Art, Aesthetics and Innovations in The Built Environment: Beyond Theory into Practice

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Abstract

The way and manner in which construction development occurs within an environment characterize the overall look of the neighbourhood and consequently the locality, city or country. Therefore, Art, Town and City planning, Architecture and Construction are the first determinant factors that drive the innovation of any environment. The first three are the back of the house, while the latter is the front of the house.

This article examines a series of academic writings for how they posit on the training students in the built environment get and how well they are prepared to integrate into the evolving innovation dynamics of the construction industry. In addition, these literature pieces were studied for teaching methods, the mindset inculcation, and the world's reality beyond classrooms.

There is a reality in practice beyond the theory and lectures of varsity rooms. While theory provides one with the required information to build on, practice affords one the real-time experience of managing thoughts into reality.

Keywords: Art and Architecture, Built Environment, Construction, Innovation and Practice.

1. INTRODUCTION

Art is a subject that explores an unseen creation of the mind that could be expressed in graphics, while aesthetics is the expression of the thought of the mind in graphical or imagery beauty. Art is hidden and has to be revealed by the artist. Aesthetics is revealed and evident for all to see. The aesthetic part of arts is what people see and relate with (Cropley and Cropley, 2011). Arts and aesthetics are the inspirations that 'initiates' the thought of development. When the words 'we want to do (create)… or we want to develop…' come into play, it is usually almost directly accompanied by the words'…and we want it to look like this… or how will it look like when you finish it…?' (Harries, 2011). This tells how much of a beauty people are delighted about when people envision developments. (Leder et al., 2004)

Art and Architecture are like siamese twins that birth the aesthetics of an environment. Innovation and construction are the other twins of the same family root- the built environment. Architecture in the built environment is the bridge between the thoughts and beauty of art and the science of innovative construction. Hence, it is conventionally defined as the 'art and science (technique) of designing and building'. Art and Architecture and Construction and Innovation define and help to give an impression of definition to what an environment or community is or would be known for. They impose character that delineates that environment for which it would be known for many years.

While we don't 'see' the concept of Arts and Architecture with physical eyes as it conceived in the mind, except when expressed in graphics, we see construction and innovations in the built environment. Construction and innovations are the physical representation of the 'abstract' thoughts of Arts and Architecture. Therefore, the union of these elements of the built environment becomes imperative to the survival of the sustainability goal of any environment. With the advancement in technology and innovation, the face of construction development has been rapidly redefined in the past two to three decades. The redefinition will continue with the developing trend in technology and the introduction of computer-aided application into the design and construction industry.

This paper will thus focus on the environmental impact of arts, aesthetics and innovation- a reality beyond classroom teaching. It employs the teaching curriculum and suitable mindset building as essential tools to help produce environmentalists that think and look beyond the walls of varsity learnings. This paper thus tries to prepare the student of the built environment in understanding the strong marriage among the built environment players as he gets ready to become a part of the real-world practice in the built environment.

2. LITERATURE REVIEW

The word 'art' originates from the Latin word 'ars' and implies being 'creative' or 'skilful'. Hager, M., Hagemann, D., Danner, D., & Schankin, A. (2012).

Architecture has been defined in many fashions by great architects and scholars as the art and science of building. It employs the power of artistic imagination scientifically and technically in creating buildings and structures. However, it is essentially expressed in

terms of materials, form and colours used in its final form. (Schittich and Institut fur Internationale Architektur-Dokumentation, 2008)

Engineers are more actively concerned with the science of constructing the innovation of architects than the beauty of the project (Gottemoeller and Buchwalter, 1995). But today, even engineers have come to realize that a construction development should be aesthetically appealing if it would be beneficial (Gauvreau, 2007; Rappaport, 2019). People will converge around interesting structures more than a structure that is just functional. (Mattens, 2011; Merwood-Salisbury, 2019)

Arts and architecture seem like 'intellectual' disciplines, while engineering seems like an 'executing' field. (Kaelin, 1990a) Since art has the attribute of on-the-spot assessment and mindset position, its aesthetics must be carefully crafted to ensure the reader does not largely misconstrue the graphics communicated. (McGregor, 2012; Cleridou and Furnham, 2014). Over time, the two subjects have been in the front of examination regarding splendor-impressing and imposing style of representation. (Williams, 2013)

Shapshay et al. (2018) noted that shortcomings in artistic production in an environment would negatively impact the overall aesthetics of the environment. In school, most of our works were primarily based on the non-environmental art thought-line even though most of us were undergoing training to produce 'arts, aesthetics and innovation' that should relate with and impact the environment. The kind of arts we conceive, the type of aesthetics we express from our thoughts and eventually the innovation we develop from the conception and expression determines the environment we create and consequently the one we will live. (Robinson, 2012)

3. RESEARCH METHODS

A number of academic writings were examined for how they posit on the training students in the built environment get and how well these students are prepared to integrate with the evolving innovation dynamics of the construction industry. In addition, these pieces of literature were studied for the method of teaching, the mindset inculcation and the reality of the world beyond classrooms.

4. MAIN DISCUSSION

Artists and architects want beautiful edifices. Engineers want constructible designs; client want functional designs, scientists wish to have an eco-friendly development and the government want revenue making, economically friendly and good human-relation promoting edifices. These realities would stare the graduate of the built environment in the face upon leaving school to practice the trade he is partially fully trained to do.

With more tremendous clamour for a sustainable environment and in line with the Millennial Development Goals, MDGs, the construction industry's innovation hub must also focus on 'green' developments. With the evolution of new technological innovation, professionals in the built industry should pay more attention to the rising demand of

cosmopolitan and global warming (Thorsen, 2020) without compromising the sophisticated aesthetic appreciation.

The architect, who has been traditionally known to be the construction industry leader (Harries, 2011), must commence the imagination and conceptualization of his idea by marrying all the factors mentioned above in the first line he draws. He must know something, if not all, about all he has to do. He owes the other players and design team the responsibility of incorporating the functionality of their part of the construction job into his 'art and science' of proposing a development for humanity and the environment.

Construction is a pivotal pointer in the development of a nation or any community. The need for infrastructure development trails the need for growth in any society. There cannot be a development in any facet of life without having to point to infrastructure development. Infrastructure development is what promotes and make reasonably easier our every day-to-day activity. The need for good and fast connecting roads, a more conducive work environment, a habitable place to recline to after a hectic day, and the need for other basic support infrastructure cannot be over-emphasized. These needs come at a cost to the environment, the physical well-being of people, the money cost to the government, and the intellectual resources of the professionals who are to carry out these projects.

With this development comes other challenges such as pollution, disturbance to the ecosystem, endangering animal and plant species, and the impact of such development on the users' psychological well-being and the impression such development leaves on the immediate environment where it is found. (Peck, 2016)

Cheng et al. (2015) reported that when artistic and aesthetic values were incorporated into construction as cited about the Shenyi road in the Shennongjia region of China's Hubei Province (between 2006-2009) using the esthetics greenway concept, there were massive benefits observed. Road accidents decrease by over 50%, GDP improves by 60%, and many people visit such a tourist area more.

5. CONCLUSIONS AND RECOMMENDATIONS

There must be an extensive collaboration within the education system and the practice for there to exist the desired metamorphosed graduate. Students should be allowed frequent industrial training to prepare them to fit into the world they are being prepared for. (Washuta, N.J. et al., 2018; Pabst, 2018; Griffith, 2012; Nolen, 2011).

5.1. Conclusion

There is a reality in practice beyond the theory and lectures of the classroom. While theory provides one with the required information to build on, practice affords one the real-time experience of managing thoughts into reality.

5.2. Recommendation

Since the essence of education, if not all forms of education, is to innovate knowledge for practical application and create or find a means of livelihood, the students must be trained

for life and practice beyond the classroom (Goncher et al., 2010). Therefore, he needs to be nurtured beyond the traditional curriculum of education, knowing fully well he also might become a tutor (either formal or informal) and transferrer of knowledge in times to come, even if not within the sphere of the academics. (Kaelin, 1990b; Shinew and Sodorff, 2003)

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