COLLECTION 3

ARCH 330

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JAN 17, 2019

B2 HOUSE + HOWARD HOUSE

PART 1 INDIVIDUAL ANALYSIS

PART 2 COMPARATIVE ANALYSIS

THE B2 HOUSE

ARCHITECT: HAN TUMERTEKIN
LOCATION: AYVACIK, TURKEY
PROJECT YEAR: 2001

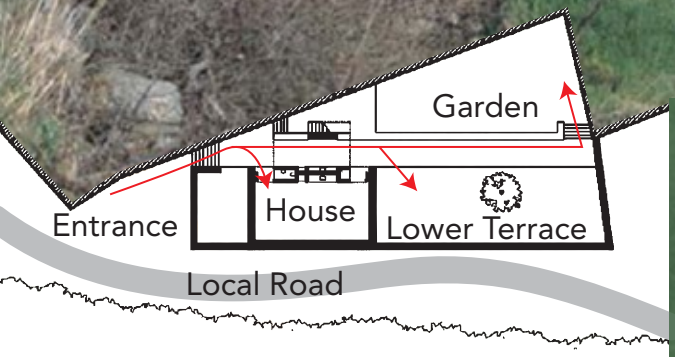


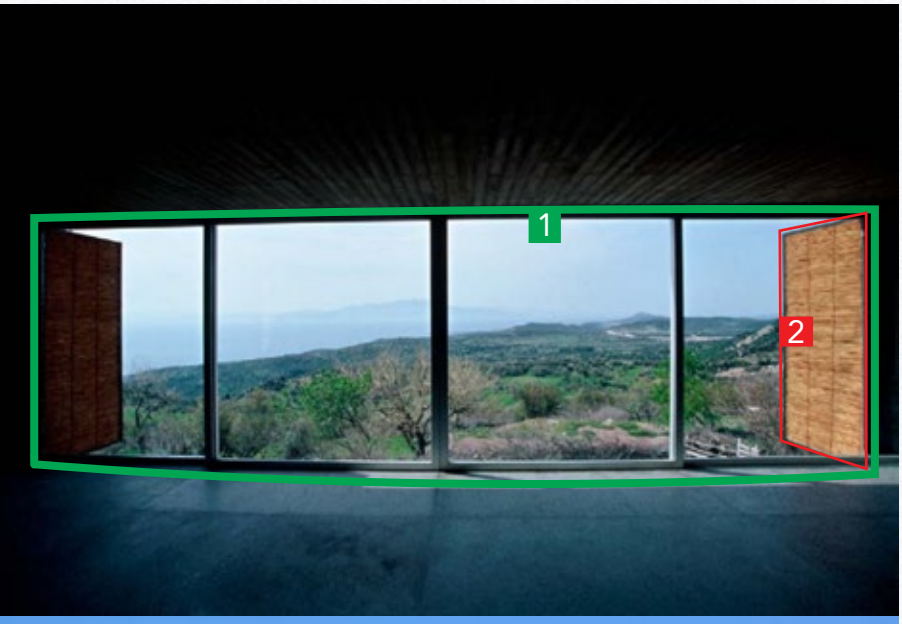
Figure 1 *(Above): The B2 House overlooking the Aegean Sea (Al-Hiyari, 2004)*

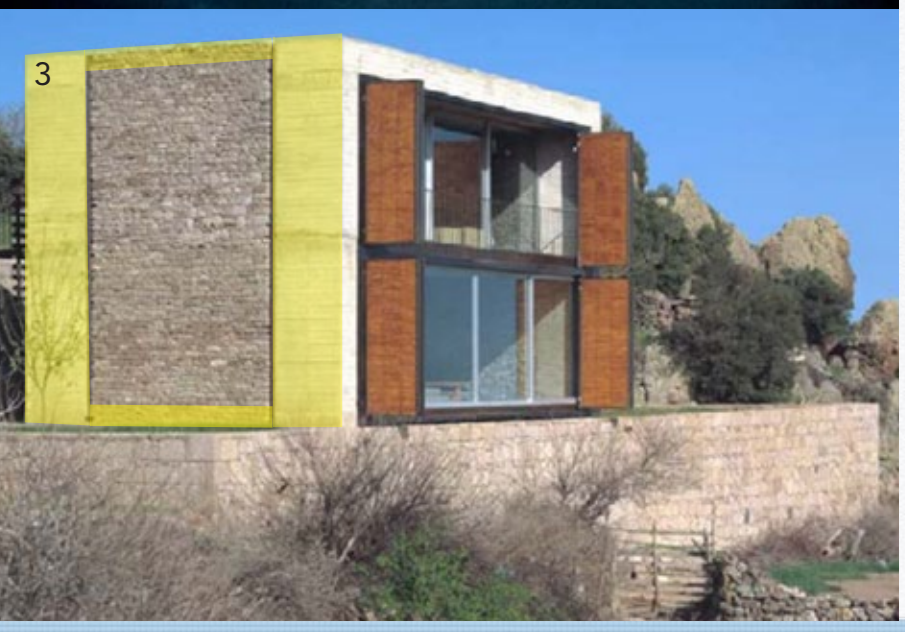
Figure 2 *(Left): Site plan (Al-Hiyari, 2004). The B2 House is located on a triangular plot that uses terracing to create a viable building location. The red line indicates circulation through the site.*

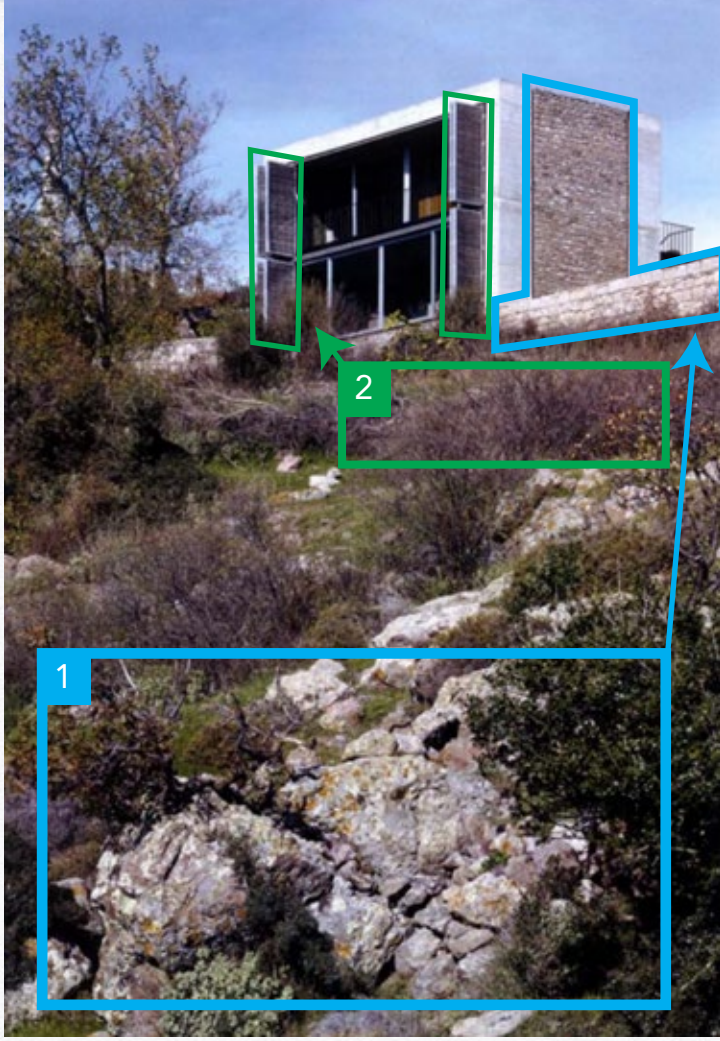
The B2 House was designed as a nomadic retreat from the city for two brothers (Al-Hiyari, 2004). They desired a place where they could spend short periods escaping the city and connecting with the nature. The building is a rectangular cube and uses local materials to blend into the surrounding landscape (Al-Hiyari, 2004) The building is designed to be used as a summer home, the only climate control comes from the south facing windows that capitalize on solar radiation principals and windows that allow breezes to cool the interior. The southern orientation guards the building against the north eastern winds that are common to the region (Al-Hiyari, 2004) and allows the B2 House to revolve around the view of the Aegean Sea (B2 House, n.d.). The house frames the view for the occupants, the manmade frames the natural, which is a strong design theme throughout the home (Al-Hiyari, 2004). Poured cement frames natural stone on the exterior, aluminum shutters frame local reed window coverings, all reflect this theme.

Figure 3 *(Right): (Al-Hiyari, 2004) The use of local materials helps create continuity between the B2 House and the surrounding landscape. 1) Local stone is used in the wall and roof construction. It is also used in the terracing, which gives the building the effect of being carved out of the mountain. 2) Local reeds are weaved together to create the window coverings which dominate the front of the building when the shutters are closed.*

Figure 4 *(Below): (Al-Hiyari, 2004) Using man-made elements to frame in natural elements is a design theme throughout the B2 House. 1) The structure of the building itself can be perceived as a frame around the view of the Aegean Sea. 2) The aluminum shutters frame in the window coverings made from local reeds. 3) The poured concrete frames the local stone on the side walls and the roof.*







While the overall plot has a triangular perimeter, the architect uses terracing to create rectangular spaces surrounding the building. When the same shape is used, it adds to visual continuity between the spaces (Ching, 2015, P.198). This links the indoor living room space with the outdoor terrace living area (B2 House, n.d.). The garden space remains triangular due to inherent site shape.

When viewed from the bottom of the mountain, the terraces create a pedestal that the building sits on top of (Al-Hiyari, 2004). The building appears to be carved out of the mountain.

Upon entering the ground floor, the north wall serves as the separating plane between the outdoors and the large living room that the floor is designed around. The north wall also contains the basic domestic functions of the home like the bathroom, kitchenette and laundry (Al-Hiyari, 2004). The functional spaces are hidden to not interfere with the purity of the design (Al-Hiyari, 2004).

The largest spaces are places of rest. The living room space is maximized while the functional spaces are minimized and even hidden (Al-Hiyari, 2004). The bedrooms dominate the upper floor while the bathrooms are also hidden into the northern wall and occupy the minimum amount of space to retain functionality. This spatial organization shows the importance and emphasis the building places on rest and rejuvenation. The southern orientation of these resting places capitalize on the stunning views which also reflect the importance of these spaces.

Figure 5: *(Al-Hiyari, 2004) The back side of the B2 House. 1) The back wall that contains the kitchen, bathroom and storage hides these rooms from the occupant. Instead of walking past a room, it feels more like walking through a thick wall. The narrow opening encourages movement into the large living room. 2) This area is set up as an outdoor living area. Similar in shape, both the indoor (3) and outdoor living areas spaces share a wall that is identical on the inside and outside. These spaces blur the lines between indoors and outdoors. Note how the stairs are outside the building to preserve the rectangular design inside the building.*

A closet separates the two upper bedrooms. When the blinds are closed and as well as the sliding doors, the closet appears as a defined separating plane. When the sliders and doors are open, the closet changes to appear as a freestanding plane in a single volume of space (architectural concept from Ching, 2015, p. 202). This flexibility allows for the house to be fully utilized if one or both brothers are present.

The covered functional area outside the north wall create a transitional space between the building and its surrounding landscape (Al-Hiyari, 2004). By moving the stairs outside the

confining walls of the building, it forces interaction and flow between indoors and outdoors for the house to function properly. It also maintains the purity of the rectangular interior design (Al-Hiyari, 2004).

An oblique approach emphasises the monumental stature of the building on top of the hillside (concept from Ching, 2015, p.255).

When the shutters of the room are closed, it allows enough light for the room to be functional. It creates a pattern of light and shade that encourages a calming environment. In creates an inwardly focused space that encourages internal refection. When the shutters are open, it allows the surrounding view to become a part of the spatial experience.

Figure 6: *(Al-Hiyari, 2004) The upstairs bedroom with the shutters closed. The view, which is normally the dominant feature of the room, is cut off. The pattern of shadows and light create a calming environment that is conducive for internal reflection.*

When sitting on the couches, the size of the room becomes apparent, the amount of extra space becomes the dominating factor of the room (Al-Hiyari, 2004).

THE HOWARD HOUSE

ARCHITECT: BRIAN MACKAY-LYONS
LOCATION: WEST PENNANT, HALIFAX
PROJECT YEAR: 1999

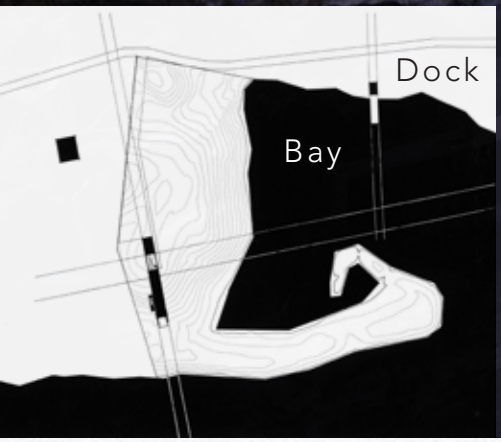


Figure 7 *(Above): (Howard House, n.d.) The Howard House is a wedge shaped building that points out towards the sea in West Pennant, Nova Scotia.*

Figure 8 *(Left): (Howard House, n.d.) The site plan. To the east is a protected fishing bay with a dock. The building has a similar orientation and footprint as many of the docks and boatsheds that populate the shoreline in Nova Scotia.*

The Howard House was built for a young family in Nova Scotia (Lowenstein, 2006). It was constructed using local materials and building techniques (Lowenstein, 2006) and is a modern take on a fishing shed (Kennedy, 2010).

The roof line is the only oblique line in the building. All the other elements of the space are based on rectangles, such as the windows, the book shelves, the cabinets, the tiling and shape of the fireplace. This draws special attention to the oblique roof line, which is perceived as a horizontal line rising and directs the attention of the occupant out towards the sea.

This house has a linear organization, with a sequence of rectangular spaces (concept from Ching, 2015, p.207). A straight path runs uninterrupted throughout the main floor of the structure. It is the primary organizing element for the spaces (concept from Ching,

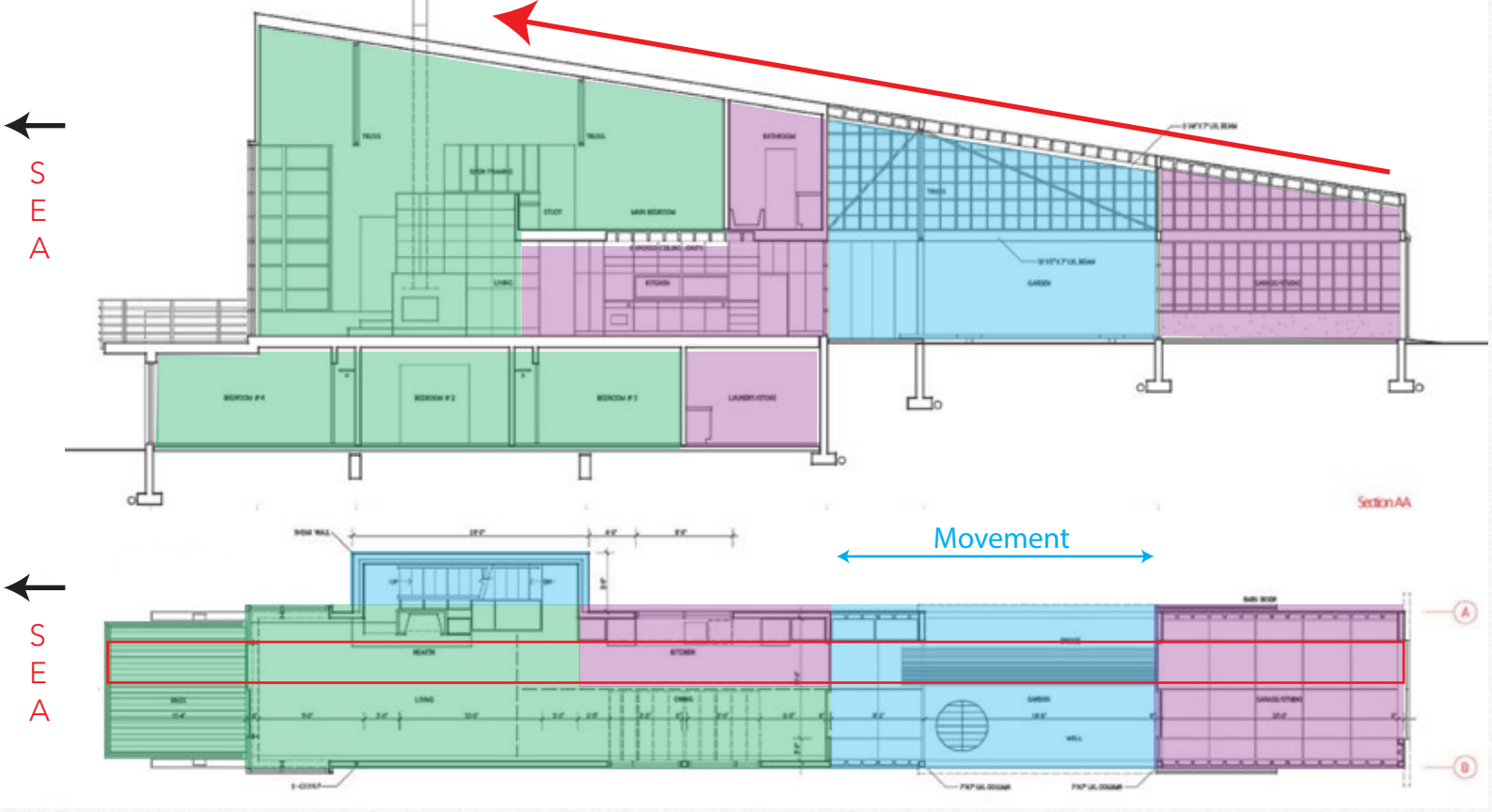
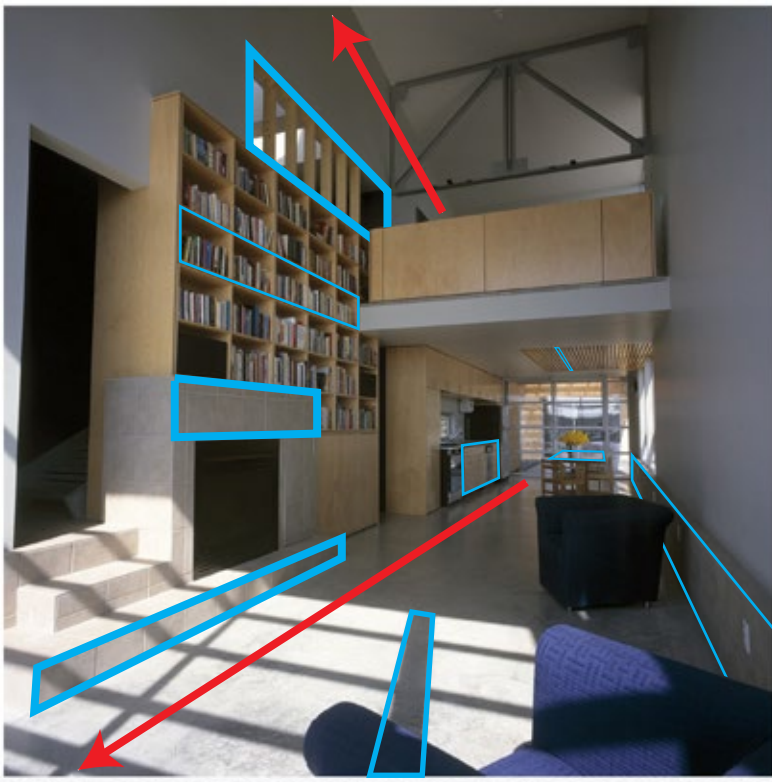


Figure 9 *(Above): Floor plan and section from the east (Brian Mackay-Lyons, 2002). Legend: Green = Place of Rest, Blue = Place of Movement, Purple = Functional Space. The places of rest are located in the areas with the best view and highest ceilings. The functional spaces are placed in the least optimal spots.*

Figure 10 *(Right): (Howard House, n.d.) The oblong rectangular shape of the building can be found throughout the building. It is a dynamic shape that encourages movement. The oblique roof line also dynamically rises toward the sea. The building calls the occupants toward the sea.*



2015, p.277). Increasing levels of hierarchy are hinted at by the rising roof line. The narrowness of the footprint brings a dynamic aspect to the building and it encourages movement toward living room/balcony that looks out over the sea. The shape of the building also limits the surface to volume ratio, which reduces heating costs during the cold winters (Porteous, 2005).

The stairs are pushed outside the main rectangle of floor space in orders to preserve the flow of the narrow rectangular footprint (Classic House 071, 2007). The stairs are cased with exposed cement walls that bring continuity with the rocky shoreline the building

occupies. It also creates a barrier that shields the building from powerful western winds (Classic House 071, 2007).

A breezeway with large sliding doors allows for the building to appear as one large, continuous structure that is closed off to the elements when the doors are closed. When the doors are open, the massing of the building changes and it appears as two buildings connected by a bridge. Opened doors allows for the wind to be harnessed for cooling, while closed doors provide protection from the elements in the shifting seasons of Nova Scotia (Porteous, 2005). The slatted pathway in the breezeway marks it as a transitional space and encourages movement toward either the house or the garage/studio.

The building is approached from the side to reach the entrance. This allows for the view of the profile of the building to be experienced, which is the building's most striking feature.

The architect attempts to create variable functionality in the home, as demonstrated by a book case that doubles as a dividing wall and a fireplace that also functions as a stairway. (Porteous, 2005)

The stairs flare out at the bottom, and the landing/final destination are both visible from the ground floor, which invites ascent (Concept from Ching, 2015, p.300).

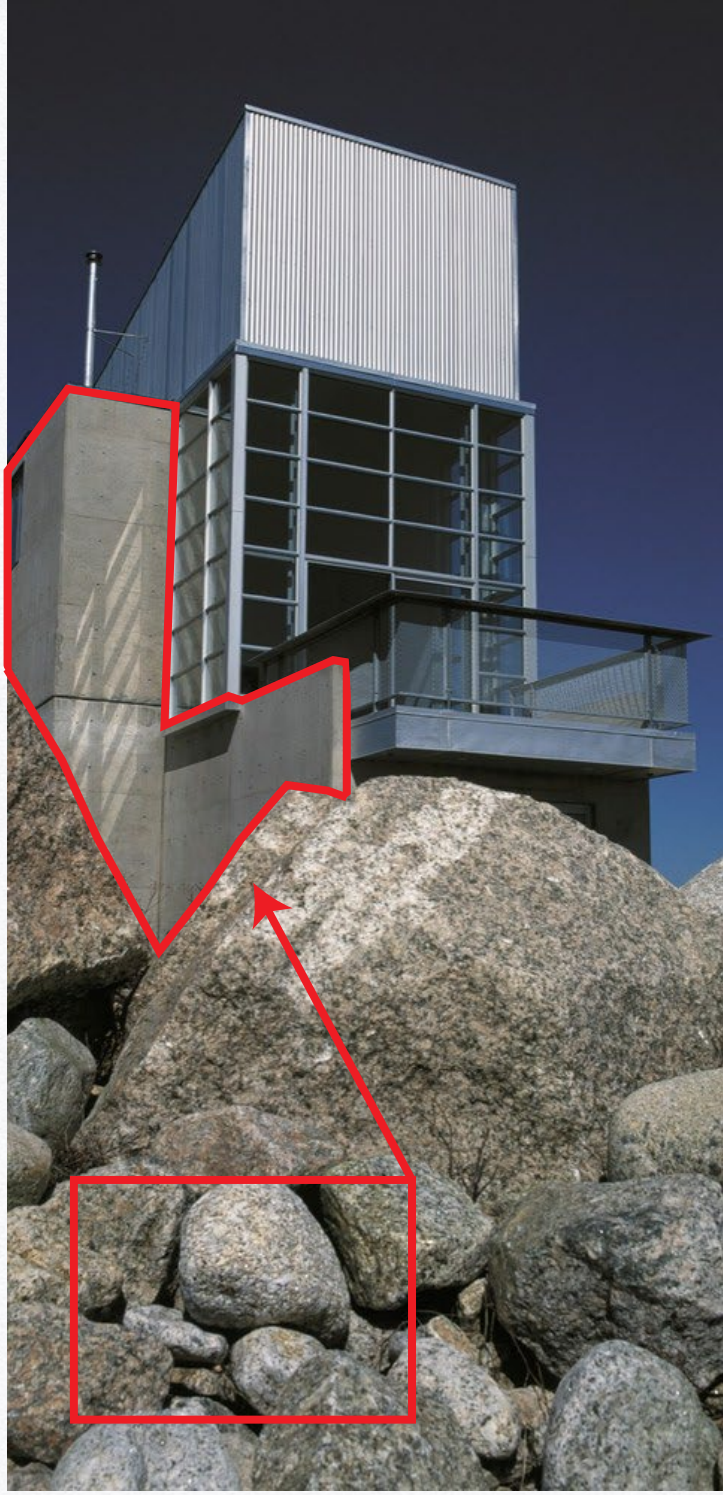


Figure 11: *View from the water (Steeves, 2011). The concrete cased stairwell creates visual continuity between the rocky shoreline and the Howard House*

COMPARISON

Intent

The B2 House is built to be a short-term retreat where two brothers can escape the busyness of the city and enjoy the surrounding nature (Al-Hiyari, 2004). In contrast, the Howard House is built as a full time dwelling place for a young family (Lowenstein, 2006).

Hierarchy

Both the B2 House and the Howard house allow resting spaces to dominate the most prominent areas of the buildings that provide the best views. Both buildings push functional spaces like bathrooms, kitchens and laundry to the back of the buildings. The B2 House attempts to make it appear as through these spaces do not exist, while the Howard House accepts their existence but attempts to push the focus of the home towards the resting spaces.

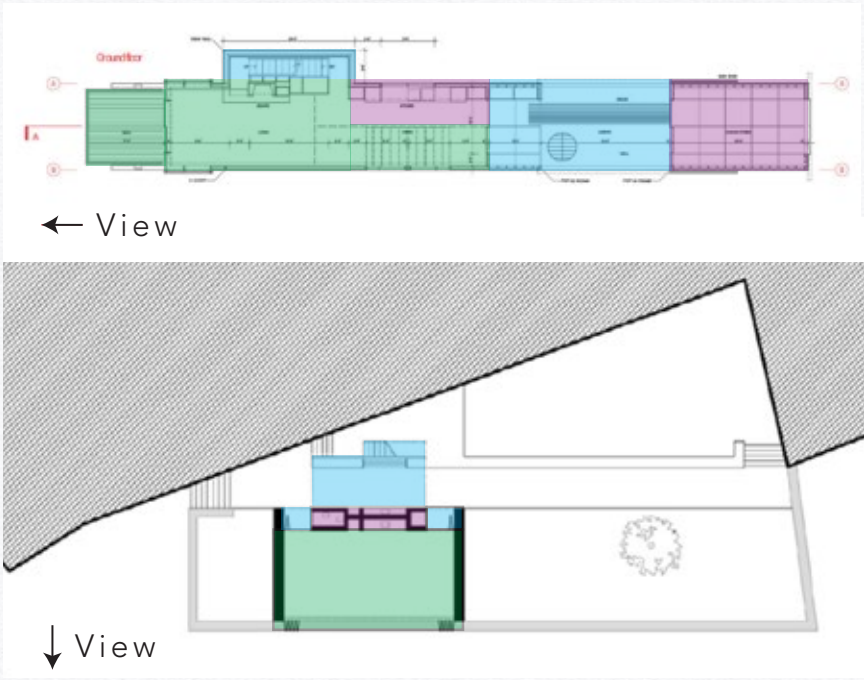


Figure 12 *(top): Howard House plan (Brian Mackay-Lyons, 2002).*

Figure 13 *(bottom): B2 House plan (Al-Hiyari, 2004). The green areas are places of rest. The purple areas are functional areas like bathrooms and kitchens. The blue areas are for movement. Both the Howard House and B2 House push the places of rest towards the view. This indicates it's importance.*

Social context

Both dwellings are constructed with a cost saving approach that reflects the lower income region the buildings are constructed in (B2 House, n.d.) (Lowenstein, 2006). Local materials and local construction techniques keep costs down and allow the building to better relate with the surrounding buildings (B2 House, n.d.) (Lowenstein, 2006). The box like structure of the B2 House is used in many of the surrounding houses, which are mainly constructed from local stone (B2 House, n.d.). It stands in contrast to the surrounding community by its exposed and stand-alone nature. Most homes in the surrounding village are clustered together, with protective walls that close the outdoor living spaces (Al-Hiyari, 2004). The B2 home stands in monumental fashion, segregated

Figure 13: *A boatshed in eastern Canada (Boat & Shed in Greenspond, n.d.). The inspiration for the Howard House, which shares a similar footprint and placement.*

Figure 14*: A local house in Ayvacik (B2 House, n.d.). The B2 House uses the same stone siding and shape as the local homes.*

from the rest of the village, with no walls or barriers to hide the building or its gardens (Al-Hiyari, 2004). It's strict minimalist approach serves to focus the occupants on the surrounding nature, but struggles for wider community acceptance, as many locals to refer to the building as the 'Japanese House" (Al-Hiyari, 2004).

The Howard House also reflects the surrounding buildings of the region. Instead of mimicking the design of traditional homes, the architect uses a fishing shed as the basis for his design (Classic Home 071, 2007). Oriented on the edge of the water and perpendicular to the sea, the building was initially taxed as a boat shed (Lowenstein, 2006). While the Howard house also uses minimalist design principals, the purpose of scaling down the home to its simplest form while remaining functional reflects the pragmatic view of Nova Scotian culture (Lowenstein, 2006). By creating a functional minimalism and using references to culturally important structures, the architect allows a style that may have otherwise struggled for acceptance in Nova Scotia to stand in contrast to traditional homes, yet form agreement in its pragmatic approach and cultural motifs (Lowenstein, 2006).

Physical Context

Both houses use materials that allow them to fit into their environments whil dominating their respective landscapes. The local stone used on the B2 House allows it to be visually connected to the surrounding stone mountain (Al-Hiyari, 2004). The Howard House uses an exposed cement base and walls to blend into the rocky shoreline it oc-

Figure 15: *(Steeves, 2011) The Howard Housecan be viewed as three sections when the sliding doors are open. The main house (1) and garage (3) appear to be connected by a bridge (2). When the doors are closed, the building appears as one singular unit.*

cupies.

The B2 House can completely open up to the environment and blur the lines between indoors and outdoors (Al-Hiyari, 2004). This is appropriate in the warm Turkish summer climate when the building is intended to be used. The Howard House in relatively closed to the surrounding environment, except for two doors in the breezeway, which allows the home to harness the wind to cool the interior during summer months (Artillery94, 2014). Due to the harsh winters in Nova Scotia, the building is more focused on being well insulated and protected from the cold weather and winds (Porteous, 2005)

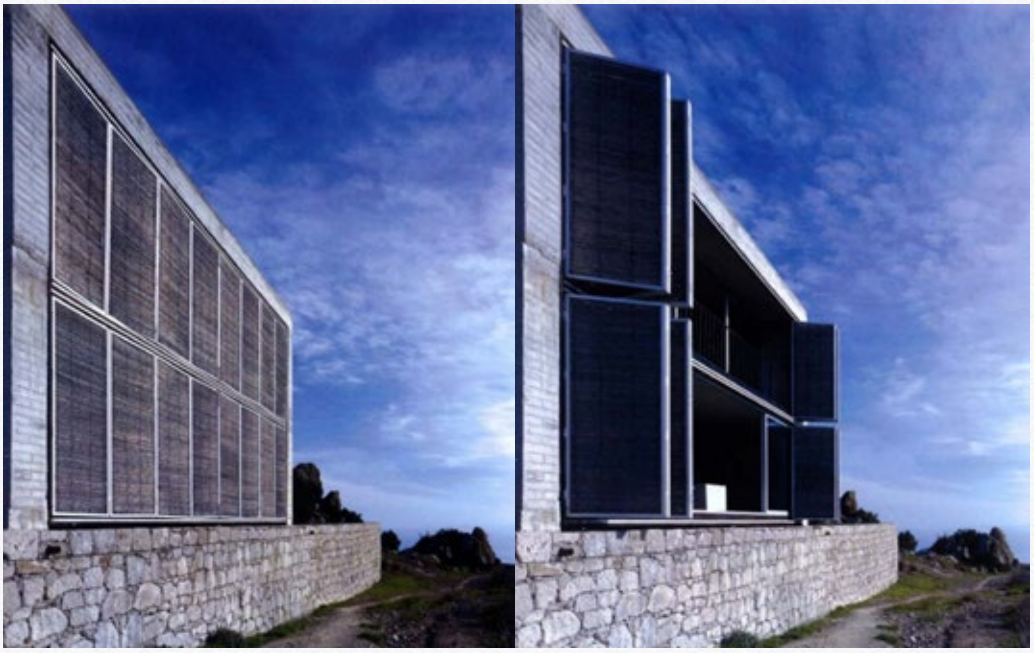


Figure 16: *(Al-Hiyari, 2004) The B2 House with the shutters open and closed. When the shutters are open, almost the entire house is visually exposed to the surroundings. When closed, it is completely cut off.*

Parti

Both buildings are based on a simple rectangle, with the stairs pushed outside the main rectangle to preserve the form of the interior. The B2 House has a rectangular footprint and section. This fits the building's purpose of being a restful escape. While the Howard House also has a rectangular footprint, but its oblong shape creates a dynamic feel which is conducive to the sea-faring history of Nova Scotians (Porteous, 2005). The side section is dominated by an oblique line that creates a dynamic sense of movement towards the sea as well.

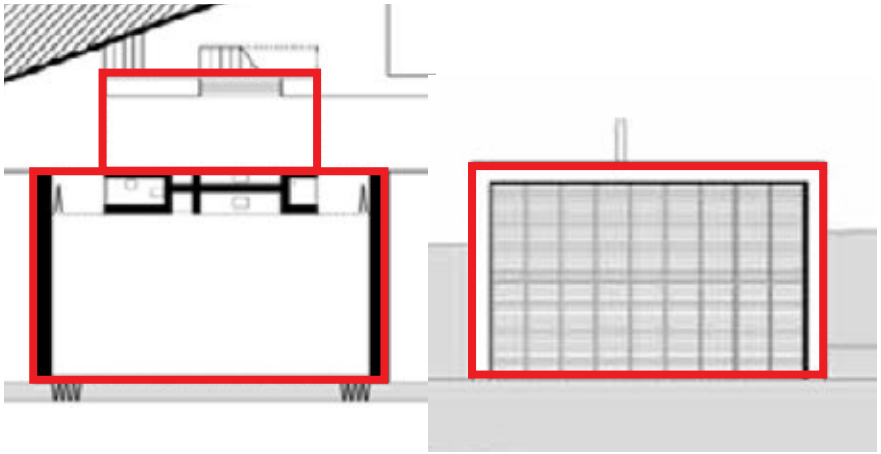


Figure 17: *(Al-Hiyari, 2004) The plan (left) and section (right) of the B2 House. The parti (red lines) of the building is a simple rectangle with the stairs pushed outside the main structure.*

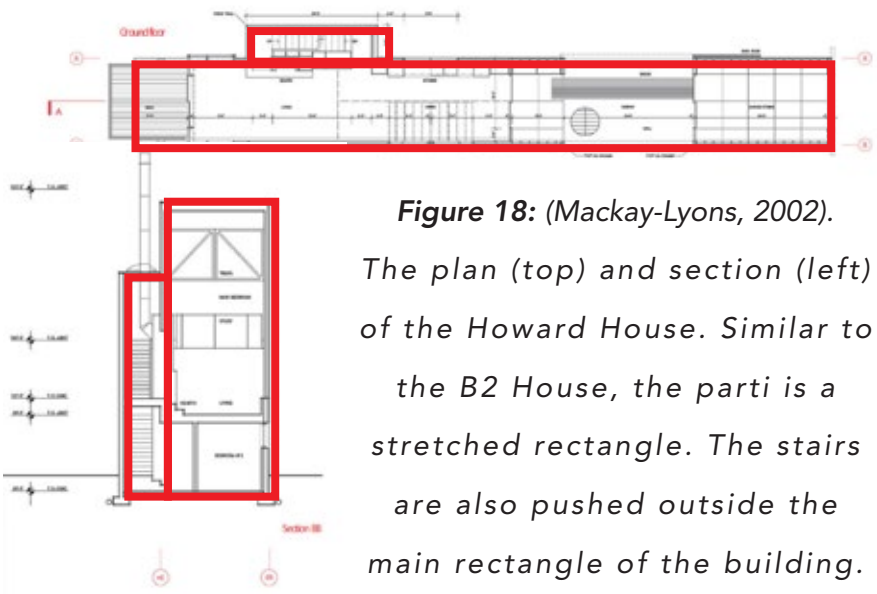


Figure 18: *(Mackay-Lyons, 2002). The plan (top) and section (left) of the Howard House. Similar to the B2 House, the parti is a stretched rectangle. The stairs are also pushed outside the main rectangle of the building.*

Conclusions

Although both homes exist in vastly different cultures and climates, they both use a minimalist approach that meets the needs of their clients. Both homes place their spaces of rest in the most important locations, capitalizing on the views of the surrounding landscape. Both homes are distinct from their surrounding buildings, but create familiarity by using surrounding buildings as inspiration. Both homes dominate their landscapes, yet feel connected to it. While the B2 House creates a restful escape, the Howard House creates a dynamic and lively home. Overall, the architects were able to apply similar general principals to their buildings and craft them in such a way that they suit their surroundings and clients.

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