

BY INVITATION



### Ar. Navnath Kanade

Co-founder and Principal Architect, Shilpa Sindoor Architects & Planners, Bengaluru, Karnataka, India

Email ID- shilpasindoor@yahoo.com

Navnath Kanade of Shilpa Sindoor Architects is the legendary Architect passed from Sir J.J. School of Architecture in 1966, not only modest about his spectacular work, but he is also earthy in his material selection and approach to space design.

His spaces speak volumes about his creativity as well as his acute sensitivity to the environment, the green inclinations loud while keeping aesthetics firmly in place.

## Beyond the Built Environment: Ethics and Aesthetics of Sustainability

*Architecture, silhouettes its contextual societal values as it predominantly shapes the physical environment while embodying energy and materials. The most functionalist and minimalist builtforms have the potential to be meaningfully designed as the most promising architectural expressions of sustainability aesthetics meanwhile upholding the professional ethical values.*

### Prologue

*“Sustainability is no longer about doing less harm. It is about doing more good”*

*Jochen Zeitz*

Architecture, echoes its contextual societal values as it predominantly shapes the physical environment while embodying energy and materials. In the current milieu of the swiftly transforming built environment- the architecture, construction management, landscape design, urban design, building science, ecology, economics, social sciences, building services, interior designing, lighting designing, building technology, computational design, physical-digital infrastructure planning, diverse investors, security consultants and many such related other professions are progressively becoming the fundamental part of the comprehensive design. In such interdisciplinary collaborative professional setting, it is significant to reflect on the measures of sustainability through the lens of creative aesthetics, optimising resource usage while efficiently maximising the building's performance. Furthermore, while formulating solutions for the built environments at regional, local, neighbourhood and individual building scales, the ethics and sustainability aesthetics should be guiding principles in order to make the human settlements sustainable, accessible, safe, resilient and inclusive (physically, economically and socio-culturally).

### *An Architect's Journey : A Painful Joy or A Joyous Pain?*

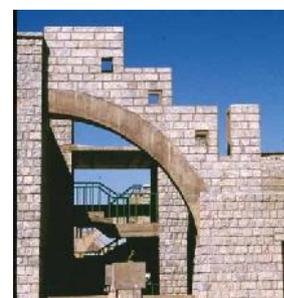
As architects, in our design approaches of the built environment we prioritise contextual creative aesthetics and optimal integration of the utilitarian aspects while efficiently managing the various resources. It is widely evident that the consideration of various dimensions (resource optimisation, performance / efficiency, cost, value, health and comfort) to



achieve the ecological and economical agendas in the development of builtforms, invariably influence the architectural aesthetic outcomes and professional ethical values. In the present interdisciplinary collaborative professional setting where an architect is obligated to design the built environment, might feel to have lost the edge of creativity to successfully create an aesthetically enriching justifiable architecture. This particular aspect obviously presents the most critical aspect of the relationship between freedom of aesthetic creativity and the development of ethically sustainable architecture.

However, this very relationship of expression of aesthetic creativity and the development of ethically sustainable architecture could be explored thoroughly to evolve the most promising and stereotype defying ingenious designs, construction techniques as well as systems for the optimal use of energy and material resources, which are not only contextually appropriate but also promote local employment, local livelihoods as well as local economy in turn supporting minimum ecological footprint.

Figures 1,2,3,4,5,6&7. Defying stereotype of the urbanscape: Varied skyline of the building clusters, human scale, sustainability considerations, visual connectivity, sense of place, aesthetic features, shaded interconnected streets, multi-level open/covered hierarchy of spaces, diverse design patterns, etc. provide an interactive fabric which defies stereotypes of the multi-dwelling housing units.



Source: Compiled from different sources



Several prominent architects have been explicitly demonstrating this particular aspect by developing their uncompromising design approaches, techniques and material usage in the development of the built environment which are not only honest with their ecological context but are also culturally appropriate and socio-economically sustainable. Although, this process of addressing several intertwined facets to express aesthetic creativity and to develop ethically sustainable architecture, may seem a painful journey to begin with. But when these processes start yielding visioned results and sometimes even beyond, the entire process becomes a joyful journey that an architect looks forward to navigate in every successive project.

Figure 8 Creativity unleashed: Context specific and user sensitive built forms reflect the aesthetical, ethical, ecological, economical, socio-cultural & innovational dimensions.



Source: Compiled from different sources

***The Ethical Architect: Environment, Economics and Equity***

Sustainability, a global phenomenon is not only increasingly recognised as the most significant development trend but also as an ethical dimension of developing human centric living environments. In this regard, architecture being the prime form shaper of the environment and being allied with intensive consumer of energy, resources and labor should strive to address environmental aspects, ethical economic values and equitable sharing of finite resources to express aesthetic qualities and sustainability characteristics of the built environment.

Figure9. Standardization v/s Personalization: Going beyond the mere functionality of the built forms through the effective design of elements is vital to negate the false image, endorsing optimal use of resources and achieving the cost effectiveness reflecting the unique aesthetics. These built forms relate to the user (externally and internally) and support in personification of the spaces by the user.



Source: Compiled from different sources



An architect should aim at articulating architectural design solutions that not only reflect the sustainability concerns of the built environment but also promote socio-economic equity. Several pioneering approaches are emerging to limit the usage of energy intensive manufactured construction materials and to augment employing natural materials to the highest potential possible. In such contexts, the whole gamut of sustainable development is constantly evolving to include restorative and regenerative concepts. Providentially, several focussed attempts are being evolved by individual architects, institutions as well as collaborative organisations at local /regional /national/ international levels to develop comprehensive as well as inclusive design approaches, methods to extensively use local materials, involving local human resources, and innovative construction techniques for improving the sustainability performances of built forms. These attempts support in integrating building sector as an integral part of the circular economy.

Figures 10,11,12,13,14,15&16. Developing indigenous construction technologies: Innovative ideas to design and develop indigenous construction systems using the natural materials predominantly yield significant amount of reduction in the usage of manufactured materials and cost savings while employing traditional building artisans and craftspeople. Furthermore, these techniques support the unskilled labour to learn and earn livelihoods promoting local employment opportunities while fostering circular economy.



Source: Compiled from different sources



***Anchor of the Architectural Practice: Evolve and Innovate***

For the design proposals of the majority of the projects, the sustainability aspect is perceived through the lenses of environmental, socio-cultural and economical aspects. However, the agendas of sustainability in the design process should logically represent the ethical values and aesthetic features as integral facets too. The aesthetics of sustainable architecture and professional ethics are intrinsically linked with the regional characteristics, contextual setting, sense / identity of place, socio-cultural fabric, psychological acceptance, accessible for all, user centric, regulatory framework, economic considerations, climate, conservation of finite resources, construction techniques and materials to contribute towards improving the quality of living. Hence, as architects, we must attempt to articulate the extents of ecosystem, ethics, aesthetics, equity and economics while evolving the sustainable architectural design solutions. Thus, the innovative creation of aesthetically appealing, ethically sustainable built environments can actively promote and engage the users in embracing / adopting alternative lifestyles which in turn advance the better quality of life.

Figures 17,18,19,20 & 21. Architecture is for the users: The pursuit of a design should enhance user's emotional responses. In order to be at its maximum functionality, spaces need to be effectively planned so as to allow the user to personalise and shape it over a period of time.



**Source: Compiled from different sources**

In this regard, architects should endeavor to innovatively interpret the prevailing architectural language of the region which is inherently considered ethically sustainable. These built environments explicitly express the most ecologically efficient forms, in which the building form aims to adapt to the ecology, socio-cultural aspects, economy and the use of the local materials, local human resource as well as renewable energy sources while being honest with their aesthetic values.

Holistic sustainability should be a central idea in all the crucial stages of the project development and should continue throughout the life cycle of the building (strategizing, planning, preparing, designing, constructing, occupying, maintaining, renovating, recycling, demolishing, rebuilding, etc.). Diverse innovative design / construction approaches have been and are being



developed by proactive architects to propel sustainability paradigm towards realising dynamic, non-linear, resilient, regenerative architecture so as to develop coexistence amongst ecosystem, inhabitants and built environments.

An architect should employ his/her creative wisdom and challenge the limitations of any sorts to be able to play a key role in the fast changing landscape of the living environment (urban/rural areas). For instance, innovative design approaches / construction techniques could be evolved based on the detailed analysis of the natural landform features, emerging diverse demographic profiles, socio-economic trends, development projections, policy/regulatory frameworks, etc. Architects need to create opportunities for themselves to confront the challenges and to step forward with a strong intent of addressing shared societal concerns by developing creative, innovative, socio-culturally contextual, aesthetically appealing, environmentally sustainable, economically viable solutions with professional ethic as a primary driving force.

Figures 22, 23 & 24. Expressive architectural language: Built forms assembled with natural materials and elements of nature (sunlight, land, water, air and vegetation) are aesthetically expressive, within which creatively planned / designed fenestrations & perforations bring in much desired hierarchy of interactive spaces as well as natural ventilation to improve indoor living quality while fostering the inhabitant's well being.



Source: Compiled from different sources

### ***Proactive Approach to Promote Sustainability Aesthetics and Ethical Built Environment***

Architecture as a science and an art form, predominantly silhouettes the living environments while encompassing all the dimensions of the sustainability. The redefined concept of sustainability, which not only as an ecological design paradigm but as an ethical paradigm supports in the co-creation of holistic, dynamic, socio-culturally relevant, aesthetically qualitative as well as resilient built environments. Focussed and proactive approaches should be practiced to devise ethical and aesthetic solutions to sustainable architectural configurations by reconceptualizing and strengthening the various set of relations (regional characteristics, sense of the place, ecological features, socio-cultural cohesions, economical trends) through the inclusion of natural elements (sunlight, land, water, air and vegetation), dynamism, natural materials and innovative construction techniques. Thus the sustainability aesthetics could be potentially expressed by emphasizing the relation centered approaches (natural and man-made landscapes), sense of place, socio-cultural references, community implications and devotion to various details. As a way forward, the most functionalist and minimalist built forms have the potential to be meaningfully designed as the most promising architectural expressions of sustainability aesthetics meanwhile upholding the professional ethical values.

