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Social Interactions

The Self Sufficient Habitat

From the City to the Building

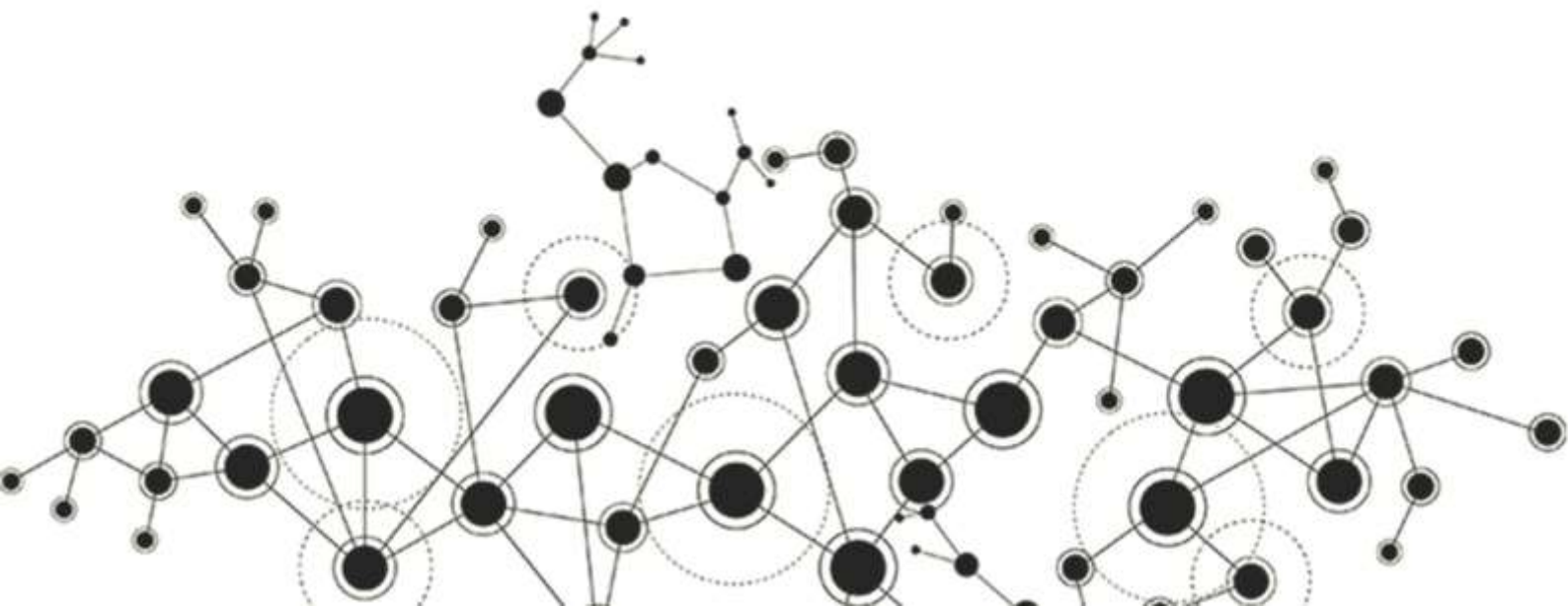


Abstract

"Human centered approaches to industrial and interaction design have long focused on studying human behavior to create informed and appropriate designs. A social interaction designer must consider not only people, environment and existing tools, but also the unseen elements of the system such as social relationships, power dynamics, and cultural rules." - Gentry Underwood

"I fear the day that technology will surpass our human interaction. The world will have a generation of idiots." - Albert Einstein

Starting with the quotes, aim of this research is to understand the aspects of Social Interactions via all the different phases of life cycles from history till our today's modern era and provide better and smart solutions for making a socially interactive community. Approach and research does not only focus on the human interaction or people but also other aspects which plays an essential role in making a community that one lives in healthier. Structure of the paper starts with the history of social interactions from city scale to reaching down to a building scale conclusion/solution/proposal understanding the dynamics of the Social Interaction phenomenon of psychology with respect to the new standpoints of cities scaling to a building. Connecting it all together for a dynamic socially interactive community.



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Introduction

"People are like the best show in the world. And you don't even pay for the tickets." - Charles Bukowski

Society has changed over the course of time and so has the social interaction ways. People earlier use to create huge public spaces and gather when there was no technology and share their daily attributes of life and these public spaces were designed in the centre of the city and in and around the residential area's certain patterns which still exist and one may find them around the world.

But as time changed so did the interaction methods, now people rely more on the technology for their communications and gather around together in case of events updated or generated through the technology. The paradigms of the show has changed and so has the methods as to how the show use to cater to itself for the society.

"Architecture is a social activity that has to do with some sort of communication or places of interaction, and that to change the environment is to change the behavior." - Thom Mayne

This study reviews the change of patterns of social activities and social interactions over the period of time. So, as to how the society use to run the show then and how it has been running the show over the period of time and how it is responding to it now and then finally to come up with a proposal for this everlasting show that is running on our planet to add to it, in order to progress even a bit of enhancement to this running show and cater the needs of social interactions and activities for a better show to come up with.

Background

"There is no doubt whatever about the influence of architecture and structure upon human character and action. We make our buildings and afterwards they make us. They regulate the course of our lives."

Winston Churchill, addressing the English Architectural Association, 1924

Social interactions in architecture is the generation of interactive spaces in architecture which deals with the branch of architecture that engages with building featuring the trio of sensors, processors and effectors entrenched as a core part of its nature and functionality. Interactive architecture not only consists of building automations but goes beyond its form indulging communications, environmental impacts, social engagements, responses to the surroundings and its paradigms in pure emotive and artistic monarchy.

History

During the course of time line we have seen the evolution of social interactive spaces from when there were no homes(Caves) to the evolution of public spaces in the constructed structures till today. Principles of gathering has remained the same in terms of creating public spaces but the definition has changed from time to time and so has the perception behind those spaces but the use and purpose has more or less so ever remained the same for interaction of these spaces for public or people of the area/neighbourhood/city/house etc.,

Common fire grounds in
the middle.

Great baths, citadels, City
Squares.

Courtyards, living rooms,

Community spaces, gar-
dens, parks.

Community centers, The-
atres, Exhibition spaces

Roof top gardens, market
spaces.

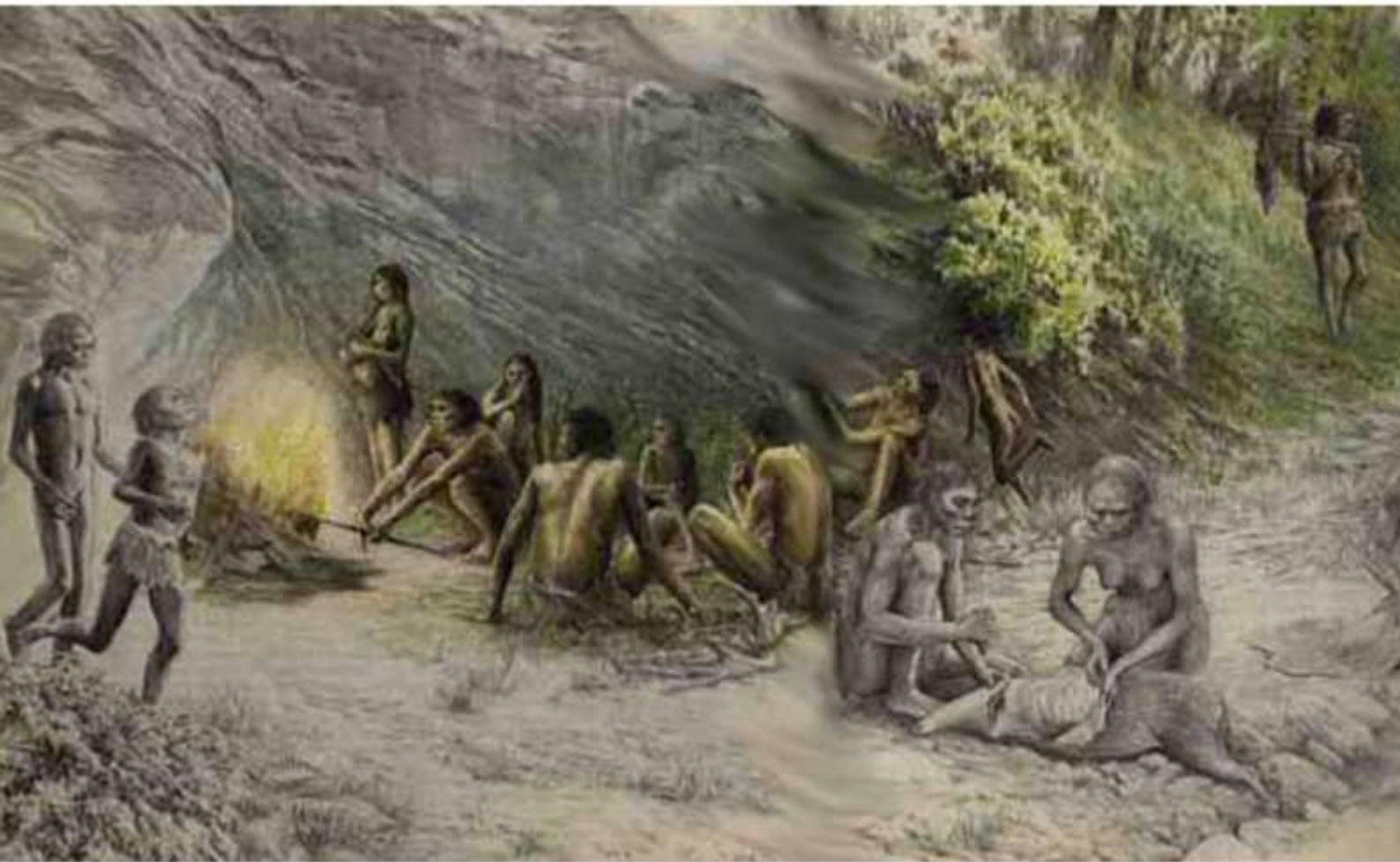
Commercial centers, malls,
cultural centers, media
houses.

Interactive Design.

Growth in Social interaction domain of architecture through time.

Earlier times public spaces or communal grounds along with trading lands, markets and areas were looked as a social interactive spaces where people from all over the neighborhood and city use to gather around in these communal areas and interact with each other. Over the period of time these areas have improved and the rationality of the use of these spaces increased as well. The concepts of design enhanced in-order for catering these spaces for embedding the social and cultural growth in the society also came through with better perceptions and visions with the growth in time line.

Common fire grounds in the middle(Caves, Tends etc.,)



Community Design or Living Design for the society has always been a part of the bigger picture i.e., for the society which formulates to communications. Creation of social interactive spaces as early as the ancient times gave birth to new community ideas which are still enhancing with the flow of the evolution of human kind.

During the ancient early times when there were no homes or dwelling units when it was just the nature and the shelters provided by nature such as caves. The social gatherings or the interactive spaces during that time were starting to get defined by the notion of gathering around the fire where people/nomads use to gather around and hence the social interaction between the people and the communities started.

As seen in the image above the social gatherings during the time period, people use to pleat all together around the fire for many different purposes such as communication amongst one another, cooking, dance(or events) etc., The notion of social interaction is not just a recent development but one of the first characteristics for development.

Great baths, Citadels, City Squares.

Knowing the history from when the first civilization emanated into depiction which was of The Indus Valley Civilization where the communities congregated to form a composed community as one whole in a form of a city with administration and use of natural resources to twitch the formulation of living conditions as a society.

And living in a society or big community, they very well kept in mind the dwelling social interactions amongst the society for which they generated public spaces such as the great baths, citadels, city square as social interactive spaces where the major interactions and decisions took in place. And hence the definition of public spaces or interactive spaces began.



Great baths were the earliest known public water tanks or public baths of the ancient world. Leaving a big mark on the public space interactive design.

Great baths were the earliest known public water tanks or public baths of the ancient world. Leaving a big mark on the public space interactive design. The civilization not only consisted of the great bath but also the great granary where all the harvested crops use to be kept of the entire city and assembly hall where the decision making and public announcements and events use to happen for the city which can clearly mark it as an administrative city not only well planned but also very well socially planned.

Courtyards, Living Rooms

The two structures designed not only as open or big spaces one as an open shed structure and other as a closed shed structure in dwelling units, houses, castles etc., for ventilation or other stereotypical architectural design elements of spaces but plays a very important role and aspect in the social interaction not just with the community and society that one brings into their living space but also amongst the users/family/people living inside the unit as well. Being a common area in a house. They deed as interactive spaces in the house. A tradition that is still followed till date.



Community Space, Gardens & Parks

Concept of community spaces, parks & gardens arrived with the growth of cities and to have a calm, nature processing environment spaces in the busy towns that were growing. Another place for people to interactive and have a calmer experience. Space designed to generate relaxing social interactive spaces following the rule/law of enclosure between the space and its participants.



Community Centers, Theatres, Exhibition Spaces

With the arrival of community centres, theatres and exhibition spaces came a new platform for societal congregation and communications. Societies started to relish in with this new fundamental notion of these communicates of certain inherent and distinct emotional qualities. People found the avoid of static quality that were often in formal balances of the society, if quality is not desired then there was an additional factor of variation and contrast. They moved a larger dull-coloured mass to a more vibrant aspects of social interaction exchanges, which helped a lot of masses to see a growth in themselves which they would have achieved. Hence, the emergence of social interactions from gates t open spaces gave light to much more new aspects in publics eye towards the positive aspect of life for, "Seize the day!"



Roof Top Gardens, Market Spaces

With inaugural to newer aspects of interactions, people started bringing the outer spaces to their inner space by creating rooftop gardens or balcony gardens as more vibrant social interactive spaces in the house as oppose to the notion that had been going on. Along with it the market spaces were started to been looked differently as a place for interactions as well and not just a place for bargain hunting.



Commercial Centres, Malls, Cultural Centres, Media-Houses

Emergence of such public spaces where it had the conception of bringing in multi work environments, neighbourhoods with entertainment dynamics, and with the urban social interaction grew up by fetching in the enhancements in a community's quality of life. It's always essential to think through how definition and design of such centres and spaces connect to the consumer while balancing a design that also satisfies the society. It minimises and maximise the specialty in close proximity to the mouth of major society. Controlled environments, malls and spaces that offer protection and designated 'holding zones' for people to "meet and greet" are crucial. Thoughtful design creates centres with points of difference and offer more than just an outing thus becoming a destination of choice enhancing the interactive sliders of a community. Architecture that ties the community to the development is essential and each centre needs to be relevant to the local context that it is to embed itself into.



Designing just the right mix of living, working, shopping and entertainment to create an experience is to take an experience. As buildings or architecture that designs spaces for social interaction are not just designing for the only counterfactual of designing for social interactions but for creating an experience, in other terms social interactive designs could be called as the experiential designs, creating memorable spaces that makes people use them and when they use them, they become exultant. To reflect an artful combination of dynamic public space along with exciting architecture. These are made through understanding the qualities that make great spaces with great experiences. Every place has it's own value and essence and by enhancing these essence and values of these places to create new experiences and memorable experiences is what brings the communication into the society to its growth as social interactions are the most important aspect in the development of a society.

Interactive Design

Moving ahead in time, jumping from one paradigm to the other, today we have moved from the industrial era to the information era where the use of electronic devices/gadgets are moving at power and this era is also being called as the internet era where everything is has become super-fast and at a hands grab reach to interact not just with one another but to the entire planet forming a global network connection between people, societies and communities as appose to social. As in this information the access of internet helps people to reach out to a much quicker terms of social interaction yet at the same time deteriorating its peers from the actual congregated conventional methods of meeting and exchanging the in-person interactions.



It's a niche specialization in the structuring and design of social media with an emphasis on social practices. Social media of course have UI, design elements, form pages, search, directories and navigation schemes, and many of the components that have long defined web design. Social interaction design is an approach to web 2.0 and social media that addresses the social interface: the interaction of web site with data/information where users provide the content, and interactions are social. Users engage with other users, whether they know them or not, and whether they really care about them or not.

All of these individual actions and contributions together produce the content, which is to say, produce the experience also, that defines and becomes the identity of a social media service. Failure to provide for compelling user experiences and visible, recognizable, and compelling social practices, will result in failure of the site.

Social Interactions?????

*"I didn't know what made people want to be friends.
I didn't know what made people attractive to one another.
I didn't know what underlay Social Interactions."
- Ted Bundy*

A social interaction is an exchange between two or more individuals and is a building block of society. Social interaction can be studied between groups of two, three or larger social groups. By interacting with one another, people design rules, institutions and systems within which they seek to live. Symbols are used to communicate the expectations of a given society to those new to it. The empirical study of social interaction is one of the subjects of microsociology. Methods includes symbolic interactionism and ethnomethodology as well as later academic sub-divisions and studies such as psychosocial studies, conversational analysis and human-computer interaction. With symbolic interactionism, reality is seen as social, developed interaction with others. Ethnomethodology questions how people's interactions can create the illusion of a shared social order despite not understanding each other fully and having differing perspectives.

In designing and constructing environments in which people live and work, architects and planners are necessarily involved in influencing human behaviour. While Sommer (1969) asserted that the architect "in his training and practice, learns to look at buildings without people in them," it is clear that from, for example, Howard's Garden Cities of To-morrow (1902), through Le Corbusier's Ville Contemporaine and La Ville radieuse, to the Smithsons' 'Streets in the sky', there has been a long-standing thread of recognition that the way people live their lives is directly linked to the designed environments in which they live. Whether the explicit intention to influence behaviour drives the design process—architectural determinism — or whether the behaviour consequences of design decisions are only revealed and considered as part of a post-occupancy evaluation (e.g. Zeisel, 2006) or by social scientists or psychologists studying the impact of a development, there are links between the design of the built environment and our behaviour, both individually and socially.

The influence of Christopher Alexander (Alexander, 1979), such strategies and tactics may be expressed architecturally in terms of patterns, which describe "a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice". The concept of patterns, and Alexander's, A Pattern Language (1977) will be examined in detail in a future thesis extract, for their form, philosophy and impact, but, as an example, it is worth drawing out a few of the patterns which actually address directly influencing behaviour architecturally. Among others, Frederick (2007) and Day (2002) both also outline a range of architectural patterns, some with similarities to Alexander's, including some specifically relating to influencing behaviour.

Most architectural patterns for influencing behaviour involve, in one way or another, the physical arrangement of building elements—inside or outside—or a change in material properties. In each case, there is the possibility of changing people's perceptions of what behaviour is possible or appropriate, and the possibility of actually forcing some behaviour to occur or not occur. These are not independent alternatives: the perception that some behaviour is possible or impossible can be a result of learning 'the hard way' in the past.

*"All buildings are predictions. All predictions are wrong".
Stewart Brand, How Buildings Learn, 1994*

*"I built skyscrapers for people to live in there and now they messed them up—disgusting".
Ernő Goldfinger, commenting on tabloid reports of violent crime in the Trellick Tower, above (quoted in Open University, 2001)*

Urban Social Interaction???

Urban areas impact individuals' relationships with one another. Economic problems and power dynamics are intensified in small spatial areas in which resources are scarce due to dense populations. Social scientists seek to understand how metropolitan social dynamics are distinct from those in other contexts. German sociologist George Simmel was a founding father of this sociological subfield. He gave a speech that analysed the effects of urbanity on the mind of the individual, arguing that urban life irreversibly transforms one's mind. Social scientists ask two sets of questions about social life in urban areas. The first set asks how social interactions are shaped by urban environments, and the other asks more pointed questions about how the architecture and physical space of a city influence social interactions. Around half of the world's population currently lives in an urban area, and the United Nations World Urbanization Prospects Report suggests that 60% of the world's population will live in an urban area by the year 2030. As such, social scientists have paid increasing attention to the particular types of social dynamics that develop in urban environments.

Social scientists have focused on social interactions in urban areas because cities have the unique capacity to bring together many cultural strands. Economic problems and power dynamics are intensified in small spatial areas in which resources are scarce due to dense populations. Further, cities operate as zones of confluence for economic relationships and other types of diversity as new ideas, people, and goods are constantly flowing through urban areas. As a result, the people there have to respond to new influences, often bringing dominant strains of culture to the fore. What does a particular group of people value? What can they tolerate? What do they revolt against? All of these questions play out in cities.

Urban anthropology is an anthropological subfield primarily concerned with urbanization, poverty, and the consequences of neoliberalism, or the contemporary political movement that advocates economic liberalization, free trade, free movement, and open markets. There are four central approaches to an anthropological study of cities. The first is an urban ecology model in which the social scientist considers how individuals interact with others in their urban community. Second, one could focus on power and knowledge, specifically how these elements are combined in the development of urban structures. Third, one can study how localities relate to communities beyond their bounds, such as an analysis of the relationship between the local and the global. Finally, one can consider how political economy, or the study of production, law, and distribution, is essential to a city's infrastructure and the consequences of this interdependence. These questions have been closely examined in urban contexts in the past fifty years.

Despite the relatively recent ascent of urban sociology, sociologists have long studied the sociological implications of space. Georg Simmel, a German sociologist from the turn of the twentieth century, famously considered the social impact of urban environments in *The Metropolis and Mental Life*. Published in 1903, this work was originally given as one of a series of lectures on all aspects of city life by experts in various fields, ranging from science to religion to art. Simmel was originally asked to lecture on the role of intellectual life in Berlin, but he effectively reversed the topic in order to analyze the effects of urbanity on the mind of the individual. Simmel argues that urban life irreversibly transforms one's mind. Simmel does not say that these changes are negative, but writes that structural forces on socialization are particularly strong in an urban milieu.

Social scientists thus ask two sets of questions about social life in urban areas. The first set asks how social interactions are shaped by urban environments and how social interactions in urban environments are distinct from social interactions in other contexts. These are the types of questions asked by Simmel and urban anthropologists. The other strand of analysis asks more pointed questions about how the architecture and physical space of a city influence social interactions. This second set of questions is taken up by urban planners, architects, and, in the social sciences, by individuals who study the sociology of architecture and the sociology of space. Clearly, questions about social interactions in urban areas cluster loosely and are quite broad. However, it is clear that social dynamics are influenced by urbanity and sociologists intentionally study this field in broad terms to understand the multifaceted ways in which urban life influences society.

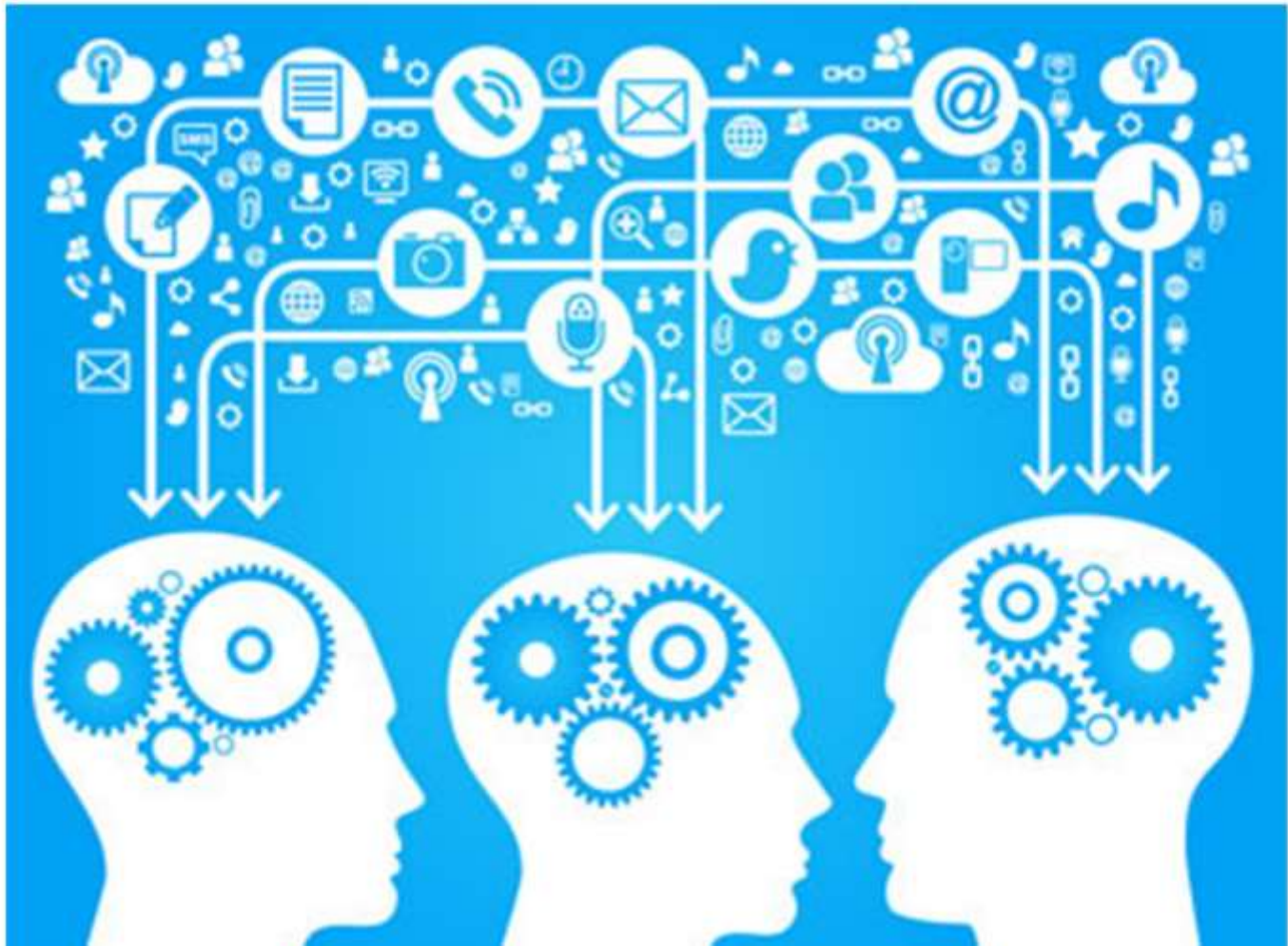
Social Architecture

In town centres and local neighbourhoods, public spaces provide social arenas for all kinds of people – residents, workers, shoppers, visitors, and children at play. Different age groups tend to use civic spaces at different times of day and for different reasons. Older people and children in particular appeared to be influenced by the presence of other age groups. Older people are frequently absent from public places, especially after dark. In addition to the social function of civic spaces, some people use them for discretion or to support a sense of provincial ownership, this particularly applies to groups of fledgling people and ostracised groups.

I believe that a new trend of Social Architects have come into picture where they are not just designing for the society but are being part of the society and then comprehending to the design problems and towards their solutions regarding the social aspects of the architectural or urban scale modules that are being presented these days.

Courses in mind and picture one can apprehend and worth the complex adaptive systems as Kevin Slavin talks about the role of new generation of designers for the complex adaptive systems being humble as we are not designing for ourselves but to the society as a part of society system. We ought to understand the how different societies works and be a part of the society in-order for our generations to yield for an improved system of functionality linking the Era and the Cycle for recuperating solutions.

In this forum we're interested in all these different ways in which architecture and interaction design are becoming concerns for one another, and how this changes the world around us. Such changes might be about the deployment of new interactive technologies in physical environments, or digital systems deliberately designed to work as stable structures for ways of interacting (to guide certain behaviors, activities, or flows of information). We're also interested in lessons learned from working with design projects across these two fields, such as the importance of a precise design language and ways of working with style, formats, and materials (including digital materials). To further explore the intersection of architecture and interaction design, it is important that we also look at the history of design (ideas).



Proposal

In architecture no aspect can be dealt with in isolation. Structure is related to massing which is again related to aesthetics which in turn is related to function and so on leading to Inter-related scheme and comprehensive scheme. Designing may not be something merely intuitive and mysterious, but it has a large component which is rational and hence subjective to analysis. The nature of architecture derived from environment to which objects which had previously only utilitarian value now become sources of emotional value to make it both beautiful and useful & social. One who exclusively pays attention to the utility is to be referred as the technologists, and the one who exclusively pays attention to the aesthetics and not utility as an artist.

"A building has integrity, just as a man and just a seldom!
It must be true to its own idea, have its own form and serve its own purpose!"
- Howard Roark, The Fountainhead.

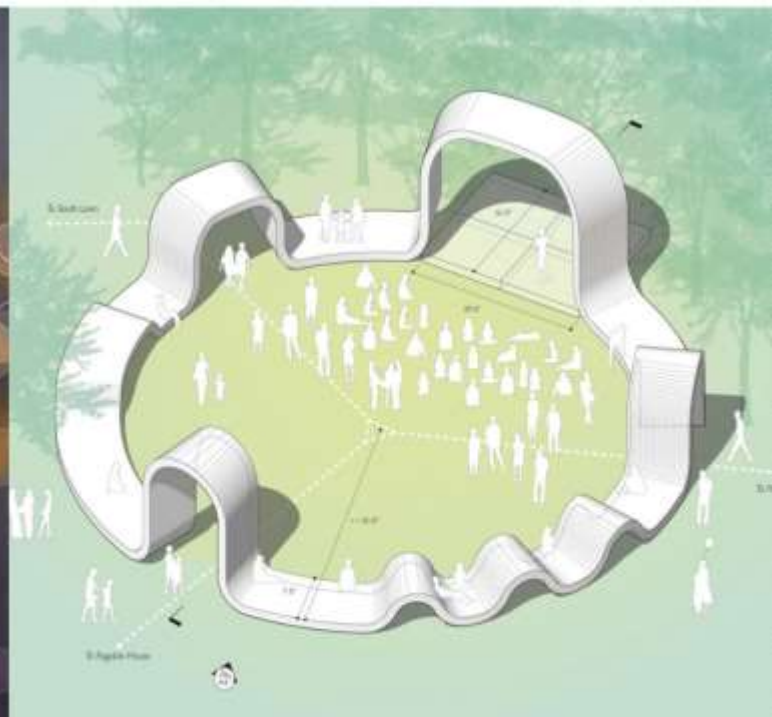
Being an architect or an urbanist it is our soul responsibility to design buildings and cities. But when you think about it more, it is not true. As an architect we should look beyond the architectural and urban scales of typical definitions that has been generated over the period of time and not to second the notion but move pass this and create our own. We should look more into opportunities and impacts that we can generate for the world. We should become a combination of both Expert Citizen and Citizen Expert, adaptation of new design or strategies with respect to the society.

– How do we design or strategize for the society but not the user?

To answer to this question, first we need to understand where it is coming from, most of the architectural projects that are being made today are made according to the clients/users with our Co-designers. But we should design with that which reponds to the society as whole and built up social structures of the cities.

–What it is now and what it has the potential to be?

It is more of a dynamic module to enhance the technologies and architectural skills and structure but with hard skills of design and soft skills of humanity. We can generate this power which can as one of more responsive designs for the society.

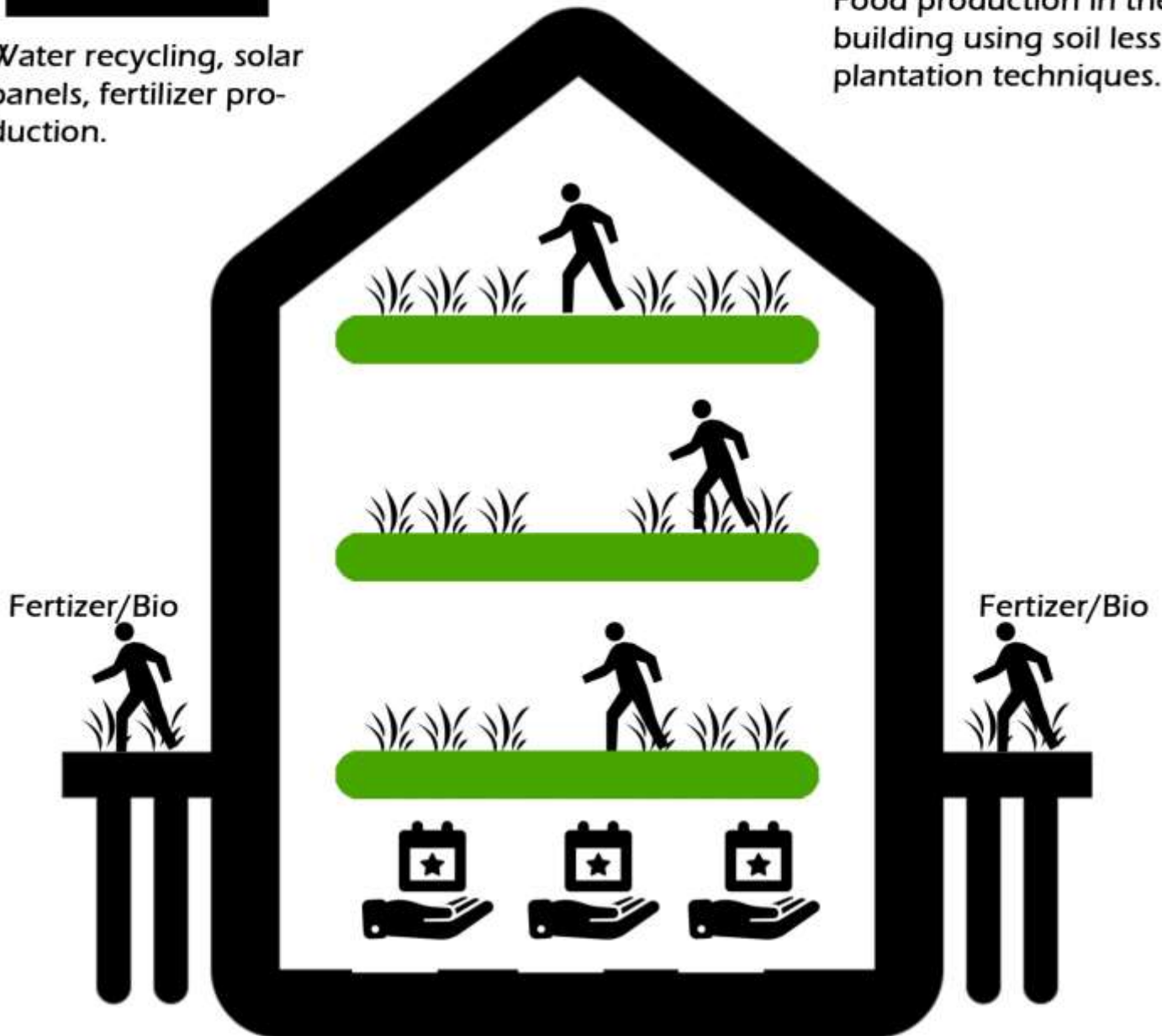




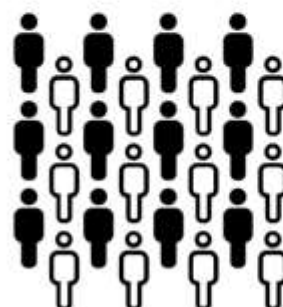
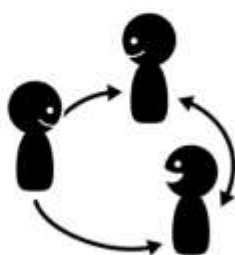
Water recycling, solar panels, fertilizer production.



Food production in the building using soil less plantation techniques.



Extra food production or food not used to be collected in the basement and then give to home-less or people on the street together as a team.



Creating more social interaction.

Food production system
in the building with the
help of soil less plantation
techniques.

Community will together
collect food for homeless,
shelter, orphanages etc.,
creating social cause and
awareness along side
helping others.

Solar panels at the roof
top, for generation of
solar energy.

Fertilizer production/Bio
production at the bottom
back outside of the build-
ing.

Recycling of water

Less energy consumption,
production & maintain-
ance.

More social interac-
tions/socially unified
community.

Bibliography

https://www.forrec.com/wp-content/uploads/2015/11/FORREC_RMU.pdf
<http://www.i2c.com.au/2014/06/6-design-fundamentals-when-planning-neighbourhood-retail-centres/>
https://en.wikipedia.org/wiki/Social_relation
<https://www.reference.com/world-view/social-interaction-bae75e39545f2bb5#>
<https://www.reference.com/world-view/main-principals-social-cognitive-theory-83a5c52739f102bd>
<https://www.princeton.edu/~joses/wp/socialinteractions.pdf>
<https://books.google.es/books?hl=en&lr=&id=V1RyhTamPkgC&oi=fnd&pg=PR7&dq=social+interaction+architecture&ots=inG0iSxGEU&sig=oNRZvxwwUoLUI2DMILJKwINO8ts#v=onepage&q&f=false>
http://www.gravity7.com/what_is_sxd_1.html
<https://www.boundless.com/sociology/textbooks/boundless-sociology-textbook/population-and-urbanization-17/urban-life-124/social-interaction-in-urban-areas-700-10412/>
<http://johnnyholland.org/2011/04/the-theory-behind-social-interaction-design/>
https://en.wikipedia.org/wiki/Social_interactionist_theory
<http://www.peterdalsgaard.com/documents/publications/Hespanhol%20-%20Social%20Interaction%20Patterns.pdf>
<http://architectures.danlockton.co.uk/2011/09/12/architecture-urbanism-design-and-behaviour-a-brief-review/>
http://www.huffingtonpost.com/claudia-gatsby/social-architecture-a-new_b_5448130.html
https://en.wikipedia.org/wiki/Social_architecture
<http://eu.haworth.com/docs/default-source/white-papers/physical-space-and-social-interaction-pdf-28568.pdf?sfvrsn=6>
<https://pdfs.semanticscholar.org/0aed/a1d7838b1f383c024ef599a425afb8aa4b78.pdf>
<http://archnet.org/publications/10542>
<http://www.idemployee.id.tue.nl/g.w.m.rauterberg/publications/CCD2015paper.pdf>
<http://www.springer.com/gp/book/9783642117619>
http://gravity7.com/SxD_Principles-AdrianChan-2012.pdf
<https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/interaction-design-brief-intro>
https://en.wikipedia.org/wiki/Interaction_design
<http://interactions.acm.org/archive/view/-march-april-2015/interaction-design-meets-architectural-thinking>
<http://www.ijdesign.org/ojs/index.php/IJDesign/article/viewFile/341/154>
<https://www.jrf.org.uk/report/social-interactions-urban-public-places>
<http://www.crystalinks.com/induscivilization.html>
https://en.wikipedia.org/wiki/Indus_Valley_Civilisation
https://en.wikipedia.org/wiki/Interactive_architecture
https://issuu.com/ani.arzumanyan/docs/4dSPACE__interactive_architecture
http://www.academia.edu/296259/INTERACTIVE_SPACE_SEARCHING_-_FOR_A_DUAL_PHYSICAL_-_VIRTUAL_WORLD
Boundless. "Understanding Social Interaction." Boundless Sociology Boundless, 08 Aug. 2016. Retrieved 26 Jan. 2017 from <https://www.boundless.com/sociology/textbooks/boundless-sociology-textbook/social-interaction-5/understanding-social-interaction-50/understanding-social-interaction-314-5912/>

Note: All the unidentified images are google sources images which has been placed with the context.

Links above are the sources and resources that after reading and going through them have helped me understand the context for this paper with the help of some great minds, thinkers, architects and people from other professional fields from the links mentioned above.