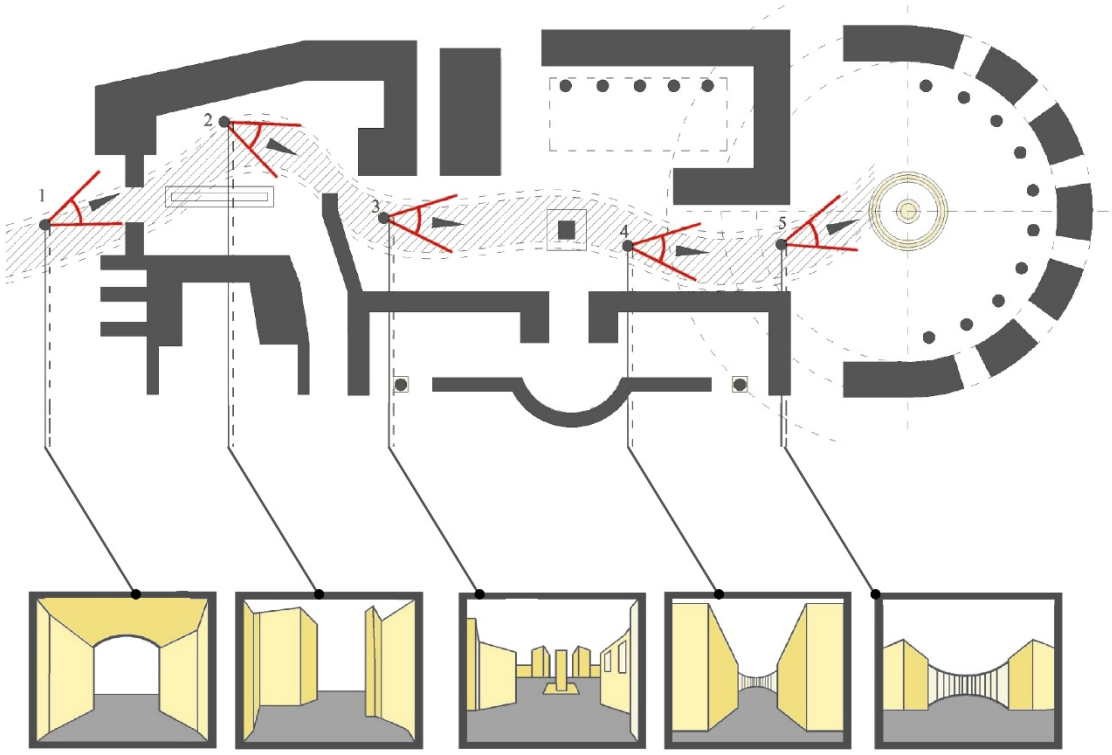
21



MANCHESTER | URBAN DESIGN | LAB

MUD-Lab Toolkit

Serial Vision

In this handout you will be introduced to Serial Vision as a key townscape analysis tool. The handout aims to familiarize you with this important design and analysis tool by explain its rationale, when to use and the techniques of doing it in the analysis stage, design stage and presentation stage. It will support this with a practical example at the end.

MANCHESTER 1824
The University of Manchester

Toolkit Published 2020

The MUD-Lab Toolkit

Series Editor: Dr Philip Black

Series Graphics/Software Editor: Dr Taki Eddin Sonbli

Regular Series Contributor: Mr Robert Phillips

To reference this MUD-Lab Toolkit please use the following:

'Manchester Urban Design LAB (2020) '***MUD-Lab Toolkit: Serial Vision'*** accessible at www.seed.manchester.ac.uk/mudlab

1-INTRODUCTION

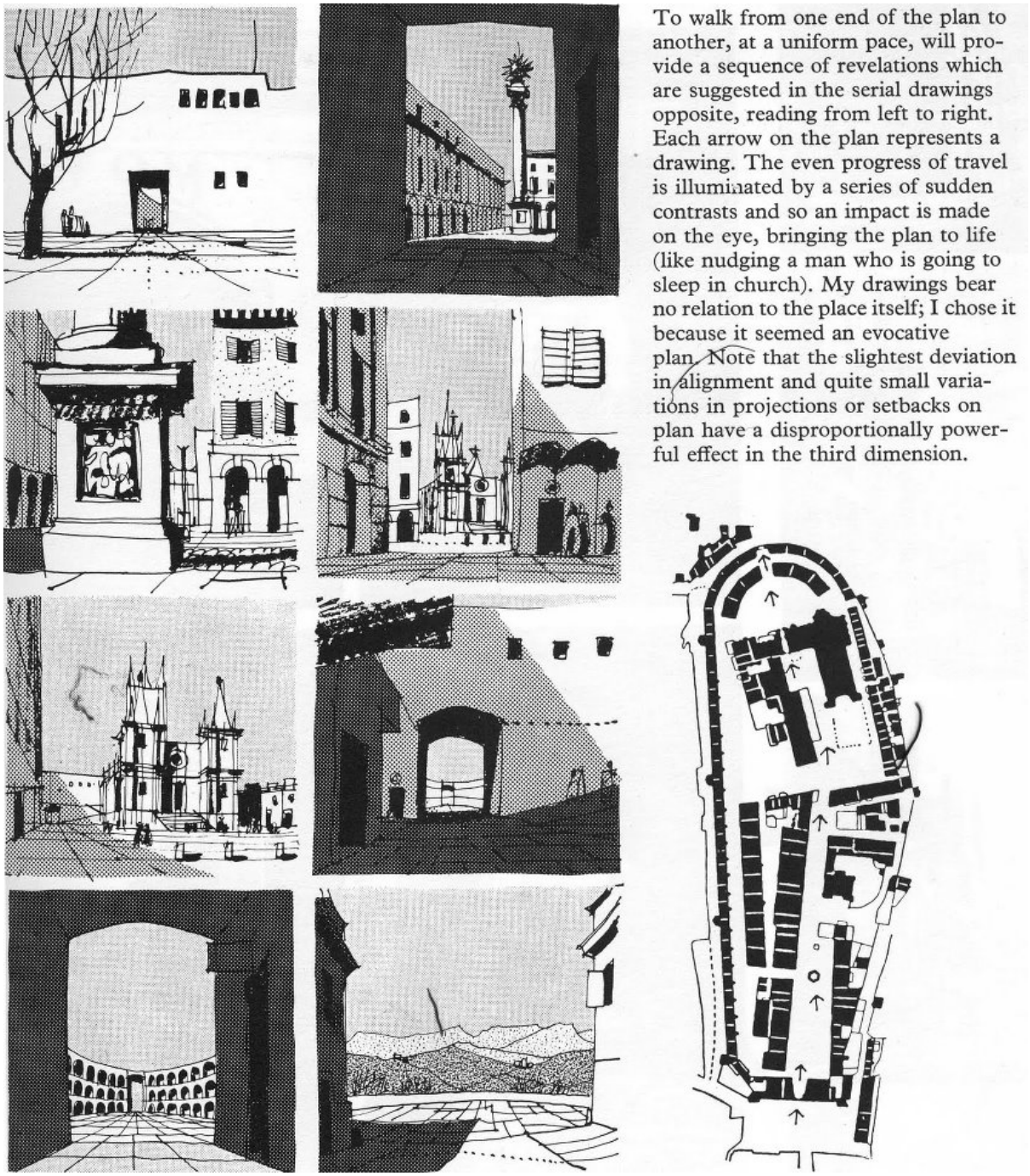
Serial Vision is a visual approach to urban design first introduced by Gordon Cullen in his 1961 classic Townscape. For Cullen, urban design is the ''art of relationship'' between the various physical elements of the urban landscape. It is the art of taking '' all the elements that go to create the built environment: buildings, trees, nature, water, traffic, advertisements, and so on, and to weave them in such a way that drama is released''.

It is a presentation from the moving person's perspectives rather than from bird's eye view. This method of visual representation can be used as a tool for evaluating current experience in moving around a space, analysing it, designing alternatives and presenting a new design. It consists of a group of hand drawn sketches shown along with a map presenting the journey and the viewpoints from which the sketches are drawn. You should keep in mind that the map is an essential element in this method; otherwise you will be presenting a group of fragmented sketches which is not the purpose of Serial Vision.

2-HOW TO CREATE A SERIAL VISION

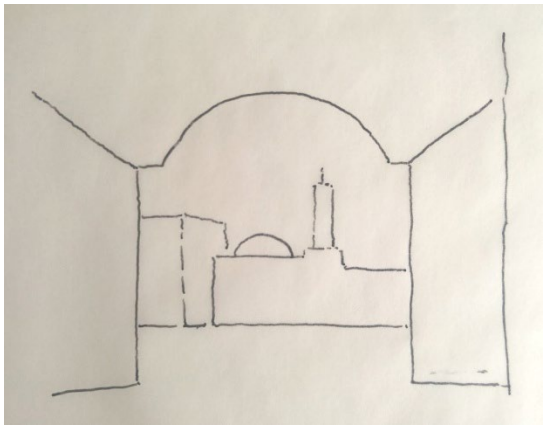
2-1-Skeches in Serial Vision

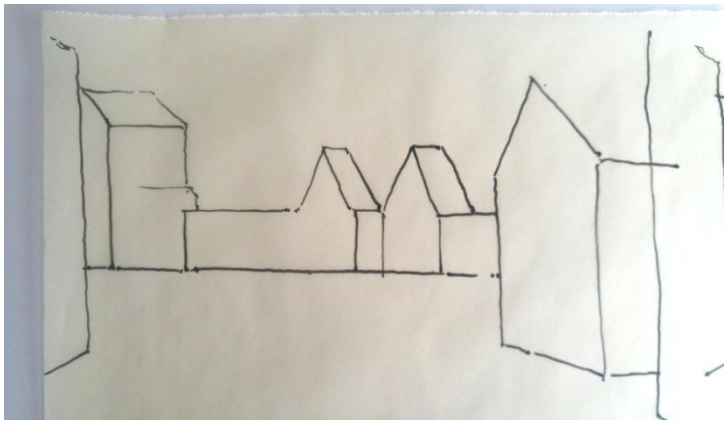
Different sketching techniques can be used to illustrate serial visions ranging from simple and fast to detailed and coloured sketches. The aim is presenting an informative illustration of spaces which is capable to give the general impression about the journey. Cullen's sketches below (figure 1) are simple; a combination of fast lines (have a look how he sketched the cathedral for example) and shadows. But they are superior in explaining the journey around this master plan. For a detailed sketching guide to urban design please refer to Sketching Techniques handout.



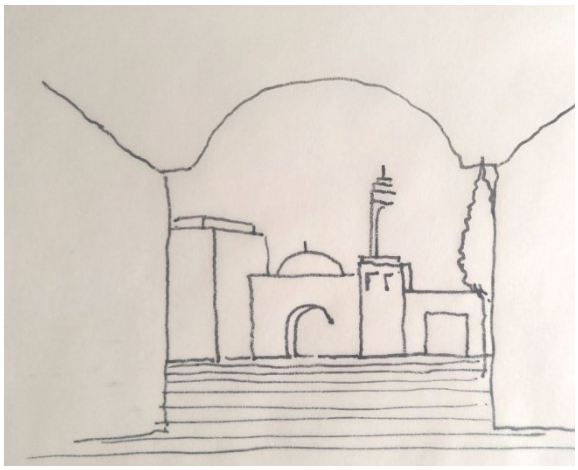
Cullen's Serial Vision as presented in the classic *The Concise Townscape* (Cullen, 1961).

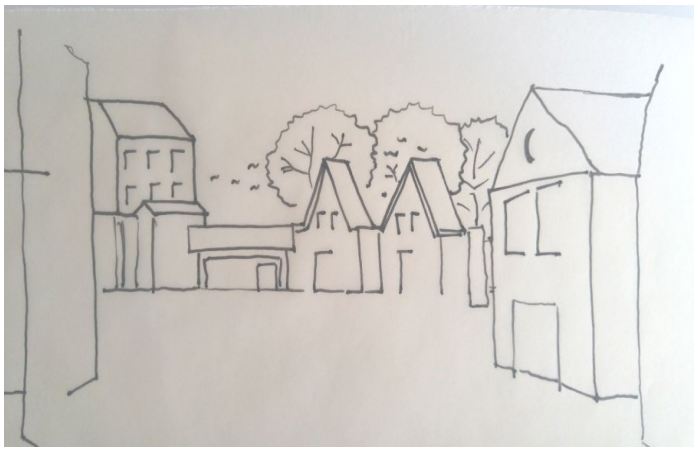
As a general rule, you should start from the general lines that shape the space and give it its character.



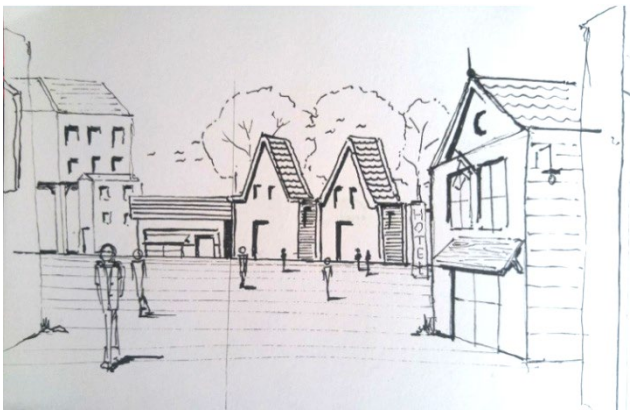


Then you add other elements and details which you feel important in illustrating the space environment such as windows and trees.



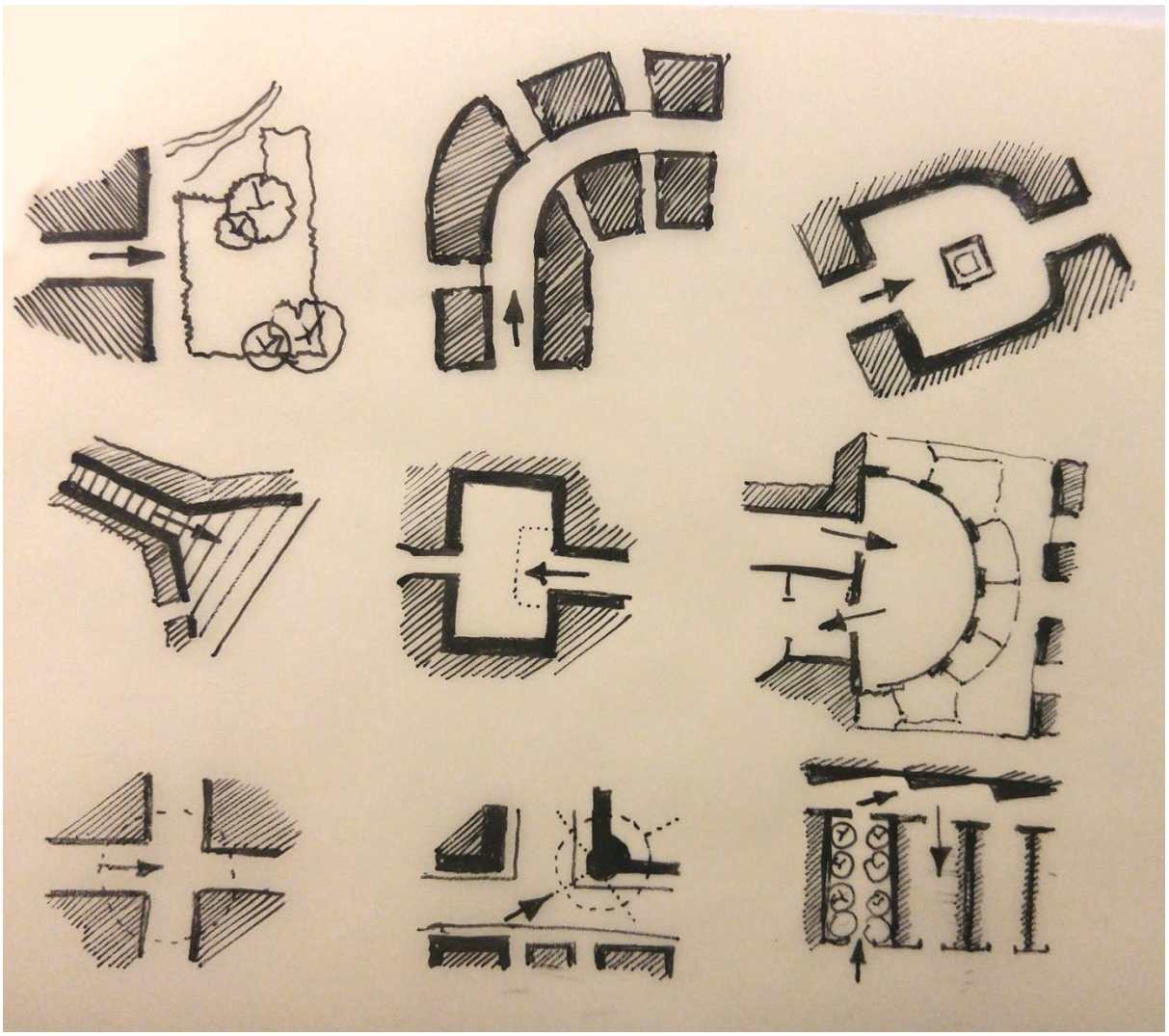


Then you add shadows and textures, in addition to people to show how active the space is.



2-2- Selecting Vistas

Obviously you are not able to sketch every single scene in the urban space you are exploring, so you should be selective when coming to choose an appropriate path. Your rout selection depends on the story you are telling and thus there is no strict rules that restrict your selection. However, the rout should be an important path in the studied area. Serial Vision is a method to experience the space and its transformations, a revelation, changes and contrasts of the built environment that one can experience when exploring the space from pressure to vacuum, from enclosure to exposure, from traditional to modern, from public to semi-public, from streets to squares, from higher to lower level and from busy spaces to quite alleys. So unless you are showing deliberately a repeating view (to say that the path lacks diverse spaces for example), you should select views that show changes and contrasts in the studied space.



3-SERIALVISION IN THE ANALYSIS STAGE

In the analysis stage, serial vision is a visual description of the existing condition of the urban space. However, you should think about the rationale behind it, rather than simply doing a series of sketches. Think about the purpose of your visual analysis; Select the path you are interested in according to its importance and to the story you want to tell. Ask yourself some analytical questions including:

Are you going to improve this path? Or just describe it to show, for example, its architectural style to imitate it elsewhere?

Are you going to show how active/dull the space is?

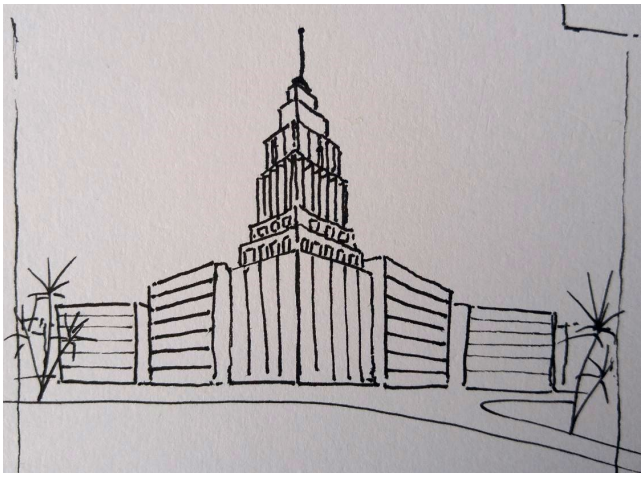
Are you illustrating the strong/weak urban character of the path under study?

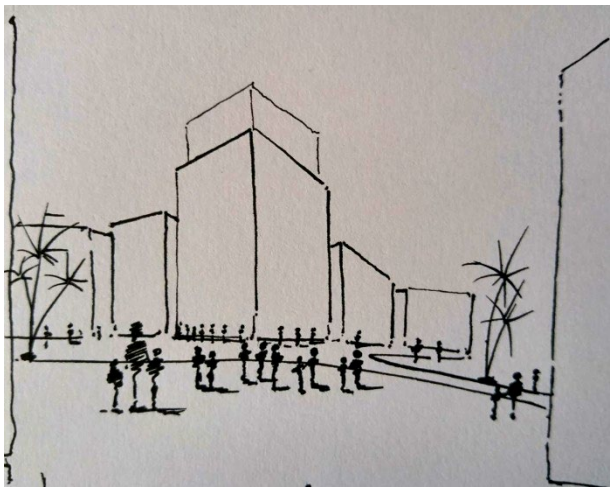
Are you going to suggest different design to make it more attractive?

Have you identified a need for a more variety of spaces in that path to make the journey more interesting?

After answering these questions you will be able to decide the views and what you are going to include in your sketches. Have a look at the examples below. It is clear that they do not have the same sketching techniques, and the elements included in them are selected to build an argument:

This example shows two different sketches with different focus for the same scene. In the left sketch the focus is on the facades' design and how the vertical and horizontal lines give a certain character to the space. On the right sketch the focus is on how busy this corner is.





Similarly, in the example below the left sketch focuses on the active environment in this square, whereas in the right sketch it focuses a bit more on the design of the cathedra which might affect your design. Both sketches are rough and fast, however, the building-focused sketch on the right give a bit more attention to details.

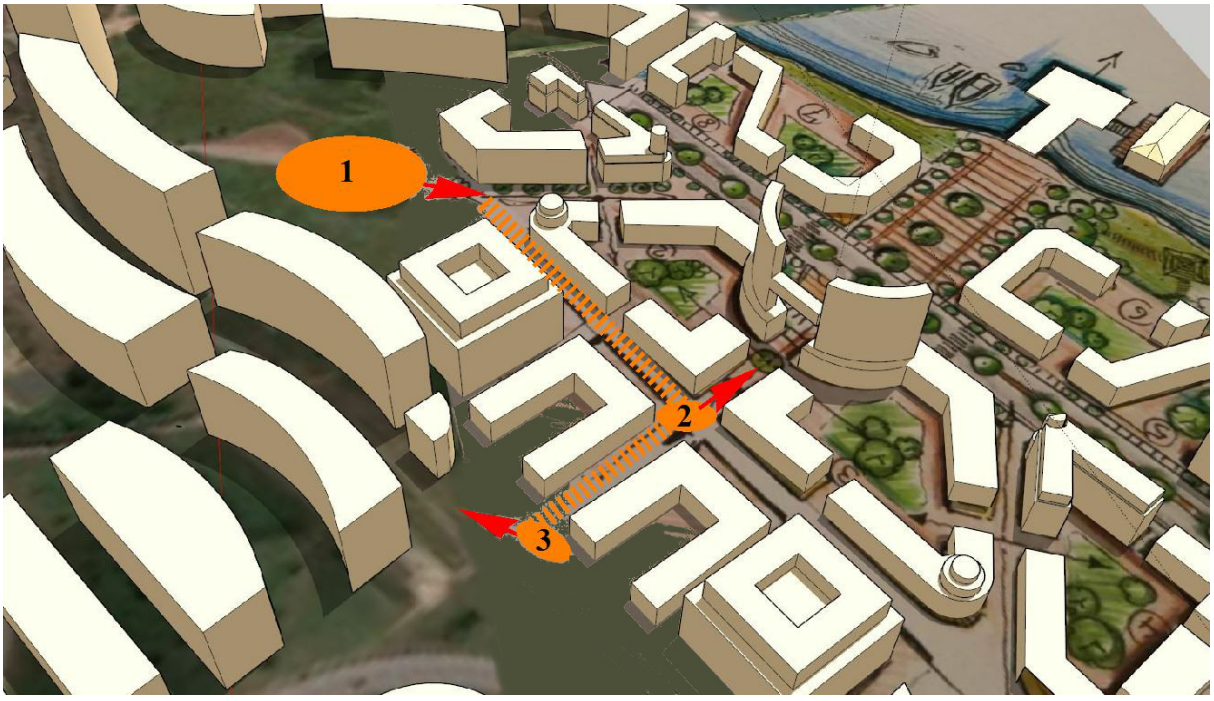
The above examples show why sketches may be more informative in the analysis stage than pictures which capture every single aspect of the view. They also show how Serial Vision is more than simply a literal description of the space.

4-SERIALVISION IN THE DESIGN STAGE

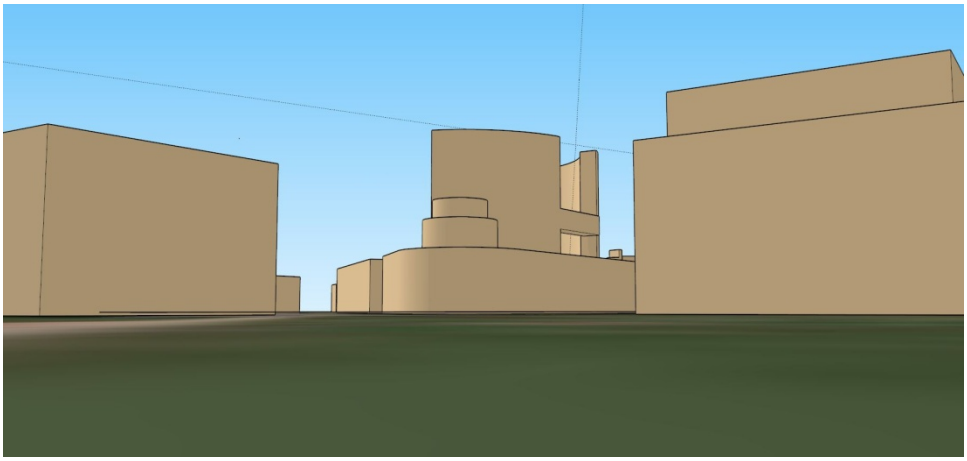
In this section we will explore how serial vision can be helpful in the design stage. We will use an imagined projected done from scratch and give examples of how serial vision may help in designing its spaces. The scheme is firstly sketched by hand as a 2D layout. The 2D layout should be based on the analysis stage. It is then extruded by Sketch Up to explore the different alternatives of building heights which also should be based on the analysis stage. The serial vision will give different alternatives to the suggested urban environment. Bear in mind that nothing is final as we are still in the design stage. In other words, the serial vision could suggest changes in the building heights, and the SketchUp model could suggest changes to the 2D layout. All these tools should work together to build the final scheme.

Below is the 3D proposal designed in Sketch UP on a 2D layout done by hand. Sketch Up is useful in changing building heights easily and to see if they work in harmony. It is also useful in doing a virtual journey inside your design.

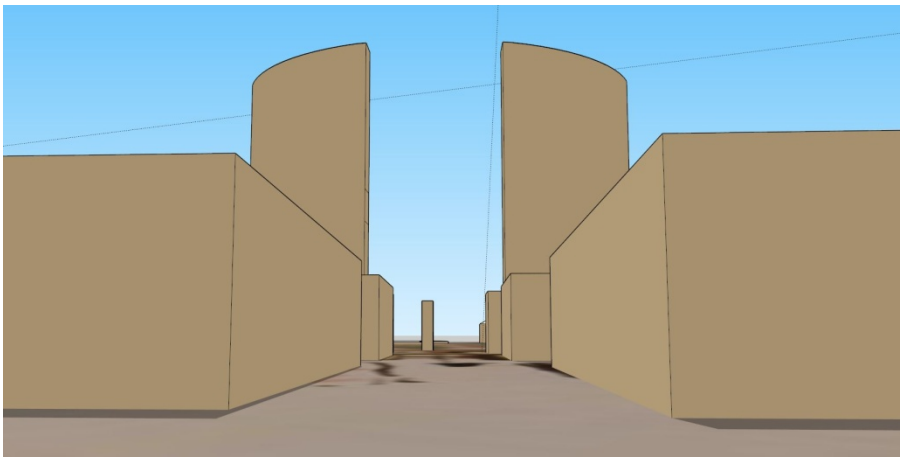
Next a rout is chosen as it connects between three important yards. Only three views were selected for the purpose of this handout.



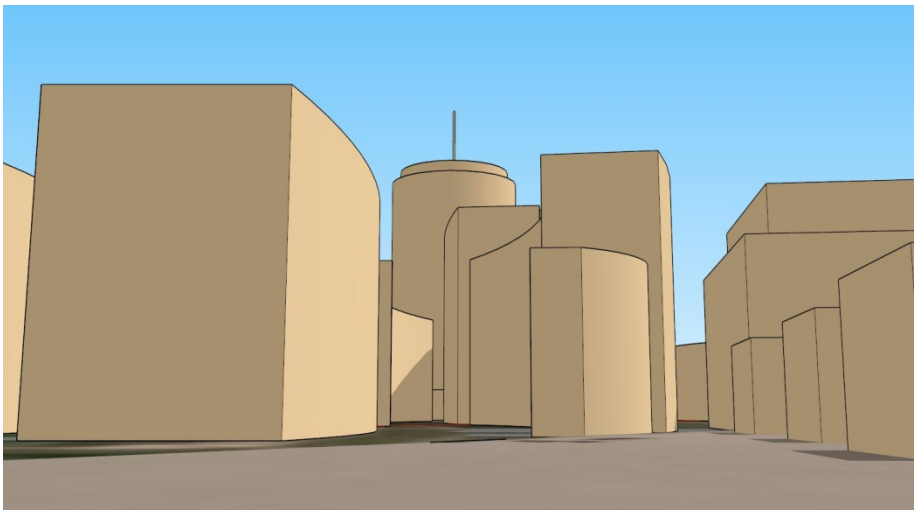
View 1



View 2



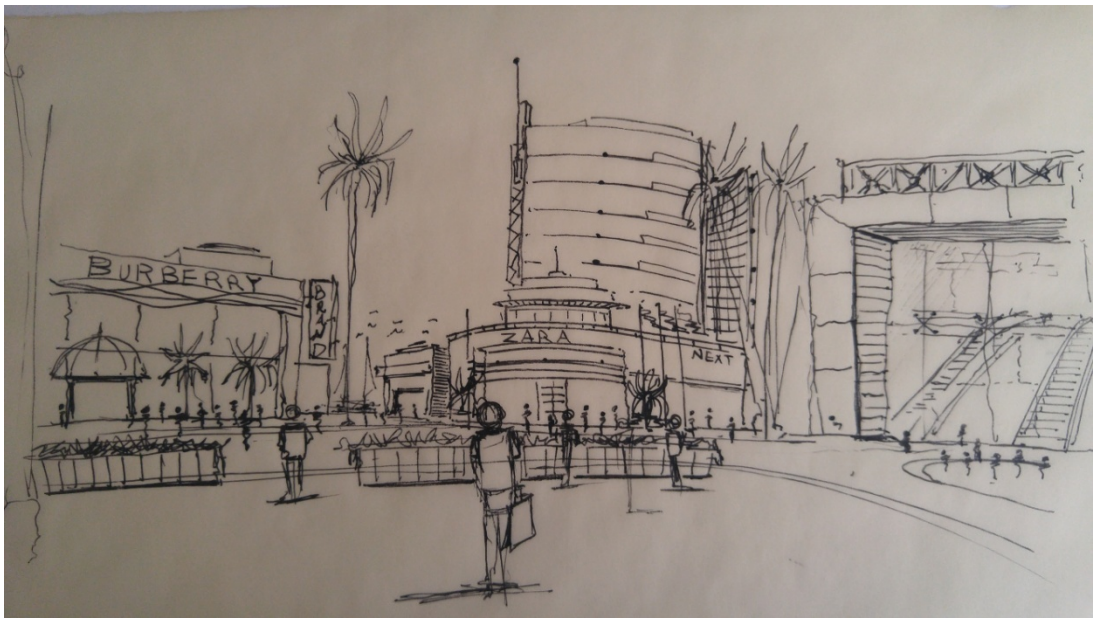
View 3



Print the selected views on A4 (keep them small such as two views per A4). Put a tracing paper above the printed view and trace the main lines and add details that give the type of environment you want based on your intensive analysis. This method is helpful if you do not have very good sketching skills.

See the examples below about the suggested spaces of views 1, 2 &3.

View1: Suggested design



View 2: Suggested design

View 3: Suggested design

Design Intervention

Many alternatives and improvements can be done to the initial sketches and suggested spaces. Add a new layer of tracing paper, put some notes and suggest modifications.

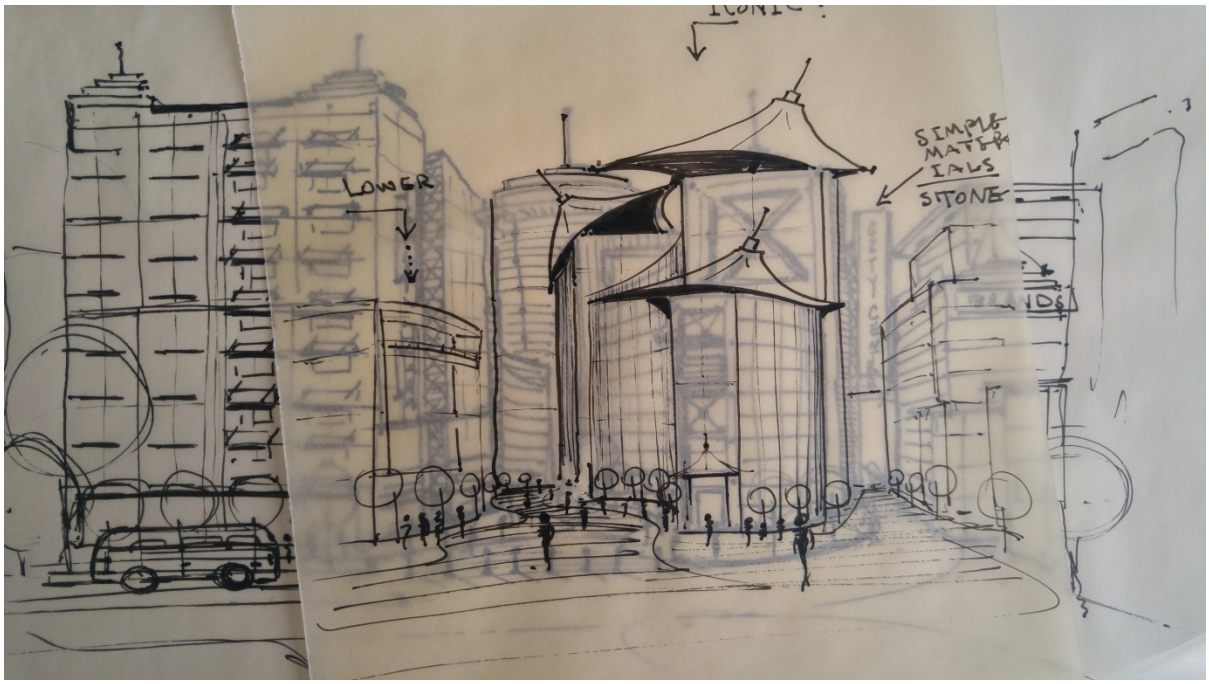
In view 1 below it is suggested that the sea can be seen clearly from this yard if the left building is moved to the left. This will add to the character of the space and may make it more interesting (boats, the coast, palms and other activities are seen from the yard now).

Another option is changing the whole urban character of this yard to make it more traditional look. All is of course based on robust analysis and sound character study. This is to make the rout environment more divers and give more contrast and changing scenes. It is argued that the first deign while modern may give a boring repetition.

Option 4 is a more Oriental design. This is again should be justified and based on the wider context of study (place history, function, design code...etc.).

View 2 will be kept without changing.

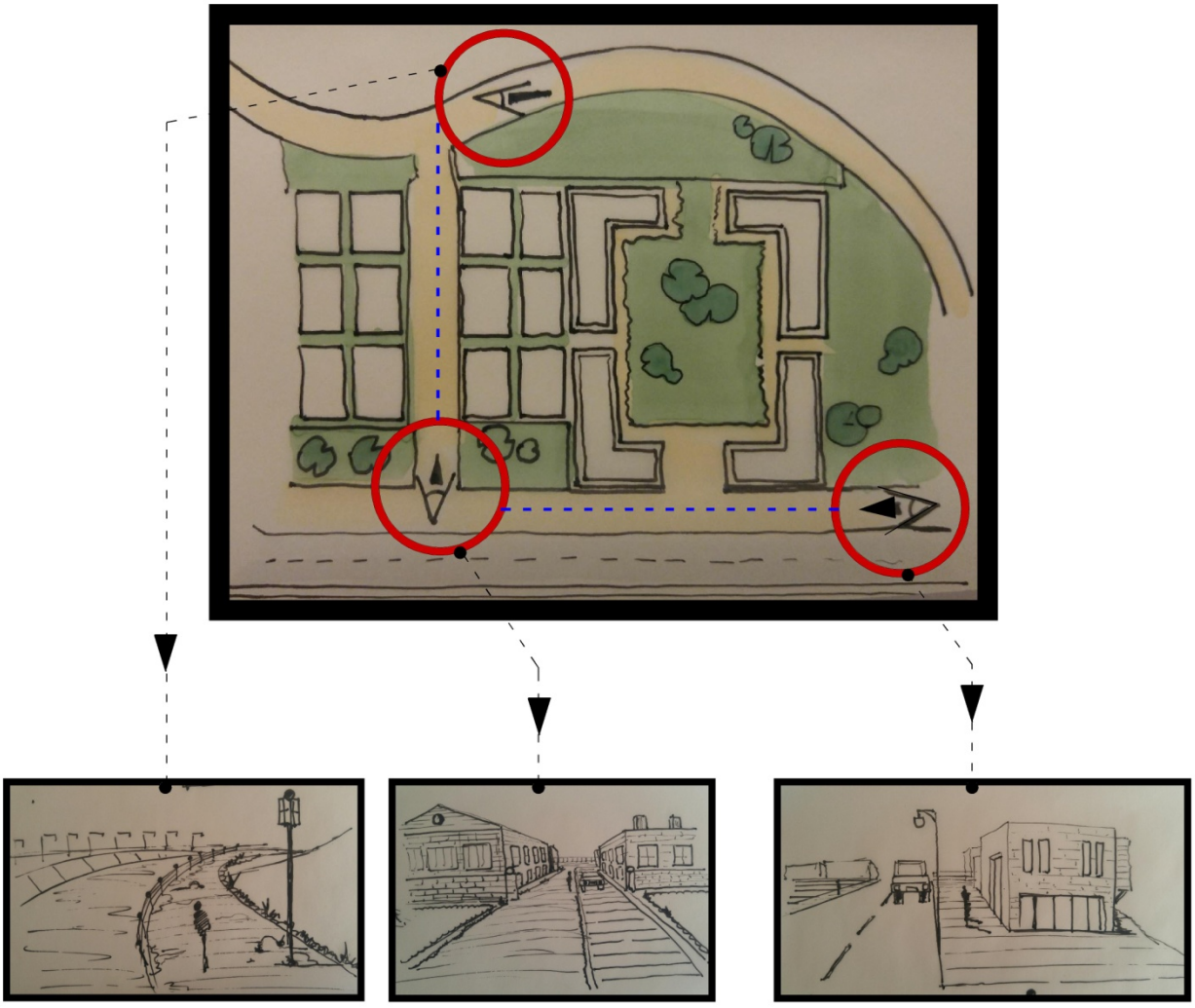
View 3: the option below suggesting creating a more iconic corner for view 3 to create another landmark to enhance legibility rather than the existing generic buildings.



The rout now is more diversified. Rather than having three repeated modern spaces it takes us in a more exiting journey from traditional, to high buildings with upmarket environment to iconic and enclosed modern space. Agai, all of this s based on the intensive analysis you have conducted (including land us, legibility, public realm analysis, character study…etc.)

5-SERIALVISION IN THE PRESENTATION STAGE

In the presentation stage (i.e. after finishing design) you can do a more detailed and neat serial vision using pencil colours for example. The serial vision in this section is based on this sketch 2D layout below. It is an imagined regeneration of a neighbourhood of chalet houses along a river and a main street. In addition to how may present your work, we will go briefly through the design process. An interesting rout was selected which represent a journey from the street to the chalets' path to the river. Three views were selected on three meeting points. Those are transition points from function to other, from the market street to chalets path to the river sidewalk; and from wide to narrow to wide again. A comparison is done between the existing condition and the improved design at the end.



View 3 - Existing Condition

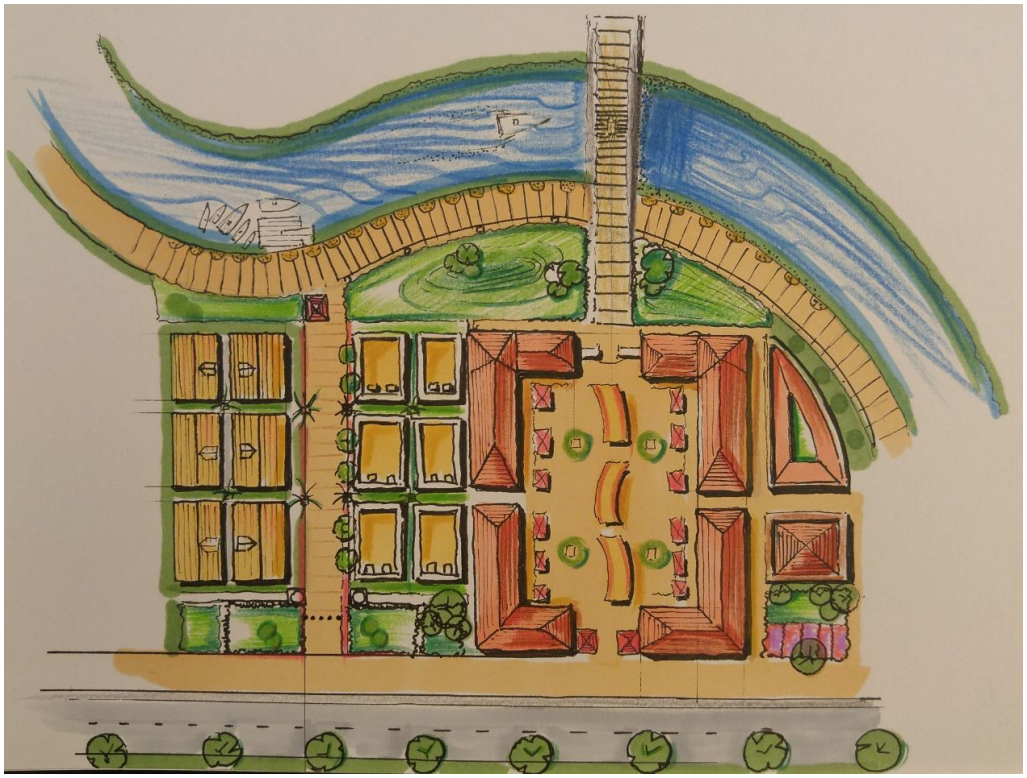
View 2 - Existing Condition

View 1 - Existing Condition

The serial vision of the existing condition shows a clearly dull rout. View 1 from the commercial area shows a dull corner with wide lost spaces and a wide street. View 2 from the chalets' path shows that buildings' facades are of the same materials of the buildings from view 1, the path is also used as a parking space. There is a lack of greeneries. View 3 shows the river path which might look abandoned, unsafe and lack design quality.

Design Intervention:

Using the information from the serial vision done in the analysis stage above, the layout is improved. The improved 2D layout below was designed with the assistance of the serial vision method. The suggested location of trees, floor patters, the shade and other details are the outcomes of the designed serial vision. As this is a presentation stage, colours and details are used to make sketches clearer and more convincing.

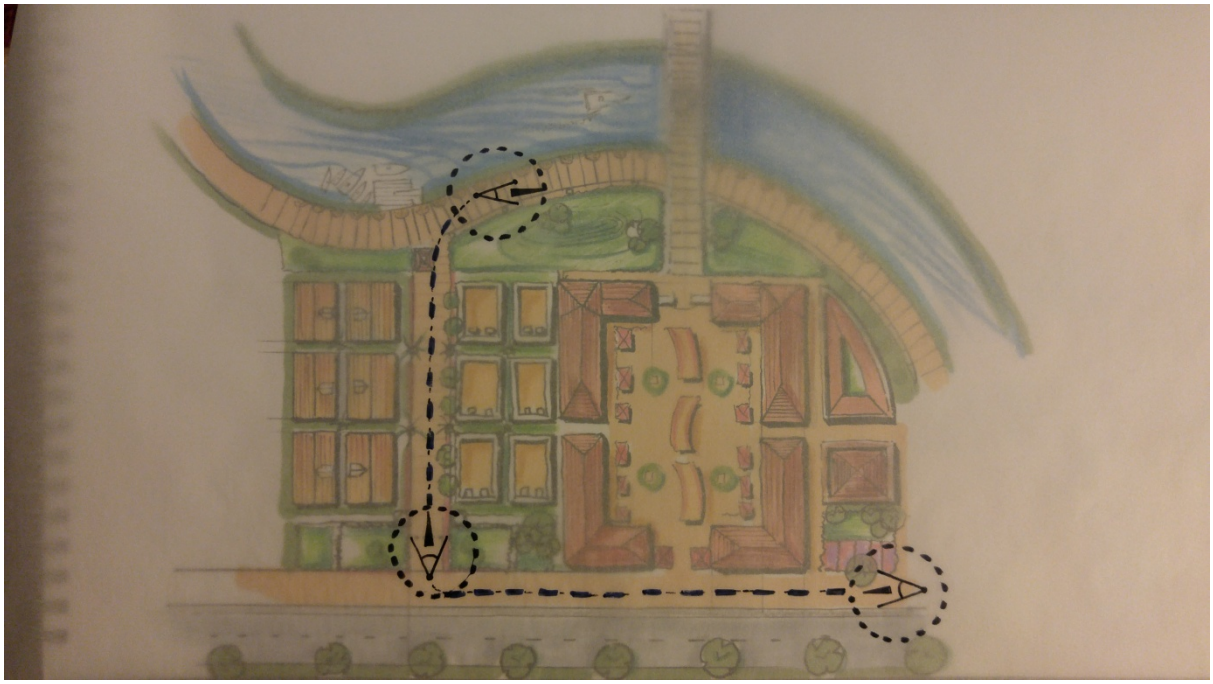


For view 1 the suggested design deals with the lack of enclosure by adding high trees which define the street and the pathway. New street lights are suggest which allows hanging advertisements and flags. The corner is redesigned, a higher tower clock is added with a red roof representing a landmark, new materials that combine between the old textures and new render surfaces are suggested. This suggested view indicates a busy market. So the market yard is redesigned to function as an inner market with different environment, rather than green space. The market now has both outer and inner facades with coloured shades that give it a distinct character. The floor is divided into different parts (green spaces, flower pots of different colours, tree pots, walking path and parking space) with different patterns, colours and materials.

The new design for view 2 suggests various types of trees: Tall palms to define the path and shorter trees to mark the chalets' entrances. A shade landmark was added to the end of the path which indicates that certain activities are going there. It has a similar design to the corner in view 1. Buildings' facades are redesigned with new materials and new distinct windows. Chimneys are redesigned. Roofs and balconies are planted. Two columns are designed to define the entrance gate. Different textures and colours are used on the ground. The path is now for pedestrians only and car parking spaces were moved to the wide street in view 1.

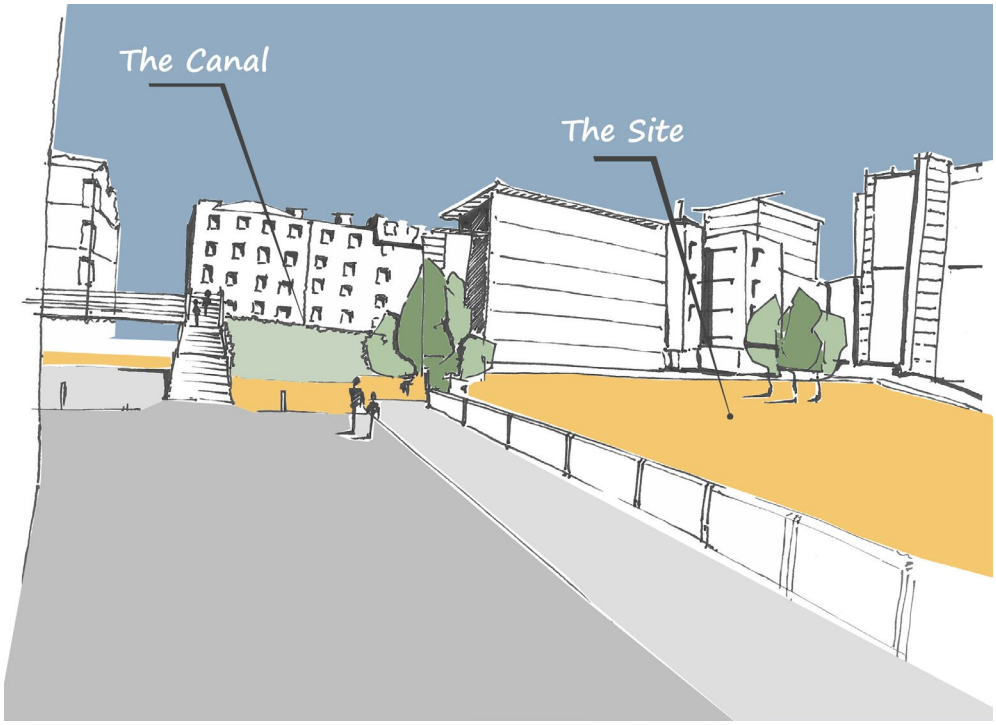
View 3 shows the new design for the path along the river. A bridge is suggested to connect the market with the surrounding areas and to overlook the path which makes it feel safer. New designs for the floor, in addition to greenery and street lights which make the path more defined and give a sense of enclosure. Boat rental point is suggested under the shade in view 2 to make the river path more viable.

A useful step now is comparing both serial visions, before and after, to show how the space is improved.



Serial vision helped in imagining a virtual journey in the urban space. The existing condition helped in identifying the path problems and the final presentation gave a clear vision about the suggested improvements. The journey is now more appealing and more organized. Spaces are better used and connected and the market is clearer and more accessible.

Another way of presenting serial vision sketches is by colouring the sketches in Photoshop or Ai. Make sure to be selective on what and how to colour. In the example below (Black and Sonbli, 2019) the site was given a yellow colour, the ground was given two shades of grey, green for trees and the sky was given a blue colour. All buildings are left white to show the contrast between hem and the surrounding context.



The path has been shown on a 3D graphic made in SketchUp that also shows listed buildings in yellow to add another dimension to our analysis.

The result is a neat and simple yet informative presentation that explains the townscape of the area under study.