

the yoga studio

inquiry into the relationship between architecture, mind, and body

1d Understanding the Program

Starting Monday 1 February (2/3 students teamwork)

Due (review): Monday 6 February

(a) Layer one

Still working with your partner(s), based on the building program, develop a **list of the TOP 10 to 15 actions** that will take place **in, on, around, and in the vicinity** of your project. (Remember that experientially and socially, ‘property line’ is a questionable idea.) This list should be as specific AND extensive as possible. Each action (verb) must be put into some sort of context. (“Sitting” is a meaningless verb without some kind of qualification; why am I sitting? — working at a computer at my job is very different from sitting at the dinner table, or in a soft chair to read a book.)

Elaborate on each action with a list of **qualitative and subjective requirements for the space in which the activity will take place** (quality of light, tallness, sound, temperature, memory, color, vastness, kinds of materials, level of material articulation, privacy, view, air movement, etc.)

Where possible, also note **any relationships between actions** in terms of: connections to other actions (not simply adjacencies, but RELATIONSHIPS; how does this affect that?); hierarchies among a set of actions; or relationships to EXTERNAL/INTERNAL conditions. If you want or if it helps you, think of these actions in relation to one another as some sort of ritual (e.g., the yoga practice ritual, the arrival and departure ritual, the changing ritual, the social ritual, the shopping ritual, etc.)

What we are asking you to do is to NOT to make judgments about space sizes and adjacencies, but to develop an attitude (or architectural position) about spatial qualities and relationships. By thinking more directly about the actions of the inhabitants, this should allow you to begin thinking about the architectural qualities that you might want to create in response to their actions. This document will begin to anticipate some aspects of the design process by attempting to describe the qualities that you think the spaces of your project should have.

(b) Layer two

Develop at least 1 (ideally 2 or 3) **BUBBLE DIAGRAM** that expresses the functional relationships among the different programmed spaces. This diagram(s) should acknowledge primary, secondary, and tertiary hierarchies in terms of relationships as well as the inclusive nature of some spaces related to others.

the yoga studio

inquiry into the relationship between architecture, mind, and body

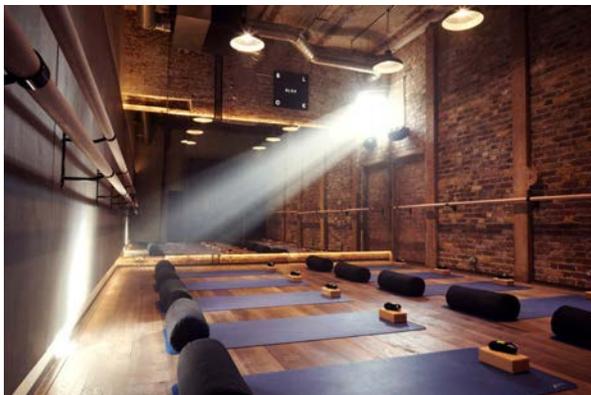
(b) Layer three

The first diagram of Layer Three has to do with understanding the size of your program vis-à-vis your site. Therefore, represent the total gross square footage as a solid box placed on the site. This **SCALE & SITE DIAGRAM** will teach you how the program would fill the site if it were packed tightly together. Keep this model as a visual tool to maintain your understanding of the program scale. Recommended scale: 1/8"=1'

Your second task will be to produce a **GRAPHIC 3D CONCEPTUAL MODEL OF THE PROGRAM three**. This should not be a precise model that attempts to translate the square footage of each component directly. Instead, this diagram should focus on **the most important relationships** embedded in your program. Where are spaces pushing and pulling one another? Where are the significant in-between, un-programmed spaces? What parts should gravitate towards the center or the edge of the site? Do some parts *intersect with* others? Should parts be broken down into smaller components and dispersed? To what extent should the relationships between parts be chaotic or simple? Are edges hard or soft? How distinct are inside and outside? What about the threshold? Is the program actually fixed or will it mutate over time? What parts of the program want to be double-height (if any) and which ones want to be single-story spaces? What about light, air, and sound? How do they affect things?

You should produce at least **THREE DIFFERENT 3D (hand-drawn, digital, or physical) DIAGRAMS**. They should fit into a flat working model built at 1/8" = 1'-0". If you need you may have one of these diagrams to be just 2D (in order to get going).

Obviously, the relative proportions of things may influence the way you make the drawing, but it is **CRITICAL** to understand that these diagrams are a way to abstractly begin to unpack the program. These diagrams will allow you to understand the relative scale and impact on the site as well as compare internal relationships. It is **NOT** in any way a *direct* precursor to the generation of form.



the yoga studio program

Program Total: approx. 7,000 – 7,500 sq.ft.

Yoga practice studio for 30-40 people = 1,500 sq.ft.

Two small Yoga practice studios for 10-15 people = 1,000 sq.ft. (500 sq.ft. each)

2 locker rooms including restrooms (M+F) = 1,000 sq.ft. (500 sq.ft. each)

Reception and Waiting Room (social area) = 750 sq.ft.

“Your thing” (health food, yoga wares, community service, etc.) = 750 sq.ft.

Office/Teachers/toilet rooms = 500 sq.ft.

Storage/Laundry: 500 sq.ft.

Mechanical room = 250 sq.ft.

Circulation/other = 15-20%

Outdoor Yoga practice/garden = up to you

Note: please, consider the size of a yoga mat as an essential component with which to measure, experience, conceive, design, and understand a yoga studio (approx. 72”x24”)

the catholic university of america — school of architecture and planning — spring 2023 — arpl 202:
architectural design I — instructors/critics: bermudez (coordinator), mohsin, morshed, roman

the yoga studio

inquiry into the relationship between architecture, mind, and body

1c Precedents Study

Handout: Wednesday 25 January (2/3 students teamwork)

Due (review): Monday 6 February

Students groups will be randomly assigned one of the following sets of precedents to analyze

Precedents Set #1

Lavan Dance Center (London, UK)

<https://www.dezeen.com/2016/12/11/herzog-de-meuron-laban-dance-centre-new-photographs-jim-stephenson/>

<https://arquitecturaviva.com/works/centro-de-danza-laban-londres-8>

Siquiman Lodge (Cordoba, Argentina)

<https://www.designboom.com/architecture/pablo-senmartin-arquitectos-siquiman-lodge-cordoba-argentina-gonzalo-viramonte-03-09-2022/>

Tru3 Yoga Studio (Salmiya, Kuwait)

<https://www.archdaily.com/931241/tru3-yoga-studio-itginteriors>

Precedents Set #2

Little Yoga (Kyiv, Ukraine)

<https://www.bezmirno.com/project/little-yoga/>

Health Yoga Life (Boston, US)

<https://www.archdaily.com/938856/health-yoga-life-bos-ua>

Wellness Center (Awaji island, Japan)

<https://www.designboom.com/architecture/shigeru-zen-wellness-center-awaji-island-japan-02-25-2022/>

Precedents Set #3

Studio X4 Meditation Space (Taipei, Taiwan)

<https://www.dezeen.com/2022/11/14/studiox4-cavernous-meditation-space-taipei/>

Siobhan Davies Dance Studios (London, UK)

<https://www.swarch.co.uk/work/siobhan-davies-dance-studios>

Yoga House (Novidad, Chile)

<https://www.archdaily.com/957903/flow-yoga-and-movement-studio-nan-arquitectos>

Precedents Set #4

Y+ Yoga Center (Shanghai, China)

<https://www.architectmagazine.com/project-gallery/y-yoga-center>

Yoga Pavilion (Norrköping, Sweden)

<https://www.archdaily.com/982551/yoga-pavilion-nyrens-arkitektkontor>

Scottish National Ballet Company (Glasgow, UK)

<https://fraserlivingstone.com/work/scottish-ballet-headquarters-glasgow>

Precedents Set #5

Newt Hotel Yoga Studio (Somerset, UK)

<https://www.designboom.com/architecture/invisible-studio-new-yoga-studio-for-newt-hotel-in-somerset-09-08-2022/>

One Third Yoga (China)

<https://www.archdaily.com/966822/one-third-yoga-boundary-space-design>

Yoga Space (Uberlandia, Brazil)

<https://www.archdaily.com.br/br/888520/espaco-de-yoga-premavati-aguirre-arquitetura>

Precedents Set #6

Flow Yoga and Movement Studio (Pontevedra, Spain)

<https://www.archdaily.com/957903/flow-yoga-and-movement-studio-nan-arquitectos>

Health Yoga Life (Boston, US)

<https://www.archdaily.com/938856/health-yoga-life-bos-ua>

Mulryan Centre for Dance (London, UK)

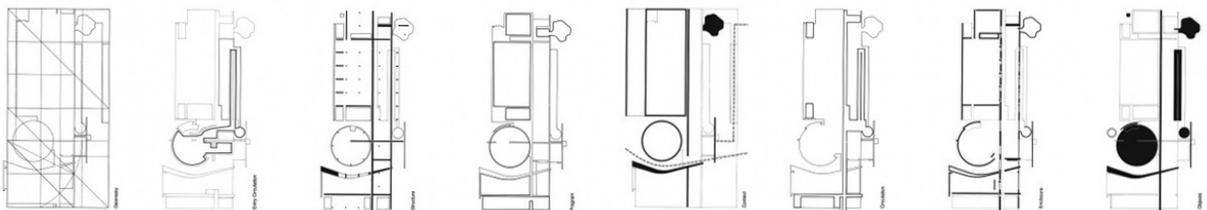
<https://www.glennhowells.co.uk/project/english-national-ballet>

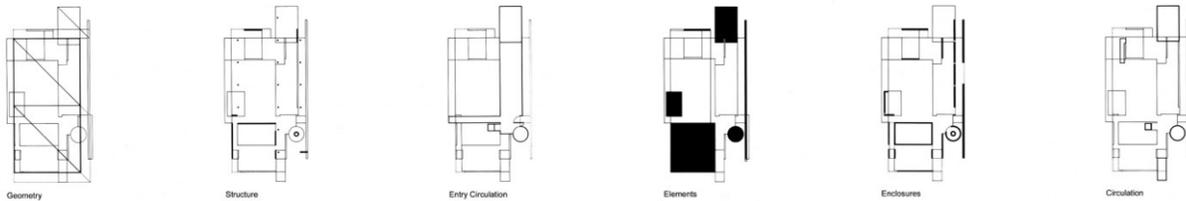
More information about Yoga and Architecture that you should study:

<https://www.youtube.com/watch?v=iZHZSbMPBJ8>

<https://www.archdaily.com/797259/the-key-architectural-elements-required-to-design-yoga-and-meditation-spaces>

<https://www.archdaily.com/983907/architecture-and-yoga-tools-for-mindfulness>





In each case study, you are to consider the most fundamental issues associated with your building program. You will conduct such studies using a series of diagrams/drawings. Try to consider at least similar issues in two of your three precedents. This will enable you to make comparisons and learn from these buildings. For each case study, you will study the following:

1. **Form/Space:** (a) solid vs. void or form vs. space, (b) repetition vs uniqueness, (c) geometrical order, (d) symmetry and balance, (e) part to whole, (f) typology (linear, central, cluster), (g) edge vs. center, etc.
2. **Tectonics:** (a) materials, (b) structure, (c) light, (d) details, etc.
3. **Program/Function:** (a) circulation vs. areas, (b) private vs. public (or open vs. closed), (c) serving vs. served, (e) size of room, (f) ritual (stages, directionalities, cleansing, practice), etc.
4. **Experience:** (a) sequence, (b) layers (foreground, middle-ground, background), (c) individual vs. social, (e) entry/stay/exit, (f) comfort, etc.
5. **Site/Context:** (a) access, (b) views and orientations, (c) scale vis-à-vis surrounding, (d) relation to its neighbors (nature or urban), etc.
6. **Section:** (a) main space/idea, (b) inside-outside, (c) relationships, etc.
7. **Synthesis:** this type of diagram should summarize in itself all the rest. What is the most basic expression that explains this building (some people call this '*parti*')?
8. **Scale** comparison among the three projects (in plan and section)
9. Include at least one interior and external photo that best represents the building

We recommend that you review the precedent analysis examples by Clark & Pause posted on the website (OTHER)

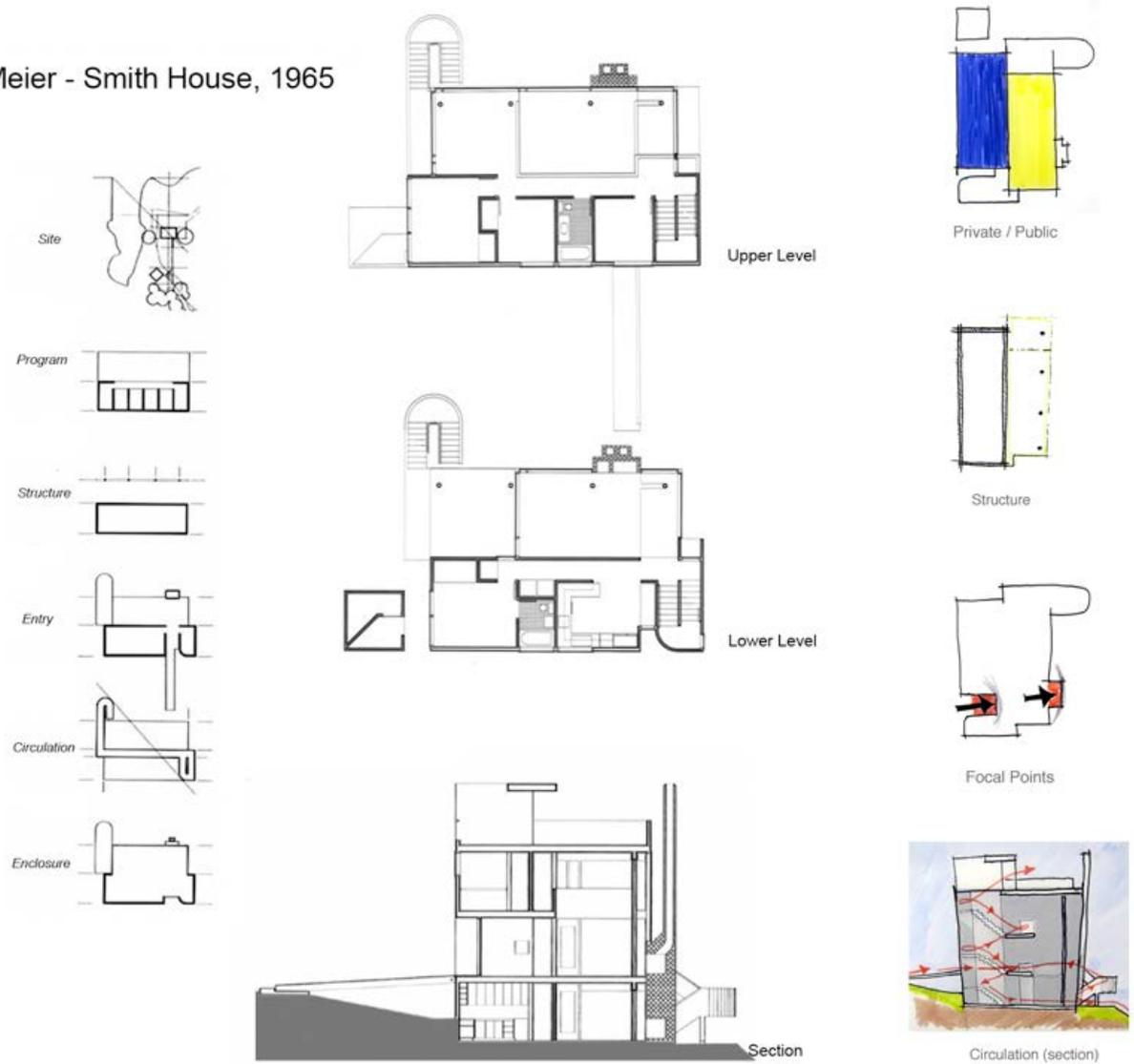
Product

One 12"x 48" board image (per precedent) in hard copy printed and in digital copy saved as a single sheet pdf. Hand-drawings are welcome (in fact, encouraged) using tracing paper over orthographics or other graphics. If everything is manually done, we accept high-res photos as digital submission.

Resources

In addition to books and magazines from the CUA library, there are many websites that contain valuable information about all types of architectural precedents. Access them from here: <http://juliobermudez.com/courses/636/digital-resources.htm>

Meier - Smith House, 1965



Examples of Precedent Analyses

Examples are available in the studio website ("Other"). Refer also to the following books:

- ***Precedents in Architecture***, Roger Clark & Michael Pause (Hoboken, NJ: Wiley 2012)
- ***Understanding Architecture Through Drawing***, Brian Edwards (New York: Taylor & Francis, 2008)
- ***Drawn to Design. Analyzing Architecture Through Freehand Drawing***, Eric Jenkins (Birkhäuser, 2013)
- ***Analyzing Architecture***, Simon Unwin (New York, Routledge, 2014)
- ***Twenty-five buildings every architect should understand***, Simon Unwin (New York: Routledge, 2015)

Grade

This is the first of three components of Part I covering 15 % of the course grade. Team members received the same grade.

the yoga studio

inquiry into the relationship between architecture, mind, and body



1a Practice: *Yoga & me*. *One-hour-long Introduction to Yoga Class*

Scheduled for Friday 13 January (individual work)

Due: Wednesday 25 January

In the ideal world, architects have had first-hand experience of the core activity of the building they are designing. It is hard to respond to something you have no understanding of. You may imagine what it is like, what it feels like, but, really, the knowledge coming from direct experience is impossible to simulate. Given your age and status (student), it is highly desirable to undergo the learning experience of becoming familiar with the programmatic core of the building you will design. This will significantly enhance your ability as a designer. By the way, this is a method used quite often but leading architects 30-40 years older than you.

This class is strongly recommended. If for some reason, you cannot do it, you will still have to attend as an observer.

Logistics: We are going to meet on Friday at 1:45pm at the YOGA DISTRICT H STREET STUDIO (526 H Street NE). Consider taking the Red Line Metro (exit at the New York/Florida –Gallaudet stop) and then walking. If you drive, then, be aware that parking requires paying meters or has a 2-hour limit. Directions:

- exercise clothing with loose fit and for warm temperature (80s degree). NOTE: since we will also work outside, bring appropriate warm clothing for cold weather too.
- towel (you may sweat)
- empty stomach (so eat a light lunch)
- bottle of water
- no perfume wearing
- no phones or pagers (or a place to leave them).

2:00-3:00 pm Yoga Class #1: Julio and Adnan Sections

3:15-4:15 pm Yoga Class # 2: Ana and Faisal Sections

Product: Written essay (300-500 words)

Upon returning home (or the studio), write down your impressions directly as they come out of your mind. Edit only after you have put down all your thoughts. Due: Wednesday 18 January

the yoga studio

inquiry into the relationship between architecture, mind, and body

1b Site Research

Architectural interventions do not exist in isolation but have the ability to transform, frame, compliment, and at grave moments adulterate the contextual landscapes and environments in which they exist. In its context, architecture is neither cursory nor punctuated. Individual buildings are always perceived first as a part of the whole. The place in which we are situated is not only elemental in the totality of the architectural experience but is also an innate component to the perceived character and quality of the design.

Identification of place lies as a generative core of architecture. Place is to architecture as meaning is to language. Recognition, memory, choice, sharing with others, the acquisition of significance; all these contribute to the process of architecture.

Excerpt from *Analysing Architecture*, Simon Unwin.

It is for this reason that this studio covering design fundamentals starts with site research. We will carry this study by considering quantitative and qualitative dimensions.



Site

The Yoga Studio will be located in what is presently a parking lot on [1004 H Street Northeast, Washington DC](#). We will have a site visit on [Friday 13 January](#).

Grade

This is the second of three components of Part I, covering 15 % of the course grade. Team members received the same grade.

the yoga studio

inquiry into the relationship between architecture, mind, and body

Objective Understanding of the Site

Starting Wednesday 11 January (teamwork)

Due (review): Wednesday 25 January

(a) Site Documentation.

Document actual conditions of your site (photos of elevations of adjoining buildings, views and viewpoints, etc). Make measurements and notations of objective conditions as necessary. Get lot info and plot maps as necessary (Google Earth is a good place to start. However, this site has important information as well: <http://atlasplus.dcgis.dc.gov/>

Product: photos, plans, elevations, plots, etc. At a minimum,

- Site plan with adjacencies (same area as site model, i.e., explained in class)
- Longitudinal section through the site, including H Street and the other side of the street and buildings @1/8"= 1'0"
- Transversal section through the site, including 10th Street NE and the other side of the street and buildings. @1/8"= 1'0"
- Photomontage of the H Street Elevation (at 150 dpi, : @approx. @1/16"= 1'0") – Full block and corner
- Coordinate all the information into CAD files in order to build physical model

(b) Site Analysis

This place demands considerations of space, scale, adjacencies, materials, rhythms, repetitions, circulation, traffic, accessibility, visibility, uses, sun, wind, etc. Another point of reflection is the size and shape of the given lot. What kind of natural, socio-cultural, economic, and political zones overlap on it? Is there a particular pattern of the nearby buildings to follow? What about the geometry and regulating lines of the site and surroundings? What about the major tensions and architectonics informing/deforming the conditions? Should you diagram them in plan and elevation? Does the neighborhood need green space? Is H Street too busy with cars, not busy enough with pedestrian flow? What is the unique conditions of this part of H Street? What is invisible yet essential to most people about the site conditions?

Groups of two students will be assigned to one of the following analytical tasks:

Cultural/Historical: Cultural: Institutions, community values, demographics, socio-cultural fabric; Historical: Time, Memory, and Events (2 people)

Functional: activities, business, human/transportation flow (2 people)

Environmental: weather, climate, sun, shadow, wind, rain (2 people)

Formal/Spatial: Massing (Solid-Void), Tectonics, Scale, Pattern, Figure-Ground, Light (Sun), urban context (e.g., alley, canal, etc.) (2 groups of 2 people)

Examples

<http://juliobermudez.com/courses/202/site-analysis/>

the yoga studio

inquiry into the relationship between architecture, mind, and body

Product

Each group will compile the result of their studies on 24”x 24” boards. Utilize diagrams, orthographics, physical models, conceptual sketches, photography, and/or other freehand or digital drawings as well as notations to carry out and communicate your analytical work. Media is up to you.

Review

Study at examples of this type of work in the following web link:

(c) *Physical Model* *(all section members led by two appointed students)*

Each section will build one Site Model @1/8”= 1’-0”. Details, logistics and cost-sharing will be discussed in class.

Deadline for Site Model: Wednesday 8 February

the yoga studio

inquiry into the relationship between architecture, mind, and body

Experiential understanding of the site.

Starting Friday 13 January (2/3 students teamwork)

Due (review): Wed 25 January

Conduct an open, embodied, experiential (i.e., NOT analytical) study of the site. Don't indulge in analytical elaborations that remove yourself from the actual experience of the place. Be conscious of the forces affecting you and the buildings surrounding the site by feeling them. Think in order to help you become AWARE and NOT to elaborate hypotheses, reasons, ideas. In fact, this assignment is NOT about thinking. Do, touch, see, walk, smell, jump, kick. Open to what is present there. Don't bring in what is not there. Avoid asking "why" and instead choose to remain aware, observant, active, sharp. During your focused, afternoon visit to the site, you will do the following:

(a) Space-Form essay

Take *photos* of the site and its surroundings involving your physical and emotional impressions (e.g., feelings of mystery, warmth, aversion, roughness, cold, boredom, excitement, fun, etc.). Consider that the most important thing to experience may be the context, atmosphere, spirit of H Street and not the site itself. There is no right or wrong way of doing way of doing this. Use a 3.0 Megapixel camera or better (or scan photo at 150dpi).

Product: At your return to studio: compose (and manipulate if necessary) these photos into one large sheet in such a way that they create a *collage that 'vibrate' with the feelings, sensations, and intuitions you experienced at the place.* You should use at least 12 photos. The format is two, 24" x 24" sheets (to be printed). Remember, these photos are NOT for documenting the place but to present its 'aura.'

(b) Life essay

Capture the 'temporal fluctuation' of life in the site. *You may consider running through the place while capturing your movement in video, monitoring people's activities and record them on pencil, looking at the change in light conditions and photographing them, hearing (and recording) the sound/noises as they change, registering the passing of cars (or clouds, birds?), etc. You may question how do matter, energy and information are harnessed by the site's intrinsic nature. Where do those fluxes bleed away and where they get stronger? What is the spatial, temporal and body potential of the site? Does the site have a body? What is it like? What is the yoga of the site? Turn on your senses and see, hear, taste, touch, smell and move!*

BE EXPERIMENTAL!!!!!!!!!!!!!! DARE TO EXPLORE THE UNKNOWN

Product: it is up to you how you display these observations. Video, sketches, diagrams, photo-montage, conceptual models, and hybrids among these are possible. This is an experiment on perception that seeks insight out of your experiential interpretation of the site. See provided examples.

