

# **INTELLIGENT URBANISM**

## **FROM PRINCIPLES TO ACTION: CREATING HAPPY PLACES TO LIVE IN**

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I was deeply honoured in the year 2001 to be commissioned by the Royal Government of Bhutan to prepare the Capital Plan for Bhutan. The process involved participation and consultations. The regime of planning and the regime of land have inherent conflicts, and the stake holders, like all places, had a variety of agendas. But the engagements were real and lively. These engagements were based on a charter of values upon which all the participants could agree. It was a process of transforming the underlying values of Gross National Happiness into axioms, or principles, against which issues and decisions could be examined, debated and decided upon. To make these principles, and the values which underpin them, more imageable, we decided to list them. This value based process lead to what I would call THE PRINCIPLES OF INTELLIGENT URBANISM. Thus, a development process began with the creation of a kind of meeting place of minds; a charter of principles against which any fiscal or physical input or expenditure could be reviewed.

The plan which emerged was structured by several themes. These included an Urban Corridor, which assures an alternative to the automobile thru express buses that link compact, walkable urban villages. Instead of a plan which zones

uses, the plan employed a composition of precincts, which facilitated different stages in the life cycle, different dharmas and various aspects of the human psychology. Thus, there is a place for householding, a place for learning, a place for right livelihood, a place for spiritual evolution and a place for governance. There is a place for contemplation, a place for romance and a place for friendship. The directive nature of the precincts act to protect the fragile environment of the Wang Chhu and the forest covered hills and mountains which protect and nourish it. More than sixty percent of the urban area is protected through limited density, limited ground coverage and limited bio-mass destruction. More than thirty percent is in fragile reserved areas where no building is allowed at all! Pathways, footpaths, foot bridges, and a system of open spaces provide places for human interactions and engagement. Looking back at the often joyous, often painful, and always enlightening process of evolving a structure for the capital city, the axioms or principles can be stated quite succinctly. Clearly these principles emerge from the concept of Gross National Happiness.

It is important to note that a new paradigm is always measured, analysed and judged by the methods of the old paradigms. Each historical paradigm creates its own basis, rationale, descriptive tools and measures. Thus, a new horizon appears too hazy to visualise through the old tinted lenses of the old paradigm. Western society needs to measure everything, and thus can not visualize the measureless! The Bhutanese way of seeing things is more emotive, spiritual and

diagrammatic, like a mandala. There is wholeness and a completeness which we fail to see because it is not laid out to us like a Renaissance one point perspective. Rather there are overlays of symbols and motifs, each implying meanings and knowledge systems. In preparing the capital plan, we knew we had to work between the spiritual and the empirical. The Principles of Intelligent Urbanism became a vehicle to achieve this.

Thus, the **Principles of Intelligent Urbanism (PIU)** are a set of ten axioms that lay down value-based frameworks within which human settlements negotiations and planning can proceed. After review by stake holders, PIU act as a consensual charter around which constructive debate over decisions can take place. Emerging from our experiences in planning the capital city of Bhutan, the PIU was the basis for the new capital plan for Bhutan (Benninger, 2001). These principals surely have relevance to the planning of human settlements in other contexts. They hint that happiness may not be as illusive as mainstream development professionals imply!

PIU's first principle, **Balance with Nature**, emphasises the distinction between utilising resources and exploiting them. It focuses on the exploitative threshold beyond which deforestation, soil erosion, aquifer depletion, silting and flooding reinforce one another in urban development, thereby destroying the natural environment. The principle promotes environmental impact assessments to identify fragile zones, threatened natural systems and natural habitats that can

be enhanced through conservation, density control, land use planning and open space management. To quote Lyonpo Jigme Thinley (1998), “Reality is not hierarchical, but a whole, circular and enclosed system.” Putting the whole in front of self interest is central to happiness. It is also central to intelligent urbanism.

The principle of **Balance with Tradition** integrates planned interventions with existing cultural assets in consonance with traditional practices and stylistic precedents. Heritage structures become focal points of views; axis of boulevards; zones of open space and parks. Heritage treasures become the spatial “benchmarks” which define urban spaces and neighbourhood districts. His Late Majesty, Jigme Dorji Wangchuck, achieved revolutionary changes within a cultural framework, which was peaceful, yet transformational. He freed the serfs, created the National Assembly, made written laws and the judiciary system to justify them; replaced foot cartage with roads, and villages with towns; instituted elections; and sent youngsters abroad to study teaching and medicine. He built schools and hospitals! He formalized diplomatic relations with Bhutan’s neighbours and set a path for friendly co-existence in a sea of strife! His shifting the capital to Thimphu, and rebuilding the ancient Trashi Chhoe Dzong (as a symbol of modern Bhutan!), exemplifies his genius for using tradition in the service of transformation and change. The Bhutanese experiment in development, unlike those in nations around it which employed western models

almost mindlessly, was free of violence, strife and hatred. A balance with tradition uses a middle path to maintain happiness in a world of change.

**Appropriate Technology** promotes building materials, construction techniques, infrastructural systems and management practices consistent with people's capacities, geo-climatic conditions, local resources and investment capabilities. Materials and methods which displace craftspeople, cottage industries and low energy traditional materials are rejected. Appropriate technologies are in synch with the local culture, history and ways of doing things. They involve people, rather than alienate them. Appropriate Technology promotes happiness.

**Conviviality** sponsors social interaction through public spaces in a hierarchy of civic places devised for civic life (companionship, solace, romance, domesticity, neighbourliness, community, etc.). These are realised through quiet forests above the city for solitude; walkways along the river and parks for romance; sidewalk cafes, street benches and civic courtyards for friendship; Urban Village squares for communities; and neighbourhoods, well defined, for families and close knit groups. It promotes urban villages, which serve clusters of neighbourhoods, in the form of a walking city. A number of Urban Villages composed of compact, walkable centres accommodating basic services, convenience shopping, parks and an express bus stop, support lower density areas spreading from them.

The Public Domain is rapidly disappearing from the urban fabric, replaced by privately owned and managed spaces, generated to earn profits. The shopping mall has gradually replaced the street and the public garden, and the entrance to the mall is controlled by vendors and limited to those who can pay. The very essence of urbanity is the opportunity for chance meetings, to encounter the exotic and to experience the serendipity. Cities are places of the unknown and of self discovery! Thus, the PIU reclaim the experience of discovery and engagement with the new and the unknown. Conviviality and self realization engender happiness!

**Efficiency** promotes a balance between the consumption of resources like energy, time and finance, with planned achievements in comfort, safety, security, access, tenure and hygiene. It encourages optimum sharing of land, roads, facilities, services and infrastructural networks, thereby reducing the unit costs per capita, and increasing affordability and civic viability. Using intelligent transportation systems, it structures nodes and hubs along urban corridors and networks. It makes the employment of public mass transport a viable alternative to the private vehicle. Well designed, efficient urban systems increase the number of people who use costly urban infrastructure, to make the per capita costs less! This breeds accessibility to basic services and leads to financially viable urban fabrics, rather than deficit generating forms of spread out networks, so apparent in urban sprawl, in “suburbia,” and in low density far flung bungalows, separated by vast open areas. Access to basic services and the

enjoyment of mobility can only happen within a framework of efficiency. Efficiency promotes happiness!

Reliance on **Human Scale** encourages ground level, pedestrian oriented urban arrangements based on anthropometric dimensions, as opposed to machine, inhuman scales. Walkable, mixed-use, pedestrian villages dominate over single-function blocks that need extensive motorways and huge parking lots. The scale of the so called progressive world is that of expressways, motorways, monstrous office towers, vast blank walls of the shopping malls with the private spaces locked inside. Human scale is low rise, is imageable, and small. Building human scale environments creates understandable and meaningful spaces. Human scale, balance with nature and with tradition, conviviality and efficiency are holistic parts of a complete circle. Human scale and happiness are mutually reinforcing.

Creating effective **Opportunity Matrices** enrich the city as a vehicle for personal, social and economic development through access to institutions, services and facilities. These create opportunities for education, recreation, employment, business, mobility, shelter, health, safety and basic needs. Cities exist for many reasons, but most formidable is the freedom of choice and the vast networks of opportunity they create. Good cities provide a plethora of alternative paths and ways by and through which individuals can reach their full potential and awareness. They offer a variety of channels to ensure that basic needs are

achieved and that hidden desires and capabilities can be realized. The web of choices that good city design presents to people is a generator of happiness.

The principle of **Regional Integration** envisions cities as an organic part of a larger environmental, socio-economic and cultural-geographical system essential for its sustenance. This axiom recognises that there is a symbiotic relationship between cities and their hinterlands; hinterlands and their regions; and regions and the nation. It emphasizes that there is a symbiotic relationship between nations and the common welfare of the world citizenry. No city, no nation, no region is an island. The environmental mess of one region spills over on to the others, like an atomic cloud dropping particles of pollution everywhere it is blown. No nation is isolated from the terrorism engendered by the repressive policies of its neighbours. Thus, all units of civility must fit one within the other like the Russian dolls that dwell within one another in consonance. Happiness is the inner knowledge that the world is just and fair; not just that one city, or one family, or an individual is well and justly cared for.

**Balanced Movement** promotes integrated transport systems of walkways, express bus lanes, light rail transit corridors and automobile channels. The modal split nodes between these transport means become the public domains around which compact, high density clusters, urban hubs and mixed-use urban villages emerge. Freedom is enhanced by physical access and mobility. A good urban system allows each member of a household to choose the time and destination of the joy and opportunities they seek. An automobile will only provide mobility to

one household member; two automobiles will provide a modicum of happiness for a second person! Only a well managed mass, public transport system will assure the freedom to all which a good urban system provides. Happiness is tempered by choice, possibilities, mobility and a variety of physical destinations.

**Institutional Integrity**, PIU's last principle, recognises that good practices inherent in these principles can be realised only through accountable, transparent, competent and participatory local governance founded on an appropriate data base, entitlements and civic duties. PIU promotes a range of facilitative urban development management tools to achieve urban practices, systems and forms. A citizen, who is sure that the machinery of administration and governance will treat them objectively and fairly, rests peacefully at night. The mental torment that is generated by state terrorism, the misuse of power, incompetent property records, the direction of the general welfare resources to the benefit of a few; and by the manipulation of justice...thwarts personal peace and blissfulness. Good governance results in happiness; the carefreeness that one can experience when they know that all is right in the heavens!

A great deal of the discussion on Gross National Happiness has implied that happiness is not quantifiable and that it is embedded into different cultures in different ways. True, that trying to measure and to quantify happiness goes against the very concept of GNH, but there are some common grounds where happiness dwells! This paper is based on the experience of Bhutan composing its own future through the vehicle of an urban plan. At the end of this process, I

feel, we have much to share with the world where carrying principles into action is concerned.

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