ARCHITECTURE

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Temple Mount West Wall, Jerusalem, Israel

"As the navel is set in the centre of the human body, so is the land of Israel the navel of the world... situated in the centre of the world, and Jerusalem in the centre of the land of Israel, and the sanctuary in the centre of Jerusalem, and the holy place in the centre of the sanctuary, and the ark in the centre of the holy place, and the foundation stone before the holy place, because from it the world was founded." Midrash Tanchuma, Qedoshim

The above represents the traditional Jewish Rabbinical poetic view (and the Islamic view as well) of the importance of the rock in the center of the Temple Mount in the City of Jerusalem. The rock in the center where the Dome of the Rock is located is believed to be where G-d fashioned man out of the dust and Abraham almost sacrificed his son Isaac as proof of his faith. At the time of the Jewish Temples, it was believed to be the floor of the Holy of Holies where the Ark of the Covenant containing the two stone tablets inscribed with the ten commandments given to Moses by G-d on Mount Sinai was kept, the inner sanctuary. The rock in the center is today called Mount Moriah, but immediately after Solomon built the first Temple about 1,000 BCE, it was called Mount Zion. Over the centuries however, in the turmoil of the changing political control of Jerusalem, another mount west of the old City of Jerusalem was identified or misidentified as Mount Zion instead, and retains the name to this day.

King Nebuchadnezzar of Babylon destroyed Solomon's Temple in 606 BCE. When Cyrus the Persian King defeated the Babylonians and freed the Israelites, he directed that the Israelites return to Jerusalem to build the second Temple in 515 BCE. Israel did this, but went through a succession of conquering rulers, until finally the Romans took over with King Herod's help. Under King Herod's rule the Temple was rebuilt by the Romans. It was during this period in 37 BCE that the west wall was built, wherein it extended the platform to the west, but also to the other three compass points as well, more than doubling the size of the platform to 37 acres total.

The Romans constructed the walls without mortar, of stones of varying sizes, generally larger on the bottom and smaller on the top - with one exception. There is a stone visible today, in the excavated tunnel north of the building juncture with the west wall parallel to and exposing the west wall to the north, where it had previously been covered over by buildings, that measures approximately 11'-4" square x 42'-4" long, weighing in at approximately 407 tons. This was not a unique Roman achievement: at the Temple of Jupiter in Baalbek (present day Lebanon), the Romans placed three stones measuring 14' x 12' x 64' long each weighing 806 tons each, along with six stones 14' x 10' x 33' each weighing 347 tons each, all with no mortar and all laid 20' up in the air on smaller stones! See E&A Architecture, 3rd Quarter 1989 on our website. With all of our modern lifting equipment, we would have difficulty matching this ability, especially with no mortar and the joints being razor blade tight!

The Roman Emperor Titus destroyed the Second Temple in 70 AD in reprisal of the Jewish revolt that he put down, and dispersed the Jews throughout the Roman empire. All of the stones comprising the temple were knocked down and thrown over the sides of the mount. Thereafter, other conquerors came and built upon the mount. The Byzantine Christians built worship facilities: The Church of St. Cyrus and St. John by St. Helena in 325 AD, later converted to the Church of the Holy Wisdom (Hagia Sofia) that was subsequently torn down also. In 610, the Muslims conquered Jerusalem, and shortly afterwards, in 691 the Dome of the Rock was built, and 78 years after that the al- Aqsa Mosque. Mohammed is reputed to have ascended to heaven on a fiery chariot from the rock under what is now the Dome of the Rock - the navel of the earth. After the Arab conquest, a Jewish synagogue was also built on the Temple Mount, but was subsequently destroyed by the Crusaders during their conquest in 1099. Its location is unknown.

During most of the Arabic and Muslim rule of the Temple Mount, it was forbidden for Jews to walk the Temple Mount. It was forbidden by the Muslims out of disdain for the Jews as well as the "infidels"- all considered unclean to walk this hallowed ground. Curiously, Jews are forbidden by the Rabbis from walking the Temple Mount also, as they may inadvertently tread upon the Holy of Holies (forbidden trek) since its exact ancient location is unknown.

Israel was re-founded in 1948, but the old part of Jerusalem remained a part of Jordan and totally under Muslim control. Jews were forbidden entry into the old city and anywhere near the Temple Mount. During the 1967 war,

Israel captured Old Jerusalem and liberated it by incorporating it within Israel. Yet the Temple Mount remains under the control of the Muslims. An Islamic Waqf (religious committee) manages the Temple Mount and provides little access to non-Muslims. Non-Muslim prayer is prohibited on the Temple Mount.

Social Engineering Through Architecture, Part I

by Perrin Ehlinger

Social Engineering refers to coordinated efforts to influence attitudes and behavior of people on a large scale, and it has a long, occasionally sullied, co-history with architecture. To some extent, every piece of architecture has both intentional and unintentional aspects of social engineering. Simply designing a building for a specific use entails creating spaces where the attitudes and behavior of people are intended to be confluent with the use.

Classrooms, for example, are designed to focus attention on the teacher and to deaden unnecessary noise and distractions. When done properly, the teacher can easily project their voice, and the lighting and spacing of the students are such that they can focus without straining.

When done improperly, like the infamous Harrelson Hall of North Carolina State University, all manner of misery can occur. Built in a cylindrical shape, the concept of focusing attention on the teacher is well established, but all possibility of concentration is destroyed when the air conditioners turn on. The entire building resonates with a thundering drone that drops student's heads to their desks for uninspiring drool sessions. The problem is caused by the shape of the building's structure, and was not solved by traditional vibration isolation of the units.

Besides poor execution, Harrelson Hall is also a well-known victim of unintentional social engineering. The bathrooms were designed with full height mirrors along the convex wall, and the toilet stalls along the concave wall. This allows anyone in a toilet stall to peer at the frontal reflections of men using the urinals. Needless to say, the restrooms are rarely used at Harrelson, and over the years, several arrests have been made of perverts taking advantage of the design flaw.

In addition to it's functional and social problems, Harrelson Hall, NCSU, also has foundation problems and is sinking.

When used intentionally, social engineering in architecture often fully achieves the desired outcome. One of the best known modern examples of this are Casinos. Generally, they're designed with no windows and no clocks. The goal is to separate patrons from the flow of time in the outside world, so they get lost in the games.

Other methods of crowd control can be a bit more brutal; in the United Kingdom, several residential and shopping districts became concerned about teenagers gathering in areas and causing troubles. They installed pink fluorescent lights, which highlight acne and other skin blemishes. The goal is apparently to make young people self-conscious so they'll move on, with some reported success. Blue fluorescent lighting was installed in the public restrooms of Edinburgh, in high drug use areas, to prevent people from injecting themselves, as veins are hidden in the blue light.

These limited examples highlight how the design of a building and its components can be used deliberately to influence behavior and attitude. From this, it can be extrapolated that nearly any aspect of a building's design could be considered a tool, then, of social engineering, if consciously directed.

Historically, architecture has always been a reflection of the societies which built them. But it wasn't until the post-Renaissance era of diverging societal philosophies that architecture was deliberately used as a tool for societal changes. As Churchill put it, "We shape our buildings; thereafter they shape us."

So it may be difficult to pinpoint when, exactly, Architecture was first used deliberately as a mechanism for societal change, but where it has been, there is no denying the results - both good and bad.

On a large scale, one of the most prominent examples of deliberate societal change through architecture was when Napoleon III, ruler of the Second Empire, hired Baron Haussmann to redesign Paris. Over 40,000 homes were demolished, streets were cut through the city, existing streets widened, infrastructure was created and upgraded. Rampant diseases were curbed, crime was controlled, traffic was eased, and the quality of life was greatly improved.

The impact of the architectural changes Haussmann instituted, however minor at the time compared to the massive urban planning changes to the overall city, might be considered to have the longer, more lasting impact on the character of Paris as a whole.

Haussmann created a required architectural aesthetic for the buildings that lined the main boulevards that we cut through Paris. The broad avenues were for crowd control through open fields of fire for cannons and rifle brigades. Buildings were required to maintain a similar appearance across an entire block, instead of being constructed as individual units. The first floors were to interract with the streets, with shops and restaurants, the second floor was considered a shorter mezzanine, and the third floor was required to have a balcony. Floors above could vary with balconies and details, but the roof was required to be a Mansard, so that they all shared a similar appearance.

The result was a lasting change to the way citizens and tourists interacted with Paris, because it, much more than

An example of classic Hausmannism, easily identifiable as Parisian.

the unique landmarks, ultimately characterized the way people live in Paris.

Perhaps the biggest implementation of social engineering through architecture has been in the industry of housing, and the stark contrasts in the competing modern philosophies of the family as a unit, as a machine, and as a society - a topic to be expanded in our next issue.