled, the canopy and veil would be in place. When Aaron emerged from the veil, the priests stepped forward and raised up the Ark by its staves. A shofar blast would sound. "And it came to pass, when the Ark set forward, that Moses said: 'O Lord let thine enemies be scattered, and let them that hate Thee flee before Thee.'"

B. The Godlike Elements

The Godlike elements that are formless and invisible make possible all being: light, space, time, and natural law, and those that have form and inhabit all beings are life and moral law. The arts and knowledge manifest the first group for us. The Torah and the priestly and prescribed rituals manifest the second group.

C. The Dismantling and Portage of the Tabernacle

The ritual dismantling of the Tabernacle and all that pertained to it, so precisely outlined in biblical passages is of profound symbolic significance, and this code of dismantling, like that of its assembly, is still visible in the ritual of traditional Jewish morning prayer.

We may see in Numbers 4:5-7, "When the camp setteth forward, Aaron shall go in, and his sons, and they shall take down the veil of the screen and cover the Ark of the Testimony with it." There is a clear parallel between this first item of disassembly, the Ark and the Holy of Holies and the traditional manner in which a Jew ends his morning prayers as he too prepares to set forth to begin his

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257 The disassembly follows an order similar to putting away of tallit and tephillin. The most sacred things are put aside first so as not to leave them naked and abandoned.


259 Numbers 4:1-49 and Numbers Chapters 2 and 3.
day. The first item removed and put away is the tephillin, the one covering the head, as the Holy of Holies corresponds to the head of man in the "man shape" of the Tabernacle, and then the tephillin of the heart on the left arm is put away in its cover. The two tephillin together represent the covenental halves of the Tablets inside the Ark, while singly they are the cube-shape of the Holy of Holies, and the altars, the geometric-aesthetic metaphor of the eternal spiritual attributes of the God outside of and beyond nature.

D. Colors

The ritual describes the color of the cloth in which each item is wrapped, blue being reserved for the most holy items, i.e. the Ark of the Testimony, the Table of Showbread, the Menorah and its utensils, and the Altar of Incense. A purple cloth is used to cover the Altar of Offering and a most interesting combination of the fleeting colors of eternity is used in wrapping the Table of Showbread. "And upon the Table of Showbread, they shall spread a cloth of blue, and put thereon the dishes, and the pans, and the bowls, and the jars, wherewith to pour out." Dr. J. H. Hertz comments on Numbers 4:6, "All of blue, emblematic of the blue of the heavens, 'the like of the very heaven for clearness.'" Exodus 24:10." Numbers 4:8 says, "And they shall spread upon them a cloth of scarlet..."

Symbolically, the blue coverings upon the holiest objects can only mean that He whose abode is in the heavens is walking on earth in the midst of the people of Israel. The blue, an echo of the eternal color of the sky, moving in its miniature constant of geometric form is a metaphor of the Eternal One in the midst of His people. This aesthetic fact of earthly form echoing eternal attributes is the very essence of how the ancients used art to educate and indoctrinate reverence for abstract concepts into the minds and hearts of their people. We can

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260 Numbers 4:13.
261 Numbers 4:7.
imagine seeing the blue specks of the coverings of the holy objects accompanying Israel's multitude in a wilderness where, even in that time (Sinai may have been fertile at that time) blue would have been the rarest of colors on the ground.

From the use of these blue coverings upon the holiest objects may be seen a unity between them and the commandment to "wear a blue fringe in the corners of your garment," in order to be ever-reminded before whom we walk and not to go astray after our own desires, but to keep God's commandments. These verses, recited every day and on the Sabbath, are part of the very prayers contained in the tephillin. Thus, there is a unity between the Tabernacle, the center of Israel's life, and the individual whose blue fringe recalls him to the focal point of his individual life, and the one color of eternity, the blue of the sky, which is the least fleeting, and most ever-present when the light of heaven is clearest and strongest.

Nor can the aesthetic element of these combinations of cloth to object and vessel be overlooked, for we see in them the most vivid interplay of complimentary color. The gold objects and vessels are covered in blue, which is the complement of gold. As gold is metallic and in the case of these golden forms, would be highly polished and therefore reflective to a high degree, the wrapped vessels, and again when unwrapped would be shown to their best effect, giving off hosts of reflected colors generated by the energy of light-absorbent blue cloth and light reflective bright gold.

Let us return to the covering of the Table of Showbread, the only object which is wrapped in two separately colored cloths. The Table of Showbread is covered first with a blue cloth, upon which are then set "the dishes, the pans, and the bowls, and the jars wherewith to pour out; and the continual bread shall remain thereon." The Ark of the Tablets may seem an exception as it is covered first by the delicately woven, semi-transparent veil, which then is protectively

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264 Shema, Deuteronomy 6:4-9 and Numbers 15:37-38 "thread of blue".
265 Numbers 4:7.
covered with a seal skin, and concealed, and then only does the blue cloth cover it.

Let us imagine now looking upon the Table of Showbread, its golden vessels set upon their blue field of cloth while over them the red cloth is being set in place, in the bright light of a desert morning. The holy objects would generate a virtual, if not actual aura of colors; perhaps even rainbows of color suspended as if hovering over the very objects themselves. Blues reflected off the gold would throw off variations of green, from yellow to dark blue, while the red would throw off orange bursts from the gold even more vivid because seen against the field of blue. With a blue cloth sea below them, the gold vessels, reflecting from the red cloth sky above would have the aura of a magnificent sunrise set in miniature, under the hands of Aaron, the High Priest, the spokesman of God to Israel.

The Altar of Sacrifice alone is wrapped in a purple cloth, “and they shall take away the ashes from the altar, and spread a purple cloth thereon.” 266 A conjecture as to the logic of the purple cloth for the Altar of Sacrifice may be this: blue, as representative of its sacredness and red for the blood continually spilled thereon together make purple. As for the red cloth for covering the vessels of the Showbread, I can think of no particularly fitting reason other than its aesthetic drama and dignity as can be witnessed to this day in the many wonderful Renaissance paintings wherein Mary is clothed in red and robed in blue. The color scheme is, after all, taken directly from the Tabernacle, and the Showbread is (most likely) seen in Christian theology as precursor to the body of Christ.

In wrapping and unwrapping the holy objects, now helpless “taken apart,” “divided,” “taken to pieces,” “destroyed” as indicated by the Hebrew wording, they are yet treated with utmost respect; as a dead person, or a helpless person is cleaned and dressed with dignity, in a manner to show them well, so that they are not put to shame by way of their helplessness. This analogy to a human body is of

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266 Numbers 4:13.
utmost importance to understanding other elements of this Torah portion and the subsequent Haftorah\(^{267}\) in Hosea to which it is connected.\(^{268}\)

Now all the above would apply only to those designated to do the wrapping, namely Aaron and his sons, if the sealskin covering over the holy objects were meant to conceal and protect them or, as may have been the case, merely to cover them like an outspread umbrella to protect them from direct light and other elements. This colorful train would then have been visible to the people, a reassuring token that God had not abandoned them. Visible to the people, its message of comfort would have certainly been understood.

\(^{267}\) Hosea 2:1-22.
\(^{268}\) Numbers 1-11, 20.
Chapter 11
Ancient Art and Architecture: A Cultural View

Comparison between the crowning works of art and architecture of the Egyptian and Greek civilizations reveals that they both used the same mathematical canon of the golden section and worked out of the same profound sensibility that ordered, aesthetic harmonies act as a reflection of the spiritual laws that govern the universal order. Both civilizations believed that these laws are divine and eternal, and that they have their counterpart in laws that govern human affairs.

We know now that the golden section was used in the Great Pyramids. In fact, the Pythagorean theorem was learned by the Greeks from the Egyptians. The earliest physical proof that the Pythagorean theorem predated Pythagoras comes from the inscription of that theorem on a clay shard dated to around 1600 B.C.E., some three centuries prior to the accepted date of the Exodus, and eleven centuries before the construction of the Parthenon in Athens.

The Pythagorean theorem is mathematically linked to the golden section: to the concept of eternal abstract laws of beauty and order found in nature and applicable to works of art, architecture, and music. Man’s ability to apply these natural, but invisible or abstract laws was a proof to the ancients of man’s direct link to divinity, and he used his godlike gifts in turn to praise his gods. Out of this worldview, a belief evolved that united daily events to cosmic actions, science to

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art, and aesthetics to divinity. The Israelite mentality also developed this view, albeit in a unique way. Throughout the Torah and other biblical writings of Judaic canonical literature, this unified mentality is maintained and this helps us to understand both the Bible and the people to whom it was revealed. This awareness controls not only ritual content and narrative structure, but an “embodiment” principle included in Torah descriptions of the construction of the Tabernacle. It is carried a step further by Moses and Israel in their subsequent sublimation of art, or the aesthetic to the moral, so that beauty, being neither worshipped or scorned, is rather embodied in all the rituals, forms, and structures used to serve God. This thinking becomes the agency whereby commandment and beauty form a perfect union in the daily life of man and society.

A. Differences of Practical Application of a Similar Canon by Egypt and Greece

To oversimplify, it may be said that the Greek application of numerical canons of beauty was more theatrical yet mathematically more complex than the Egyptian, but that the Egyptian application, while mathematically simpler, was intellectually more subtle and ceremonial. To this day, Jewish ritual, as it continues to exist among devout and practicing Jews, seems to bear the influence of Egyptian civilization. It is not of the slave mentality, which is “the reproach of Egypt,” 271 but those elements that were most highly ceremonial at the peak of Egypt’s civilized glory.

The Greeks used harmonic numerical relationships to enliven the actions of their sculpture and their architectural proportions, whereas in Egypt, these codes were used to lay out relationships which were more hidden within the masses of their works of art and architecture.

B. Sculpture: The Squared Block

The Egyptians did not carve their statues from freshly quarried rock. They would begin to carve a figure only after first squaring the stone into a block of

271 Joshua 5:9.
four flat sides. From this squared stone emerged the statues of the Pharaoh, his queen, and other divine beings. While photographs seem to emphasize the starkness of their square outline, on seeing these statues face-to-face, they are as relaxed in their positions and their facial expressions, as alive and humanly flexible as any work of ancient Greece. The head on a Greek statue was designed to reflect a cool, reasoned detachment from daily concerns: the classical repose, as it is commonly known. This ideal is also expressed in statues of Buddha.

Yet in so many Egyptian statues, especially those at or near life-size, our eyes look upward into a calm, but uncannily warm, receptive, comprehending face, a face animated by good humor and engagement as much as by intelligence and thoughtfulness. It is not at all discomfited by its eternally regal pose within the confines of its square block. But one is always aware of confronting that regal square, for the Egyptian sculptor purposely retains the squareness of the original block throughout the statue.

In total contrast, the Greek statue gives us a free standing, harmoniously animated body in the midst of a physical motion but with a facial expression that looks always past or beyond the viewer confronting it. Both cultures used ideal canons of proportion and both emphasized muscular suppleness, correct anatomy, and physical beauty in their renderings of the human form.

What accounts for their differences is not, as it is commonly thought, merely skills in carving the human body, but rather profound differences of outlook. These different worldviews determined not only how works of art were to look but also what was permitted to be carved or painted.

Both Egypt and Greece saw their gods in terms of natural forms, human, animal, and combinations thereof. But for the Greeks, their athletes were warriors and their warriors were gods. Bodily animation combined with the detached concentration of an athlete on a distant goal is what we see when we view a sculpture of a Greek god. Athletes were the models for the Greek sculptures of the

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273 The Colossi of Ramses are obviously designed to intimidate.
gods and conversely, athletes were one of the most important subjects of Greek art.

It should be noted that all the games of the Greek Olympics were in imitation of qualities or physical prowess necessary for war. Even the "discus throw" may hark back to the prehistoric hand ax, recently demonstrated to be a carefully balanced and effective throwing weapon to be hurled at an animal or enemy.

Divinity in Greece was expressed through depiction of the athlete-warrior. This concept was continued in Western art and is visible in Michelangelo's statue of David with its marvelously supple body upon which the head is fixed in concentration upon a far goal, beyond attainment by the mortal viewer. The Greek statue expresses reasoned detachment and abstract thought that are the foundations of philosophy. In the same manner as an athlete trains his body with reasoned concentration and then controls its harmonious action by cool reflection upon the ultimate goal, man's reason and mental gifts fit him for heroic action.

The ancient Egyptian mentality is not so familiar to us as the Greek, but as between Judaic ritual and Egyptian statuary, we may discern some analogous symmetries. We do not find nude athletes as a subject in Egyptian art. Divinity, while portrayed in animate form, is always confined to the squared block. This squareness imparts its meaning and feeling to the alert viewer.

The Pharaoh, as the divine incarnate had to be portrayed, always oriented to the cosmos. By retaining the four-sided block, the Pharaoh's sculptured image, like his temple and pyramid tombs, would be oriented to the four eternal directions and cardinal points. Aesthetically, this sculptural squareness imparts a mood of unchangeableness, of eternity. In opposition to the Greek statue then, the Egyptian Pharaoh confronts us with a human face engaged with our own, but set upon a body encased and supported by eternal forces.

The Egyptian royal statue, carved always from the squared block, retains the aura or ghost of the squared block from which it was carved. The width

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from shoulder to shoulder recalls the frontal and back sides, and the distance from heel to toe of the walking feet recall the opposite sides. Thus, oriented forever to the divine cardinal points, the Egyptian pharaoh or priest moved in the divine dimension, walking always within his “square,” or holy space, that places his finite body here on earth within a metaphorical block of eternal time.

It may be that the ceremonial step of the pharaoh-priest was of a measure equal to the width of his shoulders, a custom that may or may not have been carried onward in the Tabernacle-temple priestly ritual.

The fringed garment or kittle worn by religious Jews with its special threads in each of its four corners, and the prayer shawl, form a similar ghost square around the body for reasons similar to and perhaps derived from the ceremonial walking of Egyptian royalty and priests. This invisible, ceremonial square is a geometric and metaphorical statement of, “... and thou shalt walk in the ways of the Lord forever.”

The orders of the universe expressed by reference to the square seem based on more than divine athletic beings, beauty, or prowess. Another form suggested by the square block of Egyptian statuary is a dwelling or house, as indeed is invoked by the literal meaning of the Egyptian word, Pharaoh which means “great house.” Like the endless repetitive geometric patterns into which the Menorah and other Tabernacle forms divide, the religious Jew lives the fulfillment of his life in a series of endless repetitive and interweaving restraints. The bonds of Torah are his freedom and dignity, as the squared block form radiates the cosmically oriented majesty of the pharaonic statue. The concept of unfettered freedom such as we see in the free-standing statue of the Greek athlete-god is alien to Israel, and regarded as a formula for disaster. For the Jewish people, individually and in their national existence, freedom was never an end in

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275 Deuteronomy 13:5 "After the Lord your God shall ye walk, and Him shall ye fear, and His commandments shall ye keep, and unto His voice shall ye hearken..."

itself, the license to do as one pleases, but rather the necessary opportunity to be subservient to God completely with all of one's being.

Order and divinity, then, may be assumed in the Egyptian mind to have been based upon more than divine reason and physical prowess in supra imitation of its earthy counterparts in our human form. Divinity, cosmic order, and moral command have to do not merely with physical well-being and reason, though these are certainly part of the Divine order, but also with inviolate "pathways" and precise direction. In these concepts, we see immediately the Israelite cosmic and moral worldview. The mentality and thought process of the builder-artisan, whose works are ordained by divinity are traceable throughout the Torah, prophetic writings, and Psalms. The *Shema* prayer strongly echoes this mentality in its entirety, but most specifically in the sentences warning against "following after your own eyes" and telling us to deviate "neither to the right hand nor the left" of God's commandments.277

Like the builder's square, the way is revealed and given to mankind. We cannot trust our reason, perception, and natural physical endowments alone to guide us in the way of divinity. As in building an edifice, time is an important element. As the building moves from conception to completion, so do all events in the divinely conceived universe. The individual stonemason may see no connection between his labor and the rest of the work, and no one can grasp the whole conception, yet all who labor therein and all events participate in the unfolding of God's dwelling.

These are Hebraic concepts; they are certainly not of Egyptian origin. But the forms and concepts of Egyptian art were used by Moses to instill, by way of the familiar, those biblical ideas which were then radical and new.

The story of Samson is the nearest to the warrior-athlete in Jewish history and he proved fatally inadequate. The demands of Israel's moral worldview could not be achieved within the dimensions of a Greek god. By the standards of the

277 Isaiah 30:21-25. The prophet here gives his own summation of part of the *Shema* prayer. Also Deuteronomy 13:5.
athlete-warrior-god, Samson’s behavior would have been considered admirable and tragic, but for Israel, and for Samson, as an Israelite, it was wasted and disastrous.

The Egypt Exodus adventure has indelibly imprinted the mindset of the Jewish people. Rather than the warrior-athlete, the faithful servant is Israel’s touchstone. Precision is more important than prowess, and continuity is more important than the single, spectacular event. Considered restraint is more important than Dionysian freedom. The prime of life is not the few years of youth, but rather when one can bring himself to build God’s house and dwell therein. Not man, but the Eternal One is the measure of all things. No subsequent encounters with other civilizations have altered in any way the Judaic mindset formed in the book of Exodus.

The Egyptians painted and sculpted every detail of daily living from the tillers of the soil to the wars of their kings. The movements of fishermen, rowers, and dancers are beautifully rendered and preserved. Nevertheless, there was no secular art in the modern sense, or even in the sense that Greek or Roman civilization would know. No Egyptian art was done merely to decorate or to adorn.278 Egyptian art was done as participant to the afterlife: to become part of the divine eternity by being placed in the eternal dwelling of the Pharaoh-god and to accompany him forever. The Egyptians did not merely bury favorite items with their divine dead.279 From the beginning, Egyptian art was designed to meet all the daily needs of the dead as if they would be physically alive after death.

The life of the religious Jew, while it embraces all the earthly joys, sorrows, gifts, and labors of other peoples, also knows no secular dimension. There is no pleasure, entertainment, study, or labor that has ultimate value in and of itself for the mindful and believing Jew. Whatever is done must be aimed in the

279 This is in reference to the architect-healer God, i.e. Imhotep, and other human cum divine beings.
direction of service to the Divine One. But Israel's One abhorred the tomb; His dwelling place is life.

In the canonical Jewish writings, one finds nothing of a merely entertaining, sentimental, or nostalgic nature. Every event bears upon God's plan and has a direct connection to eternity - from creation, to prophecy, proverb, and psalm. Though they touch on life's most mundane events, all the writings establish their place as part of the Divine Plan, which is to say that analogous to pharaohnic statuary, no matter how human the face of the event described, it is yet squared and oriented toward the Eternal. For this reason, the Bible, virtually alone amidst the world's writings, never leaves the reader depressed or feeling hopelessness about the human condition. What the pharaoh's statue has done for the body, the Bible does for the spirit of the living: it corrects, straightens, and orients the posture of living souls. The Jew finds his freedom, his comfort, his only true repose in his complete bonding to God, to those directions in which the Torah alone has him oriented like the needle of a compass. No poetry lifts the human heart more universally than the Psalms, and even Israel's most tragic events have never left that people in despair of ultimate meaning and salvation.

What could not be "squared" with the Eternal Divine found no place in the Hebrew canon. Mathematically subtle calculations gently bend the floor and roof lines of the Parthenon in Athens so as to make them appear perfectly straight to the naked eye. The gently inward camber of its great columns give them a walking-leg aspect. Many other such hidden, mathematical subtleties have no parallel in Egyptian architecture. The use of squares and golden section geometrical proportions is basic both to Egyptian and Greek architecture. But the square is the most common sacred shape in Egyptian architecture as it is of the Holy of Holies of Israel's Tabernacle, and its courts and altars.

The right triangle which embodies the golden section proportions was used in calculating the incline of the sides of an Egyptian pyramid from the center of its square base to its apex. The right angle is used in this calculation as it was
also used in the laying out of all sacred buildings in Egypt.\textsuperscript{280} The right angle is related to the golden section. Two right triangles, one atop the other, form a golden section rectangle preferred by the Greeks and used in the Parthenon façade. There is a series of huge ramps leading up to the entrance of Hatshepsut's temple. The form by which the High Priest ascends to the Altar of Offering located in the Outer Court of the Tabernacle is also a ramp. The geometric form of a ramp is the right triangle.

The constantly repeated and echoed geometry so characteristic of art is reformed in the Judaic culture to educating the passions by constant repetitions and echoing in commandment and ritual, which intersect each other. The elaborate interweaving of symbolism in Jewish ritual is a metaphor of the repetition of the geometric vocabulary of the Tabernacle and the attendant rituals and offerings of the Priests.

\textit{C. The Feminine Modesty of the Tabernacle and its Vessels}\textsuperscript{281}

When the High Priest moved in the Tabernacle wearing his robe with the golden bells and the altar was burning incense, the Tabernacle was as a beautiful woman dancing.

The Tabernacle, while being pitched or taken apart is forbidden under pain of death to all except those authorized to perform these sacred tasks. The task of pitching or rearing up the Tabernacle and taking it down fell to the lower ranking priests. Aaron and his sons were to wrap and unwrap the sacred Ark and vessels. One phrase is worth quoting for its emphasis implying modesty: "But they [the lower rank of priests] shall not go in to see the holy things as they are being covered, lest they die."\textsuperscript{282} Hertz comments that "the lower members of the priesthood are not to be present when the unity of the sanctuary is being destroyed

\textsuperscript{281} Numbers 4:18-20.
\textsuperscript{282} Hertz, ed. \textit{The Penateuch and Haftorahs} (1941) Vol. 1, 580. Numbers 4:20 commentary.
by being taken apart, as they would lose all reverence for the sanctuary if they were to witness it.²²³

However, another interpretation can be considered. The quality of character with which these dire passages are concerned is not so much reverence on the part of the unqualified, but protectiveness for the modesty or, more precisely, the chaste quality of the Tabernacle. With such an interpretation, the connections between these Torah passages in the Book of Numbers with the prophetic chapter, Hosea 2:1-22, with which it is linked in Jewish tradition, take on a richer, indeed luminous meaning.

We have at least two commentaries by Rashi as to the feminine aspects of the Tabernacle. He describes the overhanging curtain of the Tabernacle as purposely suggestive of a woman's bangs overhanging her forehead, and the staves of the Ark protruding slightly outward from the veil of the Holy of Holies as purposely suggestive of a woman's breasts. The ancients conceived of virtually all things in male or female gender as can be seen in the genderized designation of nouns in ancient languages. Today people still think of their nation as "motherland" or "fatherland."

When the Tabernacle was being taken apart, therefore it really "she" was treated as the chaste and faithful woman standing symbolically as Israel betrothed to God. The Tabernacle and all things physical and ritual associated with it (her) were seen by the people as representing Israel to God and God to Israel. The feminization of the Tabernacle was symbolic of God's betrothal of Israel, spoken of so poetically in the last passages of Hosea 2:21-22, that are read in conjunction with Bemidbar, this Torah portion, Numbers 4:20.

What makes the beauty of the Tabernacle so chaste? One could also say, what makes the chasteness of the Tabernacle so beautiful is that her beauty is not vain or self-serving. All her radiance and adornment is subservient to the service of her betrothed, the Holy One. In the end, she diverts all attention away from

herself and directs it to the humble and unadorned tablets, which bear the Holy
word. Modesty becomes beauty as beauty becomes modesty, setting the example
that beauty serves holiness.

We can believe that the people regarded the Tabernacle as a living thing,
in the ancient classical sense, as a manifestation of the Divine Spirit. Though they
knew it was a construct of material, artisanship and subtle proportion, as a thing
of beauty, it was therefore also a manifestation of the Divine, a creation out of
man's godlike nature, which is itself, a gift of God. Unlike our modem, detached
admiration for the aesthetic, or a moving experience momentarily enjoyed, theirs
was both of these, but subsumed in the comprehension of art as the Divine voice
speaking.

Who then shall approach a betrothed woman to undress her, to transport
her, and to dress her again in her bridal splendor to be presented to her betrothed?
It is a question of deep symbolic importance and its answer is determined by
regulation and authority. Only those duly consecrated to her service can be
allowed to perform these actions. By analogy, a medical doctor is authorized to
closely examine the body of an undressed woman for purposes of healing. His
learning and the solemn oath of his profession qualify him before her and society
to perform the necessary “rites” if you will, of a medical examination. Even so,
the patient’s dignity is most vulnerable in such a helpless, or “taken apart” state,
and the physician, though an authorized person, nevertheless must be very
righteous and know that he is extremely vulnerable to deadly sin (in Jewish law)
and can bring instant shame to his patient, himself and the whole profession and
society he represents. Especially his thoughts as much as his actions must be
bound within the severest limits.

Therefore, only the Levites set up and took down the Tabernacle and
camped immediately around it\(^\text{284}\) and had the duty of transporting it, and only the
high priests, Aaron and his sons, took apart and restored the sacred objects, and
no one else was allowed near during these sacred proceedings, while the

\(^{284}\) Numbers 1:50.
Tabernacle was being deprived of her dignity. For the bride of God as representative of Israel would be in "her nakedness."

The above clarifies the following biblical verses:

"And the common man that draweth nigh shall be put to death;" \(^{285}\)

"...put to death. But not by a human tribunal;" \(^{286}\)

"But they [Kohathites, the lower members of the priesthood] shall not go in to see the holy things as they are being covered [taken apart] lest they die," \(^{287}\)

By now the connections of these passages from Numbers to the parable of Hosea and his unfaithful wife, Gomer, should begin to take on clarity. In the Tabernacle of the Exodus, we have the first physical manifestation of that resplendent image of Israel's betrothal to God, an image that recurs from this point throughout the body of Judaic religion and Hebraic prophecy, literature, and poetry.

For Hosea, who lived at the time of Israel's decline (8th century B.C.E.), the image of Israel as the bride of God was still as vividly literal as the symbolism of the Tabernacle was to his forebears. It is only quite recently, really our own century, and perhaps only in the west, that the aesthetic has been so completely separated from the eternal and divine dimension. Hosea's imagery of Israel, God's bride playing the whore, running after strange lovers for material reward and coming, finally, to bitterness and abandonment in the desert is a perfect reverse image of the glory and protection in the desert, and beauty of faithfulness of the preceding passages and indeed all the biblical passages concerning the Tabernacle and the origins of Israel's special nationhood.

In the end, Hosea foresees God forgiving Israel after due punishment and repentance. \(^{288}\) These are tender verses indeed, intimate and forgiving, soft and sweet, full of allusions to God's deliverance of Israel from Egypt, to that long ago

\(^{285}\) Numbers 1:51.
\(^{286}\) Talmud.
\(^{287}\) Numbers 4:18-20
\(^{288}\) Hosea 2:16-22.
time (nearly 500 years before Hosea’s own time) of Israel’s wandering with the Tabernacle and God’s presence faithfully in her midst.

For Hosea, as for those who heard his message, the imagery of Israel’s unfaithfulness being compared to the Tabernacle and its period, literally, Israel’s birth as a nation would have struck the rawest nerve possible in the national consciousness of the people. The Tabernacle and its time was remembered with a reverential affection, much as we today hallow periods of national history, although for the ancients it was probably a more intense emotion than we are today capable of mustering. To have this image of betrothal and faithfulness depicted as coming apart, as destroying itself for vain and selfish pursuit would have aroused many from complacency and many a false patriot, no doubt, to angry denial.

Hosea closes these two verses familiar to every religious Jew to this day. They are recited in the morning prayers, daily, after he has put on the tallit and immediately after putting on the last tephillin (the one on the forehead), and made himself a physical and symbolic Tabernacle.

And I will betroth thee unto Me forever: Yea, I will betroth thee unto Me in righteousness and in justice, and in loving kindness, and in compassion. And I will betroth thee unto Me in faithfulness: And thou shalt know the Lord.”

The unity is complete now between the aesthetic and the moral, symbol and act, between the Tabernacle of 1230 B.C.E. and the Jew today, rising in the morning to recite his prayers, wrapping himself and preparing to “set forth” to his day, to connect history to commandment by means of art: a curtain, fringes, and cube-shaped boxes.

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289 Hosea 2:21-22.
290 Hosea 2:21.
As Judaism leaves no area of life outside the scope of Divine legislation, we may ask if in some manner the Tabernacle structure reflects any of the Torah teachings within the sphere of sexuality.

As the human body is the module of proportion for buildings in the ancient world, so too the body's individual parts and systems are also echoed therein. Pillars and columns for instance, are structures after our legs, windows are eyes, and the ventilating system is likened to our breathing. The idea of a comely presence, a good countenance, or pleasing appearance and bearing are the essential aim of good proportion and so is the likeness of clarity of form to clarity or truth of speech and deed.

The Roman world, in particular, carried these concepts beyond the individual building into city planning or organizing a complex of buildings. We still use the term "arteries" in referring to main transportation routes. Indeed, it can be truly said, that no human invention is without its counterpart in our human body. The ancients also were not attuned to the neuter. For them, everything in existence was a male or female.

Rashi comments on the sexual symbolism of the Tent of Meeting: that its curtains overhung the entrance to the Tent of Meeting like the bangs of a woman's hair. Rashi also comments that the staves of the Ark poked through the veil of the Holy of Holies suggesting a woman's breasts.

One may go further. Recalling that the shape and proportion of the Tent of Meeting suggested the human form, the body, or man shape, we can also correlate a symbolic meaning in the placement and location of the body's parts. The Holy of Holies corresponds to the head of a man, his reason, the Altar of Incense, placed before the Holy of Holies, corresponds to the breath or spirit (nostrils), the Table of Showbread possibly to the stomach or digestive organs, and the location of the Menorah to the high priest's left side corresponds to the heart, the kindling of the flame of life and passion.

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Fig. 38. Concordance of the Tabernacle and Outer Court with the Female Body.

From symbolic imagery derives the prophetic concept of Israel as God's betrothed, as God's bride. The Altar of Incense, Table and Menorah symbolize sacred internal organs of the heart, lungs, liver, stomach and kidneys.

In Egypt, the windpipe and heart symbolized by the Egyptian ankh sign signified the breath or spirit and the seat of character, the heart. The four
firections of the ankh signs cross also signified eternity by pointing toward the cardinal points.

My own observation is that the entrance to the Tent of Meeting corresponds symbolically to the genital area of the female. The references of Rashi point to a feminine gender. "Gate," and "entrance" are among those Hebrew words like "horn," "song," "light," "thing," "shadow," "wing," that have many layers of religious and symbolic meaning.

It has already been pointed out that the "entrance" or "gate" of the Tent of Meeting must have had great religious significance as it rested directly at the crosshairs of the cardinal points at the center of the Outer Court. The gate or entrance curtain of the Tent of Meeting also bisects the double square of the Outer Court, thereby resting at the exact central point of the Tabernacle complex. At this crosshair point, our ancestors would have visualized a vertical line from earth's center to heaven, or from the house of earth-centered man to heaven, the House of God.

At the entrance to the Tent of Meeting, the priest stood at the precise point where the realms of the earthly and heavenly meet, where profane and sacred, the passing, ephemeral, ever-changing and the Holy and the Eternal come together. At this most sacred point of entry into the nuptial tent, the desire of the body and of the mind and the dedication of these to the service of God; the hallowing of sexuality is central.

This reading of the Tabernacle's sexual symbolism corresponds to all the teachings of the Torah regarding sexual purity and integrity. Judaism always unifies. It does not separate bodily and earthly desire from the Godly, but unites them.

And how apt is the connection in fact. For the sexual desire, while satisfied in a few moments, is also the means of reproduction, which is to say man's "gateway" or "entrance" to eternity or eternal life. At this gate, desire and eternity truly meet and become one with God. This concept of the feminine sexual symbolism of the Tabernacle comes to play a profound role in the Torah and
prophetic literature. It is the origin of all those conceptions of Israel as God's bride, now faithful and enthroned in glory, now playing the harlot and abandoned, and then repentant and returned to her eternal lover and husband, God.

Fig. 39. Sacred Spaces.
A golden section diagram divides the Tent of Meeting into two rectangles of equal size as a hidden square arises from the golden section points. This hidden square space incorporates the three squares of the Holy Place. The entrance veil to the Tent of Meeting is located at the center of the Outer Court. The line of verticality is symbolic of Earth to Heaven and Heaven to Earth. The cardinal points of east, west, north and south are indicated by the Tabernacle's orientation.
The above view would cast further light on the chapters in Numbers describing the dismantling of the Tabernacle, on David’s returning of the Ark to Jerusalem; and the relationship of Hosea and his wife, Gomer, to that of God and Israel. This latter is the designated Haftorah or prophetic chapter for Bemidbar, the Torah portion describing the dismantling (literally “tearing down”) of the Tabernacle.

E. How Works of Art Create Their Effects.

All works of art convey their messages through pattern, repetition of forms and colors, shapes, lines and by emphasis. Emphasis is achieved by isolating a part, or more powerfully by repetition in variation.

To use similar color, similar shape, and repeating them but in varied brightness or tone, different size or aligned differently, is analogous to theme and variation in music or to rhythm in both song and poetry.

The Torah makes prodigious use of pattern or repetition, theme and variation, not only in words which are the heartbeat of poetry, but in alignment of theme as well. The rabbis were exquisitely sensitive to these artistic forms and derived great meanings from them. One could say that a true understanding of the Torah is impossible without an understanding of its thematic repetition and repeated word patterns. The key, of course, is that pattern has meaning and one can discern those meanings which enlarge upon the nuance and variation of the plain text. The spread of a theme and its variation can be as broad in biblical writing as in the music of grand opera. From the story of Jacob's first deception of Esau to the final reunion of Joseph with his brethren in Egypt near the very end of Genesis, there takes place a host of deceptions by various leading figures. Each of these deceptions has in common that they are not used for evil but to correct a perceived wrong that could be corrected in no other way.

Still earlier, there is the repeated pattern in the lives of Abraham and Sarah of divine covenant or promise: the search for an heir and the removal and threat of

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removal of the heir apparent. First is Abraham's nephew Lot, then his son, Ishmael, by Sarah's Egyptian handmaid, Hagar. Ishmael is sent away after Isaac is born. Isaac is then threatened by God's final test of Abraham at Mount Moriah. Here the pattern ends in the glorious crescendo of the Akedah or Binding of Isaac, wherein the covenant is restated in the majestic tones of a formal proclamation.

One must be attuned to the language of art forms, trained to understand the language of any art. In visual art, forms and patterns come together as proportion, line, and color as melody. All together, these elements produce feelings or rather episodes of feeling through direct action upon our sensibilities. But in high art, and this must be emphasized in our day when so much art is blatantly, even arrogantly meretricious, that this action upon our sensibilities is not one of a frenzied attack, like a narcotic, but quite contrary wise, it is an inducer of thought, a quality of thinking, a quiet "still, small voice," that speaks through the agency of our senses, thus uniting passion to intellect, flesh to spirit, the earthly and everyday to the universal and eternal-Divine.

We can discern the most elevated meanings attained by conscious means in the colors, shapes, proportions, and materials of the Tabernacle. Even its construction methods carry meaning, consciously aimed at turning Israel to the exclusive service of the Holy One.

F. The Additional Meaning of the Tabernacle's Existence and the Unity It Gives to Jewish Biblical Writings.

The Tabernacle could only have been made by a people intimate to the point of being natives of ancient Egyptian culture. Yet its ritual and ceremony is of a piece with those Israelite concepts underlying its structure. It follows that the great religious, social and moral teachings which all these ritual, ceremonial, and artistic elements served to ingrain in the people, had also to be revealed in that same time, a time more likely to be acceptable to a people not yet ruled by kings, priests, and aristocratic classes of their own making.

293 Genesis 16:1-4
The commandments, statutes, and God concept would already have had to be taught and acceptable for the structures and rituals of the Tabernacle to further teach and reinforce them in so tightly woven, so intricate, organic and comprehensive a manner as the commentaries given here reveal.

And it shall come to pass in that day, I will respond saith the Lord, I will respond to the heavens. And they shall respond to the earth; and the earth shall respond to the corn and the wine, and the oil; and they shall respond to Jezreel (whom God soweth). And I will sow her unto Me in the land; and I will have compassion upon her that had not obtained compassion; and I will say to them that were not My people: "Thou art my people," and they shall say: "Thou art my God." ²⁹⁴

²⁹⁴ Hosea 2:23-25.
Part III
The Tabernacle’s Influence on Other Monotheistic Religious Structures

We can see in the mosque the Islamic expression of the Tabernacle. It is the most literal and vivid recollection of the basic shapes, colors, and tent-like weightlessness of what the Tabernacle must have presented. No other architecture exhibits this weightless aspect of the mosque, which is as much a part of its unique beauty as its geometric proportions. From whence does it come? Not from Egypt, and not from Greece or Rome. It is an architecture influenced by the descriptions in Exodus, interpreted by people who lived in desert lands.

The Tabernacle’s influence upon Christianity is most directly visible in the church-mandated colors of liturgical scenes. Blue, purple, red, gold, and white: these heavenly colors abound in Renaissance paintings depicting the lives of Christ, Mary, the apostles, saints, and martyrs. The paintings of Fra Angelico, Raphael, El Greco, and so many others reveal the high-energy effect of what can be called the biblical primaries or biblical palette.

St. Peter’s Church in Rome is a basilica: a dome hovering above a vast geometric cube. It is thoroughly Roman in origin. It uses and expresses the historical moment of Christianity's ascendancy over the former pagan empire of Rome. As for the first St. Peter’s church, it was built by Emperor Constantine from 320-335 C.E. and still remains under the new church. It was another story in that it incorporated the Tabernacle’s basic structural proportions and symbolism.
But when one steps into the Cathedral of Notre Dame in Paris, they experience something vastly different from the majesty of an imperial expression. Entering, the observer moves from one world into another, from an earthly world of light and horizontality into a dim, night-like vertical universe. Physically moving towards the interior is a horizontal maneuver but is experienced as an ascent. Looking up to the ribbed ceiling, and high up on the sides at the narrow, vertical stained glass windows, aglow in the dark with their blue, purple, and red crystalline pieces of glass, one has the feeling of being inside a body. The red colors seem to trickle like blood. The metaphorical expression in architecture of the rites of communion, the partaking of the blood and flesh of the Host, as the means of salvation is unmistakable. As mentioned earlier, the Tent of Meeting had the long shape of a human body, a proportion of three squares that was a popular coffin size in ancient Egypt.

Thus the design of the gothic cathedral may have been directly influenced by the Tabernacle descriptions in Exodus. Of certainty, the gothic cathedral and cathedral architecture everywhere is as unique a form of religious expression as the mosques of Islam. Both structures originated out of the remains of civilizations whose architecture was as different from these later buildings, as was Greco-Roman religion from the god concept of the Bible. Furthermore, outside their religious buildings, Christian and Islamic architecture tended to favor the Greek and Roman format of columns and arches. To what other source than Exodus can we point for these singular diversions into sacred architectural design?

The Tabernacle's influence on Jewish liturgical life is pervasive. Every aspect of Jewish ritual and liturgical design has its origin there. In Judaism, there is no separation between the Tabernacle as structure and the ritual life in conjunction with it, a phenomenon that does not apply as severely to Christianity and Islam. Yet, paradoxically, the Tabernacle's influence on Judaism is also the least literal of the three scriptural religions.
To understand the most profound of these influences, we must view the Tabernacle scene as if we were actually there at that time and place. Physically, we would be part of a vast encampment around a miniscule structure, as viewed from hilltops. This is what the pagan prophet Balaam saw when he prepared to curse Israel. "How goodly are thy tents O Jacob, thy dwellings, O' Israel," is what came out of his mouth.

In contrast, the Exodus and Leviticus descriptions take a closer look into the Outer Court, up the ramps of the sacrificial altar, to the laver, into the Holy Place where only Moses, Aaron and Joshua could go. It finally moves into the Altar of Incense ritual behind the Veil of the Holy of Holies: areas where the High Priest alone could go only once in a year on the Day of Atonement. There is no place, no ritual of the Tabernacle that is not made public knowledge in full detail, unheard of among ancient religions. Thus every Israelite was made an equal participant with the High Priest, indeed betrothed individually to God.

Ancient Jewish tradition speaks of two aspects of God, the Far God and the Near God, the God of power, creation, and majesty and the personal God that dwells in the heart, who hears the cry of the oppressed and forgives the penitent.

There is no ordained design for synagogue architecture other than that the niche containing the Torah is to be located in the wall towards Jerusalem towards which every Jew prays. But one design, the Sephardic, originating in the Near East, seems to encapsulate without any literal reference, the concept described above. Such a synagogue is arranged like a theatre-in-the-round but with congregants seated in a rectangle around a central raised area called a bima. A short distance away, in the wall facing Jerusalem, is the niche or box where the Torah is kept. At the central part of the Sabbath service, the Torah is brought out from its "far place" into the midst of the congregation and then placed on the bima.

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295 Numbers 24:5-7.
296 Leo Baeck, scholar and leading rabbi in Berlin from the 1930s through the end of World War II.
for the prescribed reading. Always a ceremony of high solemnity, the symbolism of this simple ritual is immensely rich. The Torah, as an object of reverence, stands virtually in lieu of the Divine Presence (Shechinah). Its coming forth is a symbolic re-enactment of Moses bringing down the Tablets of the covenant to Israel, but it is also the God of Israel come to dwell in the midst of His people as their sole King and Savior. It is also symbolically the Far God, the Master of the Universe coming into the hearts of the people as the Near God, the all Merciful One who hears our cry. It is symbolic of Israel's betrothal to the Holy One in eternal covenant. Through this spatial design and its attendant ritual the relationships are re-enacted symbolically as the primal convergence between Israel's earthly wandering and her eternal God.

297 Cohn-Sherbok, Blackwell Dictionary of Judaica (1992): 140. En Soph (Infinite) "...the divine infinite in Kabbalistic thought. Creation is bound up with the manifestation of the hidden God as En Soph.

298 A religious Jew carries the Torah with a meek countenance, head cast slightly downward, like a bride.
Chapter 12
Tabernacle to Temple to Synagogue:
The Three Religious Structures of Ancient Israel

Jewish ritual and art have their origin in three distinct but subtly integrated structures: The Tabernacle of the Exodus built near the twelfth century B.C.E. (1312),\textsuperscript{299} the Temple of Solomon completed in 827 B.C.E.,\textsuperscript{300} and the synagogue which may well have originated at the time of the Babylonian Exile in 348 B.C.E.\textsuperscript{301} The synagogue\textsuperscript{302} was well developed during the Talmudic period of the second temple and played a major role in the development and spread of Christianity and its subsequent religious structures. Each of these structures was distinctly different and each served a different purpose.

A. The Tabernacle

The earliest and most unique was the Tabernacle. Small in scale, spare, and severe in design but lavish and beautiful in its materials and appointments, it is and remains the lodestone of all subsequent Jewish art, architecture and ritual observance.

The purpose of its design and ritual accompaniment was most singular: to bring the children of Israel into covenantal relation with God and to manifest that

\textsuperscript{301} Kantor, \textit{Codex Judaica} (2006): 35.
covenantal relationship in terms of eternal betrothal to the Divine. The Tabernacle was therefore a parochial institution, meant for the people of Israel alone and for no other. Its particularity and service was confined to the Exodus and the 480th year pre-king settlement of Canaan—from the time of Moses to the time of Solomon.\textsuperscript{303} Only the first two kings of Israel, Saul and David, knew the Tabernacle for their entire lives. At the completion of Solomon's Temple, in a touching and beautiful ceremony, the Tabernacle exits history. It existed for a particular purpose and for a specific amount of time, never to be repeated. Except for its description in Exodus, its form has passed out of existence as a soul departs from the body.

\textit{B. The Temple of Solomon}

Solomon's Temple is the fulfillment and embodiment of God's promise to make Israel a nation among the nations. Its purpose was twofold: to maintain the covenantal service established through the Tabernacle\textsuperscript{304} and to be the place from which God's name would go forth to all peoples of the world.

A reading of King Solomon's majestic dedicatory speech in First Kings, Chapter 8 clearly establishes the purposes of this second of Israel's religious structures. It is permanent. It is situated on the place of God's establishment of the original covenant with Israel's patriarchs, Abraham and Isaac. It contains the original Ark of the Tabernacle, containing the Tablets of Moses, thus fulfilling the promise of God to Israelite nationhood.\textsuperscript{305} With the Temple of Solomon, Israel reaches a new plateau and begins its mission to bring understanding of God and moral monotheism to the world.

\textsuperscript{303} 1st Kings 6:1.
\textsuperscript{304} First Kings 8:30, 41-43 Prayer of Solomon, "Strangers will come when they hear of God's great name."
\textsuperscript{305} First Kings 8:21.
C. Introduction to the Synagogue

The Torah scroll written by Moses lay beside the covenantal Tablets inside the Holy Ark. As the Torah describes no adornment, we may presume that Moses' scroll was wrapped in an unadorned cloth of fine twined, white linen. So too, it may be said that the synagogue emphasizing unadorned Torah study, prayer, and simple ritual was an organic outgrowth of the Temple and its forerunners, the Covenant at Sinai, the Holy Ark, and the Tabernacle with its priestly rituals.

The earliest synagogues began to flourish near the Temple courts at the end of the Babylonian Exile, about 586 B.C.E. and likely were functioning in some form in Babylon during the Exile.

Gone from this new institution was the golden splendor of the Jewish nation's national worship; its songs, its trumpets, its cymbals, its vast choruses and processions of fruit laden oxen whose horns were wrapped in gold. No more the endless procession of worshippers bearing their baskets of bread, cakes, and "first fruits." No more would all Israel gather into one sacred place to entreat her God.

Now would come the unadorned Torah that had lain so long and quietly beside the resplendent gold and golden richness in all things of the vanished temple. In the synagogue, the people gathered informally, the unlearned next to the learned, the poor among the rich. In the synagogue, the people not only prayed but remembered; they told stories about the splendor and sadness of the olden days. Bound up in prayers of homage to their God in words and rituals, in small body movements and gestures, the perceptive may still catch glimpses, sparks cast off by the still burning fragments of the golden grandeur of old. In the synagogue, the people set aside a day to remember, to say Kaddish for their ancient temple and always, everywhere all Israel prays in the temple's direction and so too, orients its gravesites.

308 The prayer for mourners
D. The Synagogue Today

The development of the synagogue, arguably Israel’s most unique structure, is anticipated in the dedicatory speech of Solomon. Every synagogue, Jewish cemetery, and praying Jew orients to face towards the Temple in Jerusalem. Wherever a synagogue is built north, south, east, or west, its Holy Ark is oriented towards Jerusalem. Thus, like a compass, which moving around the earth always points to a single direction, Israel’s houses of worship scattered around the world all point to the Temple Mount in Jerusalem.

The synagogue, also called House of Study (Bet Ha-Midrash), is the surviving primary institution of Jewish culture. Like its predecessors, the synagogue includes rituals of covenant, but combines them with education and beyond that, civic government. Supple and mobile, the synagogue is capable of sustaining all aspects of Jewish life. When the nation failed, it was the synagogue that led Israel through exile.

Lacking the site and sovereignty of the Temple in Jerusalem, the synagogue could flourish anywhere and be small or large. It became very personal, very democratic in nature. It was the precursor of the church in combination with the town meeting hall, and the public school. It functioned as all the above for the Jewish people everywhere, a center of worship and ritual practice, a town meeting hall to decide civil matters, a courthouse, and, more important than all these, as the house of learning. Through the synagogue, Israeliite culture gave the world public education and very likely too civic care for the ill and the indigent. The least awesome or dramatic of the three Israeliite structures, it is certainly the most varied in design and, in content, the most unique. The characteristic quality of a traditional synagogue service is that of an assembly, a legislature in session. There is ritual and purpose, dignity of demeanor but also a lot of moving about by congregants in and out as well as much direct participation by individuals called to read from the bima.

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309 First Kings 8:29, 33-34.
310 pulpit
no sense of a person who is "the leader." There is no sense of hierarchy. The
diffusion of activity and the utter absence of theatricality are often disconcerting
to first time observers.

Unlike the Tabernacle or the Temple, a synagogue is not sacred by virtue
of its own material existence. Any room in a building with a Torah scroll set in a
place pointing to Jerusalem and with a proper dedication such as a mezuzah\textsuperscript{311} on
doorposts can serve as a synagogue and has the same rank of sacredness as the
largest, most splendid synagogue.

It was through the synagogues of Judea and those scattered throughout the
ancient world of Greece and Rome that the founders and apostles of Christianity
were formed and it was through the synagogues that their teaching encountered
the world. Through the synagogue, the people of Israel were preserved and
prepared for their return to modern nationhood.

\textit{E. Echoes and Evocations: Differences and Commonalities}

The integration of Tabernacle, Temple, and synagogue design is never a
literal repetition of previous architectural structures and proportions. We do not
see in the Temple of Solomon a merely enlarged version of the Tabernacle, or in
the synagogue a miniaturization of Solomonic grandeur. The Israelite imagination
did not turn towards the literal copy, seeing it as a forgery, false in essence to a
form's context, to its belonging to another point in time and place. What is
interesting to follow in the three Israelite structures is their use of geometric form-
space relationships to evoke historical and covenantal memory. Forms and spaces,
seating arrangements for congregants, elders, and the rabbi or cantor produce an
interaction between ritual enactment and sacred spaces. These devices are
certainly not unique to Judaism. All ancient peoples devised their Temple
architecture for similar purposes, which is evident today in religious structures.

What is fascinating is that Jewish liturgical architecture moves from one
basic religious structure to three; each one setting apart a distinct historic time and

\textsuperscript{311} A group of prayers encased and attached to entrances and exit doorposts.
covenantal experience, each different in purpose and design and yet incorporating into its design a memory of the structures which preceded it. Nothing is so deeply ingrained in the Jewish mindset and its religious worship as remembrance. The past is never abandoned. Nothing is left behind or forgotten. The effect on design of such a mindset is central to an appreciation of Judaism's religious structures and ritual art.

F. West Becomes East: A Comparison of the Tabernacle and Solomon's Temple

Solomon's Temple oriented east to west and divided into three parts, retaining the memory of the Exodus history and the Tabernacle. The Temple, an oblong building, consisted essentially of three divisions: a porch (ulam), a main hall (hekhal), and a Holy of Holies (debir). Being portable, the orientation of the Tabernacle was fixed to the natural world, the cardinal points, and trajectory of the sun. Solomon's Temple followed suit. As we shall see, however, there are specifically Jewish reasons for this east to west remembrance of the liberation from Egyptian bondage as recalled in the First Commandment. Egypt being ever to the west of Israel, the effect on Tabernacle and Temple was profound.

The Holy of Holies would almost certainly be elevated above the floor, taking up the extra ceiling space. There could have been several elevations in this Inner sanctuary, culminating at the Holy of Holies, thus bringing a realistic enactment to the concept of aliyah (going up) the ascent to God of the High Priest, which could only be imagined in the rituals of the Tabernacle of Exodus.

However, the synagogue, which is the traveling Holy Place of the Jews throughout the world, imitates neither the Tabernacle nor the Temple. Synagogues are oriented with their Holy Arks (the retainer of the Torah scroll) toward the Temple in Jerusalem. In synagogues west of Jerusalem, the Ark faces east. If located to the east, they will face west, and if facing north they will face south,

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Fig. 40. Solomon's Temple, Exterior-Interior
The triple cube shaped room of the Tabernacle's Tent of Meeting is repeated inside Solomon's Temple. Here the dimensions are enlarged from 10 to 20 cu height, width and length. The Holy of Holies wherein the Ark of Covenant rests is a cube shaped room of 20 cu length, width and height. This illustration is greatly simplified.
and from the south they will face north. Thus, the Ark of a synagogue in Japan would face west exactly as the Holy of Holies in both the Tabernacle and Solomon’s Temple. The earliest synagogues in ancient Israel already bear out this orientation towards Solomon’s Temple in Jerusalem rather than to the cardinal points of the natural world.

The Temple and Temple Mount in Jerusalem is not merely the final resting place of the Ark, but the exclamation point of history, the place or stepping stone from which the One God of Abraham, Isaac, and Jacob begins His journey throughout the nations of the world. Thus the synagogues of the Jews are not oriented to fixed points in nature but toward the God of Israel who is beyond nature and beyond time and whose name is enshrined in His temple in Jerusalem.

When Solomon dedicated the Temple, the Ark of the Tablets was removed from the Tabernacle and placed in the Temple. For the first time since the end of the Exodus and the last time before the coming of the Messiah, the cloud of God appeared before the assembly of Israel. The cardinal points of earth and cosmic time meet the vertical union of heaven and earth and eternal time. Natural history conjoins with human history; creation meets Creator.

Solomon’s Temple glorified God in Israel and among the nations, but the Tabernacle was designed to glorify God to all Israel alone. It did not speak to the nations or their peoples, but manifested and sealed God’s covenant with His chosen people.

From beginning to end, in spirit, material, and workmanship, the Tabernacle was made with the most perfect integrity, more than any other public work of art. The workers were a free people and the free-spiritedness of their giving, both in work and material, call forth the loftiest concepts of creativity as a divine service.

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In the making of Solomon's Temple, everyone was paid. In the creation of the Tabernacle, all was freely and joyfully given. The generations of Solomon's Temple and that of the Tabernacle were very different. The latter was spiritually naïve, but highly spirited artistically. The generation of Solomon was the reverse. They were spiritually sophisticated, by now inured to any real belief in the power of idols. The idolatry that was to be railed against by Israel's future prophets was not of the naïve and fearful kind repudiated by Moses in the episode of the Golden Calf, but the idolatry carried out for accommodation to neighbors, for reasons of state, politics, and convenience: the hypocrisy of backsliding in order to violate the moral laws for the sake of greed and corruption. The generation of the Calf was not motivated by any hypocrisy, not by a desire to gain advantage over fellowman, but by simple, almost childlike fear of abandonment. Solomon's generation was already like our own.

Solomon's Temple lasted some 400 years, the Tabernacle nearly 500 years. It served the generations of both Moses and David, from Israel's greatest prophet to her greatest king. When the Ark of the Covenant went forth from the Tabernacle to be placed in the Temple of Solomon, it was a consummate moment of history, a further consecration and affirmation of Israel's destiny.

At this point, west became east. The Jewish people no longer faced toward the west to pray as did the Egyptians who believed the land to the west was the sacred abode of their gods and the dead. With its Holy of Holies, the Tabernacle had been oriented to the west in all its journeying. When King David established Jerusalem as the Ark's final home, the Temple Mount became the sacred direction of the Jewish people; the break with Egyptian bondage was now complete at last.

G. East to West

And yet Solomon's Temple also is oriented from east to west. The journey of the High Priest from altar to Holy of Holies is the same as in the Tabernacle. Can this be simply out of homage to the ancestral shrine?
In my own judgment, the east to west movement of the High Priest in both Tabernacle and Temple was a most profound re-enactment, a ritual play recalling the First Commandment "I am the Lord thy God who brought thee out of the land of Egypt, out of the house of bondage. Thou shalt have no other Gods before Me." 314

As the High Priest moves towards the Ark inside the Holy of Holies, he moves in the direction towards the primal memory of Israel's entry into Egypt, to the west of the Promised Land. But as he nears the Ark of the Covenant, the judgment seat behind the veil, he beholds God's promise of deliverance. The ritual of the High Priest is in the name of all Israel. As he leaves the Divine Presence, it is as if Israel's deliverance recurs and when he exits the Tent (and later on, the Temple) to pronounce the priestly blessing over the people, it is as if God has brought Israel home to Him, to be their God.

One can but imagine the effect this ritual remembrance must have had in the days when the Temple stood in the very place God had promised on that mountain where Abraham, Israel's patriarch bound his son, Isaac to the eternal covenant. As ritual symbolism in conjunction with artistic design and historical memory, this vignette of a play stands alone.

And every Israelite who brought the offering of first fruits during the harvest festivals had also to re-enact the memory before the High Priest described in the lengthy prayer of Deuteronomy 26:1-11. "A wandering Aramean was my father and he went down into Egypt and sojourned there, few in number; and he became there a great nation..."

The prayer summarizes Israel's history from its birth to Abraham in Canaan, to Jacob's descendants' bondage in Egypt, to their deliverance back into the promised land. In its entirety, this blessing is not a victory hymn, but a prayer of personal gratitude said by each individual bringing their basket of first fruits and placing it into the hands of the High Priest. With these sacred rituals, both priest and people made the symbolic journey from Canaan in the east to Egypt in

314 Exodus 10:2-3.
the west and back, a journey encompassing Israel's primal memory and most singular covenant.

**H. Solomon's Temple**

Located inside a large court where people could assemble, the Temple was a rectangular hall, 60 by 20 by 30 cu. It had a porch running the Temple's width of 20 cu and it was 10 cu deep before the temple proper.\(^{315}\)

Solomon's Temple incorporated the shapes and three-part divisions of the Tabernacle and Court: an outer gate (the porch), an inner hall (the Holy Place), and the chamber for the ark (the Holy of Holies). The height to width of the Temple's front facade forms a golden section rectangle. The meeting of the square and porch is a geometric echo of the meeting of the squares of the Outer Court at the entrance to the Tent of Meeting.

The Egyptian temples and pyramids reflected light as it moved throughout the day and night over polished stone surfaces.\(^{316}\) However, inside Egyptian temples were dark, evoking mystery and hidden forces by breaking apart light and dark spaces amid huge columns.

The Tabernacle and Temple also admitted daylight with dimming effects but their light flowed into clearly defined spaces.\(^{317}\) Mystical religion was superseded by the religion of moral commandment and covenantal consecration. Clarity replaced darkness.

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\(^{315}\) First Kings 6:2-3. length 60 cu (100 ft), width 20 cu (33.3 ft), height 30 cu (50 ft).


\(^{317}\) First Kings 6:4.
The 30 cu high by 20 cu wide front façade of Solomon’s Temple forms a vertical golden section rectangle, the same proportions as the side (1 1/2 cubits) of the Ark of the Covenant. The upper division of the façade forms a 20 cu square, the same geometric form as the tops of the two sacred altars of the Tabernacle. Through the suggestive rearrangements and repetitions of proportion, the memory of the Tabernacle is enshrined and recalled.

Fig. 41. Solomon's Temple Porch
As for the "... side chambers ... against the wall fo the house... the beams should not have hold in the walls." ",... for on the outside he made rebatements in the wall of the house... For the house was built... of stone made ready at the quarry, and there was neither hammer nor axe nor any tool of iron heard in the house while it was in building."318

Traditionally interpreted to emphasize that Solomon's Temple was dedicated to peace and therefore made no use of iron within earshot of the house is another example of that fine attunement to the idea that the manner in which a thing is made becomes a part of its life and message very much as the manner in which children are raised leaves a permanent mark. The temple was treated with the rank of a living being. This biblical passage throws light on why King David, the man of war, was not allowed to build the Temple. See also Deuteronomy 27:4-6, where God instructs Israel to build an altar without the use of iron tools.

When we include the 30-cu height of Solomon's Temple, the repeated double square and three square geometric themes of the Tabernacle complex emerge. For example, the porch, which is a reduced Outer Court, is a double square, 10 cu deep by 20 cu wide. In relation to the Temple's 30 cu height, the porch's 10-cu height evokes the three cube division of the Holy Place inside the Tabernacle. This three cube division is repeated in the interior of Solomon's Temple, whose 60 cu length accommodates a square shaped Holy of Holies, 20 cu square and a Holy Place twice the length of its width319 which also echoes the double square of the Tabernacle's Outer Court.320 The space from floor to 30 cu high ceiling echoes in empty space remembrances of the three-cube form of the Tabernacle's Holy Place, or Tent of Meeting. A height of 30 cu and length of 60 cu give the Temple building itself an evocation of the double square of the Tabernacle's Outer Court.

Considered too must be the verticality of these non-material spatial evocations—their ascension upward, devoid of material form. The entire priestly service though in fact horizontal here on earth was in symbolic fact a vertical

318 First Kings 5:6.
319 40 cu by 20 cu
320 100 cu
ascent, a going up (\textit{aliyah}) heavenward, like the smoke of a burnt offering. The very term "\textit{aliyah}" is used when one is called up to the Torah during a synagogue service. By using space as the shadow of form, emptiness as the echo of material, architecture attains its most sublime expression.

Though different in actual size and proportion from its desert ancestor of cloth, wood, and skin, Solomon's stone, cedar, and gold design repeats and echoes the ancient Tabernacle's single, double, and triple square themes and their geometric ratios and interlockings. As with the Tabernacle, we can be as certain as reason may permit that the proportions of the Temple furniture and its ritual objects also echoed in subtle ways those square, square and a half, and double square proportional themes of the ancient Tabernacle erected by Moses.

\textit{I. The Synagogue Structure}

It is paradoxical, yet entirely in keeping with the Judaic character that the design of its most important institution of worship and the one of longest duration, the synagogue, does not in a literal sense derive from the design of Solomon's Temple. Nor in a literal sense does the synagogue's structure originate from the Tabernacle itself, but rather from a position of remembered spaces both interior and exterior to the Tabernacle.

The contents of a traditional synagogue are

- a vestibule, corresponding to the Outer Court,
- a mikve, or purification pool for women, corresponding indirectly to the laver,
- a place for congregants corresponding to the gathered Israelites,
- a raised area for the reading of the Torah and Prayers, corresponding to the Tabernacle complex at the center of the Israelite encampment,
- and a box or niche in the eastern wall which faces Jerusalem for housing the Torah, corresponding to the Ark of the Tablets residing in the Holy of Holies.
Additional areas would be the geniza, for the burial-storage of sacred books too old or too damaged to be used. Here indeed is an interesting custom unique to the Jews – no holy book, or book bearing God’s name, is allowed to be destroyed. They are stored respectfully. As for a Torah scroll, when it is too old or damaged for further use, it is given a burial service the same as for a righteous man.

The oldest synagogue design, still present in Sephardic (Mediterranean Jewry) communities, is the truest in form and spirit to the ancient Israelite religious structures. It differs however in two fundamental ways from both the Mosaic Tabernacle and the Solomonic Temple. One, the strict geometrical themes of the ancient structures are abandoned on the synagogue’s exterior. Instead, architectural designs are incorporated and modified from places where Jewish communities lived. Secondly, instead of copying the ancient architectural forms, the synagogue recreates by its arrangement of interior space, their order of prayer service and rituals, the memories of the ancient Tabernacle and the people encamped around it receiving the Torah at the foot of Sinai, and God dwelling in the midst of Israel. Instead of a priestly orientation, the synagogue is congregation oriented, to fulfill yet another purpose in the absence of both Tabernacle and Temple.

Consider the inside of the synagogue. The correct design is still a large square seating area for the congregants, male traditionally. In the center of this square is a kind of lectern or bima. Around this area sit the most distinguished elders; and the rabbis and cantor. The square of seating around this central bima and the separate seating of elders near it evokes the tents of Israel around the Tabernacle and the priests around the altar. In a niche or ark against the wall facing Jerusalem is the Holy Torah, a place always evoking both the Holy of Holies in the Temple and Tabernacle, and also the Covenant at Sinai. This area is always raised by stair steps.

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321 Women were seated in a separate, curtained off place.
In this traditional mode of square seating space with the leaders and teachers at the center, the congregants face each other as well as their leaders. Here is the visual or architectural mode of democracy, a design reflecting a parliament or legislature rather than a monarchy. Only God, represented by his divine teaching occupies the place of highest rank before both leaders and congregants.

At the central point or the most solemn moment of the holiday service, elders and/or men of the congregation, accompanied by chanting of prayers, ascend to the Ark and bring down the Torah and place it on the bima. Often the Torah is paraded solemnly through the ranks of the congregation. In this dignified ritual, movements of the worshippers interact with the spatial divisions echoing Israel’s primal covenantal experience. This experience, like all great symbolic reenactments, is as rich and multi-layered as the geometric interplay of the architectural structures it replaces. Here is the Divine Spirit descending on Mount Sinai. Here is Moses bringing the pair of tablets and God’s forgiveness of sin. Here descends the Divine Spirit from heaven to the Mercy Seat of the Tabernacle to dwell in the very midst of the people of Israel, to walk with them, to embrace Israel, His bride. Rabbinic literature comments on the three levels of the Torah high above us in the Ark, carried in our midst on a level with us on earth, beneath us on the bima or altar wherefrom God’s teaching ascends and enters the heart. The prayers and their order also echo this reenactment of covenant.
Ark is against the wall facing Jerusalem

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Ark

The Holy Place

Steps

Rabbi

Cantor

Bimah or Raised Platform

Reading Stand

Seating

Vestibule

Steps

Lamp (Nir Tamid) hangs above Ark.

**Fig. 42. - The Sephardic Synagogue**

By its design and in its ritual ceremony, the synagogue and its service are an ever-present re-enactment of Israel’s primal covenant and sojourn with God. The distantly placed Torah niche (Ark) in relation to the more central reading table is a spatial design that evokes a primary Judaic conception of God’s relation to man; that of the Far God, *Elohim* (Master of the Universe) and the personal, near God, *Adonai*. From his heavenly abode, *Elohim* descends to dwell in the midst of His people.
Whether the design of the synagogue is in this older encampment mode, or the auditorium mode common today, the design symbolism is roughly the same and the service symbolism exactly so. The reader's table is usually off-center toward the congregants' right, whereas the Ark is centrally placed against the Jerusalem-facing wall. Always, the only straight-line view from the "western entrance" to "eastern wall" is straight toward the Torah or its place. This applies to synagogues west of Jerusalem. It is reversed if the synagogue is located to the east of Jerusalem; the same if north or south. The design structure of the rituals leave no doubt as to the utmost authority of the Torah.

The Torah is removed from its place in the eastern wall and taken in solemn procession and song to the bima. From here it is raised up after the reading and returned to its place. The entire traditional Sabbath service can be visualized as a reenactment of the Exodus scene wherein Israel gathers its tents around the Tabernacle complex to hear the teachings of God. The Torah procession, with the congregants moving to kiss or touch the Torah, following it with their eyes and bodies turning as it makes its way around the synagogue, is a reenactment of Israel's wanderings when the Ark went before the people in the wilderness.

In all synagogues then, we can see the exterior view, or view from the hilltop, while simultaneously entering symbolically into the Outer Court, Holy Place, and Holy of Holies of the ancient Tabernacle. It is done without any literal copying, but with only hints of the ancient structures, without any imagery or relics, the only sacrosanct object being the Torah scroll.

In the design of the classic synagogue and its prayer service reenactments, the synagogue followed the Jews in their wandering exile around the world like the "fire by night" and the "cloud by day." The square of seated congregants reenacts the tents of Israel pitched around the Tabernacle's Outer Court. The tribes are assembled in their order of march in the wilderness and into Canaan.

In the synagogue, Jews become Israel assembled at Sinai; the tribes of Israel assembled around the Tabernacle and in the Courts of the Temple all
combined as echoed in the opening words of the Sabbath service. "How goodly are thy tents O Jacob, thy dwelling places O Israel."322

Of the three historic structures in Jewish history, the synagogue is the youngest in time but the oldest in service. The Tabernacle was in use from the time of the Exodus through the period of Judges and the conquest of Canaan by King David, a time span as stated in First Kings 6:1.

And it came to pass in the four hundred and eightyeth year after the children of Israel were come out of the land of Egypt, in the fourth year of Solomon's reign over Israel, in the month of Ziv,323 which is the second month that he began to build the house of the Lord."

The Temple of Solomon stood from the tenth century B.C.E. (995 B.C.E.) until its destruction by the Babylonians in 586 B.C.E.324 a total of 409 years. The synagogue served the Jewish people as their primary institution of education, worship and civic assembly from the time of the Babylonian exile325, 326 until the present. It has continued to be preeminent for all Jewish communities including that of modern Israel, a time span of over 2500 years. Whatever modifications may occur, the synagogue concept will live as long as the Jewish people and some geometric memory of it will undoubtedly be incorporated in the design of the future Temple in Jerusalem. Through its synagogues, the scattered Jewish people were always and everywhere able to live under the governance of their own ancient laws, rituals, and communal government.

322 Numbers 24:5. The saying of Balaam, the son of Beor.
323 Ziv, also Iyyar, is equivalent to April-May.
325 586 B.C.E.
326 de Breffny, The Synagogue, (1978). "It appears however that the foundation of the synagogue as a place for public worship, prayer and instruction occurred during the period of the Babylonian exile after Solomon's Temple was razed to the ground by Nebuchadnezzar in 586 B.C.E. when he captured Jerusalem after a two-year siege."
The most exalted and certainly the most unique expression of Christianity in architecture, the gothic cathedral, offers another experience, another reading of the Tabernacle complex. In Christian theology, Jesus, the Christ, replaces the Tabernacle and Torah of Israel, yet is still linked to Israel by origin, teaching, and lineal descent. The gothic cathedral creates a union of the two by creating a sacred space. It is a space at once soaring heavenward and yet also long, horizontal to the extreme, and narrow, very like the Mishkan or Tabernacle of Israel. Its cross plan reproduces Christianity’s most sacred symbol, recalling its central historical moment.

Touring the cathedral of Notre Dame in Paris can be a vivid and unique experience. The basilica design, of which St. Peter's in Rome is the grandest, is at the farthest remove possible from the experience of the gothic cathedral. In the basilica, whose design derives from the Roman baths with their huge expanses of domed space, the outside world follows you in; its light and air flow freely around bounded by generously formed vaulting.

On entering Notre Dame, the outside world slams shut behind you. The visitor is in a new space cut off entirely from the world outside. Looking down the long corridors and upward towards the ribbed walls and vaultings, there is the strong sensation of being inside a living body much like Jonah inside the belly of

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327 See concept "En-Tabernacled," from John 1:14, also Matthew 17:4, and 2nd Peter 1:13-14.
the fish. The stained glass windows are huge vertical slits, letting in the only light, each one packed against massive masonry ribs. The windows are of the most beautiful colors, but are predominantly the blue, purple, and scarlet colors of the curtains of the Tabernacle. Here indeed one senses being inside the body of God in the ancient sense of entering the House of the Lord.

There can be a sense of fear too. Perhaps the suggestion of a living body was too strong along with the pervasive darkness. Perhaps it is the fact that the strongest colors of the curtain-like windows are the reds, deep, vivid blood reds. The windows drip red, like blood flowing down upon the altar, like the blood of Jesus dripping from his wounds. After all, we are in this space not only inside the living body of the Tabernacle, but inside the Cross and on it as well.

A. An Irony of History: The Similarity in Origin of Israel’s Second Temple and the Second St. Peter’s Basilica.

“The Word was made flesh and dwelt among us.” 328 It seems that Pope Julius II did for St. Peter’s in Rome what King Herod did fifteen hundred years earlier for Israel’s Temple in Jerusalem: built a Greco-Roman Imperial edifice over the remains of a sanctuary of an altogether different spirit. The first St. Peter’s Church in Rome had been more Israelite in both its architectural design and spiritual statement. One of history’s great ironies is that the most revered and beloved edifices in both Judaism and Christianity are remembered in architectural forms that are alien in appearance and in spirit to these two scriptural religions. The Greco-Roman civilization that developed the forms and orders of their architecture was the enemy in belief and the persecutor of the adherents of Judaism and Christianity.

Let us capsulate that history as simply as possible for its intricacy and fascination are more than a book in itself. In the six hundred years from the time of Alexander the Great’s entry into Jerusalem, to the conversion to Christianity of

328 John 1:14.
the Roman Emperor, Constantine,\textsuperscript{329} history's first monotheistic nation is conquered and laid waste by the pagan empire of Rome. As the pagan, classical world and the Israelite/biblical world perished the two scriptural religions of Rabbinical Judaism and Christianity emerged. Christianity conquered paganism in the former Roman Empire and Judaism embarked to an exile from its national existence which ended only in the middle of the last century in 1948.

From that ancient time frame of six hundred years, from Alexander to Constantine, we can trace every commonality and every dispute between the two scriptural religions. The clash between biblical monotheism and the classical pagan cultures was a mix of admiration and contempt, intellectual absorption and physical conflict. From out of it comes every philosophical and religious conflict still wrestled with today both within Judaism and Christianity and between them. The methods of that wrestling include the concepts, forms, and ideals of education, politics, law and government still in use by Western civilization. To a great extent, the forms of our synagogues and churches are the offspring of this conflict of two thousand years ago.

Herod rebuilt Israel's temple into a national edifice that, to a great extent, buried the spirit and intimacy of its Tabernacle-Solomonic beginnings. The same is true for the Roman inspired imperial, domed building that rises today over the apostle's humble tomb in Rome. It also buried a Tabernacle-influenced structure that commemorates Christianity's first entrance into nationhood. Ironically, as the two religions emerged over the ruins of their conquerors and tormentors, the original sacred architectural forms of their national existence were entombed.

\textbf{B. The Holy versus the Imperial}

In the restored section of Old St. Peter's, Rome can be seen the incorporation of the high, narrow façade of Solomon's Temple and the

\footnote{\textit{The Catholic Peoples Encyclopedia} (London: William Clowes and Sons Ltd, 1965), 898. Constantine ordered the building of the first basilica of St. Peter between 330 and 354 A.D. over the grave of the Apostle Peter.}
storehouses round about whose walls are approximately one half the height of the Temple walls which they rest against. Its long and narrow hallway echoes the Tent of Meeting in the second square of the Outer Court whose inner structure contained the Ark of the Tablets, and here rests over the Tomb of St. Peter. Solomon’s Temple was smaller than his palace, a visual statement of significant importance. It was certainly not a statement of Solomon’s kingship being of greater importance to Israel than the kingship of God. The Temple was a place or space of uniqueness, holy, set apart, and separate from the nature worshipping perception of earthly standard. It was a space for “The Name,” the name of God, a place where the inmost truths of the heart were bared, judged, and answered. It had beauty, majesty, and intimacy like a chapel. It did not display the might of earthly rule but, on the contrary, it projected a warning: a perpetual sign against the excesses of earthly might and God’s ever-watchful mistrust of it.

One has only to note Moses’ hedging words when he describes the duties of the future ruler of Israel. Even more dramatic is the prophet Samuel’s denunciation of monarchy when the Israelites demanded a king. These passages must have resonated loudly in the minds of America’s founding fathers who still lived in a world that believed in the divine right of kings.

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330 First Kings 7:1-12. “For he built the house of the forest of Lebanon: the length thereof was a hundred cubits, and the breadth thereof fifty cubits, and the height thereof thirty cubits, upon four rows of cedar pillars, with cedar beams upon the pillars.” Using twenty inches as the approximate measure of a royal cubit, the foundation stone described in First Kings 9 as ten cubits and eight cubits would be close to sixteen feet long and thirteen feet long.

331 Hashem, Hebrew

332 First Kings 8. Solomon’s Dedication of the Temple.

333 Deuteronomy 17: 14-20.

334 First Samuel 8:1-20.
Solomon's Temple dates from tenth century B.C.E. and Old St. Peter's from 323 to 326 C.E. In both structures, the façade is divisible into the square and one half of the Ark, also the square of the two altars. Porch and doors recall the double square of the Outer Court. The scale of Old St. Peter's was larger than Solomon's Temple but the proportional relationships are the same.

The ABCD entrance facades of both Old St. Peter's and Solomon's Temple divide into a square and one half proportion as the cubit and a half height of the Ark.
The Temple, seen by Alexander in Jerusalem, rebuilt by Ezra over the ruins of Solomon's Temple, would almost certainly have been built in a manner and scale to its Solomonic predecessor. It is only after the Greco-Roman conquest of Judea that imperial scale and décor dictated Judah's temple design. As in all pagan architecture, there is no clear distinction between religious authority and the authority of the earthly rulers. In such a world, power was law and law was power and overpowering scale was its "might makes right" visual manifestation in architecture. Herod had a Roman spirit and, to glorify Jerusalem, he built to a Roman scale. The principle of the gently approaching God, the God of loving-kindness, the principle of modesty so central a part of all Jewish liturgical practice, receded, shied away and disappeared before the elevation of earthly power to divine imperial status.

Somewhat parallel in its history, the transition of the modest Tabernacle-like early St. Peter's underwent a similar transformation. After Christianity became the "official" or triumphant religion of the Roman Empire, the humble, intimate, persecuted Christian congregation became heir to a temple of imperial proportions of Greco-Roman design, bearing an aspect of unshakeable earthly authority: the St. Peter's Basilica that we admire today. In neither Judaism or Christianity did the outward trappings or formal belief systems of the two religious change, and yet they did change, as so many Talmudic sages from whom modern Judaism descends and the prophets before them warned. Later church fathers and priests such as St. Francis of Assisi and Martin Luther bore witness to the evolution. Scriptural religion cannot long bow before glorified earthly power.

The distance in years between the Israelite edifices and the first St. Peter's is worthy of note. Solomon's Temple was built in the tenth century B.C.E; the Tabernacle of Exodus, some 480 years earlier, making a time lapse between them and Christianity's earliest national sanctuary somewhere very close to 1500 hundred years. During this span of time, the biblical world with its Jewish

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335 destroyed by the Babylonians in 586 B.C.E.  
336 First Kings 6:1.
commonwealth lived and disappeared and the classical pagan world of Greece and Rome also rose and disappeared. In their place remained the two scriptural religions we know today as Rabbinic Judaism and Christianity.

C. Overlay and Deviation: The Cross Enters the Tabernacle

Even a superficial perusal of the first St. Peter's floor plan and its frontal façade, built by Constantine between 330 and 354 A.D., reveals its resemblance to Israel's ancient Tabernacle and its later incorporation into the proportions of Solomon's Temple.

In the floor plan we see the severe rectilinear divisions recalling both the double rectangle of the Tabernacle's Outer Court, and the tri-square room of the Tent of Meeting. From the entry steps, the supplicant moves through a narrow porch, into a rectilinear court with a shrine at its center. From there, the ascent enters another courtyard whose inner structure is the unmistakable long, narrow rectangle recalling the coffin or body-shaped structure of the Israelite Tent of Meeting. This structure corresponds to the framework of Constantine's basilica of St. Peter. Past this, the visitor moves into a narrow horizontal court and a rounded alcove, the center of which is occupied by a square, altar-like form: an arrangement recalling the Holy of Holies.

"In this wall, above St. Peter's stone coffin, they placed a small monument consisting of a niche with an altar-like slab over the grave (of St. Peter), supported by two columns...not really an altar but...simply a common open-air grave monument. ...the "Trophy of Peter" mentioned by the priest Gaius in his letter of the year 200.

Proved beyond all reasonable doubt...is the tradition that Constantine built this church immediately over the tomb which, in the early third century, Christians had already been venerating for two hundred years as the resting place of St. Peter."

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337 The Catholic Peoples Encyclopedia 899.
338 The Catholic People's Encyclopedia, 901. "...at its center, a foundation in a shrine of porphyry columns supporting a gilded roof and adorned with dolphins, peacocks and dragons."
339 This structure corresponds to the "framework of Constantine's basilica of St. Peter's"
New St. Peter's inner space length is three squares long. It is the same as the Mischan in the Tabernacle.

Dome of St. Peter's. Designed by Michaelangelo

The interior space of the first St. Peter's equals three squares from entrance of the Tomb of St. Peter to entrance of the porch. Same proportion as the Tent of Meeting of Tabernacle.

Porch proportion corresponds to the porch of Solomon's Temple. Solomon's Temple and both first and new St. Peter's derive porch proportions from the entrance of the Outer Court of the Tabernacle.

Fig. 44. Old St. Peter's Basilica and Modern St. Peter's
The present structure was begun by Bramante, continued by Michelangelo and then completed by Carlo Maderna. There are relationships in its proportions that recall both the Temple of Solomon and the Tabernacle.
Looking at this ground plan significant innovations are evident that differentiate the structure and modify its severity in relation to the Israelite structure of the Exodus. The rectangles jutting out from the end of the long, inner court suggest arms extending outward from a body. The rounded niche suggests an abstract head looking downward towards the congregants gathered beneath. The body form of Israel’s Tent of Meeting is here transformed into a symbol of the crucifixion. Unmistakable in this structure’s symbolic form and its resting directly over the sacred tomb of St. Peter is its visual evocation of the words of John 1:14, “the word was made flesh and dwelt among us.”

At this point we should remember that ancient architecture and, for that matter, city planning, followed the structure and functions of the human body. This is no less true of Israel’s Tabernacle and Temple than it is of Greek, Roman, and Egyptian architecture. Beginning with a goodly countenance to the world is the face and proportion of the building overlaying a sturdy foundation of integrity of character within. The body has limbs (pillars) reaching up, and legs (columns) for support. It has windows for eyes and nostrils, and doors and hallways for passage in and out of air. Internally it has a pelvic storage area, a digestion and drainage system (altars for offering), and a heart (the seven-branched lamp), culminating finally in the head or the Holy of Holies, seat of divine utterance, speech, thought, creation, command, and forgiveness.

D. Geometric Resemblances: The Solomonic Splendor of First St. Peter’s

“From within the great doors the eye was carried down a nave of five aisles made of nearly a hundred marble columns taken from pagan temples, to the monument over Peter’s tomb and the mosaic of Christ above it in the apse, ...”

The high façade section of the original St. Peter’s is still a common form of church architecture. Its narrow, quickly ascending vertical rectangle that opens

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341 The Catholic Peoples Encyclopedia; pg. 902, Paraphrased from a fourth century writer, Paulinus of Nola.
onto the central nave is also an unmistakable echo of the narrow, tall vertical that opens into the central chamber of Solomon’s Temple. So too are its double side chambers built along both sides of the central, vertical structure as seen in the illustration like the storage rooms of Solomon’s temple. The high arch at the end of the great hall before the apse, which is directly above the grave of St. Peter, marks a symbolic gateway of sanctity alluding to the veil before the Holy of Holies of the Tabernacle.

Bisecting the central vertical structure of Old St. Peter’s reveals the same incorporation of the Tabernacle’s geometric formulae as was incorporated into the Solomonic Temple. Facing us is a façade forming a golden section rectangle. From its top crossbeam to its baseline, a rectangle conforms in proportion to the flat-roofed temple of Solomon.

It is noteworthy also that the niche above the apostle’s tomb, the most sacred part of the church, is bisected height and width into four smaller squares, placing the grave at the exact center of the square. An invisible vertical line traverses geometrically through the building to the sepulcher below and to heaven above. Such a centering line from heaven to earth, earth to heaven occurs at four points in the Israelite Tabernacle:

- the Altar of Offering at the center of the Outer Court;
- the veil of entry to the Tent of Meeting where the two squares of the Outer Court meet;
- at the Altar of Incense at the center of the second square of the Holy place in the Tent of Meeting and
- at the last square, the Holy of Holies at whose center sat the Ark of the Covenant.

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342 First Kings 6:5-10.
344 The location of the two altars are also points of origin for the hidden squares in both the Outer Court and Holy Place. The Altar of Offering is exactly 50 cu from the Altar of Incense inside the Holy Place, and the Altar of Incense is exactly 10 cu from the Ark of the Covenant inside the Holy of Holies.
A line drawn through the center of the top beam of these outer facades will bisect the rectangle of the nave at the back of the church and the Holy of Holies in the Temple of Solomon.

E. Transformations: Imperial Majesty Replaces Heavenly Dominion

Like its Israelite Tabernacle and Temple forebears, the First St. Peter’s was the reflection of a Divine dominance over all the world and human affairs. It created a covenantal space set apart, separate and holy, whose power came not from its superior scale, but rather through being a reflection of divine principle over material power. In a very real sense, the history of the world since the advent of biblical civilization can be seen as an eternal conflict between the values of scripture, which are beyond nature and the values of nature worship and all other idolatries which recognize no power higher than nature. The battle waxes and wanes between these two antipodes, and it is so consuming that often the scriptural religions themselves fall away from their true heritage, as prophets and saints have so often testified through their deeds, their works and often enough with their very life’s blood.

Two times, and fifteen hundred years apart, a Greco-Roman essentially nature-intoxicated philosophy overtook the “God intoxicated”\textsuperscript{345} forms of scripturally inspired liturgical architecture. Forms are created by convictions, and convictions are in turn moved by forms. Now the struggle with Greece and Rome was not completely a war, for the Judeo-Christian and Greco-Roman worlds, in many ways, were mutually admiring. It was the competition to both resist and adapt this Greco-Roman world to differing views of scriptural religion that drove the most defining and decisive wedges between the two religions of Judaism and Christianity, while at the same time laying the foundation of modern, western civilization.

Herein lies a story of infinite complexity but its scope is far too great for this study. Suffice it to understand that over a thousand years were spent by

\textsuperscript{345} A phrase coined by the late Rabbi Abraham Joshua Herschel of blessed memory.
Jewish, Christian and later Moslem scholars in compiling, absorbing, selecting out, and reconciling Greco-Roman knowledge and worldview with scriptural religion. The battle goes on today as the philosophical rifts are still being brought together only to break apart once more.

**F. From Jerusalem to Rome, From Herod I to Pope Paul V: A Strange Convergence**

In April of 1506, Pope Julius II laid the first stone of the new St. Peter’s, the one that evolved into the Roman style basilica we see today. Later under Paul V, the elongated Latin cross floor plan triumphed over the foursquare Greek cross of Julius’s plan. But the overall effect of the building is still one of earthly dominion, power, and empire: the same as is still reflected in the ruins of the Roman forum whose dominion preceded it. Indeed, it was this very Roman Forum, which ruled over the last Jewish commonwealth. It permitted the construction by Herod of a Jewish Temple vast in imperial size and splendor, a space reflective more of the earthly empire that ruled over it at that time than the original space set apart by the God who ordained it. And into this Roman Forum were marched the pitiful remnants of that Judea, destroyed under Rome’s earthly might in 70 C.E. with the destruction of the Temple. One can follow their path today, past the Coliseum, winding the way upward and around until we pass under the Arch of Titus, built to honor Jerusalem’s final conqueror. Indeed we can see the Judean remnants still marching past us, carved in the walls of the great arch, carrying their seven-branched lamp and moving on past the Forum, past the Roman ruins still majestic and imperial even in their brokenness.

By all accounts, the last Temple in Jerusalem was a work of great majesty and beauty. So we are told by eyewitness accounts in the Talmud and other writings. But there are rabbinical references that decry its materiality and the lack of true piety that often accompanied its ritual. Some believed that God’s

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346 1609 to 1612
347 The Catholic Peoples Encyclopedia 902.
destruction of the Jewish commonwealth was because Herod's Temple was not rebuilt according to God's will.

G. Urbi Et Orbi: From Sacred Square to Public Square

An imaginary plumb line can be drawn from beneath the great dome of St. Peter's in Rome down through the remains of the Basilica of Constantine, the first St. Peter's Basilica. Still following the plumb line, it will rest upon a niche over a square space at the end of the first St. Peter's church. Below this niche is the monument of Gaius, a great cube-shaped monument of gray marble, adorned with a band of porphyry around its base, and another vertical band up the center. Beneath this, our plumb line ends inside the tomb of the apostle, Peter.

If we reckon our imaginary plumb line in years, its journey through time would have covered some thousand and two hundred years from the day the apostle was laid to rest in his sacred tomb below to the day the dome of St. Peter's rose majestically above. From the Dome of St. Peter, to us standing beneath it today, is more than five hundred years.

The floor plan design of today's St. Peter's retains the original 500 ft wide square designed by Bramante, through the sides of which radiate a Greek cross. We can assume now that this square retains symbolic kinship with the basic proportion module of the Tabernacle, the cube-shape of its Holy of Holies, which contained the Ark of the Covenant. As in the center of the cube-shaped Holy of Holies stood the Ark of the Covenant, so, too, underneath the center of this square of St. Peter's rests the bones of St. Peter in his tomb with its original

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348 lavender, purple stone
349 The Catholic People's Encyclopedia, 901. This was the monument raised by Constantine over the simple memorial he found on the Vatican Hill, as the centerpiece of his basilica.
350 Gardner's Art Through the Ages, 6th Ed. 1975, 505.
351 Cross pieces of equal length that extend from the center of the crosspieces.
Fig. 45. Present St. Peter's as Christendom's Tabernacle.
An invisible line descends/ascends from the Tomb of St. Peter through the Altars of both Old and New St. Peter's, creating an earth to heaven connection. The center of St. Peter's third square, which corresponds to the Holy of Holies of the Tabernacle, here, becomes both the square altar and the Holy of Holies of Christendom. The Dome, with its soaring upwardness and its ceiling open to heaven is symbolic of the smoke of sacred offering soaring heavenward with the invisible soul of the Apostle ascending to his Maker.
rectangular altar stone above.\textsuperscript{352} Thus this large square, whose center point is
capped by the soaring dome with its center opening to heaven, high above the
Apostle's tomb directly beneath is itself a sacred altar of vast proportions. As our
eyes lift, drawn upward and through its aperture heavenward, the dome becomes
an architectural metaphor for the curling white smoke of burnt offering for
redemption from sin and the spreading aroma of incense before the Holy Ark of
Covenant. Thus the two great themes of scriptural religion, covenant, and
redemption, are still embodied in the present St. Peter's.

The plan of Michelangelo, while lengthening the nave, retains and
reinforces the Bramante concept.\textsuperscript{353} His lengthened nave extends the length of the
square by one half the length of Bramante's square, thus replicating the cubit and
a half golden section proportion, a recurrent measurement in the Tabernacle
furnishings and in Solomon's Temple, i.e., the height and width of the Ark, the
height of the Table of Showbread, and the front facade of Solomon's Temple.
Whether or not Michelangelo was conscious of any scriptural symbolism when
making his design, or merely chose it for aesthetic purpose, is unknown.

Similar questions are raised by the "actual plan"\textsuperscript{354} wherein the nave was
further lengthened to its present size under Pope Paul V\textsuperscript{355} by Carlo Maderna.
"The Latin cross finally triumphs over the Greek which ... was thought of as
humanist, ... though... it had venerable Christian antecedents."\textsuperscript{356}

The following quotes of St. Peter's words may allude to the greater temple
established over his tomb just as the old Israelite Tabernacle was laid to rest in
Solomon's Temple.

"Yea, I think it meet, as long as I am in the Tabernacle, to stir you up by
putting \textit{you} in remembrance; Knowing that shortly I must put off \textit{this} my
tabernacle even as our Lord Jesus Christ hath showed me."\textsuperscript{357}

\begin{itemize}
\item \textsuperscript{352} Catholic People's Encyclopedia, 903.
\item \textsuperscript{353} Catholic People's Encyclopedia, 903.
\item \textsuperscript{354} Catholic People's Encyclopedia, 903.
\item \textsuperscript{355} 1605-1612
\item \textsuperscript{356} Catholic People's Encyclopedia, 903.
\item \textsuperscript{357} II Peter 1:13, 14.
\end{itemize}
It was the apostles who set Christianity on its journey into the non-Jewish world and converted the capital of the largest pagan empire to a scriptural religion. From this altar, and from this vast public square above it, the second scriptural religion was able to spread abroad to all the world. Its vast colonnades, designed by Bernini, spread like outstretched arms to embrace and bless the faithful of many nations as a loving father.

Might this lofty design of Bernini's have been inspired by verses 26 and 27 of Deuteronomy 33 wherein Moses bids his farewell to Israel? If we think of St. Peter's Dome as that majestic stone metaphor enclosing its own microcosm of heaven, lovely and appropriate becomes the tribute of Moses to Israel's God to this sacred earthly space.

There is none like unto God, O Jeshurun, Who rideth upon the heaven as thy help, And in His excellency on the skies. The eternal God is a dwelling-place, And underneath are the everlasting arms.

But like its predecessor, Herod's Temple on Mount Zion, St. Peter's also is a magisterial construct, embodying the architectural grandeur of the Greco-Roman world it displaced. Adopting the Greco-Roman dome, the freestanding statues life size and beyond, the decorative columns and vast scale, St. Peter's departs from the severe modesty of the Tabernacle and the Solomonic Temple that lie beneath Mount Zion. The wandering succot in the midst of the people gives way to theatrical elements that marked the last Jewish Temple built by Herod in the days of the Roman occupation of Judea.

The Christian covenant too is metaphorically inside a Grecian urn and the metaphor becomes that of the philosopher contemplating the universe, the Greek concept of human/godlike perfection. Its imperial sense is enveloping, so overwhelming, it is so close an imitation of the infinite cosmos. Indeed, St. Peter's is urbi et orbi and who cannot admire it or even love its grandeur and its beauty? It is a sacred gift to the world as was Herod's Greco-Roman Temple before it. But the modesty of the wandering succot of the harvest, the intimate

358 Giovanni Lorenzo Bernini, 1598-1680.
space of the "still, small voice," whose speech rent asunder the void, comforted the broken heart, and raised up the downtrodden are no longer seen. They lie hidden beneath the imperial architecture of both edifices, the Judaic and the Christian, yet their remains are there to this day.

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359 First Kings 19: 11-12.
Chapter 14

The Architecture of Islam: The Third Scriptural Religion

The most profound similarity or correspondence between shape and meaning is in the Ka Ba itself. The perfect cube-form of Islam's holiest religious shrine\(^{360}\) echoes the cube form of the Tabernacle's Holy of Holies. The cube form is later repeated in the Holy of Holies of Solomon's Temple. These were the most sacred spaces in Israelite civilization as they contained the Ark of the Covenant.

Further evidence for the intentional use of the square and cube for art of sacred content is seen in the architecture of mosques. What first catches our eyes are the lofty and majestically arched gateways and the delicate arcades, the beautiful domes that blend into and then emerge from the sky. The huge, square architectural backdrops that loom carpet-like or curtain-like around the majestic gateways are interesting in comparison to other cultures. The magnificent gateway is common to all ancient architecture; the square and cube are specific to the Egyptian and Judaic religious cultures. We may wonder also if the curtain and veil decorations of the Tabernacle,\(^{361}\) like the decoration of Islamic architecture, were comprised of quotations of important prayers and passages woven in beautiful form through their golden threads. Islamic architecture may thus carry a hint of that which has been overlooked. Rabbinic commentary speculates that the curtain and veil decoration may have been animal images symbolic of the Twelve

\(^{360}\) located in Mecca, Saudi-Arabia.

Tribes. It is entirely possible that both tribal heraldry and written quotations made up the curtain and veil decoration. Perhaps the writing in gold letters was confined to the veiled entranceway of the Outer Court of the Tabernacle, and the veil before the Holy of Holies. These gateways were the points of unification and were for all Israel, K'lat Yisrael. Or perhaps, the colored elements of the curtains and veils displayed the tribal heraldry while the golden threads weaving through them contained the scriptural quotations.

Both the nonchristian places of worship and the Christian churches, with their concentration on a holy-of-holies, and altar... were too reminiscent of image-worship or idolatry. Mohammed therefore took a simple assembly room (musalla), with a flat roof supported on pillars as the place for the public Friday prayer; a niche resembling a door (mihrāb) showed the direction (towards Mecca) in which the congregation had to prostrate themselves when praying, while a pulpit (minbar) was used by the preacher...362

The light, curtain-like appearance of these square walls surrounding the magnificent gateway entrance arches, their lace-like intricacy and colorful blending with the colors of heaven represent the most literal interpretation extant of the form, function, portability, and interaction of temporal and eternal time that was expressed by the Tabernacle and Outer Court complex. The gateways appear more like the space between drawn curtains than doorways.

The aspect of lightness, of portability of a breathing and pulsating interaction with the desert light and air stand in marked contrast to the Egyptian, Greek, and Roman architectural forms and orders. Though influential to the mosque's orders and proportions, they were nevertheless quite different from the mosque in derivation and intent. The Egyptian, Greek, and Roman Temples are statements of weighty albeit orderly permanence sited forever, immobile and unmovable, standing defiant in opposition to passing time.

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In contrast, the mosque is altogether like the Tabernacle, a child of the succot, the portable booth of the field, fragile in aspect, light, and letting light into itself and through itself, for all its mass appearing almost to float in the air.

A. The Mosque: Islam's Tent of Meeting

Of all the liturgical architecture that bears witness to the Tabernacle's influence, none equals the early mosques of Islam. The mosque is at the same time, the most literal, imaginative, and evocative reincarnation of the Tabernacle. It is as if this architecture assigned itself the task to not only resurrect its subject but also to effect the intricacy of its veils and curtains, its portable structure as well as its infinite significance. The mosque stands before us as an evocation that is as weightless and vivid as a dream but a dream made of solid stone. The mosque confronts us not as solid architecture but as the mirage of an oasis. Its design denies the materiality of its substance as a Roman arch denies the weight of the stones it supports. Thus the mosque expresses the ultimate meaning of the Tabernacle as a metaphor of the Almighty, the non-corporeal presence of Him who is the Master of the Universe.

B. Origins of Mosque Design: Geometry in Asymmetric Garments

"Western classical art developed among settled tillers of the soil and in towns, ... The art of nomads, on the other hand, proceeds from the tent and the loom." The origin of the mosque proceeds not only from the biblical descriptions of the Israelite Tabernacle, but must take on its unique affinity for that structure from the nomadic lifestyle of the early practitioners of Islam. It was a lifestyle that emulates the history of Israel up until the time of the Tabernacle and beyond. "Thy servants are shepherds, both we and our fathers;" declare

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Soaz

Altar form enclosing gateway

Double Square

Implied (hidden) square

Square 1/2 height of mosque facade creates implied double square

Laver Form before the entrance to the Mosque

Square

Islamic arch

Double square

Fig. 46. Iwan of Masjid-I-Jami or "Great Mosque," 11th Century

The shape of the Islamic arch could have derived from a drawn curtain or the entrance to a tent. The high facade of the mosque with its side rooms, which are one half the height of the facade, is similar in design to the Temple of Solomon.
Joseph's brothers to Pharaoh.\textsuperscript{364} From the time of Abraham until the completion of the Exodus wanderings, the Israelite lifestyle precluded permanent dwellings or any permanently sited architecture. In the Torah, Moses makes only an imprecise allusion to the future Temple: "... and you shall build Him a house in the place that He shall choose."\textsuperscript{365} Israel was a people dwelling in tents, wandering from pasture to pasture to care for their herds, and, when they planted crops in their permanent homeland, their harvesting was done from the most fragile shelters (the succot) that followed them into the fields.

It may be concluded from the above that Islam's early followers, with a lifestyle similar to that of the ancient Israelites, were endowed with a special affinity towards embodying a tent-like weightlessness into the design of their primal religious structure.

The facades and entrances of the ancient mosque reveal a constant interplay of the Tabernacle's proportional system of the square, the square and one half, the double square, and the double square and a half. Even when choosing the eight-sided octagonal mosque shape, which is more tent-like, the symbolism is suggestive of the Tabernacle's double square, Outer Court with its four sides to each square. An octagon, can be read as a summary, an architectural condensation of the four sides of two squares laid end to end thus taking up less linear space. The dome is a fitting roof structure and is most aesthetic for a compact square or octagonal walled structure, even though it has no known origin in either Israelite or Islamic culture and is manifestly Roman in use. Even the ancient temples of Greece did not use the domed roof. A circular manifestation of the Roman arch, the dome roof expresses mystical and spiritual dimensions unequalled by other architectural forms. Its seemingly magical command of uninterrupted space conveys, even in its most secular use, a sense of uplift as if transporting the viewer to a captured segment of the heavenly sphere outside. This effect alone, makes the dome as fitting a roof for the mosque as for St. Peter's.

\textsuperscript{364} Genesis 47:3.
\textsuperscript{365} Deuteronomy 31:10-11.
As for the Islamic arch, with its pointed tip and beautifully descending curves, we have a superb Islamic innovation proceeding it seems from the same culture of the loom and tent and worthy of the Tabernacle itself. The Islamic arch has the aspect of a majestic, weightless gateway to a place of transcendent holiness, combining a tent-like delicacy with architectural stability. The Islamic arch is an almost effeminized version of its sturdy Roman cousin.

An examination of the geometry of the Islamic arch reveals its square and one half measurements from bottom to top, in contrast to the semi-circle in a square of the usual Roman arch. The Islamic arch combines the classical architectural arch with the grace of parting curtains tied in place with hidden cords. The curtains are parted not at the center but in the center of the upper half-square from which its entire graceful shape takes place. The sides then meet the lower portion and hang straight down forming the two vertical sides of a square. Now the cubit and one half measure\(^{366}\) is the same proportion as the height and breadth of the Ark of the Covenant, the sides of which would have been viewed by the Israelites during their wanderings.\(^{367}\) They would have thus viewed mostly the backs of the two cherubim atop the Ark Cover, never their faces. The elegant Islamic gateway embodies the words of David when he brought the Ark to Jerusalem. “Lift up your heads o’ ye gates; that the King of glory may come in.”\(^{368}\) is echoed in the invisible, tent-like veil suggested by the Islamic arch.

Animating, overlaying its severe geometry, the mosque is decorated with golden inlays of Q’uran quotations. Arguably the most beautiful flowing script, the Arabic writhes with sensuous serpentine movement over the severe geometry underneath it. It is the very antithesis of the severe geometry it rests upon. Add the carved latticework stone windows, the colorful tiles and the whole is suggestive of the gently blowing always in slight motion, curtains and veils of the Tabernacle complex.

\(^{366}\) square and one half
\(^{367}\) Exodus 25:10.
\(^{368}\) Psalm 24:7-10.
Fig. 47. Hidden Meaning in the Mosque's Façade
The majestic beauty and weightless aspect of the Islamic arch derives from the tent. Woven and brightly patterned fabric was used as a construction material. The tent is common to nomadic people such as the Israelites and Arabs.

Severe geometry, supported by seemingly weightless, tent-like walls with perforated stone windows, decorative script of sensuous movements and beautiful color, writhing, flowing, embracing, evoke as in a dream the embroidered curtains of its ancestral shrine in the desert which was animated by blue, purple, and scarlet curtains round about and woven with gold threads inside and out. The
Tabernacle's rectangular outer courts and circular water-filled laver reflect the heavens and mirror the geometry of the mosque.

So does the mosque recall its distant antecedent in dreamlike grandeur. It evokes also heaven and water, at the same moment, lightness as well as light, severity and delicacy, male and female. Under its countenance of utter stillness interrupted only by the soft cool breezes of an invisible garden, the mosque summons the Divine presence.
Chapter 15
The Journey Recalled

An Egyptian statue of a member of the royal family was always carved from a squared block. Like pyramids and temples, it was oriented to the four cardinal points: west, east, north, and south and also to the vertical representing the direction between heaven and earth, the divine dimension which is eternal and earthly existence which changes and passes away.

In approaching a statue of Egyptian royalty, one feels the straightening effect exuded by the regal posture of the work, a posture invisibly reinforced by the physically erased yet aesthetically still very much present squareness of the original block of wood or stone from which it emerged. One may find himself barely consciously straightening his own posture, as if in real life he might check his appearance before approaching a head of state.

An encounter with the pharaonic statue, as with temple and pyramid, was never meant to be casual. No matter how intimate, warm, or loving, one was always aware of the regal presence. In the Pharaoh’s case, it was quite literally the divine presence in earthly incarnation.

The above principle is applicable to studying the Torah and other sacred texts in the Jewish canon. To be understood, this Scripture can never be read casually. Every event recounted and each letter in the Torah is carved from the squared block, that is, oriented toward the eternal. No matter how ephemeral or

ordinary, how fleeting the thing being described, one must feel the orienting presence of the Divine in order to grasp the full meaning. The Bible is a sweeping, earthly landscape full of human events, but illuminated by the Divine light. Nothing significant of the Torah’s meaning is visible to anyone who does not sense the Divine light suffusing it. This is no mystical concept, but a principle carried out by wording, meter, and other appropriate aesthetic means applicable to other art, in this case, it reaches a height of extraordinary exaltation.

Our own age can find something of this majesty in intimacy in the great works of Western classical music, created by the same aesthetic orders and out of the same belief system as our Scriptures. In its repetition and development of themes and melodic lines, classical music may well be the nearest art form to the Hebrew Scriptures that is comprehensible to the modern mind not attuned to the Hebraic methods of study. In studying the weekly Torah portions, one will see that a musical style of symphonic thematic repetition is characteristic of Hebrew Scripture in developing and stating ideas and as a narrative device.

The rabbis, who decided upon the works to be included in the Judaic canon of sacred texts, must have been attuned to the principle described here. They might have used that moment in tune with eternity as the basis for inclusion or exclusion of texts. The calming and reorienting effect of scripture upon so many generations and different peoples is undoubtedly the consequence of an aesthetic canon equal to the task of illuminating the encounters with eternity of the events and people it describes.

Significant thematic elements in the Torah weave and build through the text very much like motifs in classical music. They repeat themselves at a different pitch and with different phonetic instrumentation as if to confer greater and lesser significance. Four such parallel deliverance themes come readily to mind.
• near-loss and God-bestowed deliverance that began with Sarah’s captivity in Gerar\textsuperscript{370}
• of Lott’s escape from Sodom\textsuperscript{371}
• the near death and restoration of Hagar’s son Ishmael,\textsuperscript{372} and
• the series of course, climaxes or crescendos in the \textit{Akedah} (Binding of Isaac).\textsuperscript{373}

Another thematic example is the incredible string of deceptions to redress perceived grievances or the injustices of birth order that begins with Jacob and Rebecca versus Esau and Isaac.\textsuperscript{374} It ends with the climactic deceptions by Joseph with his brethren, which finally brings about harmony, justice, and reconciliation to the House of Jacob.\textsuperscript{375}

Less obvious is the imagery of the smoking Mount, the fiery consummation and cloud of smoke, which reaches its grand climax in the revelation at Horeb, where God’s voice speaks out of the fire. But the image begins in Genesis 15:7-18.\textsuperscript{376} Abraham makes an offering to God at evening time and is awakened at dark to see it consumed in fire and smoke. Here begins that leitmotif of fiery covenant between God and Israel. It is repeated at the “burning bush”\textsuperscript{377} that climaxes at Horeb and continues as the Fire by night and Cloud by day above the Tabernacle.

What is there today in fiction or nonfiction that demands this kind of reading? The answer is echoed as much in our images as in our literature. These single layer items have meanings that are no deeper than fleeting surface embellishment meant to titillate every facet of feeling but in only the earthly

\textsuperscript{370} Genesis 20:1-18 and repeated with Isaac and Rebecca in Genesis 26:6-18.
\textsuperscript{371} Genesis 19:29.
\textsuperscript{372} Genesis 21: 9-21.
\textsuperscript{373} Genesis 22:1-24.
\textsuperscript{374} Genesis 25: 28-34.
\textsuperscript{375} Genesis 41:6 to Genesis 45:5.
\textsuperscript{376} Known as the “Covenant of Pieces.”
\textsuperscript{377} Exodus 3:2.
passing, the workday, or common mode. They lack the exalted, eternal mode that echoes our origin by the Divine Hand.

A. The Journey of the High Priest: A Convergence of Geometry and Light

From the moment of evening when the high priest kindled the seven-branched lamp, the Tabernacle made manifest God’s eternal covenant with Israel. From the dawn of each day until the eventide moment of Israel’s final daily prayer, light entered the Tabernacle curtains and entrance veils as the sun followed its trajectory across the sky. Energy and motion darted here and there in kaleidoscopic color and change of pattern, never the same, so that the Tabernacle became animated. Through the power of heaven and the guidance of its own geometry and workmanship, the Tabernacle became a living thing.

The Tabernacle was oriented east to west as was later, the Temple of Solomon. As the High Priest moved towards the Holy of Holies, he began his service at the ramp of the altar and even into the chamber containing the Ark of the Covenant, he moved towards the west, towards the land of Egypt. In this ritual paradox of simultaneously recalling Egyptian bondage while walking towards the Covenant of Deliverance, the daily priestly ritual of the Tabernacle reenacts in the most literal way possible for public ritual and art, the First Commandment given to Israel at the smoking Mount Sinai, “I am the Lord thy God, who brought thee out of the land of Egypt, out of the house of bondage.”

“Thou shalt have no other gods before Me.” These words are also part of the Shema, Israel’s oldest and most central prayer, repeated twice daily, evening and morning, as they were during all the years of the priestly service. In perfect unity was thus brought together in Israel’s daily ritual service, the deliverance, covenant, and commandment of Israel’s birth as a people and as a nation.

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378 Exodus 20:2-3.
379 Numbers 15:41.
Into its cool gray-blue space entered the High Priest, Israel’s earthly, covenantal representative. From the Altar of Offering in the Outer Court and after his bathing from the laver, through the entry veil of the Holy Place, to the Altar of Incense, the High Priest begins his journey of ascent, a horizontal walk of about 50 cu or nearly 80 ft if he approaches the veil of the Holy of Holies but does not enter through it. If the High Priest enters through the veil of the Holy of Holies and burns the incense around the Ark of the Tablets in the very presence of the divine, he walks another 16 or so feet, or a total of approximately 96 ft.

But symbolically, the High Priest’s ascent is a vertical; and he has ascended to the Divine presence. Having received God’s blessings of forgiveness and grace upon himself and all Israel, in this once yearly ceremony, the High Priest descends and, before the elders and all Israel assembled, pronounces the priestly benediction of blessing, God’s grace and granting of peace. In this earthly and divine betrothal ritual was Israel’s covenant/mystically renewed. "The everlasting arms" embraced earth and time bonded to eternity.

B. Shadows and Echoes

The Tabernacle of Israel embodies the forms that first made manifest the teachings of God. Man is a maker of forms and, as the biblical prophets so deeply understood, our forms create us. From the work of our own hands, we find our own way, map our course, derive our assumptions, and just as often lose our way, "go after your own eyes." What we make and what we see shape us.

Religious rituals are the reenactments of the primal events that shape a culture. Our liturgical arts are the shadows and echoes not only of faraway events but the encapsulated experience of those events. Like the shadows and echoes in our daily reality, our ritual shadows and echoes also have a precise geometry.

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380 Exodus 25:22.
381 Deuteronomy 33:27.
382 Shema Prayer, Numbers 15:39.
They go back to a specific point in time and onward on a trajectory from that single point.

As we journey farther away from those events, their shadows and echoes become more precious, and also more difficult to grasp. It is through art and ritual that we remember and commemorate. Only the arts can pass on cultural memory from generation to generation. What we revere are given us by the shadows and echoes embodied in our forms, our words, songs, and rituals, our art and our architecture. All of these are in relation to the realities that they commemorate, but shadows and echoes, seeking us out in the swiftly passing moment of our temporal existence and connecting our singular little footprints in time to the long trails of our ancestors from the past to our progeny into the future. For our lives are but markers in time, signposts along the way giving either direction or misdirection.

Let them build for Me a sanctuary that I may dwell in their midst.\(^{383}\)

Then the cloud covered the Tent of Meeting and the glory of the Lord filled the Tabernacle.\(^{384}\)

For the cloud of the Lord was upon the Tabernacle by day, and there was fire therein by night, in the sight of all the house of Israel, throughout all their journeys.\(^{385}\)

We have recalled the princely journey of these forms, their beginning from the time of their making, the time of their dedication, throughout all their wanderings and their manifestation into the Israelite nation’s holy temple in Jerusalem. And from Jerusalem, the Name went out and scriptural religion was manifested again in new religions founded on similar teachings and rooted in the same forms. “For the earth shall be full of the Knowledge of the Lord as the waters cover the sea.”\(^{386}\)

\(^{383}\) Exodus 25:8.
\(^{384}\) Exodus 40:34.
\(^{385}\) Exodus 40:38.
\(^{386}\) Isaiah 11:9.
For close to five hundred years, the Tabernacle served Israel exclusively and was borne in their midst. It wandered in the desert for forty years under Moses and Aaron, and throughout Joshua’s conquest of Canaan. And Joshua set up the Tabernacle first in Shiloh 387 and then in Shechem. Shechem is almost the geographical center of Israel, about equidistant from the Jordan River west to the Mediterranean Sea and equidistant north and south in Israel. It is 10 miles north of Shiloh and 35 miles north of Jerusalem. 389

There it rests through the reign of Israel’s first king, Saul (11th century, B.C.E.). King David (11th to 10th century, B.C.E.) brings the Ark to Jerusalem and the Tabernacle rests there until the reign of the anointed son of David, King Solomon (10th century, B.C.E., 965 to 931 B.C.E.).

In the four hundredth and eightieth year after the children of Israel were come out of Egypt, in the fourth year of Solomon’s reign over Israel, he began to build the house of the Lord. 390

Now from the time that Israel ended its wandering in Sinai, through the time of Joshua’s wars and through the time of the Judges, and through all the reign of King Saul and King David, there was neither the cloud by day nor the fire by night over the Tabernacle. Such special protection was bestowed only during Israel’s betrothal to God in the wilderness; but was no longer needed when Israel returned to the home which the Lord had given to Israel.

With a hundred and twenty trumpets in the tenth century B.C.E., in splendid ceremony, feast and speech, Solomon dedicates the Temple in Jerusalem.

And the priests brought in the Ark of the Covenant of the Lord unto its place, into the Sanctuary of the house, to the most holy place, even under the wings of the cherubim. 391

387 Joshua 18:1. Shiloh is 25 miles north of Jerusalem, and 10 miles south of Shechem.
390 First Kings 6:1.
391 First Kings 8:6.
This was "in the month of Ethranim, which is the seventh month." This is the season of the New Year, Day of Atonement, and Sukkot, the harvest holiday commemorating the departure from Egypt, holy days when Israelites made pilgrimages to Jerusalem.

And it came to pass, when the priests were come out of the holy place that the cloud filled the house of the Lord, so that the priests could not stand to minister by reason of the cloud, for the glory of the Lord filled the house of the Lord.

Then spoke Solomon: "...for they shall hear of Thy great name...that all the peoples of the earth may know Thy name, to fear Thee as doth the people Israel, and that they may know that Thy Name is called upon this house which I have built."

If they return unto Thee with all their heart and with all their soul in the land of their enemies, who carried them captive, and pray unto Thee toward their land, which Thou gavest unto their fathers, the city which Thou hast chosen, and the house which I have built for Thy name; then hear Thou their prayer and their supplication in heaven, Thy dwelling place, and maintain their cause;

As the needle of a compass is drawn ever in the direction of its greater power, so every Jew prays facing in that direction of Jerusalem, towards the Temple Mount, towards the last recorded place of the Tabernacle and the holy Ark of the Covenant. Every synagogue and temple is so oriented and the headstones of Jewish graves likewise face the Temple Mount.

From the Exodus to this day, the ritual life of Jews is governed by the forms, shadows, and echoes of the Tabernacle, as it is recalled in every scroll of the Torah, which contains the accounts of its making and its priestly ritual and the places of its wandering in the midst of Israel. For 1500 years, this people and its shrines were the only habitation of moral monotheism.

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392 September – October of our western calendar. First Kings 8:2.
393 New Year Day, Feast of Tabernacles, Passover.
394 First Kings 8:10-11.
395 First Kings 8:12, 42-43.
396 First Kings 8:48-49, Solomon’s Dedication to the Temple.
Within the testaments of Christianity, within the design of its churches and in the colors of its art, the shadows of the Tabernacle can be seen and its echoes heard. And in the mosques of Islam are echoes of its severe geometry, and the shadows of its glorious curtains. As far back as these shadows and echoes are in the past as the journey has already gone, that journey will stretch into a yet more vast future, into manifestations not knowable to us here today; except that their teaching will be the same and the ancient forms will be there, their echoes heard and their shadows seen.

One day they will return home to their hilltop of Zion, where their long buried shadows and silenced echoes will be resurrected into corporeal form. And nations will sing, “...that the cloud filled the house of the Lord, so that the priests could not stand to minister by reason of the cloud, for the glory of the Lord filled the house of the Lord.”

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397 First Kings 8:10-11.
None of the findings or conclusions presented in this book contradicts either the biblical text itself according to Jewish translation, nor any of the rabbinical interpretations, which in fact, seem highly attuned to the aesthetic forces inherent in ancient art and architecture. What is stated here often amplifies the text and appears to be reinforced by the commentaries of Rabbis and Sages.

Nor is there anything in the biblical text that was not part of Mesopotamian and Egyptian technology of those times, and which therefore could logically be expected to be practiced by the laboring and artisan classes which the Hebrews would have been in Egypt.

What seems to be emerging is an incredibly unified and unique aesthetic tradition that came into being from a single generation, the same that received the Torah. That same tradition is alive and well, only hidden slightly, as by a veil in the very colors, shapes, forms and patterns of Jewish traditional, holy, and religious objects and rituals.

There are many paths to the perception of the Eternal: piety, geometry, art, mysticism and righteousness. Of these, righteousness is the most important and mysticism the least profitable. Let us change the wording a little to piety, knowledge, beauty and righteousness. Whoever can come to God by these four pathways will have a rich life, regardless of wealth. These four may be the corners
upon which God established the universe. The will towards civilization is an echo of the perception of the order of the universe.

We have seen here that the Tabernacle complex and the cultural imagery that it called into being moves through Hebraic religious civilizations like “a mighty hand and an outstretched arm.” Its antecedents emerge in the covenants of Genesis and come to a climax in Exodus in the great covenant at Sinai.

In the latter half of Exodus, moral monotheism is given its first emergence in specific forms of art and artisanship. Before the assembled tribes, its attendant rituals recalled and combined God’s great covenants with mankind in general and Israel in particular. From here its use as Israel’s shrine and rallying point goes on throughout the period of Judges, the kingships of Saul and David, and for 21 years into the reign of Solomon, a time span of nearly four hundred years. The form of Solomon’s Temple was also governed by the Tabernacle’s design.

Placed in the Temple of Solomon with great ceremony, the Ark of the Tablets disappears from history along with all the remaining appurtenances of the Tabernacle. Yet from here its influence flows ever farther, beyond the boundaries and time of ancient Israel and its Temple into the imagery of the other monotheistic faiths.

To the Tabernacle, we owe almost all the alliterative poetry in the Bible, beginning with Balaam in the Torah itself and many of the Psalms. Israel as the betrothed of God, faithful and then unfaithful: this was the favored image of the prophets harking back to that time when Israel was carried as God’s youthful bride across the wilderness. The Tabernacle was the adorned embodiment of Israel’s bridehood to the Lord.

Derived from the Tabernacle’s forms at some unknown time are all the ritual objects and practices still used in Jewish personal prayer and public

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398 Solomon commenced the Temple in the fourteenth year of his reign, and it took an additional seven years to build.
399 The Temple dedication was in the seventh month (Ethanim), the time of plowing, the modern equivalent (Tishri) is September-October, which is the season of Rosh Hashanah and Yom Kippur. First Kings 8:7-10.
400 Numbers 24: 2-7.
worship. Judaism’s only sacred object, the Sepher Torah, in its decorative garments and inner shapes evokes visual memories of the Tabernacle complex and its sacred contents. Of what other work of art can it be said that though it no longer exists, it is yet manifest in the daily and public religious life of every people and every person in whose life the Jewish Bible plays a part?

Moving through Israel’s ranks
Like a plow to the soil
Was the Tabernacle to Israel’s soul:
Turning, preparing,
Caressing her rows
To receive God’s sacred seed.
Appendix A
The Institutional and Governmental Underpinnings of Israel as Given in the Torah

**Classes:** Deuteronomy 27:1-5, Deuteronomy 31:9-13. A written law (Torah) is as binding upon the person of priest and king as upon the humblest man and maid servant, and the stranger and rich and poor alike.

**Sabbath:** Exodus 20:8-11. The weekly day of mandatory rest applied throughout the society: to all the people from king to slave and even to animals of labor.

**Clergy:** Numbers 35:1-7. The Levites (priests) were allotted limited amounts of land in 48 cities scattered throughout Israel. They depended upon tithes from the people. This commandment prevented the accumulation of wealth and power by the clerical class and made the priests dependent upon the prosperity of the common people.

**Representatives and Judges:** Exodus 18:25-26. Leaders were first chosen by Moses but later elected by each tribe to be over thousands, hundreds, fifties, and tens. These served as both a representative body and judiciary. They are probably the *Am Ha-eretz* (people of the land) referred to throughout the Scriptures.

**Kingship:** Deuteronomy 17: 14-20. The Torah offers no demand for an earthly king over Israel, but rules, regulations, and warnings if a king is desired by the people. He must be a born Israelite, duly anointed, and then ratified by the people. He must study and abide by the laws and commandments of the Torah. Israel would become in essence history's first constitutional monarchy.
Property and Jubilee: Leviticus 25:8-13. The entire land was subdivided in orderly fashion among all the tribes, except for the Levites, the priestly class (see clergy). In the fiftieth year (Jubilee), debts were cancelled and land that had been sold reverted back to ownership to the relatives of the tribe who originally owned it, an institution devised to prevent an impoverished class of landless peasants.

Servitude: Exodus 21:18-27 and Deuteronomy 23:16-17. Involuntary servitude is limited to six years for an Israelite slave. All slaves, Israelite or non-Israelite, were freed if abused or injured. The runaway slave could not be returned to his master. These laws formed the basis for the Underground Railroad, which rescued slaves from the South in disobedience of the United States Supreme Court ruling that runaway slaves are property and must be returned to their owners. There has never been such laws as these, which abolish “property in man” on the law books of any other nation prior to the abolishment of slavery itself, save in one instance of which I know. The Massachusetts “Body of Liberties,” the first code of laws established in New England by the Massachusetts General Court in December, 1641 which quotes the Deuteronomic law.401


Court—Jurisprudence: Exodus 22: 20-23, Exodus 23:1-3, 5-9, Numbers 35:30. Judges, witnesses, procedures, and punishments are regulated by strict due process. The Talmud and rabbinical commentary go into detail on all matters concerning selection and examination of witnesses, proper judges, etc. All our modern concepts of law: presumption of innocence, due process, right to defense, counsel, equal justice under law, all these and others were in practice in ancient Israel. Several rights are actually stronger in Israelite law than in modern U.S.

procedure. The Torah demands two reliable witnesses (one is insufficient) are necessary to convict of a capital crime. Confession (testifying against oneself) is absolutely forbidden. In the Fifth Amendment, the choice is left to the accused.

Equality before the law: There is no distinction between man or woman, rich or poor, priest, king, or commoner, home-born and stranger, Israelite and non-Israelite. All are subject to the same protections, procedures, and punishments.

_Lex Talionis:_ (Soncino 476) Exodus 21:18-37 Eye for an eye. Leviticus 24:18 (Soncino, page 760 and also commentary), Numbers 35:31 (Soncino 981). Convicted murderers cannot pay a fine. They must be put to death because there is no fine of equal value to human life. This ever maligned and misinterpreted legal formula is actually the origin of several rights precious to modern jurisprudence: the equality of all classes before the law, that punishment is the same for all classes, as opposed to being more severe for the commoner. The imposition of monetary fines in place of corporeal punishment also prevents cruel and arbitrary punishments.
Appendix B
The Menorah as a Mystical Object

"Mystical" is not used here to mean an object of veneration or prayer or to be used as a religious icon. The lamp’s distinctness or mysteriousness, as opposed to other structures in the Tabernacle, lies in that it is the only object that is not assigned a specific use or purpose in the Torah narrative. It also does not have an obvious use that can be derived from its unique structure. The lamp is described in detail and assigned its ritual and no more. All other furnishings, the Ark of the Tablets, the Table of Showbread, the Altar of Incense, the Altar of Offering, the laver for washing, the curtains and veils have both an assigned and an obvious usefulness of purpose. The Menorah seems to have neither.

In the course of Israel’s history, the seven-branched lamp becomes its most beloved and reproduced image and symbol. It most certainly was a revered object from its inception.

What was the purpose of the seven-branched lamp? Some rabbinic interpretations note that lights brought honor to a house. The more lights meant the greater the honor. Therefore, the lamp was designed to honor God’s house.\(^{402}\) Also, the number “seven” represents the idea of completeness, and seven lamps therefore symbolized a perfect life.\(^{403}\) Neither of these rabbinic opinions is actually stated in the Torah text. Was the lamp merely to provide light for the Tabernacle? Though lit at evening, the lamp was to burn continually night and day.\(^{404}\) If the lamp’s purpose was only the practical one of providing light, why would it need to burn during the day also? And, like all sacred lights in Jewish ritual such as Sabbath candles, sacred lights are forbidden to be used for any practical purpose such as to provide light or heat, or even to kindle another light.

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\(^{403}\) Hertz, *Pentateuch and Haftorah*, 1, (1941): 329 commentary.
The *Ner Tamid*, another sacred lamp burned at all times so that the Ark with its sacred Tablets of Covenant should never be without light. From this we can infer that, in Judaism, light is a symbol of life and, by inference, symbolic of the fires of covenant. Such a lamp burns today in every synagogue and temple before the Ark or niche wherein a Torah is placed.

Given the above, my opinion, which is contrary to tradition, is that natural light did enter the Tabernacle from the sun by day and the moon and stars by night. This re-enforces my other opinion that the Tabernacle complex was symbolic of the *succot*, the portable fragile booth used to shelter harvesters in the field. *Succot* becomes the harvest holiday commanded in Exodus in commemoration of the departure from Egypt. The entrance of natural light into the enclosed and most sacred areas of the Tabernacle would have been necessitated not merely for light, but for ventilation and health. The Tabernacle was not conceived as a tomb but as a symbol of life and renewal, temporal and eternal. It would have to be able to sustain life inside as well as inspire it outside. This means light and air must enter it.

The great curtains covering the top of the Tent of Meeting would have been uplifted and spread outward, suspended on poles affixed by ropes, exactly as Bedouin tents were, and are to this day. This setup creates not only light and ventilation, but also a natural air conditioning system. Each curtain layer gathers and cools the warm air rising from beneath. One can see and feel this same effect standing under the shade of a palm tree on a hot summer day. The palm leaves, wafted by the rising hot air create a cooling effect far beyond what is possible by its mere shade. With such simple apparatus, two results occur: one practical and one symbolic. The curtains would let in fresh air and diffused, indirect light, mostly from the north and south, the most cool and uniform lighting, favored universally by artists. Exteriorly, the desert light shining upon the curtains

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heaven-like colors of blue, purple and scarlet with golden threads interwoven, would present a symbolic image of God’s majestic wings spread as a shield over His people. Beneath the upraised curtains, the gold-covered geometric rectangle of the Tent of Meeting would be exposed. This sight would have been visible from the encampment of the Israelites as the Tent of Meeting rose 5 cu above the Outer Court. These curtains, like sails of a ship, could be raised or lowered for every circumstance of weather, even for rain as the top curtains were of ramskin dyed bright red and above this, a “sealskin” top covering for protection.

Interiorly, all elements of the Holy Place would be shielded from the desert’s harsh, direct sunlight. Instead, they would be bathed in a cool, grayed, neutral light in which the warm lights of the Menorah and the Ner Tamid would exert maximal golden light reflections and refractions from the golden objects and the intensely colored curtains interwoven with their golden threads. The result would have been breathtaking in its beauty, an endless play of light and color moving over geometric forms, expressive of the eternal presence and nearness of Israel’s living yet formless God.

A. Arched Branch versus Diagonal Branch Conceptions

The Rashi/Maimonides diagonal stem conception of the lamp raises questions. Aesthetically it is an awkward construct for the vertical lamps which must be upright and even in height, whereas the arched or bow construction comes naturally to the vertical position.

The arched branches underneath the straight line of lamps can also be seen as symbolic of the heavens above the earth. The direction of a geometric visual symbol, unlike word placement in written language, does not alter its meaning. From an aesthetic viewpoint, the arched conception also has a more handsome

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406 My assumption only: gold threads were woven into the garments of the High Priest as described in Exodus 28 4-6, 8 and 15. The Torah does not mention the use of gold threads in the curtains and veils of the Tabernacle structure.

407 more than eight feet

408 actual material not certain
countenance: a look of stability, authority, and majesty that the top-heavy aspect of the diagonal stems lack.

But more important may be the symbolic questions. The diagonal branches introduce the only triangle shape in the entire Tabernacle structure and it is not seen again in any Jewish ritual object. While the same argument can be used against the curved configuration, the triangle was sacred to the Egyptians and to many pagan cultures as a fertility symbol representing the female pubic triangle. We see the triangle form in the pyramids of Egypt and Sumer. The triangle may also be symbolic of the angle of sunbeams which the geometry of the pyramids simulates to a remarkable degree. Would such a symbol of anthropomorphic fertility and sun worship, be used unaltered in the sacred lamp, an object of such distinction and importance to the holiest of the priestly rituals? For a fundamental geometric shape occurring nowhere else in Israelite liturgy but used extensively in pagan worship to be so prominent in the Tabernacle ritual when in every other instance aesthetic choice was modified to render the forms less amenable to idolatrous veneration does raise some serious questions.

The straight stem configuration of the Rashi/Maimonides Menorah conception does not affect the geometric conclusions nor the map of the Tabernacle concept mentioned in chapter seven because these configurations are derived from the base, knops, and lamp of the central stem only. The number of lights in the lamp (seven) is not changed; therefore, the covenantal significance mentioned in chapter seven is also unaffected.
Appendix C
Placement of Objects in the Tabernacle

1. Ark of the Tablets
2. Inner Altar of Incense
3. Lamp and
4. Table of Showbread,
5. Outer Altar of Offering
6. Ramp to Altar of Offering
7. Laver

A. The Laver

Placed between the Tent of Meeting and the Altar, "The washstand was moved a little toward the south..." Again, the Torah gives no measurements or physical description of this object but my text contains some conjectures as to the reason for the omission. Used by the high priest for bathing his hands and feet before entering the Holy Place, its reflection of the heavens gave it some aspect of a reflector, or mirror of the divine countenance looking down with tender benevolence at his chosen betrothed. Its reflection of moon and stars in its round surface might possibly have served navigational and calendric purposes. The laver of Solomon's Temple is described in detail in First Kings 7:23-26 and was an immense production of the metal caster's art, being 10 cu across and supported on the backs of twelve bronze oxen, truly a grand reflector of the divine presence.

B. Placement of the Table, the Menorah and the Golden Altar

The Altar of Incense or the golden altar was the most diminutive of the Tabernacle's major furnishings, being 1 cu square and 2 cu high. "Tosafot

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409 Steinberg, Mishkan and Holy Garments (1991): 119. Rashi,
410 16.66 feet
411 Exodus 30:1. 20 in by 40 in.
explains that the Ark was positioned in the center of the Holy of Holies.\textsuperscript{412} The Ark was behind a veil. "and thou shalt set the table without (outside) the veil and the candlestick (Menorah) over against the table on the side of the Tabernacle toward the south and thou shalt put the table on the north side."\textsuperscript{413} More clearly stated, "Place the table outside the curtain, toward the northern wall of the Mishkan. The menorah shall be opposite the table towards the southern wall of the Mishkan."\textsuperscript{414}

Rashi: Place the table: In the north, two and a half cubits away from the northern wall (toward the center). And place the Menorah in the south, two and a half cubits away from the southern wall (toward the center). The golden (incense) altar was placed opposite the space between the table and the Menorah, but somewhat eastward of them. All three of them were in the front half of the sanctuary (i.e. the half closest to the Holy of Holies.)

How so? From the entrance (in the east) to the curtain (which separated the Holy of Holies from the sanctuary) was twenty cubits. The altar, the table, and the Menorah were ten cubits westward of the entrance.\textsuperscript{415}

Further rabbinic references: "From the golden altar [of Incense] to the pillars in the east [entrance veil] measured ten cubits." There were 5 cu from their place (i.e., the Menorah and the table), to the curtain (separating the Holy of Holies from the sanctuary) and 5 cu from their place to the golden altar.

The author of Ma'aseh Choshev learns from this that the golden altar was situated entirely in the inner 10 cu, and that the table and the Menorah were positioned in such a way that the distance from their inner edge (i.e. the edge closest to the Holy of Holies) to the curtain was 5 cu.\textsuperscript{416}

\textsuperscript{412} Steinberg, The Mishkan and Holy Garments (1991): 82. Placement of the Ark. Tosafot: critical and explanatory notes on the Talmud, composed by French and German scholars from the 12\textsuperscript{th} century to the 14\textsuperscript{th}. These scholars, known as tosaphists initially produced supplements to Rashi's commentary on the Talmud... Cohn-Sherbok, The Blackwell Dictionary of Judaica (1992): 546.
\textsuperscript{413} Exodus 26:35.
\textsuperscript{414} Steinberg, Mishkan and Holy Garments (1991): 83.
\textsuperscript{415} Steinberg, Mishkan and Holy Garments (1991): 83-84.
\textsuperscript{416} Steinberg, Mishkan and Holy Garments (1991): 84. According to his explanation, the space between the table and the golden altar was therefore two cubits, for the table was two cubits long and the golden altar was one cubit long.
C. Ark, Altar, Lamp, and Table: Spatial-Symbolic Relationships in the Tent of Meeting.

The two altars interconnect spatially with each other, with both squares of the Outer Court and with the inner chambers of the Tent of Meeting and the Holy of Holies by replicating, in space, the invisible shadows of their own dimensions.

From the Altar of Incense, which is 10 cu away from the veil of the Holy of Holies, another 5 cu distance behind the veil, goes to the Ark of the Covenant which rests at the center of both the Holy of Holies and the center of the second fifty-50-cu square of the Outer Court. The ramp with the Altar of Offering is one of the significant space-form-corporeal-noncoporeal connections between the outer and inner altars and the double square of the Outer Court.

The 15-cu space distance between the Altar of Incense and the Ark of Covenant, and the 5-cu distances respectively between the veil of the Holy of Holies and the Lamp and the Table of Showbread, interact in golden section ratios of three to five. They further echo in their 5 cu division, the three invisible square spaces, the three 10-cu squares of the Tent of Meeting, and the 5 cu square of the outer Altar of Offering.

Another 15-cu distance extends from the entrance curtain of the Tent of Meeting to the points where the lamp and the Table of Showbread are placed. At this halfway point, the 15-cu division of spaces divides the Tent of Meeting into a mirror image of itself, in this case, a double rectangle. Each of these rectangles form a single rectangle of six squares, the same golden section ratio as the front façade of the Parthenon and from thence the Renaissance buildings of Palladio, Bramante, and others.

According to the above references, the table, the Menorah, and the golden altar are configured in a diamond formation with sides 5 cu in length occupying the second or middle 10-cu space of the Holy Place. The offset corners of this diamond form a separate, invisible square altar in space, each of whose corners or horns intersect both the cardinal points of the compass and the sacred elements of the Holy Place. The three-to-five golden section ratio between these sacred
objects and the 5-cu square by 3-cu height of the Altar of Offering inside the first 50-cu square of the Outer Court are visible in the illustrations for Chapter 8.

D. The Offset Square of the Tent of Meeting

Within the space between the Veil of the Holy of Holies, the Altar of Incense, the Lamp and the Table of Showbread an offset square is revealed, its points signifying, symbolically perhaps the horns at the four corners of each altar.

The center point of this invisible offset square is the center point also of the second or central square of the Tent of Meeting. From this center point, another invisible 10 cu square exactly one third the length of the 30 cu Tent of Meeting appears, just as the 50 cu square of the Outer Court goes from the foot of the Ramp to the Ark of Covenant. The 10 cu invisible square of the Tent of Meeting also ends at the center of the Ark of Covenant. It is a space charged with great holiness, the last point before the final precinct, the very presence of the Divine.

Irrespective of the variations of rabbinical judgments on the placement of Tabernacle furnishings, two principles seem to unite them all. There is always a distance and placement relationship between the two altars, the entrance to the Holy Place, and the Holy of Holies where the Ark of the Tablets is located.

Secondly, the Menorah and the Table of Showbread are always in cluster-like proximity around the inner Altar of Incense. These basic relationships are set down in the Torah and are always maintained in each of the varied rabbinical opinions. The result of this restraint is that whatever the details of placement of the furnishings a dynamic geometric and proportional intensification takes place between these furnishings and the Outer Court, the Holy Place and the Holy of Holies.

The above phenomenon is in large measure due also to the fact that both the Tabernacle and its furnishings were constructed in golden section proportions derived from the square/cube.
Appendix D
Tefillin: Boxes of Remembrance

"Tefillin are two small leather boxes used for weekday morning prayer." One is worn strapped to the upper left arm facing the heart. Its long strap is bound seven times around the forearm and bound around the hand and fingers. It's called the tefillin of the hand (yad). The other, the tefillin of the head (rosh), is worn atop the forehead. Inside each tefillin are four Torah passages of the law.

Christian Scriptures allude to tefillin in a critical way, calling them phylacteries (i.e. prophylactic amulets) .... Tefillin were therefore worn by some Jews every time they ventured into the public domain, and occasionally women too wore them. But in time, the practice was restricted to certain hours and occasions; they were to be worn at day and not by night; and they were to be put on during morning payers, after the donning of the talit.

The four Torah passages inside each tefillin are as follows:

- Exodus 13:1-10
- Exodus 13:11-16
- Deuteronomy 6:4-9
- Deuteronomy 11:13-21

These passages are a summary of Israel's redemption from Egyptian bondage, the covenant at Sinai and the commandment binding Israel to complete faith in the one God. In sum, they are a restatement of the First Commandment of the Decalogue at Sinai.

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418 The English Translation of the Torah (Jewish Publication Society, 1981), 472.
420 Exodus 20:2-3.
A. Origin of Shape and Color: Why Two Tefillin instead of One?

The two tefillin evoke the two Tablets of the Law which, being a pair, signifies covenant. In their precision of line and plane, tefillin remind me of those wonderful almost magical corners seen in Spanish missions, crusader fortresses, and other ancient architecture. The square or cube is by itself not so much decorative or even aesthetic, but rather arresting in its deviation from natural forms. My earlier writings on the Tabernacle refer to the square or cube as symbolic of the eternal divine. The tefillin sanctity derives from content, not mysticism. Tefillin contain four covenantal Torah passages inscribed by a scribe (sofer) in a square format on parchments and rolled up forming a miniature Torah.

Their black color and severe geometry against a white talit and bare skin evoke the black Hebrew script against the white parchment of a Torah scroll. The public viewing of an uplifted Torah scroll is described in rabbinical lore as “the black fire atop the white fire.” The seven bindings of the tefillin of the hand around the left forearm between elbow and wrist bone are an evocation not only of the covenantal seventh or Sabbath day, but of the seven branched lamp placed to the left of the Holy of Holies inside the sanctuary of the Tabernacle. A Jew, wrapped in his talit and wearing his tefillin, thus becomes an evocation of this ancient sanctuary whose forms and rituals manifested God’s betrothal of the people of Israel. During prescribed windings about the fingers and hand of the tefillin of the hand the beautiful passage of betrothal from Hosea is said.

“and I will bind thee unto Me forever; yea I will betroth thee unto Me in righteousness, in justice, in lovingkindness and in compassion. And I will betroth thee unto Me in faithfulness, and thou shalt know the Lord.”

423 Hosea 2:21-22.
Symbolic as these words are, they bear unmistakable reference to the physicality of marriage. Jewish vows, in the same vein as the rite of circumcision, are a physical manifestation of spiritual covenant.

After the seven windings around the forearm, the tefillin of the head is carefully placed above the hairline. It is placed along an area that would correspond exactly to an imaginary line joining the top plane of the head to the frontal plane or forehead, a line that corresponds to the same area along which the horns of hooved animals grow out. The bullock, the ram, and the goat are animals used for offerings, being thus totally subservient to God. The Hebrew word, Keren a common name, means horn or strength or beam of light. We would surmise that the beams of light emanating from the head of Moses\textsuperscript{424} may likewise have originated from this point.

If there is merit to this assertion, then the symbolic richness of this placement of the tefillin of the head is an aesthetic symbolic choice of tremendous power, scope, and beauty. It appears in Torah chapters, recounting God’s forgiveness of Israel’s worship of the Golden Calf and His reestablishment of eternal covenant with Israel.

\textsuperscript{424} Exodus 34:35 “(Keren) root word, pronounced Koran or Hebrew for "beam of light" Hertz, \textit{The Pentateuch and Haftorahs} (1941): 368.
Appendix E
Robed in Majesty, Clothed in Light: The Talit and Tzitzit

With the tzitzit ritual, the Jew lays out the foundation of his life of service to God through correct memory of the Torah commandments: by precision and not by guesswork, whim, self-interest, or idle curiosity. The corners must be perfect and correct or the edifice will not be right and strong.

The prayer ritual follows the procedure of Tabernacle ritual. First, the symbolic laying out of the Tabernacle, the tzitzit prayers (knotted rope), then the curtains: the talit, then the tefillin strap of the hand is wrapped seven times around the forearm, the divine number of harmony. The wrapping of the hand, forming three letters to spell the Holy Name parallels the hand or handiwork of the Almighty Fashioner of the Universe. From the elbow to the tip of the middle finger is the royal cubit used as the measure in royal and religious Egyptian architecture.

A. The Rope Bearer

The longest strand (of the tiztzit), Shammash is then wound 7, 8, 11, and 13 times around the other 7 halves of the four threads. After each set of windings, a double knot is made. The total length of the Tzitzit should not be less than 11 and ¼ inches.425

The ancient Egyptians measuring rope (the old term for "surveyors" was "harpedonaptae" or rope stretchers) was treated to hold its length. Some of the ropes depicted in hieroglyph were graduated by knots tied at intervals.426

425 Werblowsky and Wigoder, Encyclopedia of the Jewish Religion, 392
In a solemn and panoramic ceremony, the pharaohs of Egypt would lay out the corners of their temples and tombs. With a rope along whose length were five knots, the Pharaoh, Egypt's god incarnate and known also as "Chief Rope Bearer," in god-like fashion, would mark the corners. Upon these sacred corners would rise the eternal architectural forms of Egypt and enshrine their gods. Is there perhaps a relationship of some kind between the five knots on the ropes and tzitzit that relates to the pentagram, so involved with pi and the golden section?

It is not a great stretch of the imagination, especially when reading about the laying out the Tabernacle, to envision Moses as a youth in Egypt watching Pharaoh lay out the sacred buildings that his enslaved Hebrew brethren were forced to build. At each corner, a bullock was offered up to Ra. Corners were special, sacred. They alone made possible the square spaces, those sacred spaces not seen in nature, and the square surface of altars. What a stroke of didactic genius for Israel's greatest teacher to remember that image of a human god commanding the sacred homage of his slaves, only later to present those same slaves with the same image. However, he gave them sacred corners in their garments instead to remind the people twice each day when they recite the Shema, Israel's central prayer.

"...that you go not about after your own heart and your own eyes, after which you use to go astray; I am the Lord your God, who brought you out of the land of Egypt to be your God. I am the Lord your God."428

Thus a slave people were commanded now by their own God to follow Him in righteousness.

The parallel is seemingly more than coincidental between the talit, with its four-threaded corners, and the Egyptian knotted rope. Each corner thread has five knots. Each thread protrudes from the center of a precisely square segment of cloth at the talit's four corners. This five knotted tzitzit strongly resembles the

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428 Numbers 15: 37-41.
“knotted cord” or rope with which the ancient Egyptians laid out whatever needed precise right angles, whether a field, a canal, or sacred temples and pyramids. These Egyptian ropes also contained five knots and the Pharaoh was called “Chief Rope Stretcher,” as it was the Pharaoh, the earthly incarnation of the sun god, Ra, who stretched forth the cord to lay out the sacred square spaces of pyramids and temples.\footnote{Root, Backsights Magazine (2009).} What could have been a more fitting and familiar image to serve as a reminder to follow God's commandments, the Builder of the universe and author of both nature’s and morality’s laws, than a fringe prescribed to be worn by Jews in each corner of their garments. The four corners of the talit, each with its thread emerging from a perfect square of cloth sewn into the talit, recall also the square altars of the Tabernacle. Thus the body and being of its wearer is turned into a symbolic Tabernacle.

Judaism is a religion of covenant and commandment. The tzitzit, as a reminder of commandment, is inseparably tied to covenant. Commandment is derived from covenant and covenant is fulfilled through commandment. These concepts are inseparable in Judaism. In its physical manufacture, the tzitzit is designed around this concept of covenant and commandment.

The blue color, in so many cultures the symbol of fidelity, is the color of the sky, the most unchanging color over all the earth. It is celestial and therefore signifies truth and eternity, but its use in tzitzit or “fringe” may also be a direct reference to the passage in Deuteronomy wherein God promises the land of Israel to the Jewish people “as the days of the heavens above the earth.”\footnote{Recited daily as part of the Shema prayer, Deuteronomy 11:21.} In this passage, we see an eloquent example of the unity of commandment and covenant.

As the knots replaced the threaded blue mentioned in the Torah, a new symbolism elaborates upon the old rather than merely replacing it, very typical of the Hebrew mentality. It must have occurred relatively early, that is, at a period when knowledge of the original blue could have been lost but also at a time when the significance of the knotted rope of ancient Egypt was still in use and strong in
the people's mind. It may also be that the knots were always part of the fringe but just never mentioned in the Torah or that they appeared in the period of Judges but this is speculation. Egyptian technology did not change over the centuries. So it is possible that the modern knotted structure of the tzitzit could have originated even before the time of the second temple of Ezra, during the Babylonina exile or thereafter.

In any case, a knot is an excellent symbol for covenant as it is a literal form of binding. It could be said that a knot is the seal of a bond, similar to the impression of a king's signet in the wax seal of a document.

The modern tzitzit, as it has come down to us, is made of four strands folded to make eight strands. This four-to-eight pairing is itself significant, evoking the number four of eternity and eight, the day of circumcision for Jewish newborn males.\textsuperscript{431} Between each of the five knots, a thread is wound a fixed number of times; seven times between knot one and two, eight times between knot two and three, eleven times between knots three and four, and thirteen times between knots four and five, after which the eight strands break away from the farthest fifth knot into two pairs of four strands of unequal length. The thread must be between eleven, but no more than fifteen inches in length.

Aesthetically, the entire tzitzit on a properly made talit is of a handsome proportion. The length of knotted area to loose strand is attractive visually, like an ancient totem or staff of rank and it uses golden section relationships. By conforming the two pairs of loose strands, one can create a perfect Egyptian ankhsign with a Tzitzit. Unwound to a straight line, the golden section point of the ankh occurs at the point where the vertical and horizontal bars cross and the point where the almond-shaped loop also touches.

The tzitzit bears a proportional-aesthetic relationship to the ankh sign, a symbol that was indisputably as familiar to Moses as to us. Why should it not have found its way albeit hidden into the Jewish liturgy along with the knotted rope of the builder? The meaning of the ankh sign is "life" or "long life," the

\textsuperscript{431} the first being the Patriarch, Isaac
same as God's promise for remembering the covenant and keeping the commandments for which the blue thread was the reminder. An aesthetic proportion thus unites symbol to symbol, memory to covenant, and covenant to commandment.

The tzitzit thread is a little rod or miniature of the staff of Israel or the rod of Aaron, as rich aesthetically as it is historically and symbolically. Seizing it in the hand as the reminder it is intended to be, one lays his flesh upon the covenantal history and teaching of Israel just as truly as the high priest or a tribal elder bearing his staff carved with imagery symbolic of historical memory.

B. For the Specifically Jewish Elements of Tzitzit

There may be a mathematical-aesthetic proportion in the relation of the winding of the threads between the five knots, the numbers 7, 8, 11, and 13. There may also have been some concordance between the spacing of the tzitzit knots and the distances between the knots of a royal Egyptian knotted rope. The numerical windings may reveal basic proportions in terms of shape.

The entire length of the tzitzit thread reveals a similarity with the proportion or geometry of the Menorah, whose own geometry, reveals concordances with the rectilinear structures of the Tabernacle and Outer Court. The central branch of the Menorah had five knops.

As to specifically Jewish meanings of the numbers 7, 8, 11 and 13 and their relationship to the five knots, the following concept is offered: each number related to specific covenants or the Tabernacle:

- 7 is the Sabbath,
- 8 is the day of circumcision and also eight days of Passover recalling the Exodus,
- 11 is the number of blue, purple and scarlet curtains used in the Tabernacle, and
• 13 is the rod of Aaron, placed in the Tabernacle and which sprouted almond blossoms and almonds. It established the high priesthood from the lineage of Aaron after the rebellion of Korah.432

Sabbath, circumcision, Passover, the fleeting colors of eternity, and the rod of Aaron, establishing the lineage of Israel’s high priesthood forever: all of them are symbolic of eternal covenantal relationships established in the Torah between Israel and her God. Each is tied to a specific event and bound (knotted) to a specific time.

C. Notes: Tzitzit- Music

The numbers 7, 8, 11, and 13 are the number of windings between the knots of Tzitzit. What follows is a musical reference to three of the four numbers:

Harmony has not yet found a place for so simple a natural phenomenon as the 7th note of the Harmonic series... no fewer than three (besides the octave of No. 7) are outside our system, Nos. 7 and 13 being much flatter than the notes here written, and No. 11 sharper... they have played no acknowledged part in musical aesthetics.433

There are two traditional ways of winding the tzitzit threads. Their Jewish meaning derives from significant numerical relationships based on sacred words and symbolically significant sums.

• Two knots, ten wraps (the letter yod)
• Two knots, five wraps (the letter hay)
• Two knots, six wraps (the letter vav)
• Two knots, five wraps (the letter hay)
• Two knots.

The name YHVH is written, the tetragrammaton whose numerical value is 26. This totals ten knots and twenty-six times that the long thread is wrapped around the other threads.

432 A formulation of my own.
The second traditional method (written about earlier) involves writing the tetragrammaton \textit{YHVH} with a variant, creating the meaning "God is One (\textit{EHAD})." The numerical value in this case is now thirty-nine not twenty-six, as \textit{YVMH} = 26 and \textit{EHAD} = 13.

The eight threads are tied in the following manner:

- Two knots, seven wraps
- Two knots, eight wraps
- Two knots, eleven wraps
- Two knots, thirteen wraps
- Two knots

This totals ten knots and thirty-nine wraps.

In the \textit{Kabbalah} (the book of Jewish of mystical teaching) the number thirty-nine is extremely important. It corresponds to what is referred to as "a name in motion." The tetragrammaton \textit{YHVH} representing God cannot be enclosed within the limits of finite language. The letters within an alphabet can thus be put into motion, by turning each letter into the one that follows.

The word "time," for example, can be put into motion by substituting the next letter in the alphabet.

\begin{verbatim}
TIME
UJNF
\end{verbatim}

The word UJNF is the result of setting "time" into motion.\footnote{Quaknin, \textit{Symbols of Judaism}. (2000) 16 and 18.}
Appendix F

Disputing the Existence of the Tabernacle

Without having made it my major concern, I have never taken seriously those theories of later composition of the books of the Torah. My internal evidence supports the Jewish tradition of Revelation of the Torah at the time of the Exodus in those forty years described therein, as well as the actual existence of the Tabernacle, which could only have been conceived at a time and under such circumstances as long enslavement and years of wandering as are described in the sacred texts. No other historical period could contain so many pieces of a puzzle and fit them so neatly together.

Such radical laws as the release of runaway slaves; a jubilee year of cancellation of debts and return of lands to the descendants of their original owners; and a priesthood forbidden to acquire land could hardly be adopted in an already established king/priesthood society of the ancient type. No such egalitarian legislation existed in ancient civilizations.

Modernist division of the Hebrew Scriptures into multiple sources serve only to undermine the heart and substance of that Talmudic thinking which, after the Torah and Prophetic writings and wisdom literature may well be considered Judaism's greatest contribution to modern thought and philosophy. The teachings and parables of the New Testament derive in great measure from Talmudic thought and method.

My research seems to have only strengthened the veracity of the traditional rabbinical teachings on these matters, nor has anything my research uncovered cast any doubt upon those teachings.
Appendix G
The Sephardic Synagogue

By its design and in its ritual ceremony, the synagogue and its service are an ever-present re-enactment of Israel's primal covenant and sojourn with God. The distantly placed Torah niche (Ark) in relation to the more central reading table is a spatial design that evokes a primal Judaic conception of God's relation to man; that of the far God, Elohim (Master of the Universe) and the personal, near God, Adonai. From His heavenly abode, Elohim descends to dwell in the midst of His people. "O Eternal, incline thy heavens, and descend;"\(^{435}\)

1. **Orientation:** Since King Solomon's dedicatory speech at the completion of the Temple on Jerusalem's Mount,\(^ {436}\) Jews, from wherever they are, pray facing towards Jerusalem. Thus the Ark or the Torah niche of all synagogues, wherever they are, are also oriented towards Jerusalem, and so too, are the headstones of Jewish graves.

2. **Design:** The Sephardic or Eastern synagogue design, perhaps because it is the oldest, most replicates in its interior both the Tabernacle structures and the Israelite encampment that surrounded it. The bima is placed near the center of the seated worshippers. It is an elevated place upon which is set the reading table where prayers are chanted, sermons delivered, and the Torah is read, as are also the prophetical writings. Except for sermons and announcements, all prayer and scriptural readings are done facing towards the Ark, except when the Torah, itself, is being read. Then the reader faces the congregation. The bima and the reading table may be seen as symbolic analogues to the ramp and the Altar of the Tabernacle and the Temple of Solomon.

3. **The Torah Ritual Service:** About the middle of a typical Sabbath service, the journey is made from the bima to the Ark, to remove the Torah for the weekly

\(^{435}\) Psalm of David, CXLIV.

\(^{436}\) First Kings 8:30, 38.
reading. In this brief, solemn ceremony from bima to Ark and from Ark to bima the climactic covenantal moments of Israel are encapsulated. The worshipper ascends to the Ark and the Holy Presence (Shekinah) descends to be borne into the midst of the congregation of Israel. All in the synagogue are standing, and the procession of the Torah can go all around the congregation, or straight to the reading table. The revelation at Sinai is encapsulated in these brief moments.

4. Before the Ark: When standing before the opened Ark, the worshipper is as if paying homage to a king. When the Torah is embraced and held close to the body in procession, God and Israel are betrothed, and they are equal partners. When the Torah is placed upon the reading table, God has lowered Himself and looks up to man’s heart and petitions Israel to let Him in. 437

5. Lifting Ceremony: At the end of the Torah reading, the lifting ceremony or Hagbah is performed by a man lifting up the scroll vertically above his head, at arm’s length, before the congregation. The uplifted Torah is moved in a complete circle as the standing congregation chants: “This is the Torah that God gave to Moses, and Moses gave to the Elders, and the Elders gave to the children of Israel.” While still in a vertical position, the Torah is rolled up, tied, and dressed in the embroidered garment and sliver breastplates and finials, often a crown. Then it is held by a seated worshipper, or else set aside in a special holding shelf as the reading from the Prophets (Haftorah) commences; after which, in like solemn ceremony as the one in which it was taken up, the Torah is returned to its Ark.

6. Summary: The ascending and descending motions of the Torah service, the slow processionals of resplendent Torahs weaving like golden threads amidst the gathering of adoring worshippers is a ritual reflection of a host of historic memories. This short ritual journey of a Torah scroll from its place in the wall facing Jerusalem to the reading table at the center of the congregation, from

437 A rabbinical formulation
Far God to Near God, is an echo of the praises Balaam uttered from far up on a mountain and which opens the morning service to this day: "How goodly are thy tents O' Jacob, thy dwelling places O' Israel."

Simply by looking at older Torah scrolls (those of Eastern European origin), one can see living examples of all the craft skills that went into the making of the Tabernacle. Here are the colorful covers woven and embroidered with bright blue, purple along with red designs and golden threadwork depicting lions and menorahs. Over this are the silver breastplates with details of beaten (hammered) work. At the top, the two horns of the Torah are adorned with silver finials hung with silver bells. Great love and tenderness has gone into these bridal and princely adornments and as they move in procession among congregants, their bells make a sweet, intimate sound like the Hebrew word, Shekinah, the Divine Presence.

\textsuperscript{438} "Far God/Near God" a formulation of the concept by Rabbi Leo Baeck (1873-1956), scholar, author, leading rabbi in Berlin in 1933.
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