

The Traveling Architect. Notes on Field Observations in Architecture

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Abstract

The long time connection between architecture and travel, particularly cultivated since the 17th century Grand Tour and democratized during the late 19th century to mass tourism, is undergoing at present day a new turn in development, as globalization reached new peaks in information technology and world-wide mobility. Unimagined opportunities for traveling and architectural learning are in hand, while at the same time overstimulation and distractions acts as an impediment to the very same pursuit. The key to overcoming the paradoxical effects of globalization and to gaining access to the wealth of information lays in the training of the powers of focus and a relearning of the art of observation. Observation skills are fundamental faculties for spatial understanding, widely used across activities within the architectural domain, and a major medium of cultural transmission. Central to the way architects acquire a 'feel of the space', the technique of observational learning is emphasized as a most important tool for unmediated experience with the place. Manifold features of observational learning's stages, settings, types, methodologies, and specific tools for in-situ architectural record, come to show in more detail the application of this cognitive faculty in architectural travels and fieldwork. With the explosion of information and mobility, travel - coupled with an active engagement with the environment - offers the potential to tap into the global 'field' of observation for architects and the infinite learning opportunities this opens. A great benefit from this could beget universities, given that they reassess the prevalent riff of theoretical knowledge from in-situ experience, help revive the connection between architecture and travel and reconsider a more empirically oriented agenda.

Rezumat

Legătura îndelungată între arhitectură și călătorii, cultivată în mod particular din vremea Grand Tour-ului din secolul al 17lea și democratizată în turismul de masă început pe la finele secolului al 19lea, parcurge în prezent o nouă turnură, bazată pe noile culmi atinse de tehnologia informației și mobilitate mondială pe fondul globalizării. Oportunități neimaginabile de a călători și de a învăța arhitectura stau la îndemână, și în același timp, suprastimulare și distracții acționează ca un impediment pentru însăși aceeași preocupare. Cheia depășirii efectele paradoxale ale globalizării și accesul la bogăția de informații constă în antrenarea puterilor de focalizare și în reînvățarea artei observației. Abilitățile de observare sunt facultăți fundamentale pentru înțelegerea spațială, larg utilizate în cadrul diferitelor activități din domeniul arhitecturii, și un mediu major al transmisiei culturale. Centrală pentru modul în care arhitecții dobândesc un 'simț al spațiului', tehnica învățării observaționale este subliniată ca fiind o importantă unealtă pentru experiența

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nemediată cu spațiul. Aspecte multiple ale învățării observaționale - etape, cadru, tipuri, metologii, unelte specifice pentru înregistrări arhitecturale in-situ – arată mai detaliat aplicația acestei facultăți cognitive în călătoriile arhitecturale și în munca de teren. O dată cu explozia de informații și mobilitate, călătoritul - coroborat cu o angrenare activă cu mediul înconjurător – deschide potențialul de a accesa ' câmpul ' global de observație pentru arhitecți, către oportunitățile infinite de învățare pe care acesta le deschide. Un beneficiu important stă la dispoziția universităților, dat că acestea vor reevalua ruptura prevalentă între cunoașterea teoretică și experiența in-situ, vor sprijini reactivarea legăturii dintre arhitectură și călătorit și vor reconsidera o agendă cu o mai pronunțat empirică.

Keywords: observational learning in architecture, architectural travel, fieldwork, sensory knowledge, empiricism.

1. Introduction

Architecture and travel have long been connected. This practice was most notably cultivated by the Grand Tour, the traditional trip of Europe that flourished from about 1660 until the advent of large-scale rail transport in the 1840s. The primary value of the Grand Tour lay in the exposure both to the cultural legacy of classical antiquity and the Renaissance, and also to the aristocratic and fashionably polite society of the European continent. In addition, it provided the only opportunity to view specific works of art, and possibly the only chance to hear certain music. The standard itinerary of the Grand Tour varied, but it began in England, taking the course of Paris, Geneva, Lausanne, Turin, Florence, Pisa, Padua, Bologna, Venice, and Rome, typically ending in Naples, or sometimes continued to Sicily, Malta or even Greece. The way back traversed the Alps, heading north through German speaking parts of Europe, visiting Innsbruck, Vienna, Dresden, Berlin and Potsdam, perhaps Munich or Heidelberg. From here some visited Holland and Flanders before returning across the Channel to England.[1] In essence the Grand Tour was neither a scholar's pilgrimage nor a religious one. Its idea was of traveling for the sake of curiosity and learning, an idea developed under the umbrella of 17th century empiricism. Empiricist thinkers, such as John Locke (in his *Essay Concerning Human Understanding*, 1690) argued and widely popularized the idea that knowledge comes entirely from the external senses, that what one knows comes from the physical stimuli to which one has been exposed. Thus, one could "use up" the environment, taking from it all it offers, requiring a change of place. Travel, therefore, was necessary for one to develop the mind and expand knowledge of the world. Thus, the Grand Tour provided a liberal education and the typical 18th century sentiment was that of the studious observer traveling through foreign lands reporting his findings on human nature for those unfortunate enough to have stayed home. The Grand Tour served as an educational rite of passage and, at its time, the custom was undertaken by upper-class European young men of means. After the decline of the Grand Tour, the link between travel and architecture continued to prevail, taking on a democratized and industrialized course.

Over the past centuries, travel mobility has improved enormously. Some centuries ago, the Grand Tour was a difficult enterprise, traveling by coach and enduring the hardships of crossing the Alps. Today, architects have unimagined possibilities of comfortable and fast travel to visit foreign places, cities and to expand their knowledge of world architecture. However, the circumstances are completely different. Today's world offers so many more distractions, that it becomes hard to keep focus on any endeavor one might take. Overstimulation and difficulty shutting down the distractions of the world is a major impediment produced by the globalization technology, of information and of mobility. On the other hand, the same globalization opens up unimagined

possibilities that are absolutely astounding, compared to the means of available some centuries, or even some decades ago. The facile travel opportunities, the available knowledge and technology, the potential for learning, for connecting ideas, places and people have never been this much in our reach. Unlimited opportunities and overstimulation are thus two aspects of today's world that impact very much the endeavor of traveling for architecture. In our assessment, the key to handling this two-sided impact of globalization lays in the power to overcome distracting elements and in training the power of focus. This way, an architect may gain access to and exploit the wealth of information, as well as benefit from the possibilities of professional development offered by architectural travel mobility.

Understanding 'distraction' and 'focus' requires the exploration of the human faculty of observation, which is the basic activity one does during an architectural visit. Places are observed, watched, photographed, and sketched. Spatial notions such as dimension, scale and proportion, render themselves as experiential knowledge; meaning, their knowledge cannot be acquired in laboratory settings, but rather by direct sensory exposure to them. Thus, stepping outside (i.e. leaving the university library and studio) becomes a compulsory exercise for developing the practical sense of space, or a 'feel for the space'. Bringing back the importance of in-situ experience is to be understood as the reintegration of the observational learning style to architectural learning.

With regard to this, our endeavour takes an explicit place under the umbrella of empiricism. Stating that knowledge comes primarily from sensory experience, the theory of empiricism emphasises the role of direct experience and evidence in the formation of ideas, over notions such 'a priori reasoning', 'innate ideas', or 'traditions' favoured as fundamental by several other epistemological views (i.e. rationalism, historicism, idealism, constructivism). In this, empiricism holds that no knowledge to be properly inferred or deduced unless it is derived from one's sense-based experience. For a better understanding, this view is commonly contrasted with rationalism, which states that knowledge may be derived from reason independently of the senses. [2] Empiricism constitutes a major part of the scientific method, as all hypotheses and theories must be tested against 'observations' of the natural world, rather than resting solely on *a priori* reasoning, intuition, or revelation. With regard to this, the article explores methods that are closely linked to the direct gaining of knowledge in architecture, by direct observations in the field.

A retake on the connection of travel to architectural learning and practicing is pursued in this article. The value of in-situ interactions with the build environment has its applications for all scopes and precision levels in architectural inquiry, ranging from informal curiosity to academic research. Because of its associations with the leisure industry, travel is too easily dismissed as a scholarly method. Still, the lessons of the Grand Tour very much preserved their actuality. In visiting other places lies inestimable value for an architect's formation and the aim of our research is at strengthening the awareness for the role of travels in acquiring architectural knowledge.

2. Architectural travels and the training of the power of observation

Contrary to the common imagining that travel is a pleasurable activity, the discomforts of transport and of sleeping and eating away from home amenities make travel a more tedious endeavor. As suggested in the origin of the word – medieval engl. *travailen*, *travalen* – the notion means 'to torment', 'to labor'; the later French *travail* means 'to work strenuously', 'to toil'[3] According to Simon Winchester in his book *The Best Travelers' Tales* (2004), the word *travel* has an even more ancient root: lat. *tripalium*, a Roman instrument of torture by burning on three stakes, a link that to the extreme difficulty of travel in ancient times. Today, travel may or may not be much easier depending upon the destination, on the transportation mode and whether or not extremeness of

travel is aimed at in some types of adventure travel.

Presuming that travel for architectural purposes favors more comfortable types of travel, the most challenging aspect of travel organizing lies in managing the activities for which travel takes place. Purposes, motivations and styles of architectural travels vary greatly, but to some degree, they all include discovery, exploration, getting to know other places and cultures, as well as coming in contact with other people. This is a mix of work and recreation, and for both parts its main cognitive functioning uses observation. During a visit, one is watching buildings, places, cities, and learns from them. Having made a plain description of an architectural visit, the mission of a visit is put in conflict with the aforementioned state of information explosion developed by globalization. Overwhelming, distractive stimuli, i.e. coming from social media, smart phones, billboards, entertainment industry and so on, affect the course of a visit to the degree they detain one's attention from the mission of the visit, interfering with one's connection to the environment. Resulting in the diminished effectiveness of the visit, it is possible that passivity reaches such high levels when marching through a place, that the visit becomes pointless and devoid of acquiring any of the lessons of architectural travel. Distractions interfere with one's active involvement with the visited place. Observation too should not be regarded as passive state. Observation is a trained faculty of perceiving and meaning-making. It implies the active exercising and control over one's focus and the ability to make sense of what one is watching. Developing the power of observation is fundamental for the understanding and learning architecture. It is a closely studied scientific and philosophical method. We will further explore some of the relevant aspects of observational learning in architecture, in an attempt to aid the relearning of the art of observation.

2.1 Observational learning in architecture

Observation is a basic faculty in the domain of architecture. So much are observations being used in architecture, that its implementation often comes to be overlooked. Observation in architecture occurs almost anywhere and everywhere, as it is a faculty that is very much ingrained in the profession of architecture. The active acquisition of information in architecture is made by means of observation. Observations can be made directly using the five traditional senses of sight, hearing, taste, smell, touch. They also employ the use of instruments for the recording of data (digital camera). Observations in architecture are used for any data collected during professional or scientific activity; they can be qualitative (for identification of presence or absence of properties) or quantitative (when numerical values are attached to the observed phenomenon by counting, measuring, surveying).

Observational learning is a dominant learning style of this subject. Observational learning is learning that occurs through observing outside behaviors and things, and is a particular subject of study in psychology.[4] Whereas in social circumstances it occurs in the presence of a social model, such as a parent or a teacher, in architecture it requires the presence of a model: a building, a square, a city. Most of the architectural designs one observes, remembers and imitates are taken over from a displayed model. Both desirable and undesirable architectural skills are learned through observational learning. Observational learning in architecture points out that one's environment and cognition are integrated and ultimately determine how one produces architecture. A wider implication of this process is that models can widely spread across culture through a process called in psychology 'diffusion chain'.[5] This occurs as observed architecture becomes a model for other designs, that in turn become models themselves, and so on. Observational learning has profound implications for cultural transmission.

In higher education of architecture, the educational agenda of each particular university plays an important role on how well observational learning is being implemented. For its implementation, both teaching staff and students should become aware of observation as a learned skill. Observational learning occurs in four stages, as defined by Albert Bandura's social cognitive learning theory.[6] Translated to the architectural domain, the four stages are:

Attention: One cannot learn unless they pay attention to what's happening around them. Attention to one's architectural environment or to a building is influenced by their characteristics as well as by personal liking, resonance or identification with the observed place, as well as one's expectations or level of emotional arousal.

Retention/Memory: One must not only recognize the observed space but also remember it at some later time. This process depends on the one's ability to code or structure the information in an easily remembered form or to mentally or physically rehearse the model.

Initiation/Production: One must be capable of producing or reproducing architectural ideas based on previously observed models. This is not a phase of pure imitation, but a complex processing and re-creation.

Motivation: this stage recognizes the importance of motivational processes to learning. Unless motivated, a person does not create learned models. Motivation can come from external reinforcement (promise of reward, pep talks, motivational speeches, positive reinforcements) or from vicarious reinforcement (based on the observation that high-status models are rewarded)

Observational learning of architecture leads to a change one's understanding and practicing architecture along three dimensions. First, it makes one think about architecture in different ways. Observations can teach completely new ways of making architecture; it can improve already gained skills and insights, or it can help unlearn unadvised practices. Second, progress is being demonstrated to result directly from experience and effort, as opposed to being in-born talent. Third, the changes and individual has made through observational learning are permanent for most part.

Observational learning is presumed to have occurred when one uses an observed model and produces a result that cannot be explained by an alternative mechanism. One form of observational learning is emulation, which focuses on the models principles and only fleetingly on the fidelity of the conspecific copy. Emulation is different from imitative learning. The latter is rather a duplication or mimicry of the model, while the former implies internalization and the molding of abilities, skills, insight etc.

A kindred notion to observational learning from architectural models is the notion of apprenticeship. Apprenticeship – gaining skills through working with a master - involves both observational learning and modeling. Apprentices observe and evaluate the work of their master and fellow apprentices. Very famous example include renaissance inventor/painter Leonardo da Vinci and Michelangelo, before succeeding in their profession they were apprentices.[7] There are many variants for the application of observational learning in architecture and one of the important distinctions is made by the setting of observation.

2.2 The setting of observation: analog and naturalistic observation

Analog and in naturalistic observation describes types of observation according to the settings in which it is performed.[8] Analog observation is performed in an artificial setting and/or by indirect means. In architecture such a setting would be watching an architecture album or a documentary about architecture. Observation would occur in an artificial setting, such as a library or a research laboratory. While this way of learning is advantageous for it allows for condensed acquisition of knowledge, it also has some deficits. One important drawback, for example, comes from the processing bias most architecture magazines suffer from. Computerized instruments help the presentation, but also promote to a certain degree the alteration of the original content, by digital enhancement of images or the use of selective presentation. Additionally, analog tools of presentation have a very limited means of representing multi-sensorial objects such as architecture. For the latter limitation, naturalistic observation is more adequate.

Naturalistic observation is a research tool in which a subject is observed in its natural habitat. In some fields of science specific emphasis is put on the fact that the habitat is not to be manipulation by the observer, so careful attention is being given to the use of unobtrusive methods in order to avoid interfering with the target of observation. Naturalistic observation offer the inspection of real typical scenarios, as opposed to those exhibited in an artificial environment, such as a lab. In architecture, a naturalistic observation is done during a site visit, during travels or fieldwork.

2.3 Some different types of observation

As there are many facets of observation in architecture, we find it important to explore some of its most prevalent types of applications: the scientific observation, the philosophical observation and the anthropological observation.

2.3.1. Scientific observation

In the scientific method, observation is rigorously applied to help formulate and test hypotheses;[9] Observation is heavily employed in the 2nd and 5th steps of the scientific method that goes through the following steps: (1) asking a question about a natural phenomenon; (2) making observations of the phenomenon; (3) hypothesizing an explanation for the phenomenon; (4) predicting a logical consequence of the hypothesis; (5) testing the hypothesis by an experiment, an observational study, or a field study; (6) creating a conclusion with data gathered in the experiment, or forming a revised/new hypothesis and repeating the process.[10] Scientific observation is concerned with standardization of units for objective measurements and with increasing the observation power of instruments (such as weighing scales, clocks, thermometers, cameras, tape recorders, and so on). Scientific observation standards provide an observation schema which defines a core set of properties for an observation: feature of interest; observed property; result; procedure – the instrument, algorithm or process used; phenomenon time – the real-world time associated with the result; result time – the time when the result was generated; valid time – the period during which the result may be used. The use of scientific observation is limited for the application on subjective impressions because it raises problems about the recording and the comparability of data, as senses are limited and are subject to errors in perception.

2.3.2. Philosophical observation

Observation in philosophical terms is not at all concerned with standard data collection, but refers to the process of filtering sensory information through the thought process. Input received via the senses, is analyzed through either rational or irrational thought. Impressions stored over time in the consciousness about many related observations, permit the philosophical observer to build a construct about the implications of behaviors or concepts. Philosophical observation excludes value

judgments based on personal preferences. Philosophical observation of the external world makes use of a contrasting, inward-oriented observation: the *introspection*, a faculty closely related to human self-reflection. Introspection is the examination of one's own conscious thoughts and feelings[11] providing a privileged access to one's own mental states, not mediated by other sources of knowledge, so that individual experience of the mind is unique. Introspection is thought of as a source of knowledge and in this it is often compared with perception, reason, memory, and testimony.[12]

2.3.3. Anthropological observation

In anthropology, field research aims to produce a kind of writing called ethnography, which is a grounded, inductive method that heavily relies on participant-observation. Participant observation is a structured type of research strategy, widely used in many disciplines, but most notably in cultural anthropology. Its aim is to gain a close and intimate familiarity with a given group of individuals and their practices through an intensive involvement with people in their natural environment, usually over an extended period of time. The method originated in field work of social anthropologists, especially the students of Franz Boas in the United States, and in the urban research of the Chicago School of sociology. Anthropological observation has many resemblances to observation that occurs during architectural travels. Observational studies of this type in architecture and urban planning are not necessarily sources for exacting statements, [13] but they are of great use for providing empirical information about "real world" architecture and practice. Also they provide part of the community-level data needed to design more informative pragmatic trials, and not least, they inform architectural practice.

2.4 Biases in architectural observation

The problems encountered throughout architectural observation stem from biases affecting the observation process, resulting in distorted outcomes. The human senses do not function like a video camcorder, impartially recording all observations. Human perception occurs by a complex, unconscious process of abstraction, in which the perceived data is fitted into a psychological schema (an internal model or representation of the world). Certain data are noticed and remembered, and the rest forgotten.

Of a longer list of psychological biases, one that alters architectural observations in important ways is the confirmation bias. Human observations are biased toward confirming the observer's conscious and unconscious expectations and view of the world; people see what they expect to see. Since the object of observation is the discovery of new phenomena, this bias can cause new discoveries to be overlooked. Confirmation bias can also result in erroneous support for widely held cultural myths. This bias includes conscious or unconscious influences on the result of the observation. The ultimate source of bias lies in a lack of objectivity. It is important to take measures against observation bias especially when precision and truth of observation is very important. In some of the sciences, biases in observational studies can be compensated by randomizing the experiments (double blind trial, randomized controlled trial), by abandoning preconceived notions and innate ideas about the observed thing.

3. Observations in the Field. Conducting field research

Stepping out of the university, studio, and library and getting outside means going out to the field. Observational research is done in 'fields', a concept devised by Robert Burgess as the "circumscribed area of study which have been the subject of social research".[14] Field research or

fieldwork is method used across disciplines for the collection of information outside of a laboratory, library or workplace setting. 'Fields' could be education, the market place, industrial settings, or Amazonian rain forests. Field research has been extensively applied in cultural studies, especially cultural anthropology for the study of primitive cultures, observing aboriginal peoples in their natural environments, learning their language, folklore and social structures. Field research is also used in sociology, biology, statistics, marketing, and so on. For the domain of architecture, global mobility has expanded the concept of the "architectural field" to the whole globe.

Field research is generally considered to be qualitative research, and as such it is most commonly focused around either a thematic analysis or a narrative analysis. Its results depend heavily on the field observer, his level of involvement, and ability to see and visualize things that other individuals visiting the area of study may fail to notice. The more open observers are to new ideas, concepts, and things which they may not have seen in their own culture, the better will be the absorption of those ideas. Better grasping of such material means better understanding of the forces of culture operating in the area and the ways they modify the lives of the people under study.

The approaches to field observation in architecture commonly involve the use of direct observation and some form of making an architectural record of the place, which is essential to the process. Photographs, sketches and field notes are a key part of the architectural record. The process of field photography, sketching and noting begin as the researcher participates in local scenes and experiences in order to make observations that will later be analyzed. The observer tries first to take mental notes of certain details in order that they are processed later, then photograph and take notes. Making localized site surveys lies at the heart of architectural travel field work. Area surveys encompass a broad range of activities, such as more localized site surveys, photographic surveys, drawn surveys, geophysical surveys. Depending on the case, these can be done more or less exact. In anthropological observations, field notebooks are extensively used, and distinction can be made between 4 types of notes: jot notes (Key words or phrases are written down while in the field.), the field notes proper (A description of the physical context and the people involved, including their behavior and nonverbal communication.), methodological notes (New ideas that the researcher has on how to carry out the research project.), and journals and diaries (recording the observer's personal reactions, frustrations, and assessments of life and work in the field).[15]

Fieldwork is accompanied by exercises such as field walking. The term comes from archeological field work. Conventionally, field walking in grids or along lines called 'transects' has formed the backbone of archaeological survey fieldwork, in search for archeological artifacts.[16] Sometimes, architectural fieldwork may slip out of the mere contemplative watching-walking mode, into an action oriented stage, involving excavation and building. Another method used in architectural field observation is interviewing locals or users of architecture and this can be done in different formats, ranging from more formal to more informal discussions.

4. Final considerations

Travel may be the single most important and effective way of learning about our environment from different places and cultures. In this, our aim is to raise awareness about the untapped potential of travel for in-situ observations in architecture. However, a shift in perspective is required regarding place observation, in that it cannot be viewed as a passive, inconsequential activity, but rather as an engaged focus that demands the active training of one's powers of observation, as well as the combating of the tendency for disengagement due to distractions. Coupled with an architecture-related agenda, rebuilding the strong link between travel and architecture opens the way for connecting ideas, places and people in a direct learning experience of the environment. Today,

global travel makes visiting distant places more available than ever before, while simultaneously distancing the observer from the real, build environment by means of technology (internet, digital camera, books) and all kinds of distractions during the visits. This matter of fact makes it even more so important to learn to operate with the paradoxical impact of the digital age and the new global mobility, and not succumb to the problems of globalisation and be tempted to regress to a previous state of civilisation. As such, two conclusions are to be made: (1) on the necessity to travel; i.e. getting outside of one's familiar environment and exploring the world; (2) on the necessity to relearn the art of observation; i.e. rediscovering how to learn, how to see, and how to understand architectural space. Both conclusions claim their association to empiricism, asserting to a new wave of empirical thought in architectural schools. It is a pursuit that echoes the "theory of practice" of Pierre Bourdieu, the French sociologist who popularized fieldwork in sociology in his quest to connect theoretical ideas of sociology with empirical research grounded in everyday life. Architecture universities may benefit greatly from bringing back into their agendas the exercise of the practical sense of space, focusing more on the development of the 'feel of the space' than on desolate knowledge riffed off from pragmatic experience. With today's mobility, the architect's observation ground expands to the whole globe, opening up astounding opportunities for learning, research and practice of architecture.

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