ARCH 330

COLLECTION 1

BY DANE WILD



JOURNEY TO THE PUMPHOUSE

THE APPROACH

There is a long narrow meadow that runs north/south between the University of Victoria and the mystic vale gorge. Although quite picturesque in the spring, it is a pretty nondescript walkway used by students. However, this path which leads from the road to the campus has a hidden secret.

The only interruption in the long flat stretch of grass is by a few large cedar trees surrounded by a thicket of blackberries, and if you look closely enough you can see what looks like the top of a small curved tower with a flagpole emerging from the top



THE SLOW REVEAL

You could walk by a dozen times without noticing (I did) but nestled in between the foliage on the east side is a (perpendicular to the main path) pathway that leads down to a concrete pad surrounded by concrete planter boxes. The purpose defined by the forms of this structure loudly calls to a lookout point. On this side of the meadow, the gorge contains a beautiful winding creek flowing into and out of large pools filled with wildlife. Once noticed, the platform calls you down to take a look over the edge.



THE DESCENT



Fig. 3

Fig. 4

As you move downwards, the sounds of the creek become evident as you land on a handsomely designed look out point. Overgrown and covered with graffiti, the planter boxes are still beautiful in form: white and angular. The planters create a complete sense of enclosure except for a recess in the south wall that terminates in a circle, housing a manhole and rising upwards to form a beautiful curved cylinder. When moving along this wall, beside the cylinder, a set of stairs appear.

PURPOSE

Fig. 5

As you walk down the stairs onto a pathway, the cylinder reveals itself to be a large volume protruding from a wall. It is now apparent that you were standing on the roof of a building. The walled paved path shoots you away from the building, towards the forest, and then pulls you back along the extended radius of the cylinder. This wraps the path out and back 180 degrees to bring you (towards) an encounter with the doorway.







FACE TO FACE

The door at the end of the circle tour does not disappoint. It has a magnetic power. This is what has been pulling from the start. The understated black metal door is elevated by three trapezoidal floating concrete steps which invite you under a pointed, spade like cantilevered awning. The design has a masterful sense of perspective. Standing there staring at it, it feels like you are about to enter (being pulled) through a portal to another world.



Fig. 10





To the right of the entrance, there is a small break in the walled pathway. Stepping through this break, waling 20 paces, and looking back, the full form of the building takes shape. Magnificent forms protrude and extend to the surroundings in all directions. Sharp, curved, angular, straight, the building is chaos. Almost as fast as the intensity of the forms hit, so does the harmony. What a beautiful composition, like a sculpture. Why would this beautiful little thing be down here in the gorge along the creek? Because it's a pumphouse!

THE PUMP HOUSE



THE JOURNEY THROUGH FORM

THE ELEMENTS OF FORM

The choice was easy. When I read the requirements of this assignment where I was to choose a building in my community to analyze form, the pumphouse was the winning candidate. The elements and visual proportions of form are all so apparent: lines, planes, and volumes, platonic solids, transformations, addition, subtraction, collusions and articulations. The elements of the building are very irregular and seemingly unrelated. It is perhaps because the underlying cube is so apparent and grounding that the contrasting extrusions are so visceral, vibrant and pulled together.



COLLISIONS OF REGULAR AND IRREGULAR FORMS

The whole of the composition is based on a simple cube. As a platonic solid, the cube is stable and inherently static, lacking movement or direction (Ching, 2014, p. 47). As contrast to this, the protruding forms give movement and direction in such a dynamic way that the whole composition looks like it is exploding. Irregular forms are shot out in every which way. The most recognizable platonic solid outside of the cube is the cylinder on the south side, although it transforms as it gracefully spirals up and out to a point. However chaotic, there is a strange balance to the irregularity added to the cube, this most basic of forms. The most extreme example of a transformed form is the shape which climbs up the east wall and curves in two directions. It is neither a wall or roof, but almost both. It has two concrete shells with wooden shingles on the outside, come together and attaching at the top. The purpose seems to be the sheltering of a wall vent like an all encompassing awning. Fitting that such a beautiful, elaborate shape is used for such a mundane task.

Fig. 14







ADDITION, SUBTRACTION, AND TRANSFORMATION

It is hard to put the isolated elements into formal definition. They are all so transformed. One thing that ties them together is the additive nature, all added to the central cube in a clustered arrangement. As you rotate around the building however, there is a strange radial nature to the cluster as all the added forms terminate in a sharp pointed way. The plane of termination of these forms is layered and if a line was drawn from their base (attached to the cube) to their terminus, there would be lines pointing out everywhere like pins in a pincushion. This is another example of the compositional balance: being both clustered and radial.

There are three types of additive forms attached to the central cube (Ching, 2014, p. 62): spatial tension, face to face contact and interlocking volumes. The stairs leading to the door "hover" and exist in spatial tension relative to each other and the path. The planter boxes on the roof and the east side, as well as the awning have face to face contact. The cylinder is the most obvious interlocking volume with the cube and the rooftop planters as a small part of the cylinder interpenetrates both. The other interlocking form is the "wing" on the east side as it merges into the rooftop planters as well as having face to face contact with the cube.

At closer look there are subtle recesses and subtractive forms. The planter boxes on the roof have recesses filled with soil and the planters along the east side are beautiful little things. The door is slightly recessed, which in turn accentuates and pronounces the awning and stairs which frame it.





CORNERS AND SURFACES



Fig. 17



There are a number of different surfaces which help to articulate and differentiate the composition. The cylinder and the roof planters have slightly recessed lines in the concrete which pull the cylinder vertically and the planters horizontally. The awning, central cube and path wall are smooth painted concrete. The wing is horizontally shingled over a thin concrete shell. The trapezoidal steps and the east planters are rough concrete. Each of these surface articulations has a partner and works with the other elements. For example, the concrete gets more treatment from bottom to top: raw stairs and planters, painted smooth walls, then a painted and lined top. This adds to the topology of the composition as the forms contrast and flow into each other, the cleanest being roof planters flow into the cylinder. The angles of each element are complimentary by being so different.



Fig. 18

Fig. 19



AFTERWORD (FEELINGS AND EMOTIONS)

Without knowing the typology, it just feels like there is a high degree of the unnecessary here. Pumphouses are some of the most utilitarian structures in architecture and the typological form reflects this: a concrete cube. The companies who specifically design and build pumphouses fill their portfoloio like an ode to the square (Fig. 20,21,22). This is what makes our example here so beautiful, every elemnet so perfectly purposeful by being extraneous and somehow all working together to achieve balance. The cube that the pumphouse is meant to be is stable and clear, this grounds the structure and allows for the flight of its elements.



Fig. 21

It didn't have to be this complicated. All of the forms are made of concrete and would have to be poured in place. Every form would need different formwork and the effort is way beyond necessary. The hanging awning, floating stairs, irregular planters, the "wing" on the east side. All of these are irregular shapes requiring a talented carpenter to just to get the process started. The finished product however is beauty in concrete. Concrete that moves in every direction. Smooth, rough, straight, curved, angular and pointed.



This is an ode to design, architecture for the sake of architecture. The architecture of the structure does not succeed in spite of the fact that it is a pumphouse, It is because it is a pumphouse. The interrelationship of forms are measured and studied. This is a building meant for display. The fact that it is hidden, swallowed up by the forest adds to the allure. Like a diamond in the rough, only the forest makes it home. Nestled in to the hillside surrounded by trees, branches and shrubs, bursting into form in every direction, all grounded from takeoff by their roots



REFERENCES

Ching, F. D. (2014). Architecture: Form, space, and order. John Wiley & Sons.

Fig. 22 https://www.mpnnow.com/news/20160423/tlc-coming-for-historic-victor-pump-houses

Fig. 20, 21

https://precastbuildings.com/products/precast-concrete-pump-house-buildings

Fig 1-19, 23 Photos taken by the author, Dane Wild

Title pages and final image taken by Dane Wild