

5th World Congress on

SMART AND EMERGING MATERIALS

April 19-20, 2018 Dubai, UAE

Eco-Panelling: Parametric solutions for façade configurations

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While Leonardo Da Vinci (1410-1519) has long been renowned as one of the most forward thinking visionaries to have treaded this planet and a pioneer during the Renaissance, there hasn't been a notable establishment which has been constructed to celebrate and relive his legacy. Though the Aspen Institute in Washington DC happens to house and translate some of his most intimate ideologues for the public to admire, it barely scratches the surface of an entire dimension of explorative learning that reflects the crude nature of his curiosity and his persistent inquiry, uniquely attributed with a "humane" element. This weaves a unique channel of interpretation that seems to have been lost in the fast-paced expedition that we embark on through the continuum of time, one where we rely heavily on the inferences drawn out from the theory of Scholasticism. However, scholastic knowledge was a privilege that couldn't be availed by Leonardo, as he was illegitimate, a bastard brought up under the patronage of his father, Piero da Vinci. Unlike popular opinion, the lack of formal education did not limit his genius, rather inspired him to observe patterns within the bionetwork immediately around him and question every element it conceived. His vision and innovational concepts, as a consequence, had the potential to spark an intellectual revolution, which eventually manifested in the form of the Renaissance, a cultural movement that transformed nearly all facets of European culture and society. (Walter Isaacson, 2017) This intellectual breakthrough under the socio-cultural constraints of his existential era lends an essence to the character of the architectural form, an ode to a legacy. Furthermore, integrating a humane element for the expression of his inquisitiveness render his works as something to be inspired by. An architectural manifestation that draws on these attributes would best be exemplified through the use of parametric façade skins that responds with the superfluous trait of natural elements, enveloping the built space while enhancing the "human connection with the cosmos", a recurring theme in all of his paintings, including the Mona Lisa.

References

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Biography

Christy Paul Joseph is a student currently enrolled in the 4th Year of the Bachelors in Architecture (B.Arch) Program in MAHE Manipal, Dubai Campus, UAE. His research largely revolves around the interpretative planning and schematic implementation of a design that echoes the character of a renowned genius, Leonardo Da Vinci. The design aims at complementing the tropical climate in its site of inception, while incorporating parametric façade skins that envelope the organic framework while generating a daylight illuminance in the exhibition space.

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