Movement is the Cause and Being of All Life

Alfred Meyers

Department of Built Environment, HAN University of Applied Sciences, Arnhem, the Netherlands sustaincollab_alfred@me.com

Erich Connell

Department of Construction Management, East-Carolina University, Greenville, NC, USA connell@ecu.edu

Abstract

The time has come to change our habits, our behavior, and to consider the necessity of sharing and repairing the Earth's resources, to prevent blaming each other regardless of 'Globalization' and share equally in the responsibility for worldwide climate problems. We would do better by bringing these problems back to manageable proportions clarifying where we stand, namely, a World fulfilling the basic needs of Mankind. We would do better by creating solutions to problems in a regional manner. Energy reduction and sustainable technology are required and only effective by appropriate local rural and urban planning. Tendencies such as growing (mega-) cities, diminishing food production look like global problems, but usually caused by local circumstances.

Our task as professionals is to find balanced solutions by 'thinking-out-of-the-box'. De Vinci speaks of the *Adoration of the Magi*, we need not adore our 'climate prophets/magi's', we need to behave as professionals with a comprehensive understanding by approaching these issues inclusively. Introverted disciplinary attitudes must be avoided in order to manage worldwide ecological, sustainable problems and dilemmas. The discussion's complexity requires technical experts and, for example, NGOs across the board. Education will play an imminently important role: students are the bearers of the future.

Keywords

Sustainability, Approach, Education, Attitude, Change

1. Introduction: The Changing World of Environments

The globalization, environmental, sustainable and climate change debate is being discussed fragmentally in expert panels and in publications as well. Architects, former and active politicians, commercial firms, so-called TV-experts and lobbyists conventionally focus on single aspects such as 'cradle-to-cradle', renewing of materials, green roofs, green façades, even vertical safari façades, sometimes illustrated by films showing 'deluges on world scale'; blacker than black is not possible. Therefore, the notion 'Globalization' frightens people; they do not know what it is and what it means for them, hearing all kinds of incomprehensible bad news. Placing these discussion issues out of the context, people will not see the meaning of and the coherence between these different aspects, by which they 'don't have any clue of it' and are lost for the discussion.

The increasing stress on diminishing availability of raw materials that have to be shared/divided worldwide, that on the environmental consequences of increasing wealth of about 1 billion people, that on the need for reusing (raw) materials and the negative consequences of the inconsequent ways of food production, transportation of goods and persons and the amount of energy consumption involved, whilst

all these aspects are being summarized under "globalization" and "climate change", should speed up the process of reconsideration and revision of our behavior, as individuals and as professionals.

Statement: GLOBALIZATION MEANS THINK MORE REGIONALLY.

2. Stewardship: balance between modesty and Growth

Despite the enormous scale of the problems, the world is nevertheless getting more like a village looking at each other and waiting what others will do. For instance, in a village community, somebody has to clean the public areas. The question is, 'who takes responsibility, who takes ownership of that task?' On world scale comparable to that, the waste problem in the Pacific Ocean. Two plastic waste islands of continental scale are a great hazard for the basic world food chain. Despite this danger and discussions in the U.N., no nation is willing to take responsibility and clean up the mass. The same goes for the climate change issues. Nations are being bound by the necessity of the 'continuing Growth' causing increasing transportation movements related to air pollution, while growing cities (of up to 40 million citizens) suffering pollution of air, soil, water and social life, shortages of all kind, etcetera.

Statement: on international level, U.N. members should formulate ownerships: sort of "Climate Conditioning Sharing Program".

3. Mega-cities: economics, citizens versus nature

Poor urban planning and urban poor policies resulted in the past in unhealthy environments for citizens, flora and fauna, not to speak of social isolation by anonymous mega-buildings, ditto city quarters and overcrowded transportation facilities. A migration into urban areas is manifest in the whole world. Cities which grow to enormous proportions (China circa 40 million citizens) need to be planned carefully and require a new way of approaching the dilemmas: dense local transportation of citizens, scheduled delivering transportation strategies of food and goods because of traffic jam risks, use of energy, communication, health care and social life. Furthermore, Economics and Education forces the local authorities to guaranty high quality of the living environment. Good educated citizens will be more assertively on protecting their interests and demands for such a healthy living environment. Moreover, to compete in the future with other mega-cities, a good quality of life will be required. These mega-cities (up to 40 million citizens) will transform into strong, self-supporting economies (town states), which can compete with other cities only by excellent labor conditions. Therefore, Wuhan's authorities, a Chinese town, prescribes that seven natural green lungs should penetrate into the city's new structure for best living quality but to stimulate physical exercise of the citizens and to avoid unnecessary transportation movements for recreation activities.

Statement: A new morphology is required: "NATURES THE CITY", the so-called 'Biotope Cities'.

4. Challenges for professionals

Future orientated solutions have priority. Core business is the reduction of energy consumption and the conditions for reusing raw materials and even that for heat exchange between buildings. Achievable by new technologies as well by changing our habits and attitude: "sustaining the ability to modesty leads to sustainability". Efficient solutions for new rural and urban planning and ditto morphology should lead to efficient strategies for public and goods transportation and to an efficient implementation of energy reducing techniques and ditto buildings.

Rural, urban and city planning requires - because of the complexity of managing large cities - preferably an inclusive approach of multi-discipline teams in which also health and sociological issues are being part of the planning aspirations. Out-of-the-box-thinking resulted in so-called 'agro-cities'. Due to the world wide diminishing of food production, ideas about self-supplying agro-cities are going around: back to local production (in buildings) and back to local supply of food and thus avoiding unnecessary international transportation and high costs for living.

Statement: old concepts should be tore down and replaced by an inclusive "thinking-out-of-the-box".

5. Challenges for Education

Although students are open-minded at the start, traditional education might put them on a conservative wrong track. In their interest, educators and coaches should offer them open platforms and by bringing serious problems back to manageable proportions, the students will have a good environment for developing new insights. Of great importance is to show these young people how managers, politicians, industrials, experts, scientists act in this important worldwide discussion. Consequently, the professionals should act towards students with a **little reserve**. Whilst students do not have the broad perspective on worldly affairs, sometimes un-aware of the notions of ecology, rural and urban problems, older professionals must work hard to avoid imposing their past and bias by infecting the students with their preoccupations, hobbies and outdated insights.

To approach worldwide social-economic and climate change matters in a coherent way, disciplines of differing kind should together focus on and be part of the preliminary planning of large ecological, rural and urban projects. Here, educators/teachers have to **move** as well, forward to a more profound intellectual collaboration with basic knowledge of other disciplines. Working with multi-discipline teams should be a core objective for educational curricula. Preferable of course is the multi-continental setting.

Statement: students should work on global issues in a multi-continental and multi-discipline learning environment.

6. Conclusion

It is evident that the enormous consequences of the globalizing world economy - due to the way in which we have organized our economies and the way we use raw materials - are irreversible, especially when developing countries will flourish in the future. We are undoubtedly confronted with the question of international mobility (pleasure, business, transportation, etcetera). We must tear down the old views and develop new future orientated concepts, visions on society, on globalization, on sustainable environments, on management issues, on technical and design disciplines. The latter should focus more on specific human needs instead of 'design-for-Design'? Too much movement will be wrong – who can follow too much changes - and too little as well – stagnation where development is needed -. Therefore, we will have to find a balance in our habits and behavior.

Practice and education

It is surely necessary to form multi-disciplinary teams in international conference settings to discuss what is to be done (agreements about a coherent economical, urban and rural planning for the World), such as the 'Millennium Development Goals' of the U.N. in 2000. NGO's (Non-Governmental Organizations) and the educational institutes may definitely deliver contributions to achievable solutions. If not, local political short-time interests of nations will lead to more problems. Education should contribute here to the basic discussions. The East Carolina University and the Dutch HAN University developed a multi-continental and multi-discipline educational program called "GLOBAL SUSTAINABLE C4 COLLABORATIVE". This program provides the objectives of an open multi-continent educational platform in which disciplines of all types, students of differing backgrounds and cultures deal with common problems and are challenged to think on these issues in order to find their own position in the sustainable discourse.

7. Finally

We will state, that 'Globalization is forcing us to regional thinking'. No matter what happens, we do have to look at ourselves and try to solve the big problems by ourselves, sometimes by adapting technology or adapting our behavior to the necessity of sustainability. Meanwhile, the international 'public' space should be the responsibility of the United Nations to organization the world trade and to come to an agreement of how sharing and recovering the remaining sources would be like.

We learn from Leonardo da Vinci (1481) that "Everything is movement. Without movement life will stop." Movement can be seen as changing attitudes, changing the old visions into a 'thinking-out-of-the-box', i.e. 'moving forwards, beyond old borderlines'.

Rest to mention **The Task** that we, professionals, have, is to develop a coherent, visionary image of the future, a policy plan, a business plan in which, we personally hope, we will focus on the elementary needs of Mankind in all his aspects (see also 'Human Rights').

8. References

PARAG KHANA: "HOW TO RUN THE WORLD"

Essay: "OPMARS VAN DE MEGASTAD, HET TIJDPERK DER NATIES IS AFGELOPEN",

15-09-2010 NRC, Rob van Erkelens

Cities are the laboratories of our networked world and a metaphor for an uncertain time. From climate change to poverty and inequality, cities are problem - and the solution. There is a glimmer a great future full of HafenCity and Songdo, instead of Karachi and Mumbai's.

"CITY IN NATURE", Foundation 'Biotope City': http://www.biotope-city.net/

"THE POPULATION EXPLOSION"

Source: L Hickman, The Guardian (UK), 14 January 2011

"INDIA, THE 'NATION OF VILLAGES', FACES AN URBAN FUTURE"

By James Fontanella-Khan

Financial Times 2011

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India's need for new cities has never been greater. To understand this, one just needs to look at numbers produced by McKinsey.

'MEGACITY CHALLENGES'

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stefan.denig@siemens.com (Tel. +49 89 636 83110)

Urban Agriculture as an Integrative Factor of Climate-Optimised Urban Development,

Casablanca "Agriculture and Megacities go together"

Urban Agriculture as an Integrative Factor of Climate-Optimised Urban Development,

Casablanca / Morocco

"Research for the Sustainable Development of Megacities of Tomorrow, Focus: Energy - and climate-efficient structures in urban growth centres".

Based on the results of the preliminary project phase (07/2005 – 03/2008), Urban Agriculture

Casablanca is a research and development project with a main project phase of five years duration (04/2008 - 03/2013).

Urban Agriculture is understood as every form of informal or formal agricultural production within a city, whereby in the context of urban growth centres "city" equates to the urban region.

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http://www.chinasquare.be/dossiers/wat-drijft-chinas-megasteden/

Chen Zhuoyong, 'Urbanization and Spatial Structure Evolution of Urban System in China', IDE-JETRO

439, Nov. nther Fischer, Interim Report Scenario Analysis on Urbanization and Rural-Urban

Migration in China, Aug. 2003, Laxenburg, www.iiasa.ac.at; Urbanisation et Croissance des Villes en Chine,

doctoraat Zelai Xu, Edilivre, 2008.

ADB, PRC Town-Based Urbanization Strategy Study, Prepared by PADCO, Washington, DC CCTRD,

Beijing.