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MANCHESTER | URBAN DESIGN | LAB

MUD-LAB Toolkit Sketching Techniques

This handout aims to familiarize you with the sketching techniques used by architects and urban designers. It takes a simple step by step approach to ease the process for beginners. The handout is divided into three sections: First, it will give you a general introduction about sketching. Second it will introduce the basic sketching tips that you need to understand in addition to some simple sketching techniques. Finally it brings everything together in a practical exercise.



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: Sketching Techniques'* accessible at www.seed.manchester.ac.uk/mudlab

INTRODUCTION:

A sketch is a fast, rough, informal, fun and informative representation of the space. It is often used by urban designers for both experiencing the space in the analysis stage (using Cullen's method for example) and expressing ideas in the design stage.

In the analysis stage, sketching differs from taking pictures in which it simplifies the view according to sketchers' eye. While the camera would capture every single aspect of the urban scene, the sketch will be a reflection of the most important elements that the sketcher recognizes. On the other hand, during the design stages sketches are flexible expressions of ideas and they invite discussion. Rather than spending hours in visualizing an idea using the computer based programs, a trained hand should not spend more than several minutes in sketching an urban scene. In this handout we will look at two different ways of producing sketches: Free hand sketches, and traced sketches:

- In the free hand sketching, the sketching process is divided into four simple stages to smoothen the process. The first stage is simplifying the scene, the second is sketching the general perspective, the third is adding the necessary details and the fourth is casting shadows. However, practicing is essential to be a good sketcher, so we conclude with a practical example. Try to sketch everyday starting by following the simple steps in this handout until you can develop your own style and rules.
- In the tracing section, we will look at a basic way to produce analytical sketches by trasing the most important elements in a photograph and producing it as a sketch. This is particularly useful for non-sketchers in which a sound sketch can still be produced and the message can still be communicated.

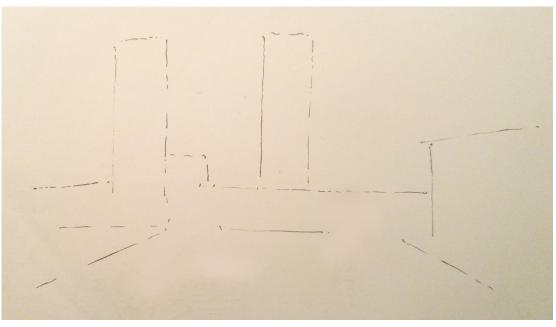
For the purpose of this workshop you will need a sketchbook, tracing paper and a good pen or pencil. I suggest a black color, fine Uniball Eye pen. This pen can be used for both writing and sketching and thus can be very handy. You can also use a B2 pencil.

HOW TO SKETCH: FREE HAND

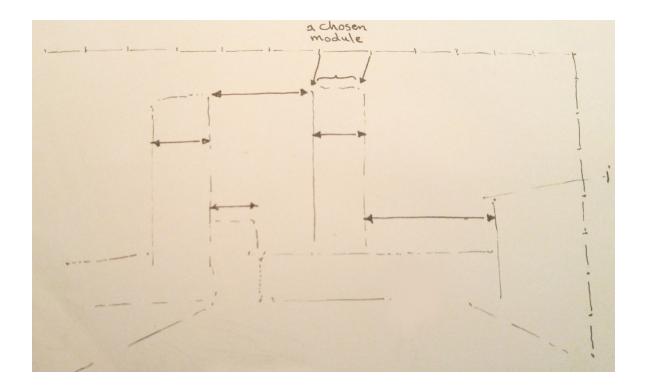
1- Simplifying the urban scene:

Start by simplifying the urban scene by deconstructing it into simpler vertical and horizontal lines. You need to simplify the complexity of the selected urban scene into simple lines and shapes that divide the scene into sections. Try to maintain ratios at this stage to build the sketch on a good "foundation". These foundations are the most dominant elements your eyes can recognize. A well trained sketcher can do this step in his/her mind, rather than on papers. However, this can be done on the sketching pad using very faint lines such as the example below.





At this stage, try to estimate the various ratios and the size relationship of one dominant component to another. Choose an appropriate module to help you in doing this. The module can be the width of a building, the distance between two buildings or elements...etc.



Now you should have very simple and basic lines that construct your chosen scene. The next step is to start structuring the sketch to give it a more 3D appearance.

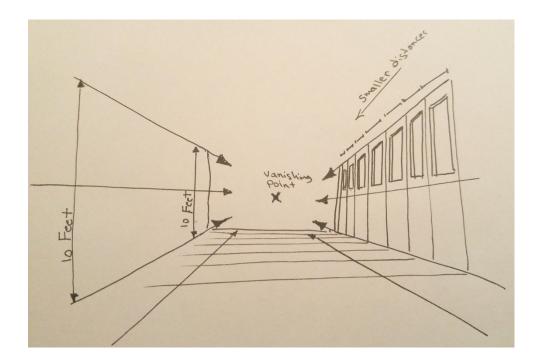
2- Sketching the general view

This is the most important step in the sketching process, and relatively the trickiest part. A well-made general view will generally lead to a well-made sketch. You need a considerable amount of training to master this step, so take your time in doing as much general views as you can. You need to sketch the main lines that construct your perspective including the floor lines, the roof top lines and the land mark lines.

For this stage we will discuss two types of perspective: The one point perspective and the two point perspective.

The one point perspective

The One point perspective is mainly used for paths. It works on the concept that all perspective lines (e.g. edges of the road or roof top) lead to one vanishing point. It is essential to understand that vanishing points in all perspective types go far from the viewer toward the far end.



You need to remember two simple rules here:

- 1- All receding lines lead to one point
- 2- The further the objects are, the smaller they look

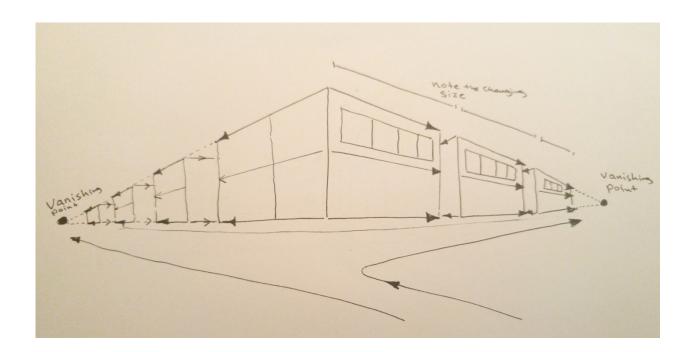
Note: As you are doing a fast sketch, the vanishing point location should be approximate.

The two point perspectives

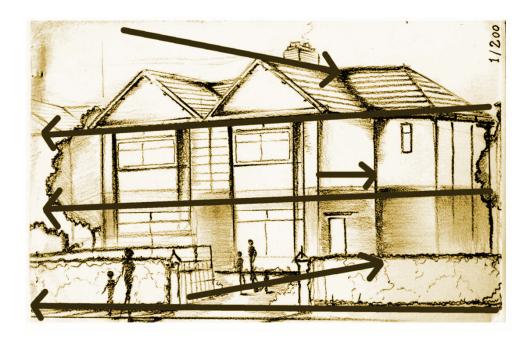
In this perspective we have two vanishing points instead of one. The same rules apply for this type of perspectives:

- 1- All receding lines lead to the two vanishing points
- 2- The further the objects are, the smaller they look

Again: As you are doing a fast sketch, the vanishing points location should be approximate



You should note that the two vanishing points, while definitely exist, they may be located outside the small A4 size sketch paper in some perspectives. So you may need to estimate their location and make all the lines in your sketch lead to the two estimated vanishing points (see the example below).

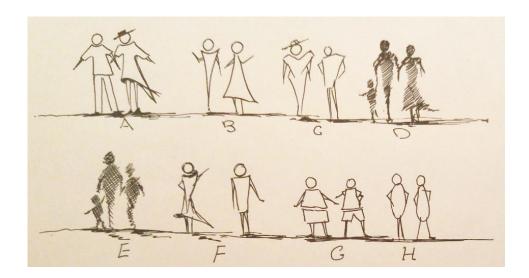


Now at this stage you should be able to draw the main lines that frame your sketch. You need now to add some necessary elements to make your sketch more realistic. The next section will give you some easy options that can enrich your final sketch.

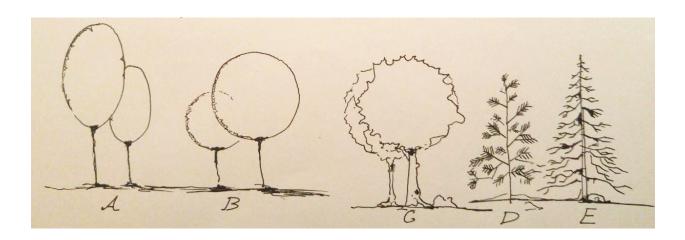
3- Adding details

Details can give a sense of scale to your sketch and can make it more realistic. Adding details to sketches usually needs a well-trained hand. However, in this section we will present some easy and simple way to draw essential elements such as people and trees. You need to practice drawing these various elements during the workshop and choose the easiest for you.

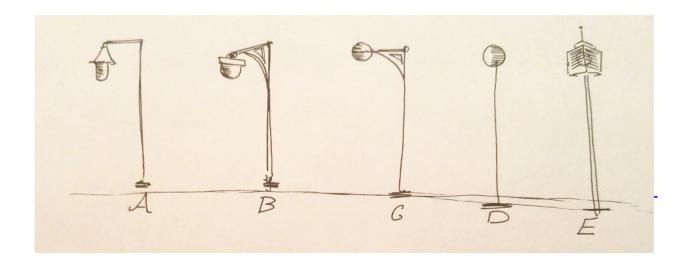
A- People



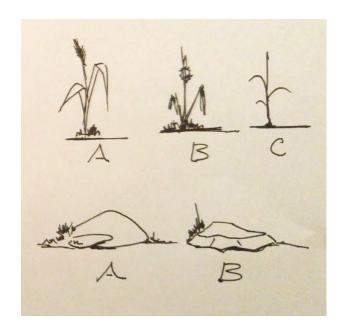
B- Trees



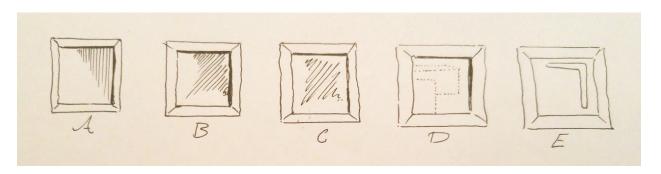
C- Street lights



D- Plants and stones

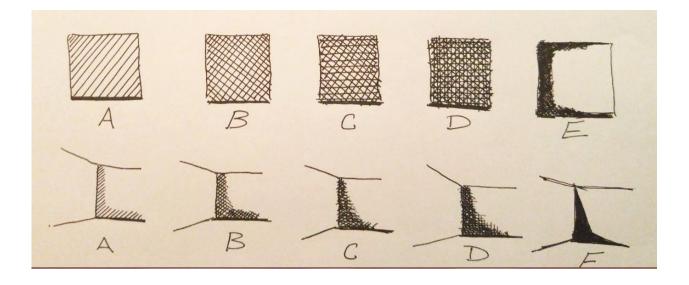


E- Glass



4- Casting Shadows

Light and shadows usually define objects. Adding shadows to your sketch is essential to create a sense of depth. As we are doing a quick sketch, not a final presentation, we will keep this simple. Try to identify the darkest areas, the middle and the lightest areas in your view. Now use the simple textures below to cast shadows. Note that these are no more than crossed lines.

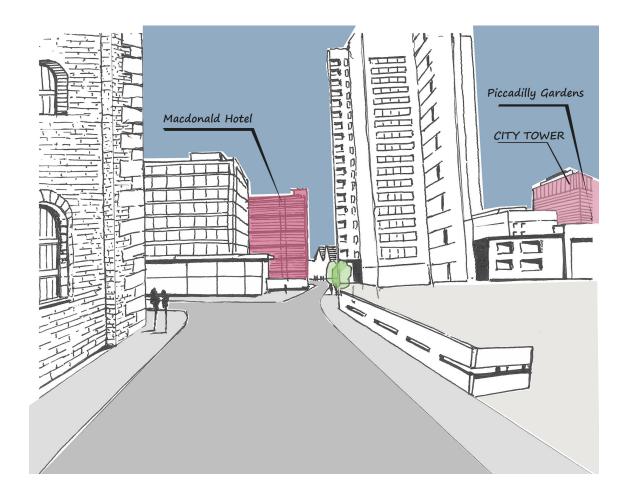


HOW TO SKETCH: TRACING IMAGES

Can we trace images to produce sketches rather than doing them in the traditional freehand method? In the context of urban design analysis the answer is yes. Obtaining the free hand sketching skill could be time consuming. In this intense one-year programme you are required to produce different types of graphics using 6 softwares in addition to sketches. Our main aim of sketching is to produce thoughtful images that reflects what we see as important messages. So unless you are comfortable to produce hand sketches, feel free to follow the method below:

- 1- Select the scene you are interested in: This scene is telling a part of your urban design story. Please refer to the urban design toolkit Serial Vision for more details on what makes good view.
- 2- Take a picture of the scene and print it. Please do not use Google Street View images as these could be outdated and they are distorted in most cases.
- 3- Tape the print on a light board (these are provided in the Studio) and place a tracing paper above it. If you do not have access to a light board you can always use a window for the same job.
- 4- Start tracing the sketch, focusing on the important elements, and omitting the less important components. This is essential to make your sketch analytical.

5- Take the sketch to Adobe Ai or Ps and edit it to make it more appealing. Add annotations, and a few colours as blow:



Note:

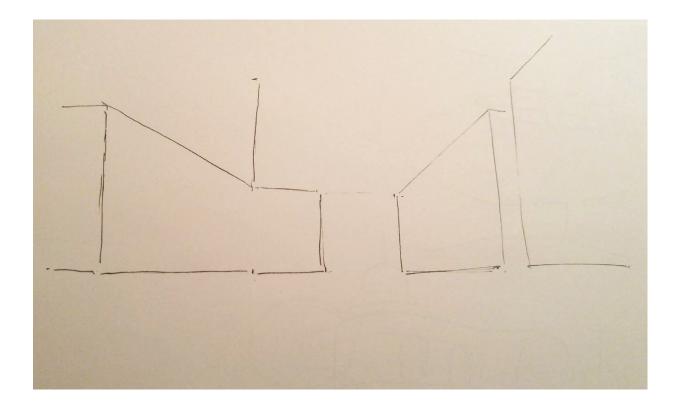
Please refer to the toolkit video tutorials for more exercise:

https://www.youtube.com/watch?v=-mgkThrwvZo

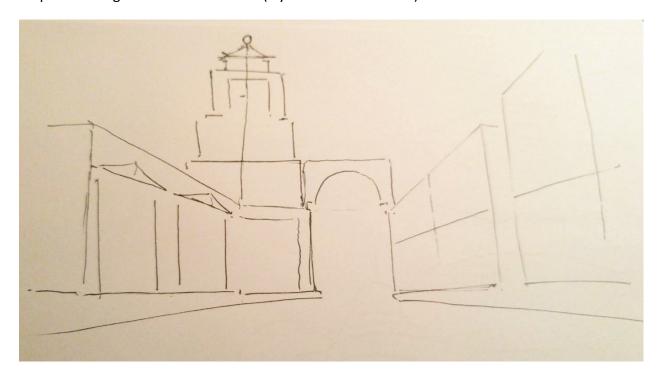
PRACTICAL FREEHAND EXCERCISE

In this practical exercise we will use the same techniques mentioned above to draw an imagined urban view (see the last picture). The purpose of this exercise is training your hand and implementing the mentioned techniques practically during the workshop.

Step 1: drawing the general view (try to do it in 1 minute)



Step 2: drawing the main elements (try to do it in 1 minute)



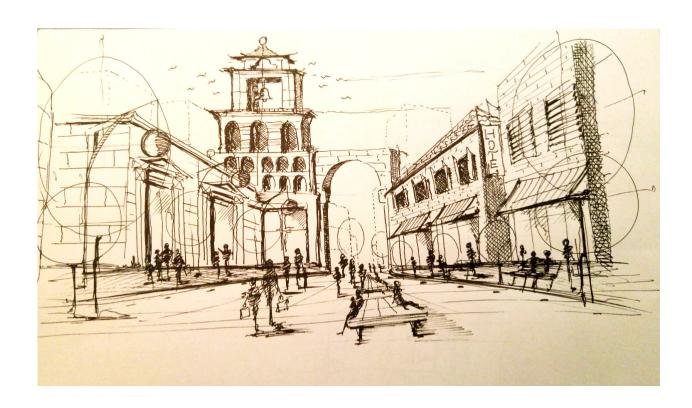
Step 3: giving depth (try to do it in 3 minutes)



Step 4: adding details (try to do it in 3 minutes)



Step 5: casting shadows and adding textures (try to do it in 4 minutes)



Recheck every step and note:

A-How the sketch developed;

B-And what elements had the strongest effects in giving it its final shape (Shadows, people figures, textures...etc.).

A trained sketcher should take about 10 minutes to finish this sketch. However, it is totally fine if you needed more time at the beginning. The more you practice the less time you will take.

Let us have a look at the final sketch: Shadows are crossed lines, trees are simply circles, people figures are scribbles with shadows on the floor and the far buildings are no more than dotted lines. Those details are simple but they give the sketch a lively look.

Now try to do your own sketches following the same steps in this handout and always remember: sketches are fast, rough, informal, fun and informative.

