ORIGINAL ARTICLE

# Use of freehand sketching: Documenting heritage buildings, Gamal Abdel Nasser Street (1830–1930), Alexandria, Egypt

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**Abstract** Freehand sketching – as one of the methods to discover cities – plays main role to understand the image of the heritage city. It is considered as an important tool to analyze and document heritage buildings. The image produced by freehand sketching heightens awareness of these buildings. Previous studies conducted on the methods of architectural heritage documentation revealed that very little researches have been undertaken to use freehand sketching in the process of data survey and documentation. These researches break the deadlock in the textual documents and express the human experience clearly unlike other methods of documentation. Therefore, this article intends to document ten heritage buildings in the study area, Gamal Abdel Nasser street, Alexandria city, Egypt. – One of the most ancient streets in Alexandria that still maintain its old character and identity – using analytical freehand sketches, the sketches and analysis was created by the researcher. The results showed that these buildings seem homogeneous and have a common character despite their different architectural styles which means it respects each other within building regulations. Briefly, the results help to find out how freehand sketching successfully analyzes these buildings that assist the architects and planners to understand the design principles used in ancient times.

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## 1. Introduction

Freehand sketching is a documenting process of the optical images, and it helps the architects to gain understanding, insight and inspiration to express their observations, thoughts and feelings [1–3]. Therefore, it is considered as an essential analytical tool for heritage documentation that must not be

underestimated [4]. It is the best evidence to document the original appearance of buildings which give it a remarkable image in its detail and depth [5,6]. Different studies have elaborated that, because of taking more time to create the sketch, it has the power to bring back sharper images. In contrast to other documentation methods, it captures the most unique moments for the building expressing the human experience which cannot be repeated [7,8]. Sketching as a kind of documentation tool heightens awareness of Building's value and gives the future generations a brief description of the city's architectural heritage within its materials, textures, colors, heights, proportions and other details [1,6,9]. Previous

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research of architectural documentation and data survey rarely has used the freehand sketches. For example, Alexandria city have not a lot of official hand-sketched documents for its heritage buildings.

Therefore, the study intends to analytically study ten buildings in different styles in the study area "Gamal Abdel Nasser Street" using freehand sketching. Sketching these buildings has helped to find out how homogeneous they are, which give a unique character to the study area. The literature review is divided into two sections. First section discusses the heritage buildings in Alexandria, Egypt, and second section discusses the skills and theories on how architects sketch heritage buildings on location choosing the appropriate materials and techniques to use.

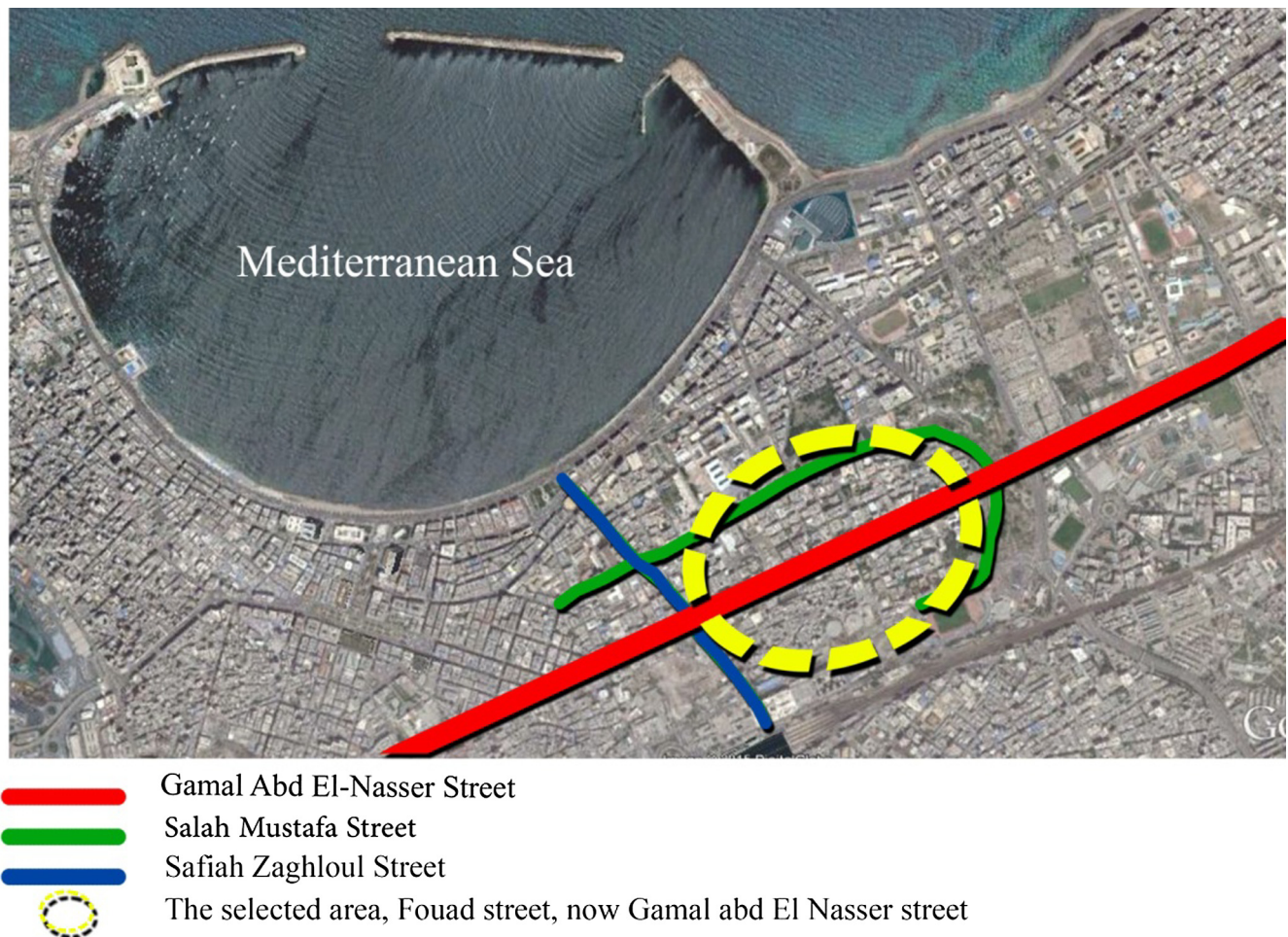## 2. Architecture in the city of Alexandria in the period (1830–1930)

In the late 19th and early 20th century, Alexandria was one of the most important ports of Egypt, and became an increasingly important center for commerce. A very large number of foreigners and immigrants from Europe and from various parts of the Ottoman Empire came and settled in Alexandria during that time. Merchants, adventurers, men of religion and pilgrims on their way to or from Mecca had settled there even earlier [10–12].

In that period of time, Alexandria city got several examples of valuable buildings in different styles, which give architects today information about the civilizations that built them. It is affected by the European style that flourished in the nineteenth-century. These buildings lived more than 100 years and still have their character. The style of building is rhythmatic, orderly and regular. It reflects the communities that previously resided in the city. Despite the intricate details in the building facades, the style of architecture can generally be characterized as simple, uncomplicated and superbly exquisite in composition [12–14].

## 3. Documenting heritage buildings using freehand sketching

The best way to understand and document heritage building is to have a visual image about it such as photographs and sketches. It raises new methods to make the document much easier and understandable for the recipient in an attempt to break the deadlock in the textual documents [9]. Edwards [6] prefers freehand sketching rather than photography, because it helps to cultivate visual memory and critical judgment more effectively [6].

The sketching needs of today have changed dramatically due to the availability of computers. Despite the studies that strongly support the freehand sketches, there are different studies preferred to use digital techniques in sketching. In their



━━━━━  Gamal Abd El-Nasser Street

━━━━━  Salah Mustafa Street

━━━━━  Safiah Zaghloul Street

⬭  The selected area, Fouad street, now Gamal abd El Nasser street

**Map 1**    Satellite map for the selected area, Gamal Abdel Nasser street.
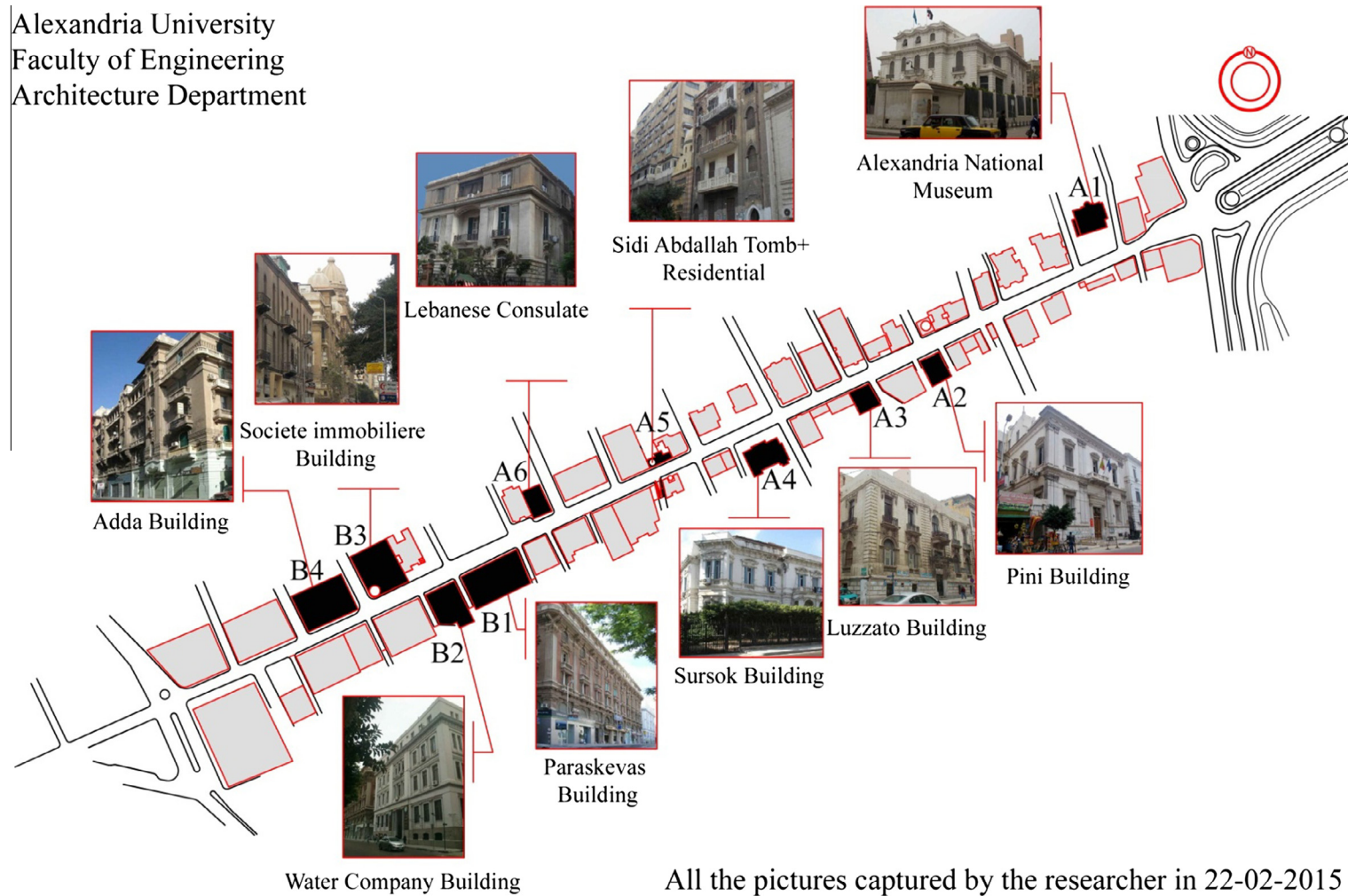
**Figure 1**  The location of the selected ten buildings.

**Table 1**    The ten selected buildings [15].

| B.N | Building name | Date of erection | Architect | Style | Function | Nationality |
|---|---|---|---|---|---|---|
| A1 | Alexandria National Museum | 1931 | V. Erlanger | Neo-Renaissance | Residential | French |
| A2 | Pini Building | 1880 | F. PiniBey | Neo-Renaissance | Residential | Italian |
| A3 | Luzzatto Building | 1909 | F. PiniBey | Neo-Renaissance | Residential | Italian |
| A4 | Sursok Building | 1890 | Henri Gpra | Neo-Renaissance | Residential | Italian |
| A5 | Sidi Abdallah Tomb + Residential | 1920 | Ministry of Waqfs | Neo-Islamic | Religious + Residential | Egyptians and Italians |
| A6 | Lebanese Consulate | 1925 | M. Avena | Art-Deco | Residential | Italian |
| B1 | Paraskevas Building | 1924 | N. Paraskevas | Neo-Renaissance | Residential | Greek |
| B2 | Water Company | 1920s | Y. Yatrou/P. Gripari | Neo-Classic | Administrative | Greek |
| B3 | Societe Immobiliere | 1928 | P. Gripari | Neo-Renaissance | Residential | Greek |
| B4 | Adda Building | 1927 | G. Nahman | Neo-Renaissance | Residential | Unknown |



**Figure 2**    On location freehand sketches.
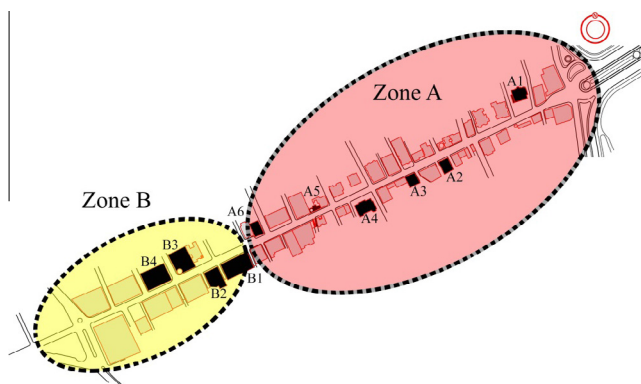


**Figure 3**    Dividing the study area into two main zones.

opinion, the manual methods have their own limitations, produce technical errors and consume a lot of time and resources. Other studies agreed that freehand sketches remain extremely important, useful and always needed, because of its simplicity and low-cost tools. However, it can be enhanced by digital sources to increase the accuracy of the survey and reduce the time. Therefore, this paper is an integral part to study how successful is the freehand sketching as a tool to study and document heritage buildings [2,16–22].

## 4. Sketching heritage buildings: materials, techniques and types

Each architect will see the building differently and has his own way to express the image and the spirit of the heritage place. Choosing the appropriate materials, tools and techniques depends on how he comprehends what he sees as long he uses a methodical approach [6,23]. Anyways the architect should has sure hand and skillful eye to create a successful composition and details with the minimum of tools [1,2,23]. The power of the sketch lies in continuous practice, and the more knowledge the architect has about the materials [24].
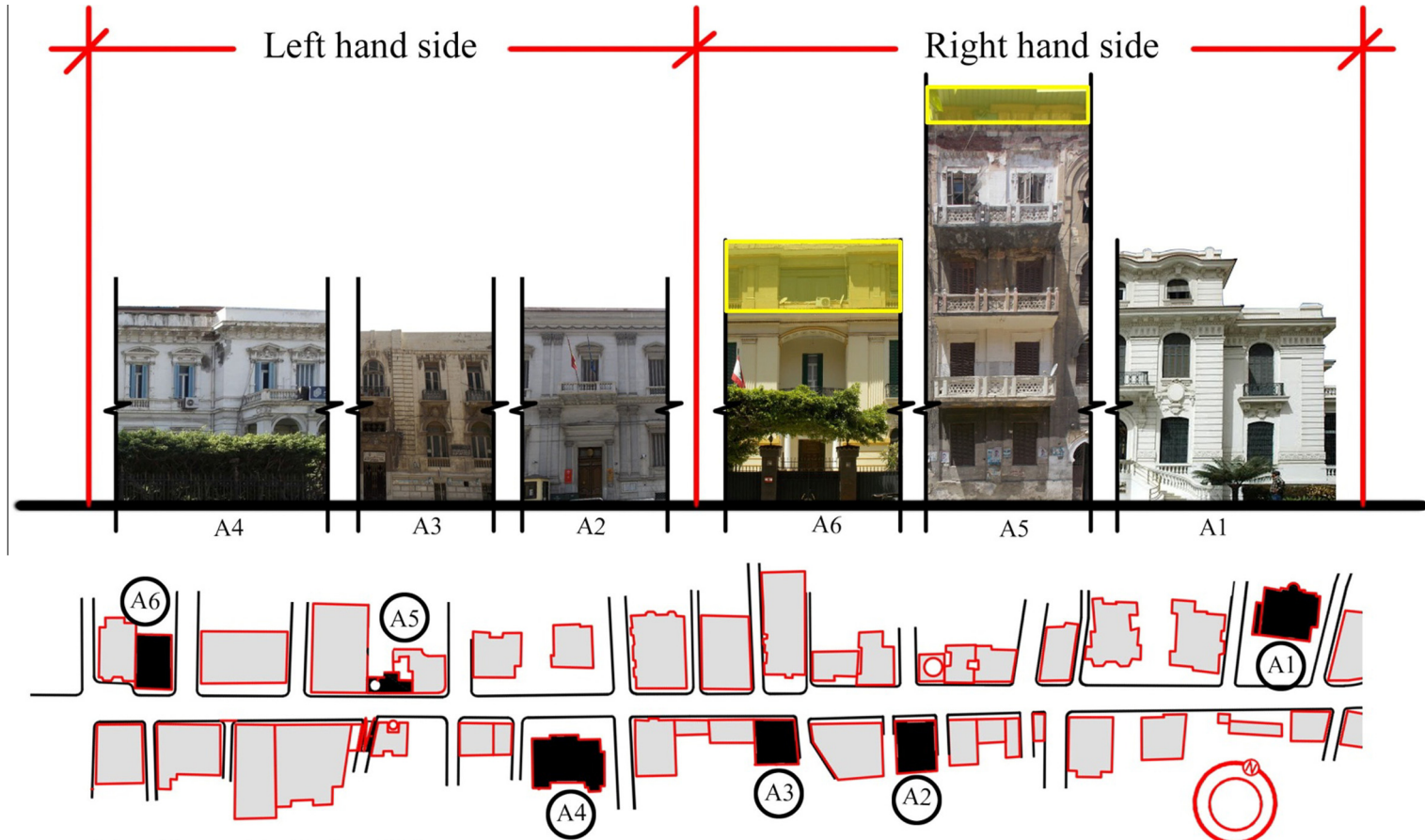
**Figure 4** Buildings Elevation, Zone (A).

A1 - Alexandria National Museum

A2 - Pini Building

A3 - Luzzato Building

A4 - Sursok Building

A5 - Sidi Abdallah Tomb + Residential

A6 - Lebanese Consulate

Extra floors were added to the heritage building

### 4.1. Materials

Many of the materials have been available for hundreds of years, so the equipment used today is similar to that used five hundred years ago. Such as charcoal which is using nowadays by architects in the same process that was before [6]. Many architects like to map out their sketches with great precision, and for this pencil and ink are the perfect tools [24,25]. It is better to sketch with a dry media such as pen and ink, graphite, pencil, charcoal or pastel instead of water color and oil paint to fit sketching on location process much easier [26]. It is also better not to become weighed down with too many sketching tools [6]. Therefore, the study intends to use pen and ink as essential sketching tools.

### 4.2. Techniques

There are several different techniques to use for sketching such as linear, tonal and textural sketch. Choosing the appropriate technique depends on how the sketcher perceive what he see and depends on the image he want to convey to the recipient. Over all, it is necessary to capture the essence of an image, give a simplified version of a complex scene, provide an abstract graphic description of reality, create a graphic expression with the minimum amount of lines, tones and textures and serve as a quick reproduction process [24,25].

### 4.3. Types

There are different types of sketching, classified according to tools and to function as shown.

#### 4.3.1. According to used tools

"Freehand sketching" has been classified into two types according to the nature of tools chosen [2]. The first one is "rough sketching" and the other one "is refined sketching". Refined sketching creates graphic images with the aid of software programs such as Computer Aided Drafting (CAD) in addition to other rendering and presentation programs which made rough sketching a declining skill. However, rough
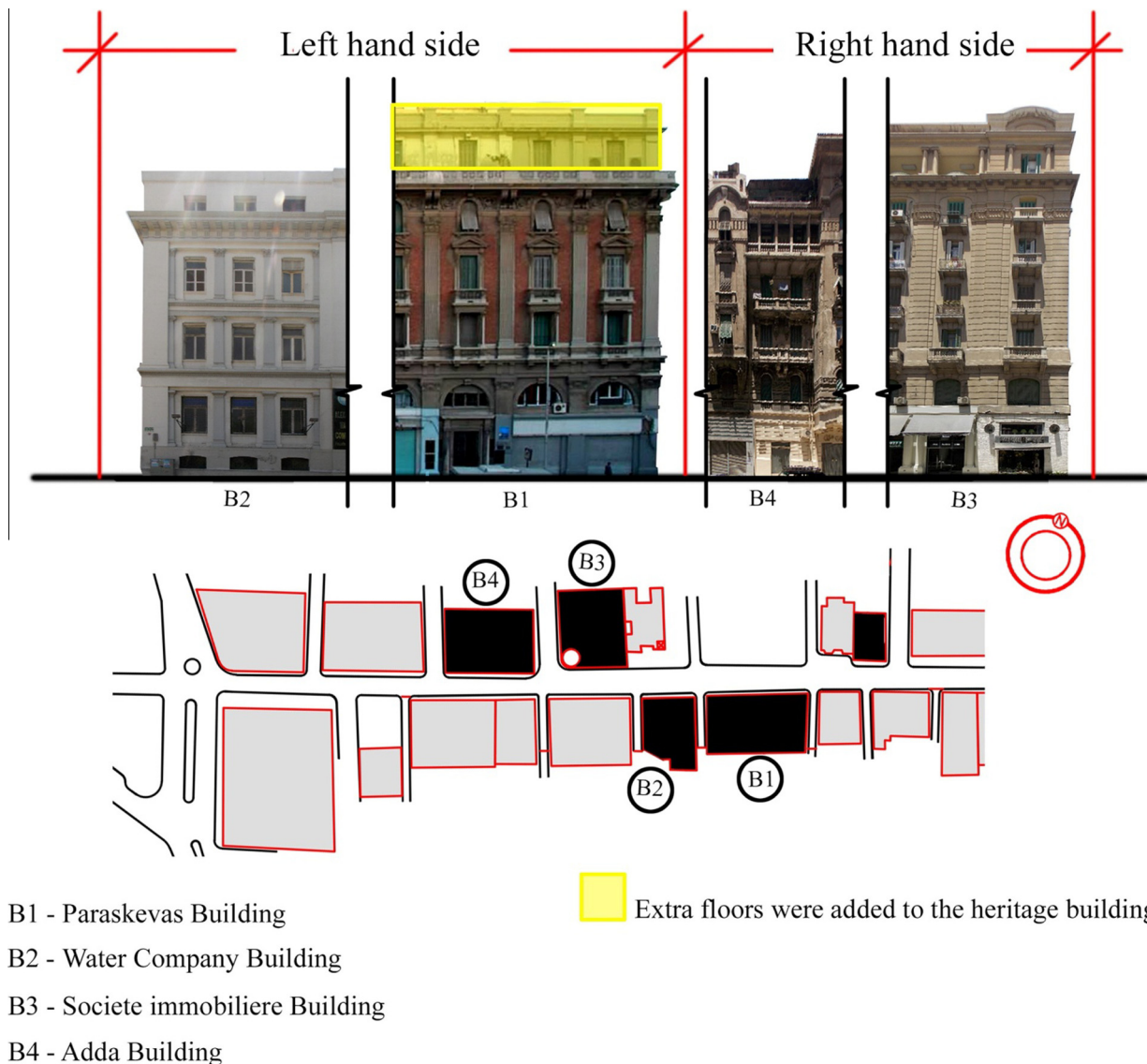


B1 - Paraskevas Building

B2 - Water Company Building

B3 - Societe immobiliere Building

B4 - Adda Building

Extra floors were added to the heritage building

**Figure 5** Buildings Elevation, Zone (B).

sketching is an initial documenting activity that will live on and requires the minimum tools for drawing and have a sketcher's character, emotions and ideas. But refined sketches require more tools than just those for freehand drawing.

### 4.3.2. According to function

There are three main types of sketching according to its function. The first is the elaborate perspective drawing used to communicate design ideas to clients or planning authorities. Mostly this type of sketching has been produced by computer. The second type concerns the production of perspectives and views used to communicate design ideas to specialists such as engineers. Sometimes it helps to clarify points for the designer's own benefit, investigate an early design, explore methods of construction, test the visual effect of details and set the design in its physical context. The third type of freehand sketching concerns the exploration of the existing world, its buildings, details and landscapes. Most of these sketches used as a method of studying building typology, using the analysis as a way of placing [3,6]. Of these three broad categories of sketching, this article focuses upon the third type with a growing awareness of the cultural and aesthetic values of Alexandria city.

### 5. The study area

Gamal Abdel Nasser Street is known between public users and Alexandrians by the old street's name (Fouad street). It begins from down town (Ramleh station area) and ended at Montazah palace's area. The selected area starts from the intersection with Salah Mustafa Street (Shallalat gardens), and ends at the intersection with Safia Zaghloul Street (Map 1). The Chosen area is in the central district of Alexandria, cut into the heart of the modern European city and further highlighted by the variety of activities concentrated in the city center: administration, finance, commerce, relaxation and habitat [10,15].

The street remains representative of the city's belle époque high style architecture, in addition to the European style that prevailed on those buildings which are characterized by fine and abundant detailed architectural elements [15].

### 5.1. The selected buildings

Fig. 1 shows the location of the selected ten buildings that have been built during the hundred years (1830–1930) in Gamal Abdel Nasser street. It is obvious that the selected buildings are scattered all over the street, it had been built in different eras and they had different styles and characters (APT-Alexandria) as shown in Table 1. The table includes the ten building's name, date of erection, architect's name and the architecture style. The list ordered and numbered by the location of the buildings (see Fig. 2).

The selected heritage buildings are registered in the preservation report of heritage buildings [27] which have been deprived from demolishing according to Law No. 144 of 2006 concerning the organization of Demolition of buildings and the preservation of architectural heritage [28].
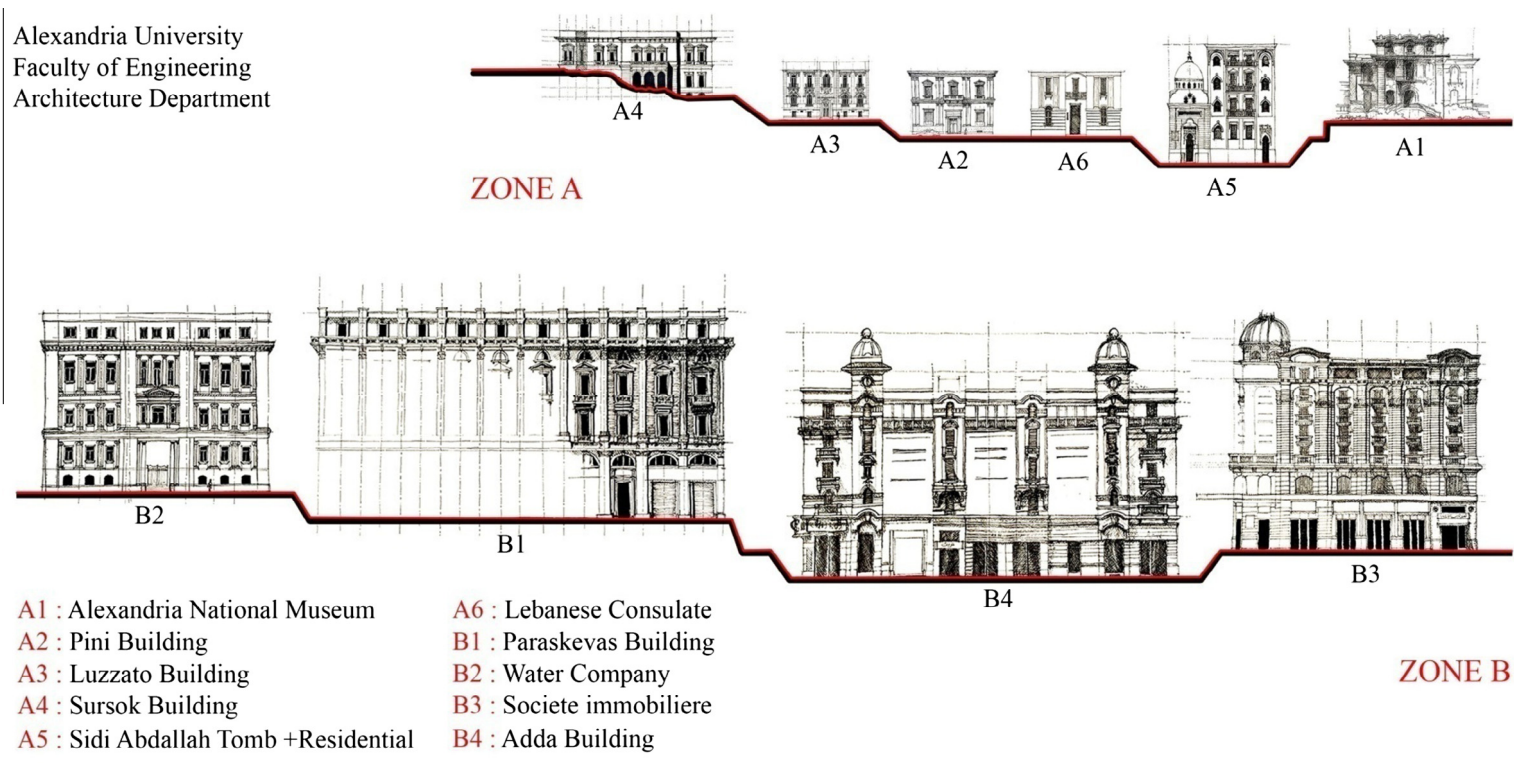
### 5.2. Methodology

The study has been conducted based on an analytical method through three main phases. The first phase is a preparatory phase for buildings selection and data collection of the study area. While the second phase is an observation process to freehand sketch these buildings on location. The third phase is an analytical phase of building's facades and its architectural elements using the sketches that have been produced in the second phase.



(a) Sketching Alexandria National Museum (A1)

(b) Sketching Water Company (B2)

(c) Sketching Sidi Abdallah Tomb (A5)

(d) Sketching Adda Building (B4)

Sketching Location

Selected Heritage Buildings

**Figure 6**    Sketching Gamal Abdel Nasser street on Location.

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Faculty of Engineering
Architecture Department

**ZONE A**

A4

A3

A2

A6

A5

A1

B2

B1

B4

B3

**ZONE B**

A1 : Alexandria National Museum
A2 : Pini Building
A3 : Luzzato Building
A4 : Sursok Building
A5 : Sidi Abdallah Tomb +Residential

A6 : Lebanese Consulate
B1 : Paraskevas Building
B2 : Water Company
B3 : Societe immobiliere
B4 : Adda Building

All sketches are free hand done by the researcher 2014\2015

**Figure 7**    Detailed ink freehand sketches for the selected building's facades.
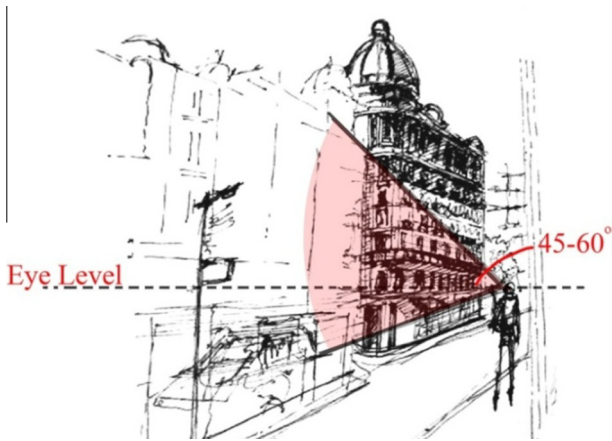
**Figure 8** Human eye sketch for Societe Immobiliere Building (B3).

### 5.2.1. First phase: preparatory phase

In the first phase, the study area has been divided into two zones to simplify the process of analysis (Fig. 3). Zone A starts from the intersection with Salah Mustafa Street (Shallalat gardens), and ends at the Lebanese Consulate which Zone B starts with and ends at the intersection with Safia Zaghloul Street. Figs. 6 and 7 shows the façade of ten buildings as a samples of heritage buildings in Gamal Abdel Nasser street and how there are relatively uniform proportions and complementary massing forms amongst the buildings provides an intact fabric in each zone of the selected part of Gamal Abdel Nasser Street.

The yellow parts that appears on some of the facades of buildings in Figs. 4 and 5 expresses infringements on those buildings such as added extra floors, which means a change in the original buildings height and change in the proportions. In the process of analysis, the study focuses on the original proportions of the buildings, apart from those infringements. Those infringements were identified by the personal observation, as it is different in finishing materials, floor height and it has been built above the ending cornice of the building.
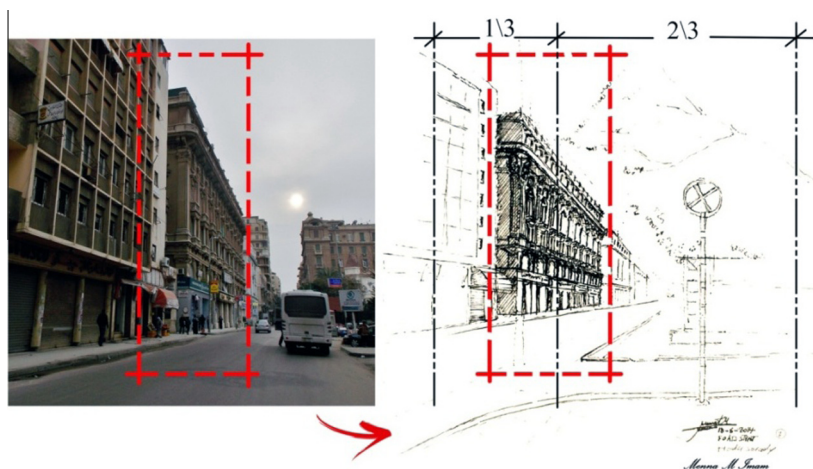
These diagrams (Figs. 4 and 5) have been created according to Jorge Hernández and Beatriz Marcotegui method to isolate individual facades from general city block image within a
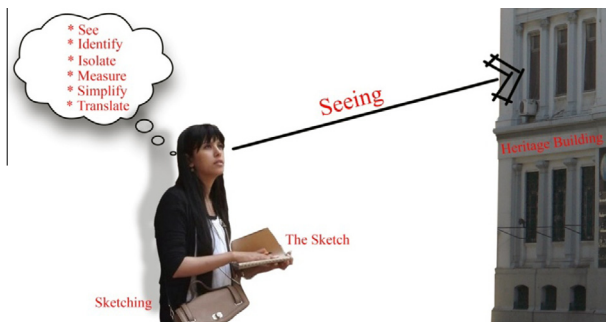


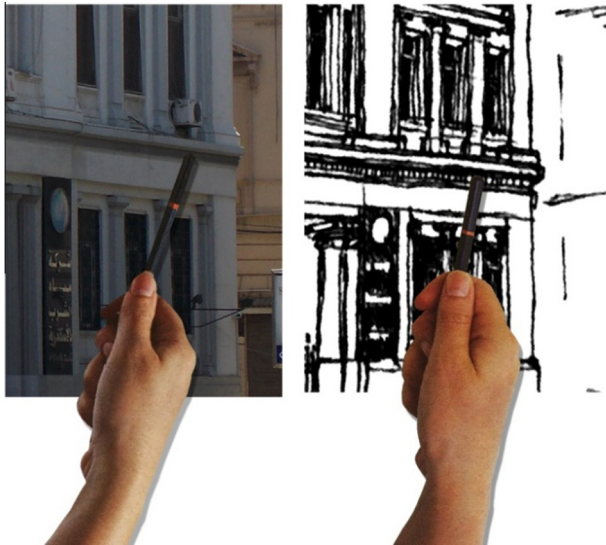**Figure 10** Sketching Adda Building (B4) using Isolation and Abstraction skill.
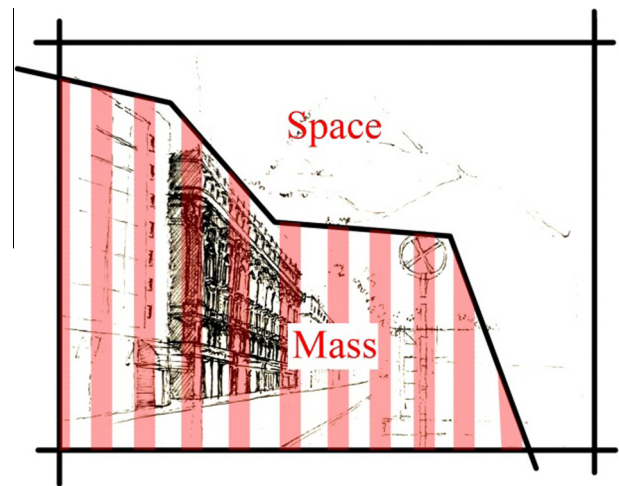


**Figure 11** Balance between Mass and Space, Paraskevas Building (B1).



**Figure 9** Sketching Paraskevas Building (B1) using composition skills.

**Figure 12**   The process of observation.



**Figure 13**   Using sketching pen as a measuring device.

segmentation process to analyze building façade images using digital tools (adobe Photoshop + AutoCAD) [29]. These images have been collected next to each other according to Baroldin N.M. and Mohd Din S.A. method to present the typology of Melaka shophouse [30].

### 5.2.2. Second phase: freehand sketching phase

The second phase is sketching on location as showing in Fig. 6, by spending hours every Friday morning for a walk in Gamal Abdel Nasser Street and take a simplified, abstracted and expressive perspective sketches with a minimum amount of lines, tones and textures in addition to detailed sketches for the selected building's facades to understand its proportions, elements and ornaments.

The second phase leads to gain a comprehensive understanding of the architectural style for each building. In addition to have detailed freehand sketches for the ten building's facades as shown in Fig. 7 and large amount of perspectives illustrative sketches and details that describes the street's image according to the researcher's vision.

According to the literature review, pen and ink were chosen to use in the sketching process because of its durability to make simple details, quickly and not to become weighed down with too many materials. In addition, pen and ink simply can exploit the fine lines to capture busy scenes or small details.

The sketching process has been done throughout the period of thesis study (2014–2015), but each sketch took a time about an hour or two at the most.

During taking measurements, dimensions and angels or recording the materials and textures in the sketching process, the researcher applied skills and theories such as the visual and perceptual freehand sketching skills as follows.

#### 5.2.2.1. Visual skills

*5.2.2.1.1. Choosing the view point.* The researcher chose normal viewpoints – the human eye level of an individual standing upright – to create a familiar sense of human perspective more obvious to the spectator (Fig. 8).

*5.2.2.1.2. Composition.* In each perspective sketch, it has been taken into account the arrangement of the sketch elements and tones to be well composed. The researcher focuses on specific parts of the scene and makes it the dominant element such as a part from the building or the building itself, due to its location of the sketching area in addition to the differences in hatching tones and the amount of details Fig. 9.

*5.2.2.1.3. Isolation and abstraction.* In case of too much details around the part to be studied (Fig. 10), the researcher uses the isolation and abstraction to concentrate on the important part without sketching the other parts.

*5.2.2.1.4. Balance.* The researcher avoids symmetrical balance taking the advantage of shifting the viewing position and elements to one side, in order to create the feeling of occult or asymmetrical balance, which is dynamic and interesting (Fig. 11). It employs the positioning of mass and space to create a perceived but not obvious balance.

#### 5.2.2.2. Perceptual skills

*5.2.2.2.1. Observation\seeing.* The researcher spends enough time observing the building he sketch carefully to interpret the image he see correctly. During the process of observation, the researcher is keen to be fully aware of the building's position, the changing of material, the variation in light quality and the liveliness of line and edges appreciating the proportion, scale, texture and composition of the entire image. Fig. 12 shows the process of observation that starts with seeing.

*5.2.2.2.2. Measuring.* Measurements are taking just to make sure that the proper relationship is correctly portrayed. the researcher uses the sketching pen as a measuring device as shown in Fig. 13, because it is available already in the hand in addition not to become weighed with too many tools.

*5.2.2.2.3. Using a viewfinder.* The researcher uses the viewfinder to determine the size of the sketch and the amount of the coverage. It frames the scene he wants to sketch and blocks out the undesirable ones, as shown in Fig. 14. After a lot of sketching practice, it became unnecessary, because then, eyes can automatically do the cropping within the picture frame.

*5.2.2.2.4. Interpretation.* During the analysis process, the researcher uses the factual perception interpretation to identify certain visible elements as well as relationships between these elements and cue within the image (Fig. 15b) while tone identifies the logical light source and creates the sensation of depth. Some of the analysis factors summoned to use the formal way of interpreting perceptual experience capturing the silhouette of the image that carries a specific meaning or message, Such as expressing the character of each object within the picture
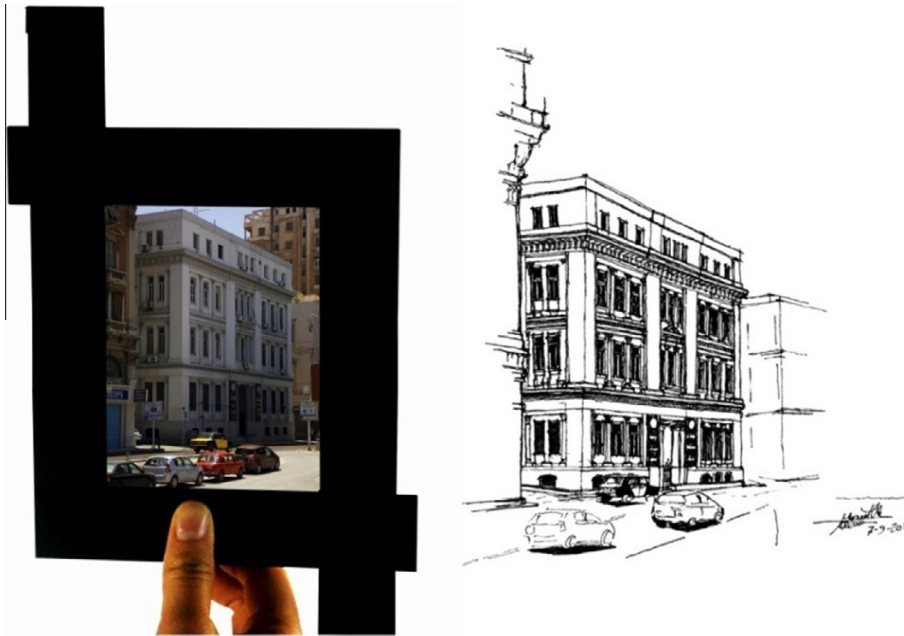
**Figure 14** Using a viewfinder, the Water Company Building (B2).
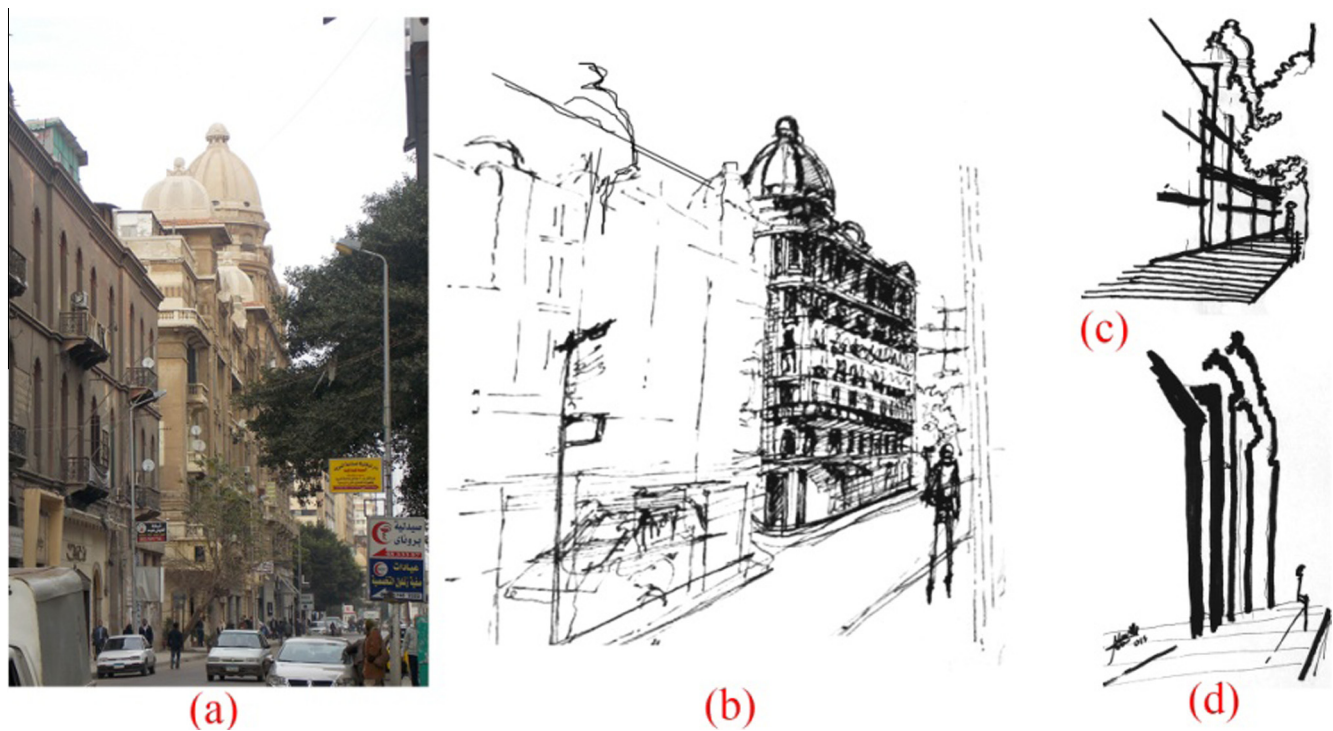


**Figure 15** Factual and Formal interpretation, The Societe Immobiliere (B3).

frame (Fig. 17c) or sharing similar features without differentiating materials details, and intervening spatial edges as shown in (Fig. 15d).

### 5.2.3. Third phase: analytical phase

In the third phase, the researcher analyzes the facades of the chosen ten heritage buildings and it is architectural elements.

Analysis is a process aimed to find out how these buildings respect each other within building regulations using the sketches that have been produced in the second phase to show the possibilities of freehand sketching to reach the goal as an analytical tool. In the process of analysis, the researcher uses the method that applied in building design guidelines of the city of Naperville, the city downtown of Hamilton, Evansville
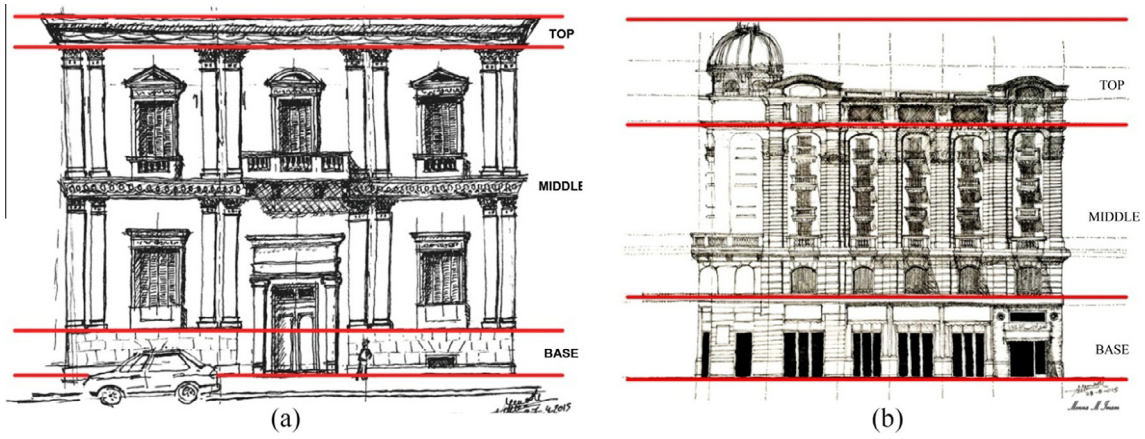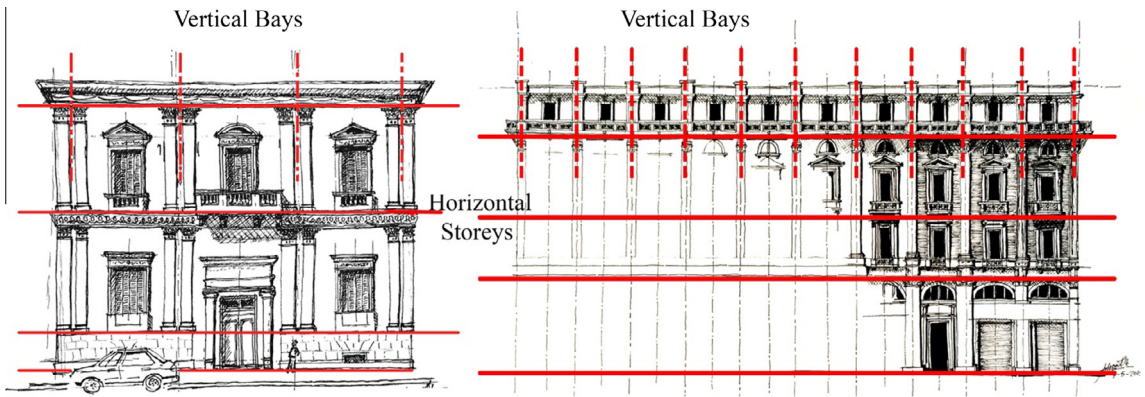
**Figure 16** Typical building composition.

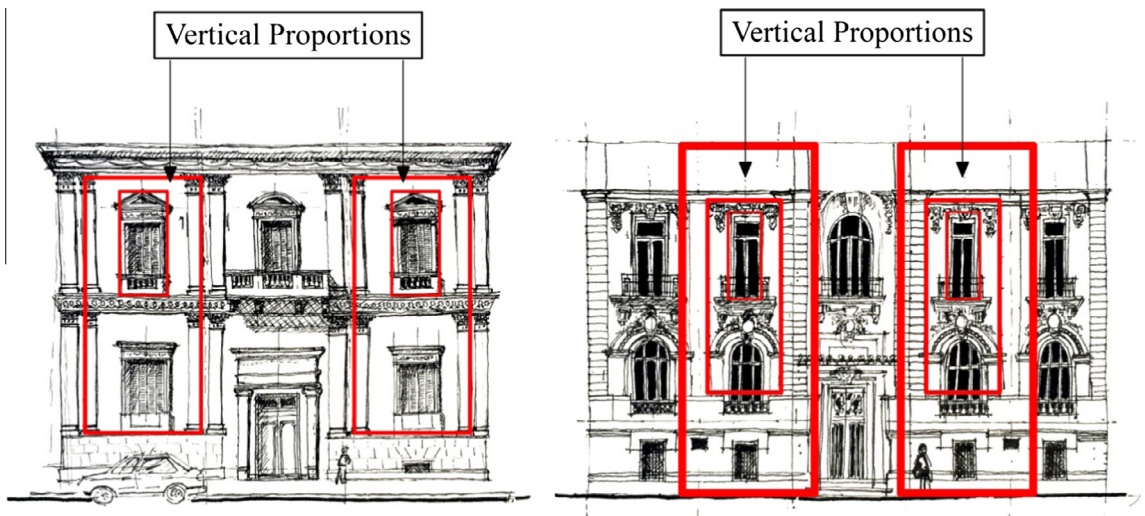

**Figure 17** Horizontal and Vertical demarcation.



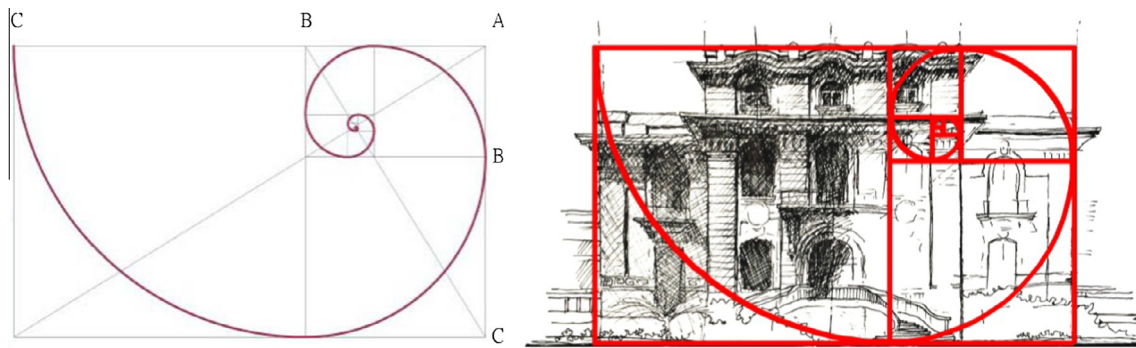**Figure 18** Articulation grid framework repeats vertical proportions.
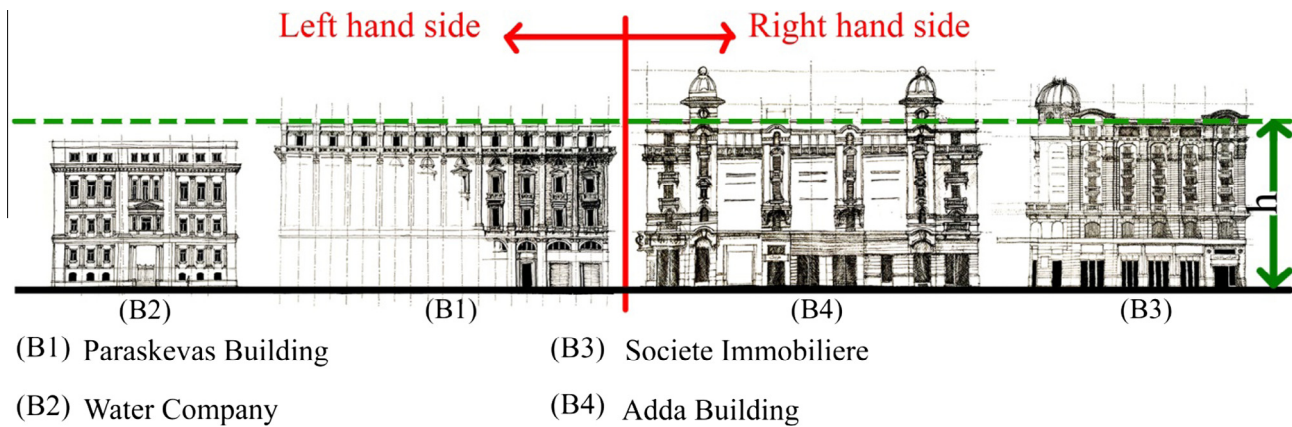
**Figure 19** The Golden Ration [36].



**Figure 20** Building heights of residential apartment and administrative buildings.

(B1) Paraskevas Building
(B2) Water Company
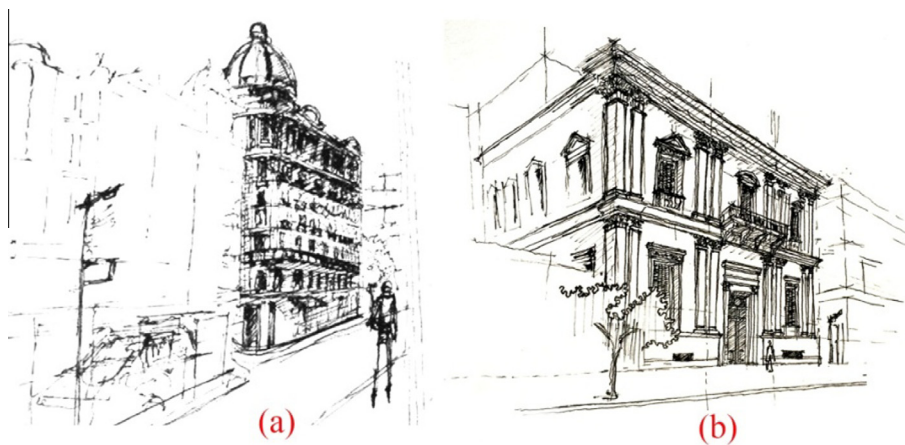(B3) Societe Immobiliere
(B4) Adda Building



**Figure 21** The differences between Endings of the buildings.

and the city downtown of Merritt [31–37] aiming to study the building's facades and the relationship between them in detail. The analysis has done through main eight analytical elements, as follows:

| | |
|---|---|
| – Composition | – Demarcation |
| – Proportion | – Building heights |
| – Endings | – Ornaments and Details |
| – Windows and Entrances | – Building surfaces |

*5.2.3.1. Composition.* The use of the term ''composition'' in this article simply means the organization of the building facade's elements, the interrelating of these elements, and the relating of them to the total form.

Most façades of buildings in Gamal Abdel Nasser street built in the nineteenth and early twentieth century use an ancient formula for building design that incorporates clear identification of three basic components such are a ground floor or street level, a middle portion of the building and an
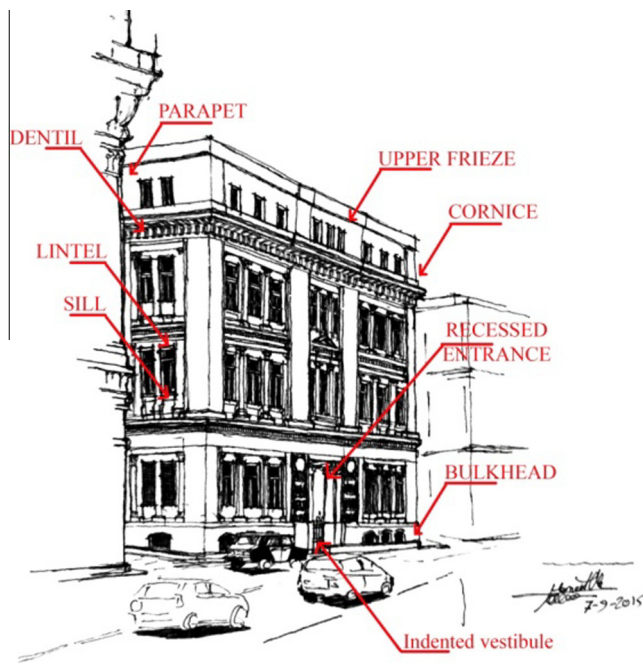
**Figure 22** Sketch for the water company building's details (B2).

upper portion that is terminated by a decorative cornice as shown in Fig. 16. The bricks or stones of building facades horizontally and vertically tie together achieving the connectivity and the visual flow. In addition to the balance created through elements shape, pattern, and texture.

*5.2.3.2. Demarcation.* All heritage building facades in Gamal Abdel Nasser street have consistent modulation, horizontal and vertical articulation (Fig. 17) within a grid framework. This framework success to break down the overall scale of a

building into intermediate scale parts, to provide visual relief for large wall areas and to minimize the appearance of bulk.

*5.2.3.3. Proportions.* The researcher studies the proportions by examining the height to width relationships of the various components of the individual building façade. Most of heritage buildings in Gamal Abdel Nasser street have similar proportioning systems that are based on the character and scale of the materials used, the alternation of solids and voids (walls to openings) in the facade, the ratio between the size of one part to another or to the space in which it is placed, Fig. 18 shows the repeated vertical proportions. This proportioning system establishes a pattern which is sensed by observing the building from a distance.

The researcher found that, some proportional relationships in building facades are more pleasing than others specially that came up with the Golden Section. Fig. 19 shows the golden section which is a proportioning system that governs the relationship to smaller parts to the whole.

*5.2.3.4. Building height.* Obviously, the existing heritage buildings vary a little in height according to its function. Residential villas are two-storey or three-storey high, administrative buildings are four-storey high, while residential apartment buildings rising up from four to seven storeys (Fig. 20), refer to Table 1 that showing the building's function. This consistent height contributes to the uniformity of built form by providing a "height standard" throughout the street. The pedestrian level environment also remains consistent as three to four storey in height is within the scale of human experience, can easily be seen from the street.

*5.2.3.5. Endings.* Some buildings ends with a dome such as Societe immobiliere (B3) (Fig. 21a) and Adda Building (B4), Table 1. But heritage buildings in Gamal Abdel Nasser street often ends with cornice – A decorative element molding along a building's roof- or cornice with a parapet, (Fig. 21b). These
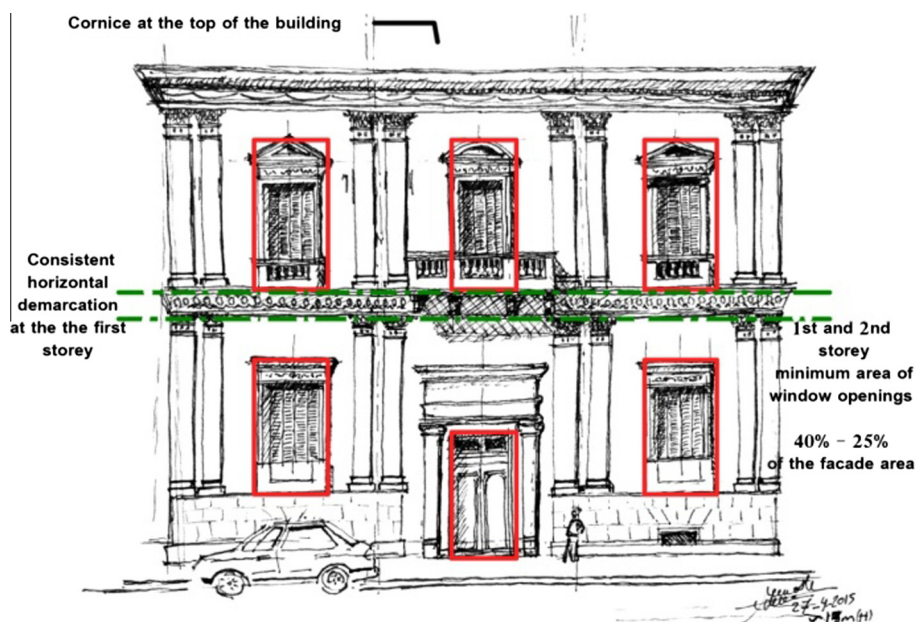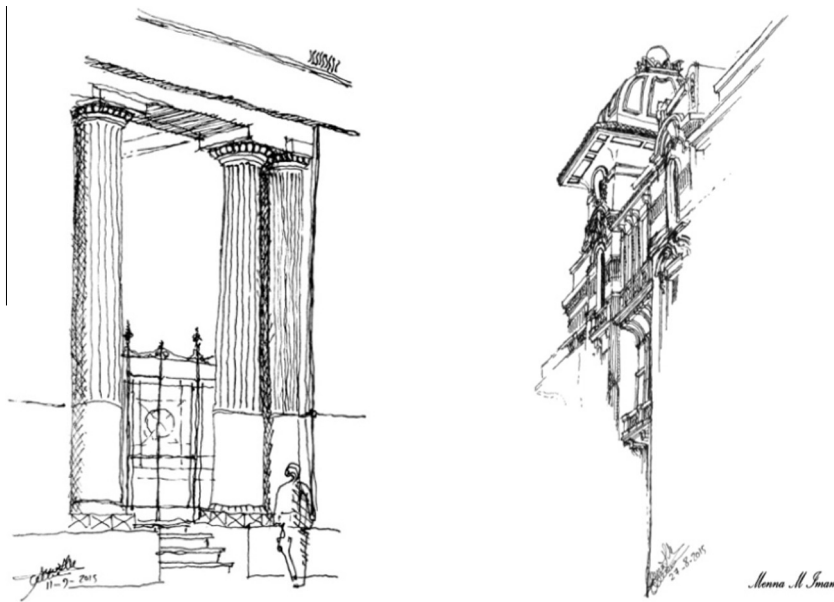


**Figure 23** The sketch is for Pini Building (A2).

**Figure 24** Detailed sketches showing the variations in surface depth.

domes can easily be seen by the pedestrian from anywhere in the street and considered as a landmark of Fouad Street, Now Gamal Abdel Nasser street.

*5.2.3.6. Ornaments and details.* Building facades in Gamal Abdel Nasser street are full of ornaments, details and decorative elements such as brick sills, dentil element, the parapet, the building's cornice, the decorative columns and the recessed entrances (Fig. 22) which play an important role in shaping people's impression about the street's image. It has a strong visual impact and aesthetic value which can be observed by any citizen passes, it also functionally serves as a transition between building elements.

*5.2.3.7. Windows and Entrances.* Windows and Entrances of the heritage building's facades are placed within the established pattern of horizontal storeys and vertical bays. Its arrangement tends to be symmetrical, and the openings are balanced by ornamental elements. Each building has windows and doors in harmony with the character and development patterns of the buildings around. Generally the window openings occupy approximately 25–40% of the overall façade, as shown in Fig. 23.

*5.2.3.8. Building surfaces.* Heritage Building façades in Gamal Abdel Nasser street are distinguished by variations in surface depth, such as recessed windows and projecting elements, including masonry coursing, piers, pilasters, columns, sills, and cornices, (Fig. 24). Variations of the façade's surface depths provide visual relief.

## 6. Discussion

According to the case study and during the sketching of ten buildings basing on the work of several authors, it was found that most of composition values have been achieved in the facades of buildings such as "Balance" that created through its elements and openings -windows and doors- which are balanced by ornamental elements. Most facades have been divided into three main components, and the middle part has

the largest percentage of the facade area (see Fig. 16) where the surface materials achieve the "Connectivity" value.

The three main components of the buildings connected together with a grid framework which contains vertical articulation that succeeds to break down the scale of the building horizontally into intermediate scale parts (see Fig. 17). There was also horizontal articulation and modulation achieved through recessed wall offsets, entry ways porch or canopy structures, columns, piers or other features. Some of the important theories such as the golden section (see Fig. 19) have been applied successfully to produce aesthetic proportions and establish a pattern which is sensed by observing the building from a distance. There are some differences in building heights but it kept the same height of the ground floor or street level which is easily seen by the pedestrian (see Fig. 20).

The author found that, heritage buildings in Gamal Abdel Nasser street respect each other within building regulations that made it seem homogeneous in building heights, form, pattern, module of openings, composition and rhythm (see Fig. 7). It has a common character despite their different architectural styles. This result is not easy to be reached or realized by the spectator or the photographer, but the sketcher who analytically sketches these buildings in detail, felt its proportions through his hands and understood its scale.

## 7. Conclusion

The article examined the possibility of using the freehand sketching in the analytical study of heritage buildings. It is truly a tool for seeing, and helps architects to shift into a deeper realm that encompasses elements such as shape, form, texture, rhythm, composition, and light. It is important to discover and understand the image of cities.

The paper introduces an example of new approach in documenting architectural heritage with participation of the theoretical thought and the existing practices. It is a comprehensive analytical study that revitalizes the heritage substance and contents in the conservation projects with inspiration of its physical elements and moral values.

The suggested methodology provides, by the contrasting with the traditional programs of heritage documentation, and a practical analytical study depends on the architect's observation. It focuses on analyzing the facades of buildings because it is mostly the matter of evaluation by visitors of heritage districts and imposes important impact on the images of the cities, in addition to giving some visual sequences through some of abstracted perspectives.

The article concludes the following guidelines:

- Techniques in sketching depend on the aim of the sketch. It is important to use the linear sketch in full detailed façade sketches, but use the tonal sketch to give a sense of three-dimensional reality to two-dimensional details and differentiate the light and shaded planes. According to the textural technique, it has been used for sketching the facades that have differences in material textures and colors as shown in figure.
- The importance of working small, as a smaller sketch area means there is less real estate to cover, and that means much less time expended and a greater volume of sketches produced.
- Sketching with a dry media such as pencils and ink is very important to fit sketching on location much more, in addition to use it as a measuring device, because it is available already in the hand in order not to become weighed down with too many tools.
- It is necessary to sketch on location, not from photos or memory.
- Simplifying the message by the collection of smaller and more focused sketches can lend creative flexibility to the evolving storytelling process.
- The important things of the practice are a consistent vocabulary of strokes, textures, and line work and employ them consistently in the sketch. The process of lying down lines and creating tones and textures becomes automatic, freeing the mind to focus on the idea.
- Attacking the sketch by thinking of it as play and avoiding the temptation to erase and correct. This is a trial and error process. Simply draw over the original line.

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