

Smart Cities colors: the new intelligent cities in Asia and the new intelligent cities in Europe. Why are they different in theirs colors in the architectural color design?

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ABSTRACT

The Smart Cities have grown all over the world and are already part of the development of space and the human being. Colors in cities are a direct and necessary part of existence and immediate construction. They need to be analyzed and investigate in detail in advance. Can cities be happy and contain some humor using different colors? The document compares existent colors of Smart Cities in Asia and colors in European Smart Cities. With this research, it will be possible to verify the differences between the introduced colors in the European cities and the colors in the Asian cities and where these can influence the permanence of the inhabitants of the place and the health that is sustained by these implications. With the introduction of the light factor on the existing colors in the city, how the lighter colors can create reactions in the human being? This study may be beneficial for new interventions and possible changes in architectural terms in the territory. The continuous existence of the same ranges of Pantone's can produce repetitiveness in spaces, which can provide both benefits and negative influences for the human being.

Keywords: climate smart cities, green, architecture, sustainability, health

INTRODUCTION

“Smart Cities” are part of our modern society and are strong models on our generation, but as everything, we have the positive face and the negative face, it always depends on how spaces are used. These spaces are a reflection of the enormous technological advances provided by years and years of studies promoted by the human being, that in certain actions go beyond the physical barrier allowing the people to live in a space at the beginning of virtually, without borders. Like many inventions changed the history, the Smart Cities are revealed as a tendency for new generations marking determining and creating a new type of culture. At the end, what are real Smart Cities? [1]“...Across the world, the stride of migration from rural to urban areas is increasing. By 2050, about 70 per cent of the population will be living in cities, and India is no exception. It will need about 500 new cities to accommodate the influx...” according to this statement human beings are trying to react to the law of supply and demand, and trying to find a way to be able to solve a future problem. Cities are modern creations [1] “...It is a city where information technology is the principal infrastructure and the basis for providing essential services to residents...” The origins can be at some especial lines [1] “...The concept of smart cities originated at the time when the entire world was facing one of the worst economic crises...” On article of November 11th of 2014, on the SustainableCitiesCollective, Nina Bianchi and Kat Hartman, describe Smart Cities as [2] “...a sceptical

image of a “remote-control city...”. The definition says [3]“...A city can be defined as ‘smart’ when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic development and a high quality of life, with a wise management of natural resources, through participatory action and engagement...”. However, the economic pressures have led some errors in planning. A city cannot provide this feeling [4]“...No other city in South Korea, has attracted more attention than Songdo, the skyscraper-intensive, apparently eco-friendly ‘smart city’ built along reclaimed waterfront land in Incheon, home of the country’s largest international airport called Songdo International City, so called because of the ‘ubiquitous’ data-gathering technology”. In recent centuries, and from 70’s by Michael Graves and his concept of Re-design cities, or even the city model of Corbusier and several authors as Paolo Portoghesi were big influences on urban design. Léon Krier, Rodrigo Perez, Peter Eisenman, Daniel Libeskind and recently Norman Foster, are major influencers in these new concepts of Smart Cities. Maria Teresa Bilotta expose on her article that Songdo is the first Smart City in the world [5]. “...It is a sustainable city, Green and full of technology and innovation. A city that contains a Central Park as referrer point, a semi imitation of Central Park in New York. A city today with more then 10 years of development. However, according Antony M. Townsend, in his Smart Cities book [6] “...Songdo was originally conceived as «a weapon for fighting trade wars» the idea was «to entice multinationals to set up Asian operations at Songdo»... with lower taxes and less regulation...”. It is true that Songdo a Free Economic Zone, an area with different regulation of the rest of the country, but the colors are influencing their population, aren’t they?

THEORY

This idea is based on logic with the concept and the implementation of Green Architecture and elements that create the Quality and Happiness inside cities - the logic of Sustainable Urban and climate and creative spaces. This initial question arises a sub - question to identify response that is characterized by knowing which the limit it has to be present on the sustainable design method to be used. On 17 December 17th of 2014, The Guardian, by Steven Poole [7] said, “...The truth about smart cities: ‘In the end, they will destroy democracy...” and further underlines also “...The smart city is, to many urban thinkers, just a buzz phrase that has outlived its usefulness: and what’s coming in its place? ” This research in direction of the improvement of these cities to be projected and built today, improving its existence, its sustainability and the type of intervention with new systems. There are situations that are not identifiable, as described Alain de Botton [8]”... Beautiful houses not only fail as guarantee of happiness, as can also be accused of failing to improve the character of those who live there ...”, may not only be the image of buildings could describe the development of a city. Nerveless, Alain de Botton identifies a reality [8] “...We have to ask what should be exactly the look of beautiful building ...” Zygmunt Bauman, on his book Trust and Fear at the Cities says [9]“...submit ourselves to the limits of our faculties: we know very well that we will never come to dominate completely the nature and our body also will never be immortal or also immune to the relentless course of time...”. Songdo from South Korea and Lisbon from Europe present completely different color levels.



Figure 1, 2 & 3: Songdo by night, Lisbon by day, Songdo by day (source: By the author 2015)

These new intelligent cities provide ‘proxemics’ levels that are identified and can be supported by the planning. “...Proxemics studies the spacial behaviour of man, the relationships between individuals in a spatial frame and between individuals or groups and the space itself. The biggest part of conceptual tools of the discipline builds on the fundamental ideas of space and distance.” by Ciprian F. Ardelean in *The Grammar of social space: An Anthropological approach to human Proxemics*. But it is not only the color that is missing in at new cities, another point focus is in “Netizen” people, the Net addiction [15]“...As many as 10 percent of Internet surfers are pathologically addicted to the Web, and although it can disrupt their lives, many doctors and mental health practitioners are unaware of the dangers, according to an article by psychiatrists at the Be’er Ya’acov Mental Health Center and Tel Aviv University...”. This is a global problem that the planners have responsibility since the beginning of the projects. Excessive connection can be harmful to the human being. The 3rd concept that needs to exist inside a City is the improvement of non-standard urban elements. WCCD the new international standard on city data, published in May 2014, create a database of indicators for City Services and Quality of life by the International Organization for Standardization (ISO). The ISO 37120 defines and established definition and methodologies for a set of indicators to steer and measure the performance of city services and quality of life in 17 different themes

EXPERIMENTAL

All inhabitants need to be informed and guided to produce results from the initial planning of interventions inside Smart Cities. The solutions pass as well with improvement on the communication with Universal Language because cities are not static is Organic. People expect that cities focus on Quality and not turn into ghost towns [10]. All this concepts with Green Architecture can be applied in Old Cities without the needing of a total demolishment. For choosing a new technology implementation it’s important knowing how people live and how people relate to cities. Jan Gehl [10] explain [11] “... Cities are the places where people meet to exchange ideas, trade, or simply relax and enjoy Themselves ... The compact city - with development grouped around public transport, walking, and cycling - is the only environmentally sustainable form of city... the city must Increase the quantity and quality of well-planned beautiful spaces are human in scale, sustainable, healthy, safe, and lively ... Cities ... They provide the structure that Enables cities to come to life, and to Encourage and accommodate diverse Activities, from the quiet and contemplative to the noisy and busy. The human city ... Creates pleasure for visitors and passers-by, as well as for those who live, work, and play there every day ... The Jan says: "We shape cities, And They shape us" ... " Technologies are used for creating more quality on the way of living, if we create the opposite we are not arriving to the objectives. Symbols in a city are an automatic human reaction...”. Jan Gehl [10] also notes the following [11] "... walking, stopping, resting, staying and conversing. Unpredictability and unplanned, spontaneous actions are very much part of what makes moving and staying in city space such a special attraction.” What is inside the buildings in the interior or in the exterior spaces produces influence on humans. Peter Zumthor [12] also transmits in his book *Atmospheres* [13] "... I enter the building see the room and - in the fraction of a second - have this feeling about it. We have perceive atmosphere through our emotional sensibility - a form of perception that works incredibly and Which We humans evidently need to help us survive ... I have no idea why that is so, but it's like that with architecture too ... ". Population, cities, governments, ... companies will benefit with this new concept with more quality, more health more happiness. Could Happiness be measured by data results? In the future, we will have this answer.

RESULTS AND DISCUSSION

This idea was based on interviews on experts, where were identified needs on Smart Cities and the influences of the technology on Smart Cities. Experts: Different ways of knowing and the city and different ways of living the city were identified. In general, everyone accepts that the results from the Data are very important, but the extreme of not giving space for Nature, off line status or shut down options are inside the needs of the population. Green was the selected color to implement on Equipment's, Green is a Sustainable color in all opinions. Create an orientation basis on the demonstration of how architecture on city's can be changed according to the real importance and action in which the Green Architecture can produce big results in our days. People need a connection between life and real Nature. For a sustainable intervention, and a sustainable business this level of thought is an integrant part of the project proposal.

Interviews + State of Art + Conclusions

CONCLUSION

All of the Smart Cities are not following the original sustainable spaces concepts, it is important to change that. To transform and create a Sustainable City, the amount of money needed pass the Private Sector level and demand the Government intervention. A project like this, will work only with a strong Community involvement and it has to be very productive. All Smart Cities have to improve and to maintain inhabitants, the colors that building present it is a sustainable factor. The importance of the proxemics, the limits of communication, the constant "ALWAYS ON LINE" status and the search for non-standard urban elements are problems to solve on the next ten years with a new addition of color.

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