# Architecture without Architects\*

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# **ABSTRACT**

The title of this paper pays tribute to Bernard Rudofsky's Museum of Modern Art exhibition dated November 1964 to February 1965. In assuming the same title, this paper will attempt to navigate within and outside this genre as a point of inspiration and a point of departure. Architecture without Architects compels us to revisit and re-acknowledge earlier ideas behind creating participatory and humanistic spaces. Followed by contemporary observations on architectural theories found in the fibre-arts along with a short discussion on 'Planned Obsolescence'. The final portion of this paper will introduce 'Experimental Combining' as a process and Nomadic Space - concepts and prototypes as a practice.

# Key words

Architecture, Fibre-Arts, Planned Obsolescence, Experimental Combining, Nomadic Space

# INTRODUCTION

### Non-Pedigreed Architecture

Rudofsky masterfully calls to our attention the art of architecture by way of the non-pedigreed. In the past, the early stages of architecture tended to be systematically dismissed. The historian was clearly more propelled to discover, debate and place importance on the building modalities of the privileged. Even today we seem to pay homage to the relic and ruins of the nobleminded. Without delving too long into historical and evolutionary theories of shelter, two points will be briefly highlighted – one from the animal world and another from the natural world. Firstly, Darwin, for instance, offers his observations on anthropomorphous apes building raised platforms for sleeping and protection. Secondly, one should also note and place a mark of respect to nature's ability to create elegant structures formed by wind and water - 'caves, having been among man's earliest shelters.'

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<sup>2</sup> Ibid., page 2

It is at this point; it will be necessary to link the argument that non-pedigreed architecture has the validity to be revisited today. For example, Pietro Belluschi defined communal architecture as "a communal art, not produced by a few intellectuals or specialists but by the spontaneous and continuing activity of a whole people with a common heritage, acting under a community experience." In some communities today, the desires and/or movements towards sustainability and participatory intentions clearly share the non-pedigreed modality. Community and heritage can promote and motivate human-centred change. However, gaps do still exist during the process of creating a sense of place — the physical and the psychological.

"There is much to learn from architecture before it became an expert's art"5 Rudofsky observations are seemingly noteworthy today. We live and build with the mentality to make our mark, to claim our space, wholeheartedly with the desire to pronounce our existence and to ensure economic return. The non-pedigreed individual may have not consciously intended to respect its landscape yet managed to work within the given conditions - the natural landscape and the availability of natural resources. The expert society has been noted to continuously level the landscape, extend the land over existing shorelines and bury streams and rivers. It may be argued that this was in the same desire as the Romans creating roads - all for the sake of progress. Yet, today one can not denied the need for entwining sustainability with technological innovation and humaneness with safety. The questions now propel us towards the how and the achievable. We may need to begin by looking at the ironies of the anonymous builders; as for they leave us the keys in the humaneness of building.

## Historical Views on the Fibre-Arts and Architecture

The first architects wore their walls.6

Social change can be historically linked to society's adaptation of transforming elementary materials, processes and devices. Here, I shall introduce and focus on the fibre-arts as area in which, community and participatory processes merged with building and material processes found in architecture. As societies and shelters evolved from utilising existing built environments (i.e. caves) and materials - from covering oneself or spaces (i.e. animals skins) followed by an interesting

<sup>1</sup> Rudofsky, Bernard [4], preface, page 1

<sup>&</sup>lt;sup>3</sup> Ibid., page 3

<sup>&</sup>lt;sup>4</sup> Ibid., pages 3-4

<sup>&</sup>lt;sup>5</sup> Ibid., page 4

<sup>&</sup>lt;sup>6</sup> McEwen, Indra Kagis, [1], page 113

innovative moment when the act of connecting and binding materials occurred. As a point of discussion, McEwen and Semper will offer interesting historical analyses in these fields. McEwen speaks about how the community and the loom contributes to the place-making process, while Semper notes 'the knot is perhaps the oldest technical symbol and, ... the expression of the first cosmogonic ideas that arose among the nations.'<sup>7</sup>

In McEwen's book entitled Socrates' Ancestor - An Essay on Architectural Beginnings, she draws our attention to Book II of Vitruvius' De Architectura. " People, says Vitruvius, were first drawn together by fire, then by shared speech. It is difficult not to see in this account a reflection of how, in fact, Greek political communities first took shape around a sacred fire which burned in a public hearth set up in the agora; the place where people assembled to agoreuein - to speak to one another. ... In Vitruvius' anthropology, community is consolidated when people begin to build: "And first, with upright forked props and twigs put between, they wove their walls." Vitruvius' first structure is that of an upright Greek Loom.8 McEwen further suggests the validity and importance placed on the upright loom alongside the hearth. She moves metaphorically and etymologically through by stating "the people wove their cities to make them visible. The goddess of weaving was the goddess of the city."9 She argues that the hearth and the loom were equal when setting up and creating the foundations of a dwelling place. "The vertical, warp-weighted loom is about the simplest example imaginable of post and beam or trabeated structure."10

In his book entitled, The Four Elements of Architecture and Other Writings, 'Semper wanted, analogously, to break the organisation of the history of art, with its insistence on the priority of one people over another, ... Semper's scheme was to concentrate on the unity of making, whether courtly or popular, and the growth of the arts and crafts from certain root processes, which were part of the universal human experience: settlement and partition. 11 The settlement and partition differs from the above McEwen analysis, Semper states the two primary archetypes are the hearth and the cloth. To Semper, the two initial acts were needed, one, to claim the space followed by the enclosing fabrication process. In either case, both McEwen and Semper seem to agree and place importance on the fibre-arts (be it the actual device or finished object). Since the nineteenthcentury the arts and crafts have been divided, social anthropologists seem to more aptly note this act as conscious decision to split work from the tool-maker and the image-maker. Today, we seem to underestimate the importance of the craft of universal creating during place-making stage.

## Planned Obsolescence 12

It is my to hope to briefly link a few interesting phenomena found in both *expert* and *non-pedigreed* architecture. On a surface level non-pedigreed architecture gave us socially minded and participatory community members. While in a pursuit for progress the architectural and engineering societies masterfully solved and created abundant technological innovations. The built environment expanded laterally and vertically throughout the world. While *non-pedigreed* architecture does suffer from varying degrees of permanency and structural security. It is this lack of permanency or nomadic conditions that proves to be interesting in contemporary architectural discourse. The following are attempts linking the past with the present:

A. Disposalability in the guise of transportability has become an interesting phenomenon in the world of architecture. The noted specialists are socially driven by way of natural or human-motivated calamities. Transportable architecture<sup>13</sup> shares similar alliance to moveable architecture found in India, Vietnam or Kenya.

B. Another observation should be noted that the disposalability phenomena have carried itself into the guise of contemporary architecture. Contemporary architecture has become the nomadic. That is nomadic in its physicality - the permanent streetscapes are changing at a phenomenal rate today. With the advent of new building materials, building practices and economic pursuits buildings are being constructed and destructed within a short time frame at rapid pace. Within our histories a city may be erased and morph into another.

C. This final statement attempts to link the virtual architecture with the *non-pedigreed*. The digital /virtual architects magically share alliance with the early dwellers who sculpt and form their spaces. It is the malleable nature of the material be it mud or three-dimensional surface of the screen.

Each of the above statements seem to share the same modality of 'planned obsolescence.' Contemporary architects, planners, developers and users have actively contributed to the temporal modality. The built environment, noble or not is no longer seen as a permanent mark made on the surface of the land. The life expectancy of buildings has rapidly shortened within the 20<sup>th</sup> and 21<sup>st</sup> century. In some ways, the liveability and usability of the nomadic builder's hut will soon equal the life span of today's domestic house.

#### Experimental Combining<sup>14</sup>

Experimental combining is a creating modality - a process different from typical pedagogical design and artistic practices. Experimental combining merges human-centred logic and intuition by way of observational analysis and historical

<sup>&</sup>lt;sup>7</sup> Rykwert, Bernard [5], page 124

<sup>&</sup>lt;sup>8</sup> McEwen, [2] page 113

<sup>9</sup> Ibid., page 109

<sup>10</sup> Ibid., page 110

<sup>11</sup> Rykwert, [4], page 129

<sup>&</sup>lt;sup>12</sup> A quote from Industrial Designer Brooks Stevens (1911-1995), instilling the buyer the desire to own something a little newer, a little better, a little sooner than is necessary. However, I am expanding this definition to include the shorten life span of material and virtual goods

<sup>&</sup>lt;sup>13</sup> Include images of transportable architecture

<sup>&</sup>lt;sup>14</sup> My definition

research. Experimental combining liberates itself from the actual and likens to the experiment (speculation with fabrication). Experimental combining looks to ancient practices while utilising innovative materials and processes in hopes of creating human-centred environments.

In a report for Leonardo Journal, the author speaks about Rich Gold's Matrix, a drawing with the following words written Art and Science and Design and Engineering. "The point he was making is that art and science share something in common, as do science and engineering, and that art and design share something else in common, as do science and engineering." Gold furthers notes the working relationships of each of these categories art and science have patrons and peers and design and engineering has clients and users. "One particularly provocative example to name the art/science axis "esoteric" and the design/engineering axis "applied", then name the art/design axis "beauty" and the science/engineering axis "truth". Rich noted that all the disciplines had a technological component in which he stated our job is to create language to speak to each other with respect."15 It could be argued that this Matrix is questioning the expert society's modality or re-combining the arts and crafts split. If technology connects to all the above disciplines, then can we assume that technological innovation tended to occur during the craft (crafting) period? Do today's creators have the opportunity to create and discover alongside an expert who shares a similar alliance to the process? Can the expert move beyond its speciality?

Once again, we may need to refer back to significant historical moments. In a <u>Search for Structure</u>, the less widely known facts of the first discovery of useful materials, machines or processes have almost always been in the decorative arts. "Discovery requires aesthetically motivated curiosity, not logic, for new things can acquire validity only by interaction in an environment that has yet to be." In recent histories, two 'outsider' engineers — Buckminster Fuller and Frei Otto developed a seemingly simple idea further. A historical instance, when an idea becomes a manufactured norm — the assembly of the unit. While, both Kepler and Einstein have judged their theories not just on the data but also on the kind of order they produce. The discovery was equal to the design. In the book entitled <u>The</u>

Artful Universe, the author draws our attention to the fact that "science and art are two things uniquely human. They witness to a desire to see beyond the seen. They display crowning successes of the objective and subjective views of the world. But while they spring from a shared source – the careful observation of things - they evoke different theories about the world: what it means, what its inner connections truly are, and what we should judge as important." Barrow attempts to diverge science and art in a way that things are admired rather than explained. In similar spirit I will present the following experimental work in a manner of diverging and admiring. As I believed, we are still faced with the expert society mentality. Today, cross-disciplinary work tends to be defined by one's undergraduate education, which at times may work in one's favour or not. While any cross-disciplinary work involves the collaboration

with the *expert*. During the collaboration process, the invited *expert* validates the process and on occasion attempts to claim the discovery. In order for social and cultural change to occur the art of collaboration and problem solving must be distinguish by what the problem is not by technological fear or ownership. It is important to move beyond the mistrust and misunderstanding for working and thinking in varying disciplines simultaneously.

I believe it is important to demonstrate that the worlds of the artist and the scientist is not so far apart particularly, with their use of the metaphor during the creative process. Both the artist and scientist share the pedagogic virtues of creative-critical thinking and the search for innovation. Noteworthy, research documents parallel achievements stating artistic breakthroughs are closely related to scientific ones. According to several historians, Marcel Duchamp's hybrid interests, in optics, mathematics and perception and particularly, his "Rotoreliefs" pieces, share similar findings to "the stereo-kinetic effect" noted by Italian scientists in 1924<sup>19</sup>. Material practices, technology and the disciplines should reinforce and nurture mutual understanding and support within the creative process. Contemporary practices should support human creativity, as a collaborative technological and disciplinary effort. Creating can be equally intuitive and logical. One needs only to refer back to the work of Leonardo Da Vinci.

#### **Nomadic Space**

"If architects designed a building like a body, it would have a system of bones and muscles and tendons and a brain that knows how to respond. If a building could change it posture, tighten its muscles and brace itself against the wind, its structural mass could literally be cut in half." - Guy Nordenson

Initial investigations began by questioning the logic of physics-constructed space. The nature of building has been mandated with convention - straight walls and rigid frames - the essential laws of physics. A series of experiments were ensued by questioning conventional ideas about constructed space versus dynamic or nomadic space<sup>20</sup>. The intention was to include psychological experiences, memories and human factors when creating personal space. Nomadic space is an adaptable interior space, one that changes with time, function and users. Specific studies were undertaken regarding the concepts of surface, structure and motion.

By specifically challenging, the traditional concept of surfaces the initial studies lead to an increase in questioning conventional building materials whilst forging towards a new architecture and a new experience. Can surfaces do more, be more? Can they be part of the more holistic humane experience? Can the surface be an interactive tactile experience?

Experimental work has lead to the creation of a series of prototypes. Space Blanket is a malleable fabric-like fragment. This architectural element is often referred to as 'geometric protoplasm': a simple grid system with a slippage mechanism, offering fluid properties. Kinetic fluidness allows for the form to move within a multitude of purposes and contexts. For instance,

<sup>15</sup> Naimark, Michael, [3], page 8

<sup>&</sup>lt;sup>16</sup> Smith, Cyril Stanley [8]

<sup>&</sup>lt;sup>17</sup> My quotations an expert moving beyond conventional training

<sup>&</sup>lt;sup>18</sup> Barrow, John D. [1]

<sup>19</sup> Shearer, Rhonda Roland [7]

<sup>&</sup>lt;sup>20</sup> My definition. Current work is interiorly bounded

Can a wall, be a chair? A shelf? Can shelf, return back to the wall? The morphing of a wall may seem extreme, sci-fi like or even digitally bounded, however one must look at a similar parallel found in simple elegant structures of the Japanese shojiscreen. The screen offers a variety of dynamic interior room transformations; nevertheless, the screen or surface remains static. The project's aim is to create malleable adaptable environments by way of incorporating technology with new material and building processes. This research looks at theoretical ideas and representational concepts in architecture and the fibre-arts. As well as, placing value on insights found in existing and emerging technological practices. Often the questions probe into the transition from what is learned from studies of work and to the social interactions experienced. While delving abstractly into the realm of surfaces and structures one discovers the individual's desire to mould one's own space.

Summations of the work, the **Space Blanket** series are conceptual prototypes of functional architectural fragments. With continued research and fabrication the speculative nature of the work will move towards the actual. The aim is to create sophisticated malleable surfaces that will create a participatory 'surface structural response' in the nomadic interior space.

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