Where does travel sketching end and design sketching begin? Reconsidering Le Corbusier's sketches of the Acropolis

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Abstract

Contrary to the current decline of travel sketching amongst architects, this article brings to light its increased relevance in the current context of both architectural practice and research as a means of harnessing the design process to investigate the underlying structures of place and simultaneously propose strategies for its comprehension and transformation.

The analysis of place is taken as the most important characteristic of travel sketching and the area with the greatest potential for architectural practice and research. Extending the thesis in the Myth of the Local (Wigley 2011), the travel sketch is treated as a combination of local and foreign influences, fused together by a process of idea crafting which attunes the individual's point of view making it aware of the otherwise imperceptible "underlying structures of place" (Navarro Baldeweg 2013). The mental process behind architectural travel sketching is closely related to the cognition of design sketching sharing a common process (Goldschmidt 1991). Travel sketching is considered a form of design sketching; Travel sketching for architects is in fact a method for designing ways of conceiving place.

These ideas are demonstrated through a graphic analysis of a sequence of Le Corbusier's travel sketches of the Acropolis. A sequential comparison of four approaches to sketching equivalent views, shows how the architect used travel sketching to work out and test ideas about the relationship between architecture, landscape and place. The example therefore demonstrates the fundamental role which travel sketching may take in developing and crafting an architect's conception of place.

This is significant because architects may benefit from a more explicit understanding of the opportu-nities that sketching creates and the relevance within the of its application in contemporary architectural methods and practice. The use of travel sketching specifically for the analysis and design of place is an area of great potential for future research especially in combination with, and not substitution by, new technologies.

Keywords: *Travel sketching, Le Corbusier, Acropolis.*

Travel sketching and capturing the essence of place

Whilst architects have drawn on their travels for centuries, their reasons for doing so have varied over time. This has depended on the specific needs and interests of the profession at the particular period. The aspect which currently sets travel sketching apart from other kinds of graphic recording is its particular ability to capture the essence of place – referred to by Navarro Baldeweg as the "underlying structure of place" (2013).

A distinction can be made between the travel sketch as a finished image, useful for reinterpretation at a later stage, and the act of travel sketching itself, a process of discovery through design.

Many architects have found themselves more interested in the practice of drawing for this reason as a method to find and disentangle the complex relationships which determine place, rather than in the resulting sketches. The process of sketching in-situ helps to uncover underlying structure of place which may otherwise remain hidden.

In the "Myth of the Local", Mark Wigley refers to this as the classic logic of the travel sketch:

> The travelling architect claims to have detected and captured some genetic markers in a site,

sampling some local traits and recording them in the form of minimal sketches that can be carried back to the studio where a project can be grafted into that basic genetic material. (Wigley 2011).

This implies that a sketch, made in situ, fast, highly selective, perhaps quite ambiguous or even abstract, can somehow capture some objective quality contained in the site, but which for some reason may not be immediately apparent. However the architect's travel sketch is more than simply a record of objective "genetic markers" contained in the site itself. Architects' travel sketches are often interesting precisely for the varied ways in which they find these genetic markers. Far from defining objective traits in the subject drawn, the architect's sketch always reveals just as much of their own subjective view point as of the factual reality. It is the particular way of seeing and interpreting which portrays place differently and that allows other readings of place to appear. One need only compare two sketches of the same view by different architects to see the degree to which each sketch incorporates the personal ideas and imagination of the drawer.
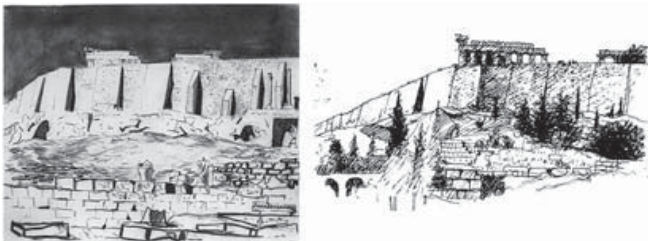

Figure 1. The Southern facade of the Acropolis drawn from the same viewpoint. Louis Kahn, left / Arne Jacobsen, right.

Returning to Wigley's argument, he claims that while the true essence of place is often hard to perceive, it can be made perceptible by through introducing a *foreign* piece of architecture. As he explains, the *local*, the qualities which are contained within the place – are often only made apparent by incorporating foreign elements.

The role of the architect is to graft the foreign onto and into the local. Architectural objects are not simply inserted into particular sites but into a kind of hypothetical genetic code. The architect detects a set of key genetic traits in the

local situation and inserts something of the outside into the code that will make the code itself visible... The graft broadcasts the ideas that the architect has imported but equally brings the local environment to life. The sense that something has been imported is inseparable from the new sense of the local environment... Even with the most foreign-looking projects, architecture is always an act of grafting in which an object speaks for the environment it is inserted into. (Wigley 2011).

The role of the architectural travel sketch is to uncover that underlying structure, and it does so through *proposing* a particular manner of seeing and interpreting it. Le Corbusier reached a similar conclusion in his night time sketch of Buenas Aires from the deck of a ship, with the lights of the towerblocks appearing on the horizon. In his notes he comments that it is the presence of the towers themselves that make one appreciate the monumental flatness of the distant landscape. In this case it is the architecture which reveals the true nature of the place. The objective local qualities of the view are selected and interpreted according to the architect's own personal, subjective criteria – in other words, criteria utterly foreign to the local place. It is this transformation of the *genetic markers* of place into a personal interpretation which can shed light on what it is that makes the relationship between architecture and place significant. In the case of Le Corbusier's sketch, it is the vertical scale of the towers in relation to the width and flatness of the horizon, together with the artificial quality of the illuminated towers over the dark horizon that convey this primary relationship between architecture and landscape.

Extending Wigley's argument about place being revealed through a combination of the local (site) and the foreign (architecture), travel sketching is capable of uncovering an underlying essence of place precisely because it fuses local information from the place with foreign ideas interpreted by the mind of the architect/observer. It is worth noting that throughout Le Corbusier's career, rather than using more objective measured drawings or photographs he chose repeatedly to explain matters such as these with his travel sketches, or diagrams recalling them. To summarise, travel sketching reveals the relation-

ship of architecture and place through combining objective fact with a subjective point of view.

Travel sketching as a design method

As well as illustrating fully pre-formed ideas, the act of sketching can also be a way of working out how to direct one's thoughts and give form to one's ideas. It can have a role of helping to organise a mental process which may otherwise remain intangible or perhaps incoherent, assisting the designer move from describing ideas to depicting them with physical characteristics (Schön & Wiggins, 1992). Hence the aesthetic appeal of a sketch is very secondary in comparison to the role that sketching plays in helping to work out these thoughts.

Research by Daniela Goldschmidt at MIT examines the role that sketching plays in the design process (Goldschmidt, 1991; Schon & Wiggins 1992). Through trial and error, and a cyclical process of judging the drawing and revising it, the sketch helps the architect to give shape to, test out and judge ideas. In essence then the travel sketch not only follows the same cyclical development as the classic design sketch, but serves to create a particular way of seeing and understanding the subject. The travel sketch is a project in its own right; the way of representing the subject is designed for certain effect in the same way that an architectural project is designed.

The architect's personal point of view –determined by their particular interests, prior-knowledge, imagination etc.– is of course entirely individual. The sketches of Aalto, Jacobsen and Kahn may each be clearly recognisable as the hand of one or other due to stylistic singularities or predilections for certain subjects, but that is not to say that their points of view acted as some kind of preconceived stamp to be imposed rigidly onto each drawing. The process of sketching actually serves to mould the point of view around the most significant characteristics of place, highlighting these factors and searching for the best way to understand and represent them.

To summarise, sketching in-situ can reveal the underlying structure of place through a gradual process of proposals, criticism and revision – in other words, travel sketching helps architects to understand place through proposing and designing new ways to see it.

Le Corbusier's Acropolis sketches 1911

In order to demonstrate how travel sketching might be used as a method for adapting and improving the architect's conception of architecture and place, a set of Le Corbusier's travel sketches from his first visit to the Acropolis are analysed. Through comparing the sequence in chronological order (given by the numbered pages in his sketchbook) the variations between sketches suggest changes in his way of understanding the Acropolis, and what he considered to be the most important way of seeing it. These sketches, and the conclusions they lead him to regarding the relationship of architecture and landscape proved fundamental and enduring throughout his career using them to justify his projects, theories and lectures. Whilst the later sketches from his Voyage to the Orient focus on volumes, masses, proportions and measurements (in Rome), the sketches of the Acropolis are particularly interesting for their focus on place, and how this is affected by the relationship of architecture, topography and landscape.

The following analysis highlights which elements gain or loose importance over the course of the sketches, and which ideas are maintained or added and which are modified or removed. These conclusions can be seen in the original sketches and illustrated with conceptual diagrams. They demonstrate how Le Corbusier's opinions regarding the most significant aspects of the Acropolis changed over time.

Figure 2. Le Corbusier, Carnet 3, p 98. Voyage to the Orient

Sketch A (Carnet 3, Page 98, Voyage to the Orient) The Acropolis appears as an isolated rock. The sketch is composed as a collage of separate and flat planes overlaid, giving the impression of a collection of four isolated objects with indistinct space between and

unclear relationship between parts. Whilst the fore-ground objects (apparently fragments of trees and city) do no more than place the acropolis in the middle distance, the other elements show the minimum parts which Le Corbusier considered essential to the nature of the view. These included the nearby coast-line, horizon and mountainous skyline framing the sea and sky in the distance. Whilst there is some emphasis on the temple of the Parthenon itself (the darkest tones in the sketch and centrally located in the composition), the building effectively merges with the walls and cliffs of the Acropolis silhouetted against the sea to the South beyond.

Figure 3. Composition analysis p 98. SH

This provides several conclusions about Le Corbusier's initial impressions:

The Acropolis was to be seen in relation to the distant mountains and bright sea and horizon even though the distances between them remain unclear.

The silhouette of the Parthenon against the sea (distinctly below the level of the horizon) gives almost as much importance to the distant mountains as to the temple.

Figure 4. Le Corbusier, Carnet 3, p 103. Voyage to the Orient

The Acropolis and Parthenon are seen as a single whole, totally distinct from the city that surrounds it which is completely excluded. (In his notes Le Corbusier describes the isolation of the Acropolis as if it were an object from space "comme un bloc d'autre monde").
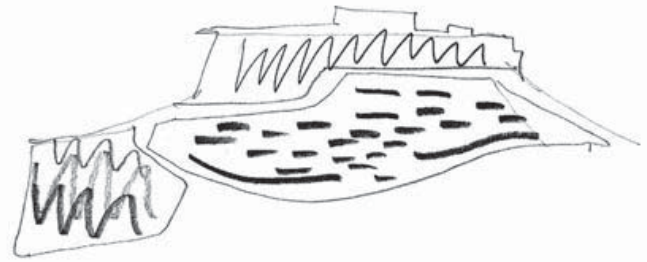

Figure 5. Composition analysis of p103. SH

Sketch B (Carnet 3, Page 103, Voyage to the Orient) shows a similar view, although from a slightly lower vantage point on Mount Licabeto, and has been treated very differently from the first sketch. The Parthenon and Acropolis are fused together as a single element in heavy shade which continues down the page tying the Acropolis into the surrounding hillsides. The Acropolis remains centrally positioned but its scale is increased in regard to the first sketch focusing attention on the mass of rock rather than the distant horizon. In contrast to the first sketch, the mountain skyline becomes relegated to a secondary element in relation to the mass of the Acropolis and Parthenon. The horizon line itself serves to mark the vanishing point and visual centre of the composition.

The temple appears to fuse into the natural geology but, standing higher than the plateau, breaks through the very centre of the horizon line. The massive character of the rock emphasises the continuity of the surrounding ground surface which is irregularly extruded upwards to form the Acropolis and Parthenon. This places the Acropolis in relation to the landscape which immediately surrounds it, expressing the nature of the topography and the distance to the shoreline. Different kinds of hatching begin to suggest different textures of the foreground.

Sketch C (Carnet 3, Page 104, Voyage to the Orient) shows a further development of the surrounding context described in sketch B.

The Acropolis and Parthenon are still drawn as a single mass and tied into the surrounding topogra-

phy as in the second sketch. The distant mountains of the first and second sketches have here disappeared completely, and the role of the horizon is to delimit the extent of the sea which makes sense of the near coastline and island. The sketch emphasises the Acropolis as a geographical accident echoed by the hill by the Piraeus and the island to the right.

The third sketch adds the city. The Acropolis is seen in direct relation not only to the immediate landscape but also to the townscape in the foreground. This takes up the majority of the sketch, and although treated rather abstractly, the heavy shading appears to leave a continuous white building facade with windows. The way in which this is drawn in negative emphasises the direct counterpoint with the dark silhouette of the Acropolis. Even the "castellated" lower edge of the buildings mirrors the skyline of Acropolis and Parthenon. The reduced scale and off-centre position of the Acropolis suggests that it is no longer the principle emphasis of the sketch in isolation, superimposed against the distant mountains of the first sketch. Neither does the solid mass of the Acropolis dominate the surrounding landscape or occupy the majority of the image. Here the emphasis appears to be on the direct relationship between the Acropolis and its contrast with the surrounding city - the foreground cityscape even takes equal visual emphasis in comparison to the Acropolis itself.

Sketch D (Carnet 3, Page 113, Voyage to the Orient), drawn towards the end of Le Corbusier's stay in Athens shows the Acropolis from a different viewpoint. The composition is fairly symmetrical, and tonally is similar to the inverse of the second sketch. The viewpoint gives a classic frontal South western elevation of the Acropolis, as typically depicted in postcards. Interestingly, although this entrance route might have been one of the first view points to draw (especially given his interest in the *promenade architecturale*), Le Corbusier left it until one of his final visits to the Acropolis. As such its character appears different to the earlier three "working" sketches used to investigate different ways of conceiving the Acropolis in relation to a variety of other elements. Instead this sketch appears more as an illustration of a now formulated concept of the Acropolis, Parthenon and landscape.

As in the second and third sketches, the Acropolis is shown connected to the surrounding landscape.

Although this time it is left blank rather than shaded, the foreground plane is shown as a continuous surface which folds up the face of the hillside and merges with the clifftop walls and entrance bastions of the Propylaea.

Definite horizontal lines are only used to divide the walls and cliffs from the buildings in the case of the Parthenon, where a double line is used. Together with the shadows and lack of horizontal entablatures, the other built elements –the walls, Propylaea, Temple of Athena Nike etc.– appear to merge organically into the top of the rocky outcrop. The Parthenon however is clearly delineated, independent from the walls below, and heavily silhouetted by the extra-dark sky behind. The effect produced is of the Parthenon as an isolated perfect temple sitting on top of a plinth of part natural-part built ground.

Shadow is used to highlight the mass of the Acropolis rock and emphasise the roof of the Parthenon, although the depth of the facade (which is in fact seen obliquely) is not made clear. This emphasises the frontality and order of the composition which is balanced yet asymmetrical. The main volume of the Acropolis dominates the majority of the page centrally placed. The buildings however are divided by a central axis between the Parthenon and temple of Athena Nike – those to the left merging with the cliff top, and the Parthenon to the right standing clear above the rest of the Acropolis.

In Summary, the fourth sketch has used certain ideas from the earlier sketches whilst eliminating others which took precedence to start with as his understanding of the complex grew. The central composition and prominence of the facade is similar to that shown in the second sketch. However the careful balance of the asymmetrical composition of buildings along and on top of the cliff top is more reminiscent of the organisation of the third sketch. The fusion of walls, entrance and cliff appear in the first sketch and are then developed further in the second and third. Whilst the continuity of the ground plane into the foreground and surrounding landscape appeared only in abstract form in the second and developed more explicitly in the third. The distinct separation of Parthenon from the walls and cliffs of the Acropolis however is new, with no precedent in the three previous sketches. This idea may have developed partly through sketches and water-

colours made in and around the Parthenon drawn during the visits between the third and fourth sketches.

Conclusions

Travel sketches drawn with using an approach similar to this example are an act of design in their own right. They are not merely graphic representations which share some superficial characteristics in common with design sketches. They are a process which allows the architect to design a way of seeing place – for making it visible, and understanding it. The sketches themselves are actual records of the developing design process taking place.

These travel sketches use the design process to propose and review ways of seeing. These were subsequently reviewed and reconfigured through treating the travel sketches as design sketches, and using the processes of design sketching to investigate, learn and form opinions about the fundamental relationships between architecture, landscape and place. Each sketch served as an experiment which he critically evaluated, modifying and adapting his ideas in subsequent sketches, until his opinions reached a point of maturity in the final sketch.

Travel sketching is an exceptional method for discovering and *understanding* the underlying structure of place. The process of sketching helped Le Corbusier to deepen his observation and analysis of place and developing into a fundamental conception of architecture and landscape. Le Corbusier repeatedly drew the Acropolis as if he were literally designing an architectural project. By doing so he harnessed the analytical potential of the design process to investigate and comprehend architecture and place. This formed the basis of some of his most significant opinions regarding architecture and landscape employed in his later designs.

Travel sketching can fill a gap between design and place left by modern technologies, and develop the basis of an entire approach to the design of architecture and place. In the current context of architectural design this is becoming increasingly important as it is a method for both design and research which is capable of unifying architecture and place, and one form of free-hand sketching which is particularly compatible with modern technology.

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