

Culture, Context and the Pursuit of Sustainability: Contemplating Problems, Parameters + Possibilities in an Increasingly Complex World

Dr. Brian R. Sinclair, PhD FRAIC AIA (Intl)

Environmental Design, University of Calgary, Canada
Human Environmental Sciences, University of Missouri, USA



“In the city of Brahman is a secret dwelling, the lotus of the heart. Within this dwelling is a space, and within that space is the fulfillment of our desires. What is within that space should be longed for and realized.” (Chandogya Upanishad)

Design and planning in our modern ethos is often confounded by serious and endemic conditions of deep fragmentation, rampant bureaucratization and ineffective regulation. Such barriers commonly hamper or cripple the ability of environmental designers to realize success in the execution of responsive, responsible, and superb projects. Adding to the impressive mix of challenges are cost escalation, outdated technologies| techniques, conservative posturing and the ever-daunting threat of value-engineering. In such a milieu it becomes extremely difficult for designers to move from concept through construction with clarity, continuity and even integrity. Left on the editing room floor are all too commonly the inspiring, enduring and magical qualities that elevate projects from building to architecture.

Over the past decade the author has assumed a broad range of positions, roles and responsibilities connected closely to the conception, design, development and construction of many large, complicated and multi-faceted building projects in the developed world. He has also worked on an array of intensely challenging initiatives in the developing world, including efforts in a spectrum of informal settlements or slums. Through effecting this broad portfolio of work, including intensive research into and comprehensive review of both process and product, it has become evident that the

need for reform proves both urgent and imperative. New mindsets and innovative methods must be developed and enacted in our efforts to improve the quality of our built environments, especially in our complex contemporary ethos where resources are limited, expectations are soaring, and the need for change is non-negotiable.

The present paper looks at a wide range of issues surrounding the pursuit of more successful and sustainable design + planning. A unique approach of HOLISTIC GUIDELINES is delineated. This approach was developed through the author's work in environmental design across a plethora of projects in both rich and poor nations. Included to illustrate ideas and propositions are considerations of assorted parameters, processes and products. Exceptional design is best cultivated when certain characters and conditions are primed and aligned, including enlightened clients, talented architects, and sympathetic authorities with jurisdiction. Modern times, in order to produce effective and efficient solutions to wicked problems, demand more innovative, creative and experimental approaches. Novel notions pertaining to materiality, constructability, affordability, durability, adaptability, modularity, and accountability loom large in equations for ingenuity in contemporary design and planning. These vital dimensions of practice, architecture and the city significantly cross cut culture, context and the pursuit of sustainability. The following HOLISTIC GUIDELINES present a vehicle with which to address this complex milieu and through which to promote more culturally-sensitive sustainability-focused design + planning.

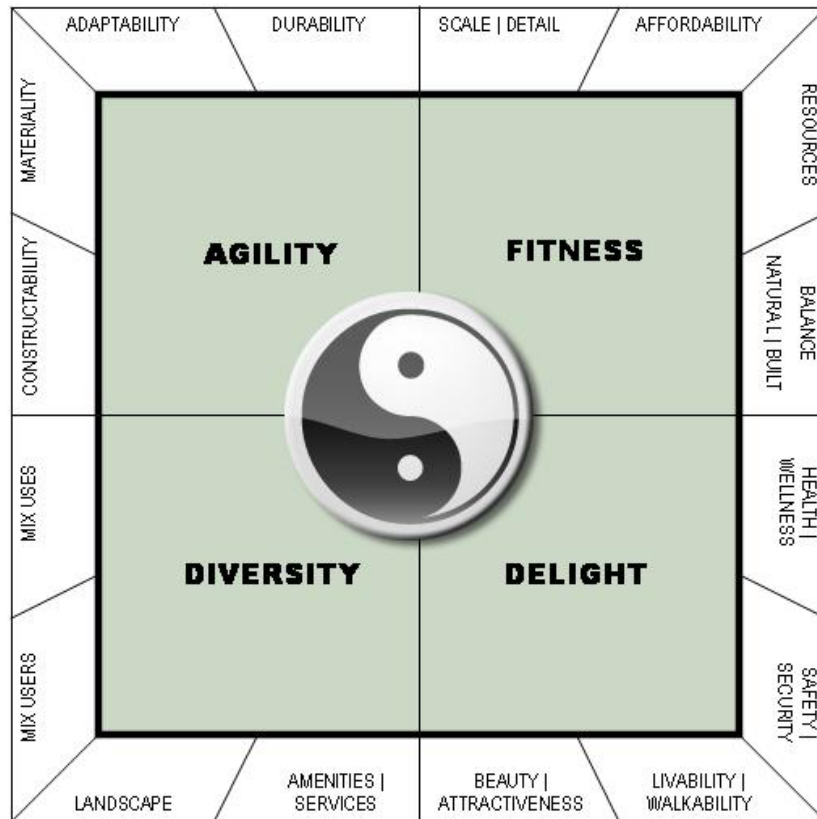
HOLISTIC GUIDELINES FOR DESIGN + PLANNING



"As you know, development is sustainable only if the beneficiaries become, gradually, masters of the process. This means that initiatives cannot be contemplated exclusively in terms of economics but must be seen as an integrated program that encompasses social and cultural dimensions. Education and skills training, health and public services, conservation of cultural heritage, infrastructure development, urban planning and rehabilitation, rural development, water and energy management, environmental control and even policy and legislative development are among the various aspects that must be taken into account." His Highness the Aga Khan¹

In our contemporary context it is vital to look intensely at the big picture – looking from above through an integrative lens is a necessary precursor to more detailed evidence based intervention. The present Holistic Guidelines have been developed to be applied in a cooperative and collaborative manner, understanding all hold equal value and significance. The Action Areas underlying these guidelines of AGILITY, FITNESS, DIVERSITY and DELIGHT are seen as having great flexibility and capacity for customization. These Action Areas are case specific and as such are subject to change and modification as conditions suggest and context dictates. Openness to a range of options, and open-mindedness, are essential to the success of the model and vital for the crafting of pertinent and potent Action Areas. For each Guideline the author has proposed and developed four Action Areas. These specific Action Areas are not definitive but rather should be seen as explicatory. A developed list of Action Items for a given problem or project could be larger and/or different from the proposed sets depending on funding, personnel and/or perspective. It should be emphasized and understood that, for reasons on manageability within the present paper, each of the Holistic Guidelines and underlying Action Items is presented at a somewhat schematic and conceptual level. As this model sees actual application in the field much greater attention must be paid to details, data and conditions. When developing and crafting more finite guidelines careful attention will be required as pertains the appropriate level of detail, the appropriate use of language, and the most appropriate means of communication to ensure most effective awareness, application and implementation. Further, and critically, each of the Action Areas needs to be cross-referenced with concerns about place-making, sustainability (including triple bottom line thinking), culture and design.

The Holistic Guidelines, and their associated Action Areas, should be seen as an interrelated set – a rich system of give and take where classification is less important than consideration. In developing this approach the author viewed the four guidelines as intensely connected and entirely complementary. Further, it is the contention of the author that successful design + planning interventions, and successful environments (e.g., interiors, buildings, landscapes, spaces and places) thereafter, most regularly arise when attention is given to both poetics and pragmatics. The trilogy of ‘firmness, function and beauty’ needs to be imagined as a three legged stool – to weaken or remove one leg serves to destabilize or destroy the system. The present Holistic Guidelines, and Action Areas, proves unconventional and in many ways indeterminate and discretionary. That said, the real value of this set of guidelines and action areas comes via looking at the world, and problems, in new ways. For an engineer to consider delight is a good step. For a politician to imagine agility is helpful. For an architect to embrace diversity is beneficial. And for all players to critically envision and ensure fitness of environments and people is vital to the realization of communities that are healthier, more livable and more successful. No small charge for sure, yet necessary and important nonetheless.



1. AGILITY



Guideline: In the design and planning of urban environments it is essential to pursue, create and realize greater agility, better interrelationship of components and more open systems.

Elaboration

“Flexible buildings are intended to respond to changing situations in their use, operation or location. This is architecture that adapts, rather than stagnates; transforms rather than restricts; is motive rather than static; interacts with its users, rather than inhibits. It is a design form that is, by its very essence, cross-disciplinary and multi-functional;

consequently it is frequently innovative and expressive of contemporary design issues.” Kronenburg (2007)²

A typical approach to design and construction in most jurisdictions globally is to erect purpose-built structures, such as a school, or an office building, or housing. Even within a given building type, the structure itself tends to be very fixed and static – not easily modified or adjusted despite the fact that needs and uses may and do change over time. One result of this approach is that such buildings often cannot readily adapt to changing demands. Another outcome is that buildings cannot easily be reconfigured, expanded or contracted as activities shift. Further, if said buildings can be retrofit the costs involved are often significant. In many cases the math demonstrates it is far easier, and more justifiable on the accounting ledger, to tear down the old and build anew. In an era of climate change, rising pollution, growing population and dwindling resources such strategies no longer meet muster. One can and must extend the arguments beyond the building itself to include critical aspects of landscape design and of city planning, including such matters as infrastructure and social systems.

Agility calls for thinking (designing + planning) and acting (constructing) that is far more open, malleable, responsive to needs, responsible to society, systems oriented. Rather than fixed in time, agile solutions are nimble. Rather than static in form and substance, agile solutions are dynamic. Such approaches, while applicable to large scale commercial buildings (e.g., office towers) are equally germane in the realms of residential housing, informal settlements and even refugee shelter.

- **MUTABILITY|ADAPTABILITY**

Action: Pursue maximum mutability and adaptability of construction systems, infrastructure and environments.

- **DURABILITY**

Action: Pursue durability and robustness of buildings and environments, including materials, components and assemblies.

- **CONSTRUCTABILITY**

Action: Pursue ease of constructability of buildings and environments, including critically the rapid and easy deployment of housing solutions.

- **MATERIALITY**

Action: Select materials for interiors, buildings, and environments that respect matters of adaptability, durability and constructability while concurrently responding to regional resources and celebrating local traditions.

2. FITNESS



Guideline: In the design and planning of urban environments it is essential to foster, invent and implement spaces, buildings and neighborhoods that are truly appropriate for the needs of people, the nuances of culture and the demands of context.

Elaboration

“We are the product of an environment that is disconnected from the natural world, disconnected from the very world that we were evolved to be part of, and we are suffering from a collective post-traumatic stress. That doesn’t mean my next door neighbor has post-traumatic stress in the same way I do – but he has grown up in a culture that does not allow him to experience connection to people, animals, stars and the tides as he was meant to.” Glendinning (1994)³

The notion of fitness implies a natural relationship between object and subject, good suitability between building and inhabitant, and above all the correctness of that which is supplied to that which is demanded. In many cities, and indeed in many circumstances within the environment, there are glaring conflicts between the requirements of a given community and the solutions developed to meet the apparent needs. The reasons for the mismatches are many, including the frequent disconnect between building owners and users, between designers and builders, between politicians and citizens, and between the empowered and the disempowered. The overwhelming authority afforded by money, privilege and power routinely translates into the creation of environments that serve one agenda while discounting or denying others.

The notion of fitness, and the guideline addressing same, serves to underscore the great need for listening well to the array of stakeholders and then executing professional responsibilities and talents with fairness, skill and grace. While on one hand this is common sense, often efforts miss targets. To meet users’ needs fairly, competently and professionally demands intense diligence, prudence, clarity and equity. It is vital to highlight the value in seeing through the eyes of the ‘other’. For example, in the exercise of designing a project in another country an architect should be able to envision and understand the ways in which the project might be seen and received –

both on the upside and on the downside. Such connection demands a more immersive role and empathetic awareness than is typically afforded or realized under such scenarios. The arms-length distance that is commonly established contributes to disconnections in the design + planning enterprise. Potent mechanisms to counter such disconnects include community-based design, collaborative planning and the integrated design process.

- **SCALE | DETAIL**

Action: Ensure consistent, careful and thoughtful attention to human scale, ergonomics and anthropometrics in order to promote more comfortable and meaningful environments.

- **AFFORDABILITY**

Action: Realize housing, building and environmental solutions, including through economies of scale and standardized systems, which prove more affordable to a much broader base of people.

- **BALANCE NATURAL | BUILT**

Action: Encourage the inclusion, balance, harmony and synergy of and between both natural and built aspects of environments in the design, planning and construction of urban areas.

- **RESOURCES**

Action: Act to optimize efficiency, reduce consumption and maximize conservation of resources, including innovative utilization of appropriate technologies, tools and techniques.

3. DIVERSITY



Guideline: In the design and planning of urban environments it is essential to consider, cultivate, and ensure a compatible array of land uses, a complementary collection of building types and synergistic community of stakeholders.

Elaboration

“Opportunity and imagination should be encouraged by a diverse and densely settled urban structure. This structure also should create a setting that is more meaningful to the individual inhabitant and small group than the giant environments now being produced. There is no guarantee that this urban structure will be a more just one than those presently existing. In supporting the small against the large, however, more justice for the powerless may be encouraged.” Jacobs & Appleyard (1987)⁴

Designers and planners over the past century became enamored, and at times obsessed, with clinical zoning. Under such zoning regimes uses were highly separated and segregated with, for example, residential and commercial far removed from one another. The world of clinical zoning was best understood through two dimensional maps and plans. Lines of demarcation on a diagram ensured that home and work were separated, that white collar offices were contained away from manufacturing concerns, that health care was bundled together, shopping was aggregated, and education carefully bounded. Today environmental designers, real estate developers, politicians and citizens alike are realizing that something is seriously lost when uses and users are arbitrarily divided and estranged. Through history many types of people, doing many types of activities, were tied together in close proximity. Higher density, greater convenience, and richer more fulsome environments were the order of the day. While there were problems, such concerns were eclipsed by the tangible benefits of propinquity and community. In recent years forward thinking environmental designers have called for a reconsideration of such distinct zoning and in its place rally for a mosaic of activities and the proffering of messy vitality. Messy vitality is seen as the complex urban milieu that arises when folks from different backgrounds come together, when activities in various realms transpire under a common roof, when live-work-play is the accepted recipe for land use, and when opportunities are provided for serendipity and spontaneity.

- **MIX OF USES**

Action: Ensure a wide array of activities and land uses within given city districts and neighborhoods.

- **MIX OF USERS**

Action: Ensure a broad base of residents, visitors and stakeholders within given city districts and neighborhoods.

- **LANDSCAPE**

Action: Encourage an assorted range of landscapes within given city districts and neighborhoods including the provision of natural areas, urban agriculture, and recreational & park lands.

- **AMENITIES|SERVICES**

Action: Encourage a broad spectrum of complementary amenities and services within given city districts and neighborhoods including the provision of healthcare, educational, cultural, commercial and spiritual resources.

4. DELIGHT



Guideline: In the design and planning of urban environments it is essential to emphasize, envision and make spaces and places that contribute meaning, comfort and contentment into the lives of people.

Elaboration

“Good artists are people who can stick things together so that they stay stuck. They know how to gather things into formal arrangements that are intelligible, memorable and lasting. Good forms confer health upon the things that they gather together. Farms, families and communities are forms of art just as are poems, paintings or symphonies. None of these things would exist if we did not make them. We can make them either well or poorly; this choice is another thing we make.” W. Berry (2000)⁵

Too commonly today we are willing to separate function (pragmatics) from aesthetics (poetics). In many instances, under the guise of value engineering or cost cutting, we aim to strip out from buildings, landscapes and communities those features judged to be frivolous, luxurious or simply unnecessary. However, the decisions about what might be required in our lives, including in this case in our built environments, are commonly in the hands of folks ill-informed and inadequately equipped to render such judgments. For example, often sustainability aspects of projects are removed after being determined to be ancillary to a building’s core purpose. Or artistic aspects of a project, such as a tile mosaic of a stained glass window, are stripped out after being judged as irrelevant to a building’s function. What is missed in this thinking, and left out of the equations used in evaluation, are the significant roles that beauty, delight, meaning and satisfaction play in our lives. The notion of environmental determinism, whereby environments can be deemed as influential in our thinking and behavior, is often denied.

In the view of the present researcher, whose background is in both architecture and psychology, it is often these more intangible qualities such as beauty and delight that matter most. In crafting the present Holistic Guidelines the ethos of Delight was deemed central and essential. Too often our environments are conceived with a mindset that favors science + technology at the expense of humanities + arts. And too often our environments are evaluated with metrics that advantage quantitative values at the expense of qualitative aspects. For environments to be truly successful they must respect the Vitruvian trilogy of 'strength, function and beauty'. In a world where money, greed and consumption have been at the pinnacle, a change in direction is seriously warranted. Akin with a triple bottom line approach to sustainability, where economics, environment and equity are afforded equal stake, the current Holistic Guidelines aim to place Agility, Fitness, Diversity and Delight on equal footing.

- **HEALTH|WELLNESS**

Action: Encourage the promotion of residents' good health and wellness, including and especially through careful attention to environmental and social determinants.

- **BEAUTY|ATTRACTIVENESS**

Action: Foster attention to environments, including interiors, buildings, streets and landscapes, that are beautiful to the eye and attractive to experience.

- **SAFETY|SECURITY**

Action: Pursue environments, including through the use of crime prevention through environmental design (CPTED), that provide safety and security to residents, visitors and other stakeholders in city districts and neighborhoods.

- **LIVABILITY|WALKABILITY**

Action: Promote and realize, through innovative architectural and urban design, environments that are satisfying to live in, comfortable to walk in, and enjoyable for all to experience.

SYNOPSIS + MOVING FORWARD:



*"We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time."
(T.S. Eliot, 1943)*

Modern nations, cities and society confront unprecedented challenges. From economic meltdown and global warming to escalating conflict and rapid urbanization, contemporary civilization grapples with finding a way forward. Concerns about a widening gap between rich and poor loom large, as does the daunting struggle to meet the Millennium Development Goals and other international compacts targeting a more just, balanced and sustainable world. Environmental designers have both undeniable obligations and remarkable opportunities. The present paper delineated HOLISTIC GUIDELINES for approaching complex design + planning challenges. The proposed integrative model, embracing together cultural sensitivity and the pursuit of sustainability, proves relevant and applicable over a breath of project types, contexts and conditions. In many instances the conventional approach to design + planning is fraught with deep fragmentation, poor communication and endemic dysfunction. Through the deployment of a much more encompassing system of mindset and method, the author's proposed HOLISTIC GUIDELINES proffers an alternative to the narrow, agenda specific manner in which many environmental design projects are routinely executed in our modern world. Considering our modern maladies, it is argued that 'business as usual' and the status quo prove inappropriate and unacceptable. More innovative, responsive and responsible ways of addressing design + planning is in need and in order. The stakes are high, the risks are many, and the imperative most urgent.

Keywords: HOLISTIC GUIDELINES, architecture, planning, environmental design, culture, context, sustainability

REFERENCES

- ¹ His Highness the Aga Khan. (2008). Where Hope Takes Root: Democracy and Pluralism in an Interdependent World. Vancouver: Douglas & McIntyre. pp. 11.
- ² Kronenburg, Robert. (2007). Flexible: Architecture that Responds to Change. London: Laurence King Publishing. pp. 11.
- ³ Glendinning, Chellis. (1994). My Name is Chellis & I'm in Recovery From Western Civilization. Boston: Shambhala.
- ⁴ Jacobs, Allan and Appleyard, Donald. (1987). Toward an Urban Design Manifesto. Journal of the American Planning Association. Volume 53, Number 1, Winter.
- ⁵ Berry, Wendell. (2000). Life is a Miracle: An Essay Against Modern Superstition. Washington DC: Counterpoint. pp. 150

All photographs by the author - reproduction with permission only - copyright 2008 brian r. sinclair | original oil painting by yuki sinclair - reproduction with permission only - copyright 2008

This article is a modified version of an original paper presented at HICAH-2009 and included within formal proceedings of same | © 2008 brian r. sinclair.