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Politiche e progetti della sostenibilità in Catalunya
a cura di Francesc Muñoz con Massimo Angrilli

Architecture: from a 'symptom of economic growth' towards a 'tool for wellbeing' *Sander Laudy*

The origins of the saying "Think globally, act locally" have been attributed to Patrick Geddes, a Scottish biologist, sociologist, geographer and town planner that lived from 1854 to 1932. His personal history shows us how a coherent vision on sustainability can only come forth from a comprehensive understanding of the phenomenon, applied and experienced in different disciplines and professional fields.

At the World Sustainable Building Congress, WSB14, held in Barcelona last October, it was clear that the social legitimacy of architecture and urbanism in the near future will depend on whether these professions will be able to respond adequately to the need for a sustainably built environment. Both are going through a big crisis in Europe and to a lesser extent also in other places around the world. The professional resilience of architects and urban planners appears small in a world where one economic boom after the other bursts, causing high level vacancy in the impressive office towers that were promoted by the local elite (as is happening lately in financial district 'Moscow City'). In some cases the works stall even before being finished, leaving their designers standing flabbergasted in front of the scaffolding.

The WSB14 showed nevertheless that, while there are still a lot of 'pre-Lehman' vices to be found on a global level, there also is a rising awareness amongst people involved in building about the problem and the urgency of sustainability. Concerns on the issue are being shared from Hong Kong to Morocco, from Sweden to Argentina and from India to Canada.

Now the strategies and techniques that were presented at WSB14 should help us to find solutions for a world that hasn't yet discovered how to combine the quest for quality of live with a respectful management of resources. It still seems necessary to have growth in order to generate wellbeing and indeed growth is what will happen in large parts of the earth. The battle against climate change will not be won or lost in Europe (where a stalling increase of the population will mark the continent for the coming decades). The reach of climate change will be defined in the continents of Asia and Africa, where both population and living standards will increase considerably.

The 'Global Vision', that the participants of WSB14 were searching for, accepted the right of developing countries to pursue their wish for wellbeing and prosperity. But it stated also that if these rights will be realised by the same methods that the already developed countries applied (i.e.: cheap energy extracted from carbon), wellbeing will be an illusion worldwide. What sense does it make that India tries to elevated the economic standards of its population, if the whole delta of the Ganges will disappear during the next century as a consequence of the rising seas?

Globally shared problems are causing different scenarios around the world. Between the 'minimal dwelling' of 400m² in Dubai and the self constructed shelters of the slums of Buenos Aires the need for reduction of CO₂ emissions is omni-present. Both extremes will be realities and thus both these cases need sustainable solutions. Different economic circumstances will all have to be addressed, although the upcoming regional challenges are of completely different nature.

Together with the growing population in developing countries, the rise of cities and highly density urban areas is one of the most significant circumstances that architects and urbanists will have to deal with. It affects them, as both the landscapes, the villages and the cities of the world will be subject to this

phenomenon. For European countries and Russia, with a declining number of inhabitants in determined regions, it will mean in the first place that villages on the countryside will go through significant changes. Meanwhile the quality of life in the city will have to be maintained through less or no new construction and mainly through rehabilitation. A serious discussion and reconsideration of the desirable density of cities will be needed.

These specifically urbanistic tendencies can be classified in the chapters of 'social' and 'economic' sustainability. But before these, one should have clear that an even more urgent question relies in the 'environmental' sustainability issues, those plainly related to CO2 emissions from fossil sources and the depletion of resources. Energy efficiency in buildings and in cities (through transportation) and the question of renewable energy generation will be decisive to shape the framework in which architects and urbanists will exercise their profession in the upcoming future. In this field a whole range of strategies and methodologies are being developed but the application has been until now way less far stretching. And in general both architects and urbanists are showing a disturbing lack of rigour dealing with technical questions. At the same time the capacity to provide creative and canny concepts that really address our future needs is not so big as one might hope. A lot of the 'green' proposals that see the light are either superficial and un-rigorous or even shameless examples of 'greenwashing'.

The small number of analyses and proposals that do seem to provide valid approaches towards sustainable architecture and urbanism, are always the result of in depth investigations beyond architecture and urbanism themselves. They include theories on industry, economy, sociology and other mechanisms that shape the context of architecture.

The USA are producing the more optimistic concepts, such as Cradle-to-Cradle, which embraces the idea of abundance through circular dynamics. It entrusts the human kind the aptitude to mimic organic processes, where waste and nutrition become the same. European scientists and thinkers produce more sober visions, (not to use the slightly contaminated word 'austere'), based on theories about 'de-growth', that put the whole capitalist system in crisis. As a matter of fact these kind of ideas can even be found, lately, in the USA, like for example in the latest book of Naomi Klein, 'This Changes everything' (1). Architects have serious problems anyhow to translate these theories into spaces and constructions.

The struggle with this big shift of paradigms will be explicitly visible in two of the latest IBA-projects, that have been started this year in the German region of Thüringen and in the Netherlands in the southern region of Parkstad, a union of municipalities around the city of Heerlen. The phenomenon of the Internationale BauAusstellung has been a motor for development through architecture and urbanism of cities and regions in Germany since the beginning of the twentieth century. Outstanding examples of architecture were realised within IBA programs in Berlin, Nordrhein-Westfalen / Emscher park, and lately in Hamburg Wilhelmsburg. Nevertheless the circumstances of these events were until now fairly favourable for the development of newly built areas. At this moment, on the contrary, both Thüringen and Parkstad are starting long term IBA-projects (until 2019 and 2020, respectively) to confront exactly the opposite of what had been the catalyst of earlier IBA's: a shrinking population in the region and an adverse economic climate.

Parkstad, the south-eastern part of the Dutch province of Limburg, has never recovered economically from the closure of the coalmines in the 1970's and in spite of all kinds of incentives that the national government has tried to implement, the population has been getting older and smaller. When in 1999 eight municipalities, villages and cities, united in order to develop coordinated policies on economic and spatial development, they directly stated that they had to look for the opportunities that 'shrinking' might offer. Forecasts on the city of Heerlen predict a reduction until 2050 of about 30% in population and of about 20% in the number of dwellings. These conditions will obviously determine the proposals that will be brought forth the coming years within IBA Parkstad. Comparable tendencies have been the reason to start IBA Thüringen but there is also the desire to comply with the objectives of the 'Energiewende' (the German transition to renewable energy-sources). Another decisive condition there is the fact that the state is withdrawing from its role as the main-initiator of public initiatives. Now it will be left mainly to local entities to take on the challenges that the regions are facing.

It will be very interesting in these two IBA's to see what kind of projects will be selected for further development. The IBA-vehicle has until today always operated within a context of prosperity, a condition that made the realisation of the objectives fairly feasible. Now the situation is different and that will require real creativity and the capacity to define resilient proposals, creating a high-quality built environment while wealth is declining.

Both these IBA projects will deal with the theme of energy management in cities and buildings, a question that by now is paramount to urbanism and architecture. Combined with Europe's stagnating population growth, which is causing a big decline in new construction, it is obvious that technology will be concentrating more than before on the energy efficiency and generation of renewable energies in existing buildings. Now that newly built buildings are increasingly able to supply their own energy, rehabilitation will be the next step. Anyhow, the adaptation of the existing building stock in Europe will surely show to be a more complicated

process, as the technical quality of housing is low in a lot of cases. Promoters, architects and industries will surely be concentrating on this field and dedicate it a lot of efforts for quite some years to come.

Governments and administrations will not be subsidising energy-projects as much as before but what they will keep on doing in general is to 'lead-by-example'. Besides being exemplary, there is obviously the tool of more demanding legislation, as there is the European Energy Efficiency Directive (EED) (2). The fourth article of this document is dedicated to the renovation of the existing building stock of the EU countries and it obliges them to develop and implement strategies in order to reduce energy consumption.

It is remarkable to see how a country like Spain, where the conservative government released last year an absolutely outrageous energy-decree, directly punishing auto-sufficiency from renewable energy sources, does perform fairly well in the field of rehabilitation policies. As a matter of fact, these policies have been defined to a great extent by a document that the CONAMA Foundation and the Green Building Council España commissioned to architect Albert Cuchí and economist Peter Sweatman (3). They released a first version of their 'Roadmap for a new housing sector in Spain' in 2010 and it has been updated every year until now. Working with a whole group of experts, the 'GTR' (Rehabilitation Work Group), they describe the possibilities that rehabilitation offers, from an economic, energetic and social point of view, in order to revive the construction sector in Spain, after it imploded in 2008. This document was very well received by the Spanish National Government as a policy guideline and it has even been of great utility to those lawmakers in Brussels, that are dealing with energy and housing. Recently it has been taken as a the main reference for the evaluation of the reports that the EU-countries had to deliver, on the progress that they were making in complying precisely with article four of the EED.

Another significant law that shows how the mind-set in Spain has shifted since the real-estate-bubble exploded, is the urbanistic 'Law of the three R's', that categorically cancels the creation of new urban terrain in the country (4). After years of facilitating real-estate promotion on new urban expansion plots, this law directs the attention of developers and investors towards the existing urban areas, in order to improve the quality of the built environment over there. The three R's in this case stand for urban Rehabilitation, Regeneration and Renovation. The generic sprawl that had been the norm since the nineties had by 2008 not only destroyed large areas of valuable natural lands but it also created large extensions of sub-urban mono-functional neighbourhoods, heavily car-dependent, that lacked the social interaction of the classical city centre and that sucked life away from there at the same time. Now to abstain from the creation of new urban terrain obviously seems a logic choice, given the situation in Spain. But this law is nevertheless surprising for how bluntly it fixes a new course. The coming years will show how its implementation takes root and whether it will be a motor for a new kind of urbanism in Spain.

The English sustainability blogger Chris Goodall participated last year in the seminar 'The context of Sustainable Architecture', amongst other people like engineer Aleksander Ivancic, architecture critic Hans Ibelings, former prime-minister of the Netherlands Ruud Lubbers (5). Shortly afterwards he posted a story on his blog where he observes how several data indicate that prosperity in England increased while material consumption declined (6). This, he said, was a clear sign that our western societies do have the capacity to generate wellbeing without exploiting ever more natural resources, breaking thus through the automatism of the consumer-society. ICT and other efficient methodologies generate immaterial prosperity and through them we can now improve our living standards, according to Goodall.

All these searches, for free energy, for prosperity without consumption, for growth without resource depletion, are moving us towards new models to create wellbeing. Architecture and urbanism have traditionally flourished with wealth and abundance of material resources. Now our professions face the challenge to find ways to change this situation radically within contemporary socio-economical frameworks. Future sustainable building will definitely require a fundamental reconsideration of twentieth-century paradigms, while at the same time we might be able to draw some serious inspiration from the words of Mies van der Rohe: "Less is more".

- (1) <http://thischangeseverything.org/>
- (2) http://ec.europa.eu/energy/efficiency/eed/article4_building_strategies_en.htm
- (3) <http://www.gbce.es/en/pagina/informe-gtr>
- (4) <http://www.boe.es/boe/dias/2013/06/27/pdfs/BOE-A-2013-6938.pdf> - in Spanish
- (5) <https://www.youtube.com/watch?v=rx2PEQmntZI>
- (6) <http://www.carboncommentary.com/blog/2014/07/02/peak-stuff-again>

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