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Contextual Practices 3

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Question 2: Define skill in the context of your own practice and the work of two artists/makers/designers from the lecture series.

The concept of skill, put into practice

Introduction

As an educator in Design, arts and crafts, the concept of “skill” weaves the realms of creation and instruction together into one. the concept of skill extent of just the pedagogical skills – it merges technical abilities, creativity, and visionary thinking with the role of the educator. In examining the intricate interplay between the skillsets of an art educator and the visionary architectural practices of Antoni Gaudí and Buckminster Fuller, this essay seeks to elucidate the pivotal role of skill in shaping creativity, innovation, and enduring legacies within the realms of art instruction and architectural design.

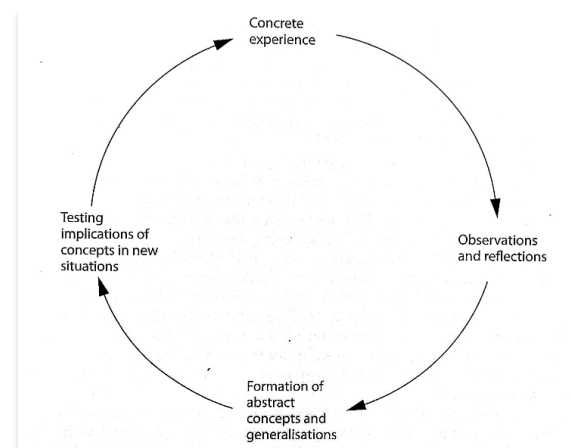
Skill

The Oxford English dictionary defines the word *skill* as “the ability of doing something well”. To be able to do something well, you must have a certain amount of knowledge in that area, and to gain knowledge you must undergo a certain amount of practice and learning.

David Kolb (1984) came up with the theoretical framework of the “learning cycle”, this model describes how individuals learn through their experiences. The model represents learning in a cycle, and consists of four stages; Concrete experience, reflective observation, abstract conceptualization, and active experimentation (Illeris et al., 2009).

“Learning is the process whereby knowledge is created through the transformation of experience”. This model focuses on how experience is valuable in the context of learning, doing action research, putting theory into practice – a

sort of learning by doing approach. Kolb underlined how personal experience is the focal point for learning, giving abstract concepts life, texture, and subjective and personal meaning.



Kolb, K. (1984) 'Learning cycle' [model] in Illeris, K. et al. *Contemporary theories of learning – learning theorists ... in their own words*. (2009). Routledge, Oxon. P. 84

A thing to consider is ways of which you can gain skill. Earlier I discussed the concept of learning by doing, however there are many ways one can gain skill, or work toward

gaining wanted skills. Reading and doing research can give you in-depth information and give you a better theoretical understanding. This can come from literature, studies, tutorials, webinars, videos, and or observations. Learning from an expert, perhaps going into an apprenticeship and learn firsthand and get constant feedback and consultation. As the expert has lengthy experience, their knowledge they can provide you could be very valuable in your own crafts.

In my own practice, which ultimately will be teaching design, arts, and crafts, I will be expected to have a certain set of skills. To ensure my students receive a valuable education, it's highly essential for the educator to poses a comprehensive understanding of their craft.

Educators all have some common skills, these being skills such as; communication – you have to be able to communicate the material in a way your which your students will understand. Classroom management – making the learning environment a safe and comfortable space for learning. Evaluation skills – guiding and critique students in a way that benefits them and propels them toward reaching their full potential.. However, as an art teacher, there is quite a few practical skills one needs to be efficient in in addition to the pedagogical ones.

Some of the skills I would like to highlight is technical proficiency, creativity, adaptability, and professional development. Having technical proficiency is vital to be able to construct, guide and help my students. I have to have a strong understanding of artistic techniques and material knowledge. Being a skilled art teacher, means you need to be able find creative ways and projects that makes your students exited and

help them blossom in their craft. Teach them how to find their own creativity.

Adaptability is highly beneficial as students learn differently. Some students might need more of a theoretical instruction whilst others might be more of virtual learners, in these instances you have to be able to adapt and modify to suit the individual's needs – this will also require you to be somewhat creative. Keeping up with the times and trends and keep improving your own skills will help you with your professional development. As renewing your skills will not only benefit you, but also your students. As essentially you are in the process of creating the next generation of designers and makers, therefore you need to keep them on the thought of pushing limits and thinking new.

Throughout my education, I have taken Kolb's learning cycle (1984) into practice. I have explored and tested theories and gained more understanding with seeing the results first hand. Weather my theories turn out to be right or wrong, I can always take some new knowledge from it, and by doing so have gained a better understanding of techniques and materials. These experiences will ultimately help my practice, as my knowledge will help guide my students, and furthermore usher their development.

Antoni Gaudí



Portrait photograph of Antoni Gaudí i Cornet (1876).

Antoni Gaudí was a renowned Catalan architect during the 19th, and early 20th century, known for his distinctive and highly individualistic style. Gaudí was born on June 25, 1852, in Reus, Spain. Set to be one of the most famous architects of the first half of the 20th century, pioneering in the Art Nouveau and Catalan modernism (Selvin, C. 2020).

Growing up his family was in the boilermaker business, and his father trained Gaudí in the arts of metal work (Watkin, D. 1986). As discussed earlier, a good way of achieving new skills could be by observing a master in the craft you are pursuing. Being in the workshop with his dad, it's likely that Gaudí got first hand experience and close tutoring, which actively would have improved his skill. Later in life Gaudí described how being the son of a boilermaker gave him a better grasp of the materials (Selvin, C., 2020). As he had been observing and thought by his father, he knew how to manipulate metal and turn it into his visions.

“That ability to feel, to see the space because I am the son of a boilermaker.

The boilermaker is a man who makes a volume out of a surface; he sees the space before he begins working.” - Antonio Gaudí (from Selvin, C., 2020).

In the 1880s in Catalonia a cultural and political revival was taking place (Watkin, D., 1986). The Catalanian people wanted independence after years of Castilian ruling, the separation of the Catalan people was centered in Barcelona and was called “rebirth”. The Art Nouveau was slowly making its way into Spain and got intertwined with the movement. Art Nouveau, or “new art”, is the description of the art style popular between 1890 and 1910. Characteristics of this art style is dynamics and movement, given by asymmetry and organic shapes and lines – inspired by natural elements such as plants and flowers. This style of art could be found in architecture, and applied art, especially the decorative arts, made from materials such as glass, ceramics, iron, and concrete.

Growing up, Gaudí experienced a lot of sickness, and spent much of his time in a summer home in Riudoms (Selvin, C. 2020). During this time, it's said that he spent a lot of his time observing and studying nature. Perhaps these observations and research is where he would draw inspiration from for his architectural projects.

“Gaudí’s mature buildings seem to have sprung by some strange natural process from the soil or from the depths of the sea, and to be covered in growths not unlike seaweed.” (Sutton, I. 2001, p.292).



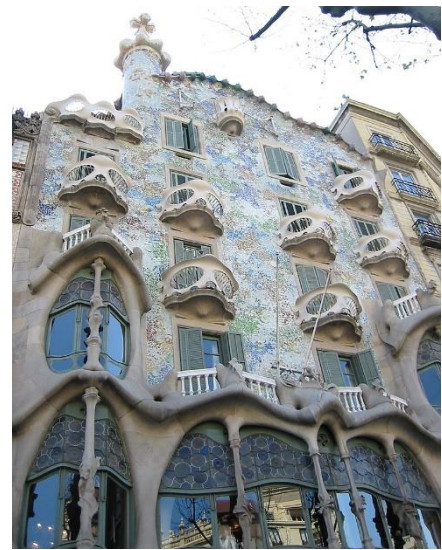
Palau Güell, Antoni Gaudí, Barcelona (2018)

The architect graduated from Barcelona’s School of Architecture in 1878. Gaudí started out as a gothic revivalist, although, the railings on his Casa Vicens for Manue Vicens (1888), a part neo-gothic, part neo-Moorish villa, could be considered as early Art Nouveau (Watkin, D., 1986). The same goes for his Casa Palau Güel (1885-9), where the entrance

consists of grills clearly influenced by Art Nouveau metal work.

This house also featured modern materials such as coloured glass, mosaic tiles – also in par with the Art Nouveau. These features set a precedent for Gaudí's coming projects. Gaudi seemed to be adamant on bringing Art Nouveau curls and swirls into basic construction (Balcombe, Gl. 1985).

Art Nouveau can be described as a highly personalised style (Balcombe, Gl. 1985), and used to decorate buildings. These descriptions fall in suit with Gaudí's buildings, as style and personality have evolved and is distinctive and fully expressed in his apartment buildings throughout Barcelona (Sutton, I. 2001).



Casa Batlló, Barcelona (2005)

Gaudi is a great example on how he has finessed his skills by engaging himself in the crafts. Gaining material knowledge from an expert in the field, doing research, finding inspiration, and not to mention; renewing himself end keeping up with the trends. By feeding into the Art Nouveau style, he became one of the frontier artist of the movement. When looking at Gaudí's creations, it is evident that he had a deep understanding of the materials and know how to put his knowledge into practice.

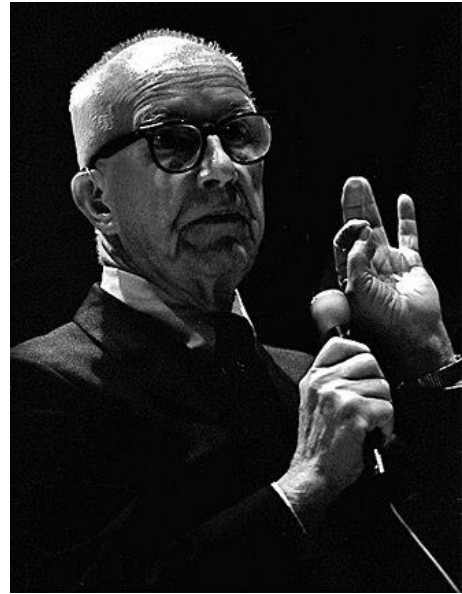
Buckminster Fuller

R. Buckminster Fuller was an American 20th century architect and inventor. He was born in Milton Massachusetts, USA, on July 12, 1895

(Buckminster Fuller Institute, no date). Throughout his life, he explored and mastered techniques and skill in multiple fields, these being design, geometry, engineering, science, cartography, education, and maybe what he's most known for, architecture. He didn't limit himself to only working within one field.

He wanted to explore and experiment with his

designs in such a way that they eventually would help to solve issues surrounding transport, housing, education, energy, environment and poverty.



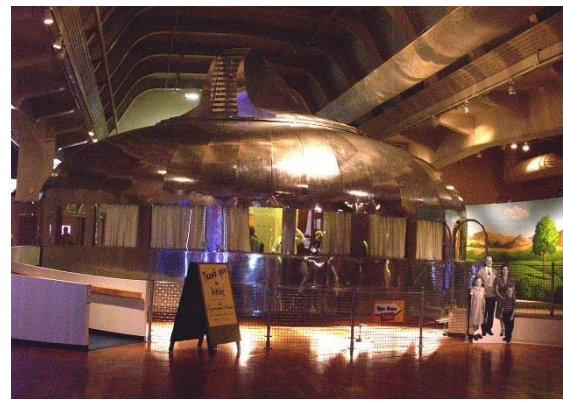
Buckminster Fuller, tour at UC Santa Barbara. (1972-3)

One of the perhaps biggest philosophies of Fuller was making more out of less. He wanted to find a way of utilizing the materials to their fullest potential in such a way that building his houses would both be economically and ecologically efficient. One can imagine that for him to be able to do so, he had to gain a deeper understanding of the materials and their qualities.

"if we do more with less, our response will be adequate to take care of everybody." - Buckminster Fuller (YouTube Movies, 2019, 1.51)

After the first world war, Fuller, with his father-in-law, the architect James Monroe Hewett, started a construction company (Kiran, K. 2023). This company was using Hewlett's invention, the "Soundex", a building material made up by fibres. Together they raised multiple hundred houses. However, Fuller found this building technique and material far too outdated. This led to him going solo in 1922 on his lifelong quest of finding materials and building techniques that would ultimately be for the grater good of all humanity.

When starting up on his own, he started dabbling into industrial manufactured houses. As the world progressed into the economic crisis during the great depression, Fuller developed and he launched a factory-made house in 1927 called the "Dymaxion house" – short for Dynamic Maximum



Dymaxion House as installed in Henry Ford Museum. (2007)

Tension (Autodesk, 2019). Made in aluminium, it was supposed to be a cheaper better material to build a house (Anker, 2010). And due to it being prefab, the rate of which the houses was being put up – increased.

In 1933, Fuller developed a "Dymaxion car prototype", again aiming for his invention to help social economic state of the world. The car prototype was lightweight and fuel-efficient.

In 1954, Fuller invented and patented the “geodesic dome”. The dome as a concept wasn’t new in architecture, but dome construction got revolutionized in the 20th century, due to the introduction of new modern materials (Weston, R. 2011). The geodesic dome pioneered originally in post-World War two Germany but is today generally associated with Buckminster Fuller – as he received an American patent for the structure. Made up by a network of great circles, forming a sphere or part-spherical shell structure. The dome reflected Fullers architectural preferences of relying on a structures force of tension.

“don’t fight forces – use them.” Buckminster Fuller (YouTube Movies, 2016, 18:33).



The Montreal Biosphère, formerly the American Pavilion of Expo 67, by R. Buckminster Fuller, on Île Sainte-Hélène, Montreal, Quebec (2004)

For the Montreal Expo 67, Fuller worked together with the Japanese architect Shoji Sado. Together they designed the Geodesic Biosphere. A 76-diameter dome was built in acrylic cladding. The spheres intention was to be a museum, showcasing the environment in Montreal, Quebec, Canada. Today, the dome is used as a biosphere in the city’s environmental museum (Weston, R. 2011).

Fuller used his skills not only to be able to create, but more so benefit humanity. He created to serve. Fuller’s way of thinking was highly systematic. When designing, Fuller had a very holistic way of thinking, as he saw all problems as interconnected parts of a larger system. How could his designs better the state of the world? He

wanted his designs to work in the favour of humanity, and therefore vowed to dedicate his life and inventions to serve all of humanity.

In the same way I would like to purpose my skills, Fuller wanted to use his skills – years of built-up knowledge, gained from his experimenting and putting his theories into practice to teach other creators/inventors. Fuller rejected terms as specialization to describe his work and insisted on referring to his own work as “comprehensive anticipatory design research” (Buckminster Fuller Institute, no date). He wanted much rather describe himself as someone constantly evolving through trial and error. Surely a humble way of seeing his own work, but also a positive and forward way of thinking, as you can always improve upon your own skills, no matter where you stand.

He published more than 30 books covering themes like design, materials, geometry, economics, and philosophy. In addition to his books, he held workshops and lectures for the next generation of designers and architects. In the span of his lifetime, fuller had 28 pattens, wrote 28 books and received 47 honorary degrees (Musgrove, J., 1987).

His projects such as the geometric dome didn't just stay a theoretical concept, but instead became a practical manifestation of Fullers engineering and design skills. Putting his theoretical knowledge in engineering into his architectural design came not only to be visually striking, but also made his structures strong and efficient. With his buildings and other inventions, he showcases his complex understanding of geometrics and structural integrity. Simultaneously when creating his inventions he showed a deep understanding of materials, as he knew how to utilize them to their fullest extent and minimalizing his waste.

Conclusion

Throughout this essay I have explored the significance of skill put into practice. I have reflected on my role as an art teacher alongside the pioneering practices of the architects Antoni Gaudí and Buckminster Fuller. Skill both in my field, as well as the Fuller and Gaudí is about exploring and testing – it's a blend of creativity, adaptability, and pushing boundaries. Their deep understanding of the materials used in their crafts, and the way they inspire designers and makers to come.

The impact of skill on our creative realm – seen in the legacies of Gaudí, Fuller, and countless educators – is about fostering an environment where evolving artistry thrives. It's a celebration of the ever-evolving canvas of skill that shapes the way we create and inspire future generations.

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