

RE-ESTABLISHING THE RELATIONSHIP BETWEEN URBAN STRUCTURE & HUMANIZING ASPECTS OF INDIAN CITIES AFTER COVID-19 PANDEMIC: THE CASE OF DELHI, INDIA

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Abstract

Cities are dynamic and liveable places where people experience the phenomenon of life. The essence of Indian cities lies in the interrelationship of its urban structure and human aspirations. Urban structure is not just the sum of development block, built entity, open space, street, landscape, etc. It is a set of socio- cultural integration that their inhabitant develops. COVID-19 capriciously affected urban structures by eliminating humanizing aspects to sustain life. The fundamentals of social integration, place making, flexibility and character, which together shapes up the city are under dilemma. The traces of pandemic have emphasized and questioned the roots of humanizing aspects in shaping the urban structure as the key urban form determinant. Perhaps, depending upon urban ways of life, during the pandemic people have carved their own ways to sustain life. It has sparked a concern about how urban structure will remain humanized by tackling the contradicting values like social disconnection, community disintegration to enrich and enliven the new normal?

The paper has address a case of capitol of India, Delhi which has undergone a major shift during pandemic. It intends to decipher the consequences of covid-19 pandemic on humanizing aspects of Delhi by doing comparative analysis between the compact and standard prototype of urban structure. First the study adopts an investigative approach to record, document and analysis the impact on existing urban structure by examining their prototype. Then through physical observations, photographs and documentary evidences it focuses on providing a toolkit useful for re-establishing and shaping the urban structures as humanized urban structure in making of resilient future.

Keywords: Urban structures, Humanizing cities, Urban life, Impact of covid-19, Humanized urban structure, Delhi.

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Introduction

"The city is, rather, a state of mind, a body of customs and traditions, and of the organized attitudes and sentiments that inhere in these customs and are transmitted with this tradition. The city is not, in other words, merely a physical mechanism and an artificial construction. It is involved in the vital processes of the people who compose it; it is a product of nature, and particularly of human nature"

(Park, Burgess & McKenzie 1925).

This definition of Robert Park states how humanizing aspect shapes and built the entire cities. In India, cities are evolved by virtue of social interaction, public realms, community participation, multiple users and multi-functional spaces which have enhanced the quality of life by making cities as a humane model. The degree of accessibility and connectivity within such dynamic and diversified model is defined by its urban structure. Urban structure is not just the sum of development block, built entity, open and landscape spaces; it's a set of socio-cultural integration that their inhabitant develops. In the battle against COVID-19 pandemic, multi-dimensional responses such as adhering to social-distancing norms, wearing masks, and hygiene measures have defined a new normal as a tool for survival. These new normal practices have completely isolated people from the welfare of society ,further segregating them in economic enclaves by interrogating the effectiveness of governance. The conventional distinction between urban structures depending upon urban tissue, urban form, land use and density floats different degree of responses to practice social distancing. However, people have carved their own ways and methods depending upon urbanism (urban way of life). A great contrast in approach towards pandemic has been perceived between the dense and scattered urban structure within city in the first half of 2020.This results into drastic and dire changes within urban structures which has hampered the qualitative & quantitative aspects of life at a major scale. Humanizing aspects being the crucial elements in urban structures ,this shapes the entire cities needs to critically look to enrich and enliven the life within city.

The intention of the study is to decipher how urban structures which is a diversified model of socio-cultural relationship remains humanized by uniting the compatibility between the qualitative and quantitative attributes of the place. First the study intends to map and analyze the impacts of corona virus disease on existing urban structure. Then it will re-establish and shape the void between the humanizing aspects and urban structures to make humanized urban structure as a combating model within such inevitable pandemics.

Background

In India, cities are perceived by the diversified assets of its people's beliefs, aspirations and desires over religious, political and socio-cultural ethos, which intervene into the disparity between planned and organic sprawl of the city. Delhi is one of the oldest cosmopolitan cities, which amalgamates such footprints of planned and organic sprawl. The population of Delhi is 16.8 million in 2011 with 97.5% living in an urban area of 1483 km.sq. having population density of 11,297 (range 3800-37,346/km. sq.)¹ It is important to note that the city has been deformed many times to become the dominant capital. Two important constituents which shapes the entire urban form of city are – Old Delhi and New Delhi which are segregated by the Fortified Wall and Ramlila

¹ <https://knowindia.gov.in/states-uts/government-of-nct-of-delhi.php>

Maidan. Old Delhi - Shahjahanabad; built by Mughal Emperor Shah Jahan, has a compact urban fabric with a high amount of socio-cultural relations. The spatial hierarchical organization in terms of Mohalla as a neighbourhood blocks consisting of small lanes termed as kutchas, gali, katras , nukkad has allowed diversification in living contributing to humanization. On the other hand, New Delhi was built next to Shahjahanabad as a capital of British India. There, the urban tissue is scattered and is highly developed in terms of its infrastructure enhancing the quality of life. Thus, Delhi is a result of a strong amalgamation of contradicting urban morphologies which have their own aesthetics and identities. Here, urban structure engenders the city with distinctive pattern of human correlations. Presently, in the month of September 2020, Delhi has been predicated as the second hotspot city in the country affected by COVID-19 with 2,30,000 total cases recorded (Covid 19.org.Delhi,2020). The conventional distinction between Chandni Chowk in Shahjahanabad as a compact urban structure and Connaught Place in New Delhi as a standard urban structure found its own way of dealing with COVID-19. Delhi govt. implemented the prestigious project of Primary Health Care centres through "Mohalla Clinique's" . Looking towards the wide spread effect of pandemic govt. authorities transformed the 'Mohalla Clinique's' as the main anchor points for contact tracing and addressing pandemic response. 480 such units were transformed to facilitate people with better services (Hindu 2020). The pandemic has altered the ideal situation of Delhi where the process of formation and transformation within the urban grain reset the definition of humanizing aspect of Delhi, its people and place. Therefore, research tends to identify the impact of the pandemic on the imperative elements within the urban structures driven by the humanizing aspects of the city. The essence of Indian cities lies in humanized urban structures, which channelize the differences of its spatial forms, relationships and characteristics. Social interaction, Cultural ethos, multi-faced community participation, conglomeration and hustle bustle of the people in the public realms are important parameters which may lift the humanization of the city.

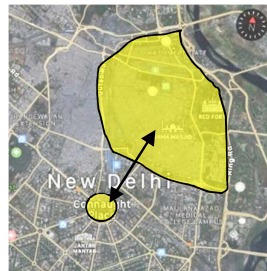


Figure 1: Connection between Chandni Chowk in Shahjanabad and Connaught Place in New Delhi
Source: Google maps

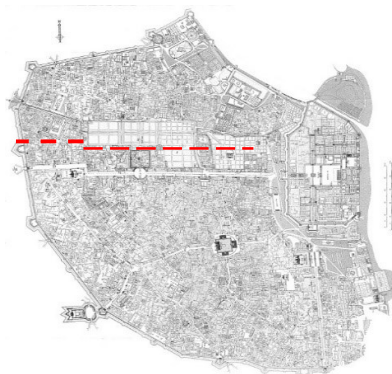


Figure 2: Layout plan of Chandani Chowk
Source: Author



Figure 3: Layout plan of Connaught Place
Source: Author

Research Methodology

The methodology adopted for this paper is an attempt to understand and analyse the impact of the COVID-19 on urban structure by deciphering the imperative elements of humanised urban structure. The study was intervened through non physical means by remotely conducting online surveys of local people and also by observing, analysing, and anticipating the existing scenario. It focuses on case study approach by investigating a comparative study between compact and standard prototype of urban structure.

Fig. 4. represents the methodology adopted to conduct the research. It provides theoretically supported and practice-based study, analysed into three fragments – tracing the past, analysing the present and originating the future.

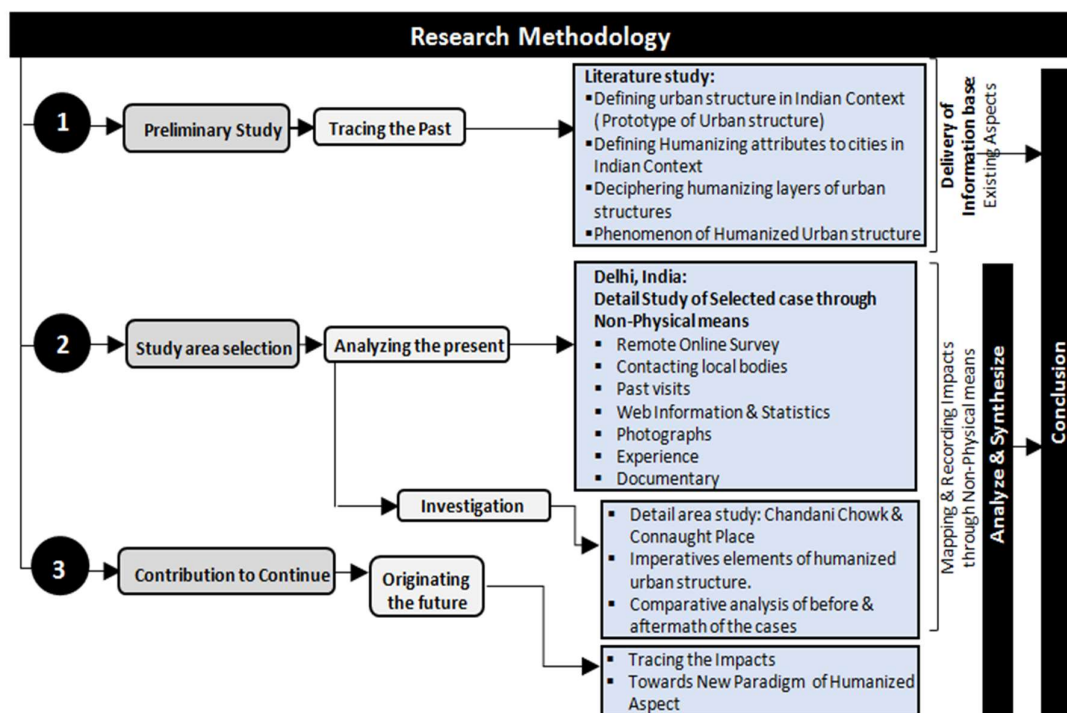


Figure 4: Research methodology
 Source: Author

The Theoretical Framework

Urban structure is the arrangement of land use in urban areas. In other words, it is how the land use of a city is set out. It also refers to urban spatial structure, which concerns the arrangement of public and private spaces in cities and the degree of connectivity and accessibility.² The term urban structure refers to the pattern or arrangement of development blocks, streets, building, open space and landscape which make up urban areas. It is the interrelationship between all these elements

² https://en.wikipedia.org/wiki/Urban_structure

rather than particular characteristics that binds together to make place (Llewelyn-Davies 2000).

The city, and particularly the great city, in which more than elsewhere human relation is likely to be impersonal and rational, defined in terms of interest and in term of cash, is a very real sense a laboratory for investigation of collective behavior (Park, Burgess & McKenzie 1925). If we look at the history of cities, we can see clearly that urban structures and planning influence human behavior and the ways in which cities operate. If there is life and activity in city space, there are also many social exchanges. If city space is desolate and empty, nothing happens (Gehl 2010).

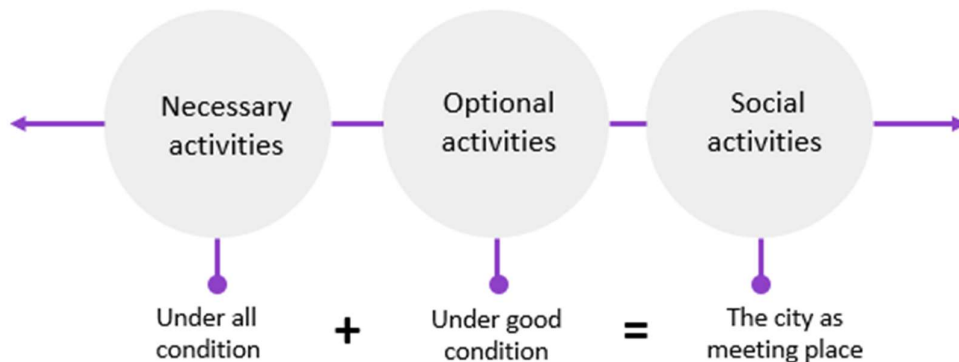


Figure 5: Types of activities
Source: Jan Gehl,2010

On the basis of degree of necessity, putting them on a scale, Gehl has categorized three types of activities. Necessary activities are purposeful, non-optional part of everyday life. These activities take place under all conditions, which have no choices. Optional activities are recreational and fun. These activities take place under good conditions, for which good city quality is a prerequisite. Social activities include all types of contacts between people and take place everywhere people go in city space.

Defining Urban Structure and Humanizing Aspects in India

Urban structure is everything that surrounds or occurs at a particular place and time. People can facilitate a successful network of dialogue, recreation and interactions within this urban existence to make an environment humane. The nature and behaviors of urban structure is an interconnected and interdependent complex process of all tangible and intangible attributes at micro and macro scales which generates a harmony within a city. It's a homo-hetero organization resulting into diversification of socio-cultural relationships, beliefs and aspirations among people ,though acting as one whole unite system making organization more humanized.

Prototypes of Urban Structure

A clear core prototype of urban structure emerges from the great diversity of urban fabric and urban forms in city space. Depending on the basis of urban fabric ,which contributes to the degree

of urbanism, urban structure is largely categorized into two types: Compact urban structure and standard urban structure.

1. **Compact urban structure:** Compact cities have affected and give shapes to urban form directly, which support essentially developments in vertical and high density-built environments.³ It is a complex system where urban environment is composed of various inter-connected and inter-dependent elements of the built-environment. It belongs to a setting which have organic and dense urban fabric facilitating urban life directly. The typical characteristics of a compact urban structure has a significant consequence on public activity, with high diversification in user which keeps the city lively and amicable. Living in compact urban structure allows high opportunities for socio-cultural interaction with safety and security. Walkable neighbourhoods, and mixed land use provide a great scopes for jobs and work , this is how valuable associations between physical entity and non-physical attributes of people contributes in shaping a humanized city.
2. **Standard urban structure:** Generally, these structures belongs to newer settlement of city which carries a strong assimilation of infrastructurally developed standard urban components like Shopping mall, parks, residential cores and subdivision which enhance the quality of life of inhabitants. It is scattered multicentred model with a distinct urban fabric which allows comprehension and easy recognition. Standard urban structures are typified as low-density development with interrelated socio-cultural and economic forces. The close connection between physical and social dimension within a well-defined coherent network contribute in shaping humanized city

Deciphering Humanizing Layers of Urban Structure

The composition of an urban structure generates a place for different individuals coming together as a common to perform an activity and experience the place. It directly or indirectly assimilates multiple minds engaged in multi-faceted activities sets in public and private spaces in the city. The strong relationships of users with any urban component (street, open space, building, etc) helps to encourage public activities and generates active public realms which strengthens the sense of place.

Depending on the practice and functioning of the activities, inhabitants share a very close co-existence which can be classified into three layers which contribute to a humanized urban structure.

³ https://www.researchgate.net/publication/269095538_Characteristics_of_Compact_Cities

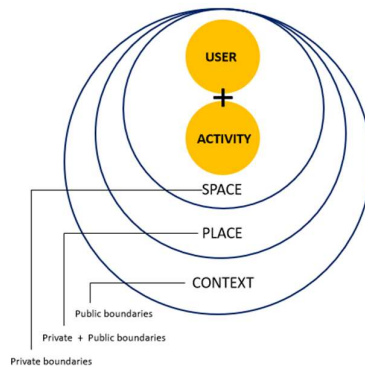


Fig. 6: Layers of urban structure
Source: Author

Layer 1: User-Activity-Space

It refers to a set of disciplines where constituent elements of an urban structure are perceived individually. It is in direct-relation to the users with its definite activity enhancing the private boundaries of space. The close connection between people and space contributes to necessary dimensions of the activity.

Layer 2: User-Activity-Place

It integrates socio-cultural relations which develop a coherent framework to quantify aspects of urban structure. It is an intra-relation of users with its definite activity enhancing the public and private boundaries of a place. The close connection between people and place contributes to moral dimension of activity.

Layer 3: User-Activity-Context

It is a multi-faceted urban existence, which has the capacity to evolve by respecting existing values which generates a context. It is an inter-relation of users with its definite activity enhancing the public boundaries of urban structure within its context. The close connection between people and the context contribute to social dimension of activity.

Phenomenon of Humanized Urban Structure

The phenomenon of humanized urban structure generates a coherent framework of tangible and intangible attributes respecting the diversity and multiplicity of users. Further, it determines various layers depending upon the intensity and degree of association with respect to activities. The tangible attributes of an urban structure are physical entities in the form of a street, an open space, buildings etc whereas intangibles attributes such as socio-cultural interactions, conversations, meetings, recreation, etc contribute to human aspects of city. The characteristics of urban tissue differs according to the prototype of urban structure developed on the basis of identity, social integration, accessibility and place making.

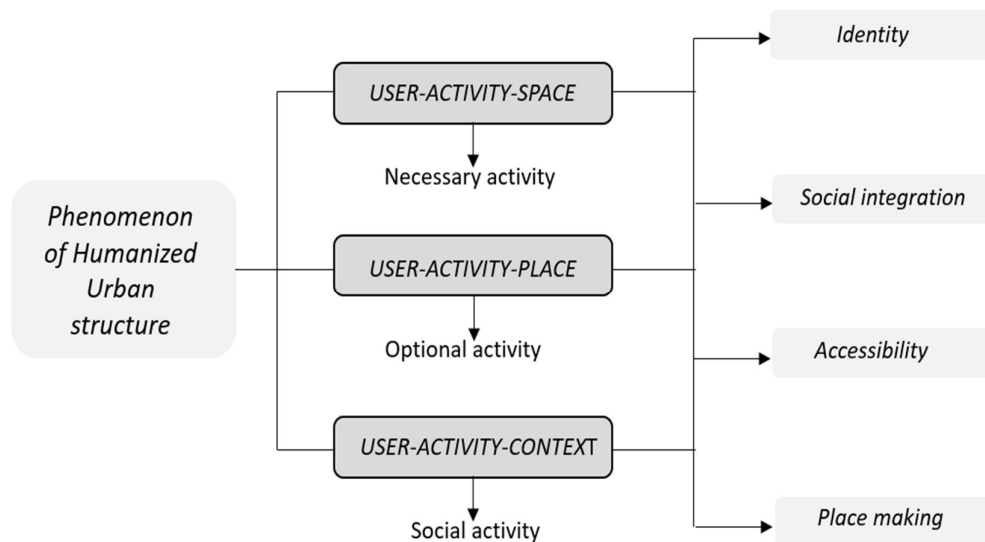


Fig. 7: Phenomenon of humanized urban structure
Source: author

Case Study-Delhi

Covid-19 has completely transformed Delhi from a cosmopolitan ethos to a sophisticated model, which has detached people from the welfare of the society. Earlier the humanized essence of Delhi was in active street life, diversified and mix-use of users and activities, socio-cultural interaction and relationships, which has been hampered at significantly because of the pandemic. The amount of damage on the urban structures has generated environmental stress, and the reflection of the same has been noticed on people's behaviours, cognitive functions, physical health and lifestyles which were coping with various phases of the disease.

Detail Area of Study

a) Chandni Chowk: It is a compact urban structure where strong socio-cultural relationship in mohalla, kutchas, gali, katras almost disappeared and the economy has been largely disrupted as it is one of the largest economic hubs of the city and the Nation.

b) Connaught Place: It is a standard urban structure where huge community spaces, amenity spaces and club houses became suddenly unusable. There was a complete social disconnection which has hampered the dignity of such a premium location.



Figure 8: Chandni Chowk, old Delhi -
Source: Alamy



Figure 9: Connaught Place, New Delhi-
Source: The telegraph

Imperative Elements of Humanized Urban Structure and Impacts on it in Delhi

Delhi has been evolved over a period of time as an integration of social species; a dynamic module that amalgamate varied communities & enhanced the quality of life. The social spaces- parks, streets, squares and promenades are the focal points of urban structure where exchange of idea, communication, interaction makes the environment more amicable and humane. Depending upon the physical structures and its moral aspects which connect people in every aspect of lives : identity, social integration, flexibility and placemaking are the imperative elements which triggers the symbiotic relationship of Humanization within the urban structure. The humanization parameter generated by virtue of this imperative elements help strengthen the quality life by connecting them together to dissolve any social barriers within the society. However, COVID-19 has drastically changed the pattern in which we navigate our urban life. Transmutation in the configuration of urban activities and its approaches has generated an unacquainted environment. In Delhi, COVID-19 transformed the urban structure which became more a mechanical, rigid and congruent model defining the cities as a machine. It is high time to control the change for a resilient future.

Table 1: Theoretical framework: Impact of COVID-19 on imperative elements of humanized urban structure in Delhi.

Imperative elements of Humanized urban structure	Humanization Parameters	Impact of covid-19
Identity	Character	Loss in street identity
	Dynamic Density	Decline function of dynamic density
Social integration	Human co-relation	Confined Human co-relation
	Participation Approaches	Utilitarian approaches
Flexibility	Urban social mobility	Redefined pattern of urban social mobility
	Urban display	Transition in urban display
Placemaking	Public Realms	Alteration in Public realm
	Social life	Downturn of social life

Source: author

Mapping the Impacts in Delhi: Taking Case-A as Chandani Chowk and Case-B as Connaught Place

Loss in Street Identity

Case A

Before the Pandemic: In the past, the streets in Chandni Chowk were highly congested, around one hundred thousand people visit the old city core to address various supply chain industries establishing a symbiotic relationship between the needs and demands interwoven with the commerce. In addition, because of the compact and dense behaviors of street, walking, cycling and biking are the predominant modes to commute. Here, streets are largely supported with juxtaposition of ritual activities, processions along markets which renders the activities forming collective identity of the street. The interrelated and interdependent cyclic process of activities generates an urban crowd giving a unique character and identity to its urban structure.

During the Pandemic: This completely altered the daily drama of life that unfolds the rich urban setting by floating norms like social distancing, and lockdown which have changed the fundamentals of participation, access and quality life within the streets. The central spine of Chandni Chowk is largely a pedestrianized commercial street which has been transformed into a deserted lane during lockdown with no people and life. Gradually, when people were coming back to their normal life, active participation in the commercial activities was traced to fulfill their necessary needs and demands with a contrast and different behavior resulting into a loss of street identity. Fig.10. Shows the impact of pandemic has slackened the character and identity of the Chandni Chowk street.



Figure 10: The street of Chandni Chowk before & after pandemic
(Source: The telegraph)

Case B

Before the Pandemic: Connaught Place is ideally categorized for its great motif, locale and ideologeme which carry a layer of values and associations of people with activities within the place. Sidewalk of shopping stretch has always remained articulated with an influx of pedestrians making the place lively. Street furniture were the great anchors for the public realms to attract people which has shaped the identity of the street.

During the Pandemic: During the phase of lockdown, the association with this great place has vanished completely resulting into a dead urban voids. The huge structure meant for the commercial purpose suddenly became deserted place due to the lockdown impositions. The loss of pedestrians and deteriorating informal commerce on the stretch of street has questioned the longevity of identity. Fig.11 & 12. Shows that impact of the pandemic has declined the character and identity of Connaught Place.



Figure 11 & 12: Connaught Place before & after pandemic
Source : Google

Decline in Function of Dynamic Density

According to Durkheim, the density is categorized into material and dynamic density. Material density is the population density, which is the ratio of people to land whereas the dynamic density is the rate of interaction within a population.⁴

If one visualises a humanized city, vital features which contribute to humanization is the ratio of dynamic density. Greater dynamic density contributes to a greater humanized structure. The pattern in which people interact with other people facilitates in creating social coherence.

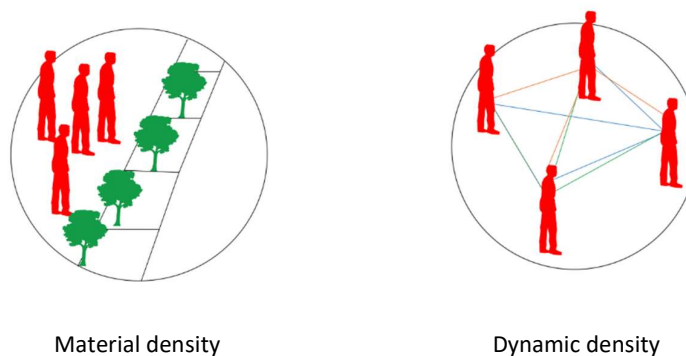


Figure 13.Types of density
Source: Author

⁴ <https://www.encyclopedia.com/social-sciences/dictionaries-thesauruses-pictures-and-press-releases/dynamic-density>

Case A

Before the Pandemic: The paucity of space and overcrowded population in apropos of commercial gain, it has generated a dense network of social interaction which has uplifted the dynamic density. By virtue of high ratio to dynamic density, Chandni Chowk has emerged as ceremonial axis with high interaction and social connection enhancing the human life within the city.

During the Pandemic: COVID-19 pointedly impacted the dynamic density by drooping huge numbers of people who use to move, sit, interact and recreate a dialogue within the place. However, because of inherent commercial quality of place material density is not much affected but dynamic density has taken a step down in order maintain social disconnection as a need of time. Decline in functioning of dynamic density has hampered the dynamism which arises from daily chaos that unfolds the rich urban setting.

Case B

Before the Pandemic: Connaught Place being the scattered urban fabric facilitate with huge open spaces, streets, landscaped spaces, podiums and terraces in building allows high interaction with socio-cultural and political gains. Here people enjoy the social life which has enhanced the dynamic density.

During the Pandemic: Connaught Place has major loss on sense of belonging and degree of intimacy within the urban structure. The emergence of passive community participation has formulated dynamic density as a notional norm in the dictionary of humanizing city. Social disconnection, community disintegration, lack of daily interaction are the methods adopted in new normal which has produced a spatial difference in social behaviour. Solitude, isolation and self-centric approaches, are the consequences which has questioned the concept of dynamic density.

Confined Human Correlation

Case A

Before the Pandemic: In Chandni Chowk active hours of the place, commercial functions and flexibility in terms of accessibility governs the human correlation in the urban structure. The degree of intensity generated, contributes to humanization and sociability of the place.

During the Pandemic: Due to compact urban structure people were finding difficulties to adhere social distancing norms. Urban life is finding a new form and approach to strengthen network of accessibility within confined and consolidate human association. Commercial frontages through selling and display of items is now superficial and governs transit interaction.

Case B

Before the Pandemic: People avail themselves to all kind of activities within urban structure. Here built environments generates external spaces where informal commerce fulfils the demand of the common people. However, it amalgamates informality with premium and standard arrangements generating a flexibility within the users by removing the boundary of socio cultural differences resulting into diversity and co-relation.

During the Pandemic: COVID -19 pandemic has altered human co-relation within both formal and impersonal setting embedded into threat of physical contact. The functioning has transformed depending upon degree of intensity of the people to cater the changing needs of the place. Most of the sidewalk which used to cover with hawkers and vendors declines the daily ritual in the structure by making confined boundaries within the user depending upon economic class.

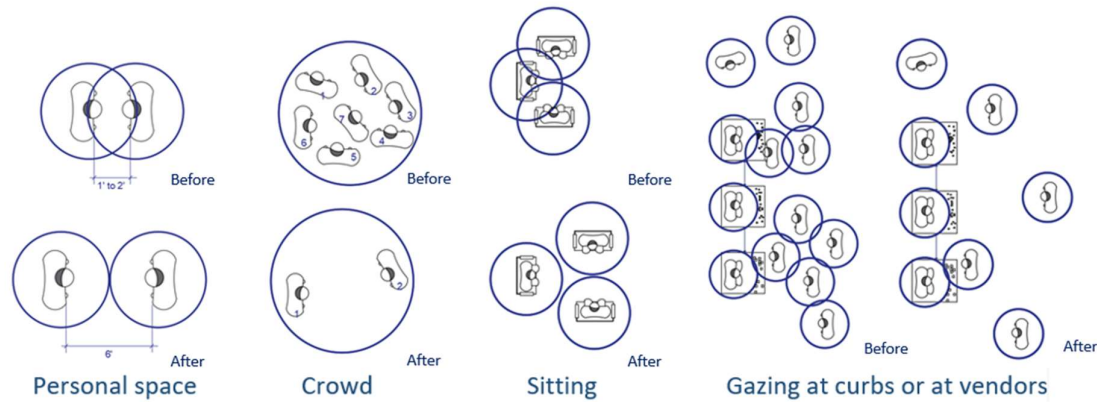


Figure 14. Comparative analysis of human correlation before and after COVID-19.
 Source: author

Utilitarian Approaches

Case A

Before the Pandemic: Utilitarian practices refer to an association which is more oriented towards potential gain rather than intrinsic satisfaction. When used in a socio-political construct, utilitarian ethics aims for the betterment of society as a whole.⁵ In past, Chandni Chowk and Connaught Place was a realm with active people’s participation.

During the Pandemic: Human interaction has become actionable rather than sentimental and amicable. Aggregative, unitary and deontic approaches have proven as central actions of public interests. People adopted different approaches in public spaces to buy from street vendors. Fig.9. Shows, people waiting in a que a few meters apart due to new kind of physical interaction altering the rhythm of urban life within urban structures.

Case B

During the Pandemic: During the first phase of pandemic, informal recreational activities was split from the typical form and character of the fabric. However, during subsequent phases, a distinctive and segmental human pattern of interaction emerged, with newer ways of physical interaction. The private and public settings within urban structure adopted approaches to increase physical interaction by eliminating societal instability. Hence, people adopted specific pattern which in turn is fulfilling basic requirement, needs and demand.

⁵ <https://www.investopedia.com/terms/u/utilitarianism.asp>



Figure15. Utilitarian approach: Defining New social behavioral pattern
Source: Deccan herald

Redefining the Pattern of Urban Social Mobility

Case A

During the Pandemic: The essence of compact urban structure lies within multifarious overlays of formal and informal commerce juxtaposed with a layer of pedestrianization. This association has considerably disappeared due to restrictions on the informal commerce. A continuous addition and modification of policies has governed the entire urban mobility pattern which is shaping the sociability within the place.

Case B

During the Pandemic: High drop in commuting, restrictions on vehicular movement, limitation in public transport system has forced transformation in social and functional properties. In standard urban structure, transformation in mobility pattern impacted the social relationship and interaction. Approximately 52% of population is practicing work from home in order to reduce degree of exposure. Dramatic decrease in motorization changed the lifestyle of people completely. The Government policies like odd-even pattern interrupted the outdoor activities generated unacquitted environment within urban structure. Reduction of pollution was an optimistic result which has upgraded the environment of Delhi.

Transition in Urban Display

Case A

Before the Pandemic: Chandni Chowk has informal disciple of vibrancy, aesthetics, inscribed history and hidden intangible attributes of emotion, and attachment within the place. The informal urbanism is the expression of chaos, social life, mixed commerce activity and people creating a pattern which is vibrant in nature. The urban display was outcome of close-knit fabric, narrow lanes, gali, shaded pathways governing physical nature enhancing user experiences .

During the Pandemic: The lockdown impacted the urban display which resulted into display of closed shutters with bulky tangible constructs of built-form and no people outside. People have gathered fear to be part of such display in coming future. It has not only impacted the economy with quality life but has also questioned the entire pattern of space function the way it was before.

Case B

Before the Pandemic: Cannught Place was having strong display of its architectural expression, with formal commerce addressing high profile users, and elite classes enjoying their social life. However, over a period of time the layer of informal commerce co-existed with the formal. In today's time the urban display of Cannught Place is multifarious with all type commerce inviting users of different socio economic class resulting into the place for all.

During the Pandemic: In present times, due to ban on informal commerce the character removal of all multiple layers of urban display has vanished the character of place. The place is just standing with a historical built form with no meaning. Due its large scale, it has brought a sense of reluctance for people to part of this place. The corridors have become dead alleys and closed shutters.



Figure 16.
Source: India tribune



Figure 17.
Source: The week

Altering the Public Realm

Case A

Before the Pandemic: Chandni Chowk is one of the oldest urban public realms within the City. Definition of public realms in Chandni Chowk is a mix of informal commerce with most of its spaces, streets and alleyways pedestrianized, walkable and porous where people enjoy their social life. The realm has a rhythm with limited formal spatial separation of street commerce from vehicular movement with people in between them.

During the Pandemic: In this period of pandemic Chandni Chowk doesn't carry an image of chaos which was full of thousands of folks, hustle, bustle of shopping and vending activities. The entire stretch which was before full of active public life has undergone a reset with oasis of calm and spiritless space in the city. The place which was before filled with people, their aspiration, and celebration has taken pause by keeping this public realm as a speculative realm of humanized city.

Case B

Before the Pandemic: The iconic shopping and recreational remnant of the colonial Capital has always been full of intense people's participation. Connaught Place is used by multiple people,

not just because it's a Business District, but because it is a comfortable place of all user groups to use and access enrich its public realm.

During the Pandemic: The arose of pandemic has shown a contrasting effect in Connaught Place by altering the phenomenon of public realms in the city. The fear of social contact and imposed lockdown has removed many hawkers and vendors ,who earlier use to attract huge number of people to be part of public realm.

Downturn of Social Life

Case A

Before the Pandemic: The open nature of place with flexible public character was representation of people's attitudes and beliefs which develops strong social coherence within the place. The compact structure enriches dense spaces by virtue of people participation in typical activities related to religion, political, commercial, and recreation by celebrating their social life.

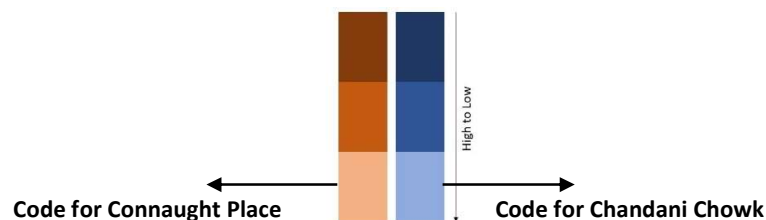
During the Pandemic: The character of people participating is shifted to spot of minimal function and meeting point by removing the essence of urban social life. The decline in the coherence and involvement of strong social activity has entirely disconnected people with their socio-urban environment.

Case B

Before the Pandemic: It was inclusive, and developed place with multi- functional spaces and activities , addressing to multiple users . This attracted various users from varied economic groups, castes, culture and religion to be part of this place uplifting the social character.

During the Pandemic: Closure of restaurants, theaters and shops reversed the economy and resulted into financial downfall. Interruptions in celebrations and festivals has transformed the normal social life. The place has lost its vibrancy disrupting the social algorithms. It has entirely removed the traces of people, commerce and social inclusions losing its identity.

Comparative Analysis between the Prototypes



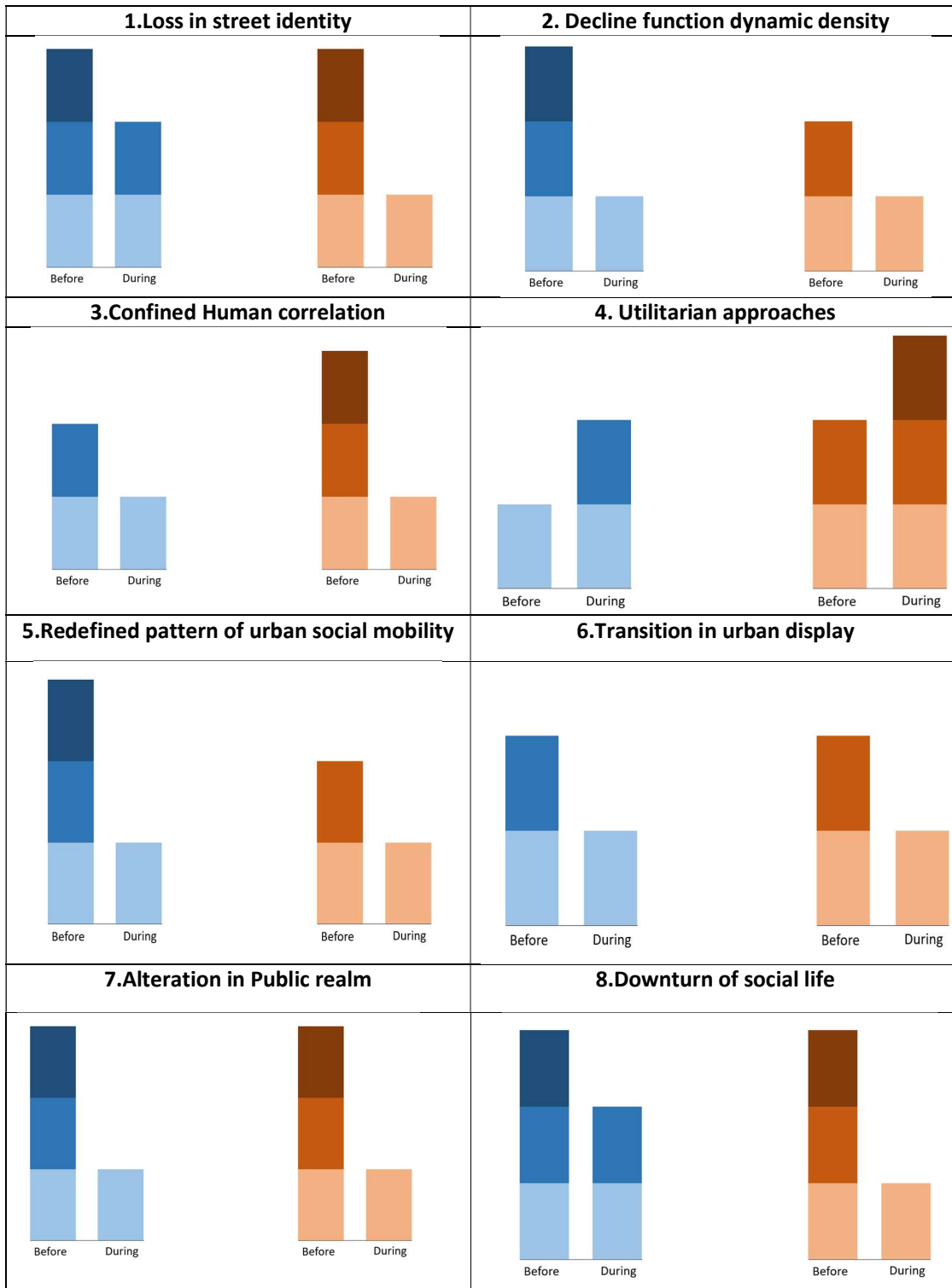


Table2: Chart showing comparative analysis at different scales for various parameters , before and during the Pandemic.

Source: Author

a) Compact urban structure: Chandni Chowk act as ceremonial axis which converge varied social and economic connections in dense urban structure. Because of paucity and narrow roads with informal interaction spaces, social distancing was almost impossible. Physical realities trace high degree of exposure as the arrangement of land use is dense and compact. It has upsurges rate of transmission of infection. Round the clock multi-functionality of compact urban structure posed challenge, facing higher contact threats creating a dilemma. The setup suffered strong social stratification in Mohalla's where sense of belonging was under constant devastation and eviction process. Practising work from home was almost impossible due to lack of resources and technological advancements, throwing challenge in order to adhere the social distancing norms. The entire urban structure is multifunctional and mixed-use fabric where depending upon hierarchy of spaces public and private boundaries amalgamates. Such diversified boundaries experienced a great shift in order to maintain social disconnection and community disintegration.

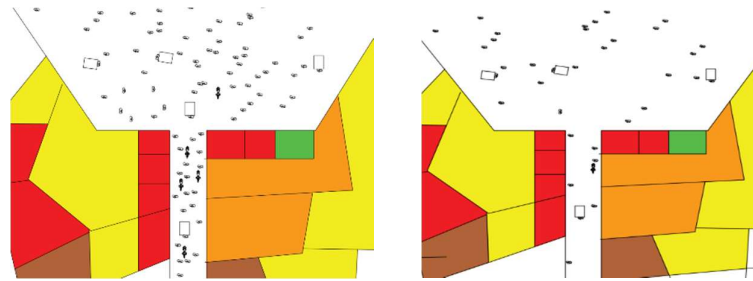


Figure 18: Before and after scenario of COVID-19 in Chandni Chowk.
 Source: Author

b) Standard urban structure: In Connaught place there was no major changes in the surrounding as social distancing was flexible and easy to adopt because of scattered development. Standard urban structure allowed people to facilitate themselves with great health care services. Curative measures for COVID-19 Patients was possible at home through home-quarantine practices. Open & Semi Open Spaces allowed isolation, where degree of exposure is less. However, huge structures of community spaces, club houses and amenities got obsolete. Open spaces remained unattended deteriorating the social life. A major contract in the lifestyle has been seen were work from home acted as tool kit to practice isolation. However, because of careless attitude and over daring among people the spread of virus was at large.

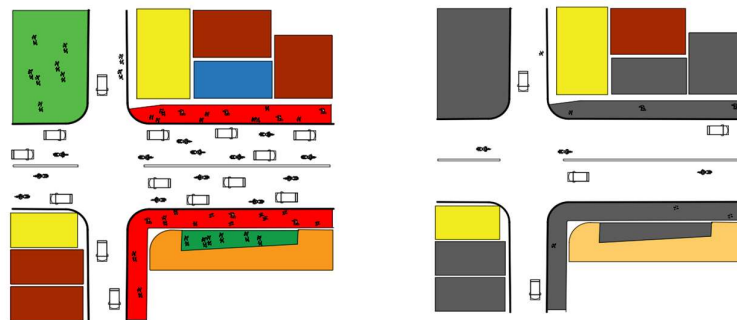


Figure 19: Before and after scenario of COVID-19 in Connaught Place
 Source: Author

Tracing the Impact

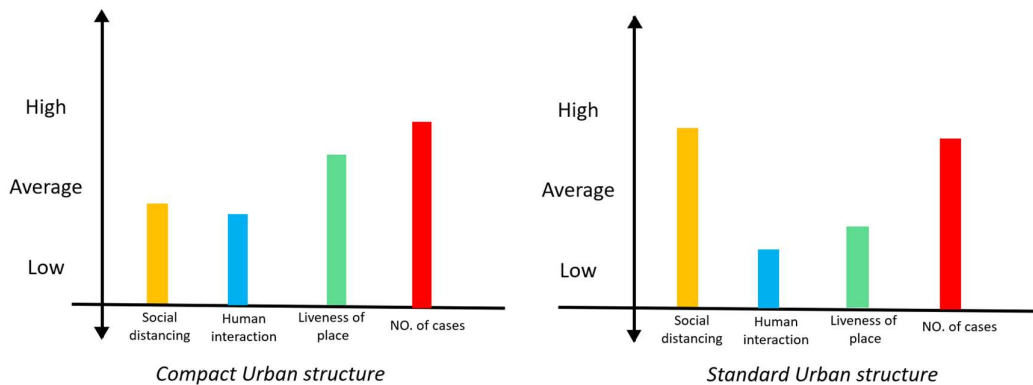


Figure 20. Chart showing a comparative intensity of social distancing, human interaction, liveness of place and no. of cases in compact and standard urban structure.
 Source: Author

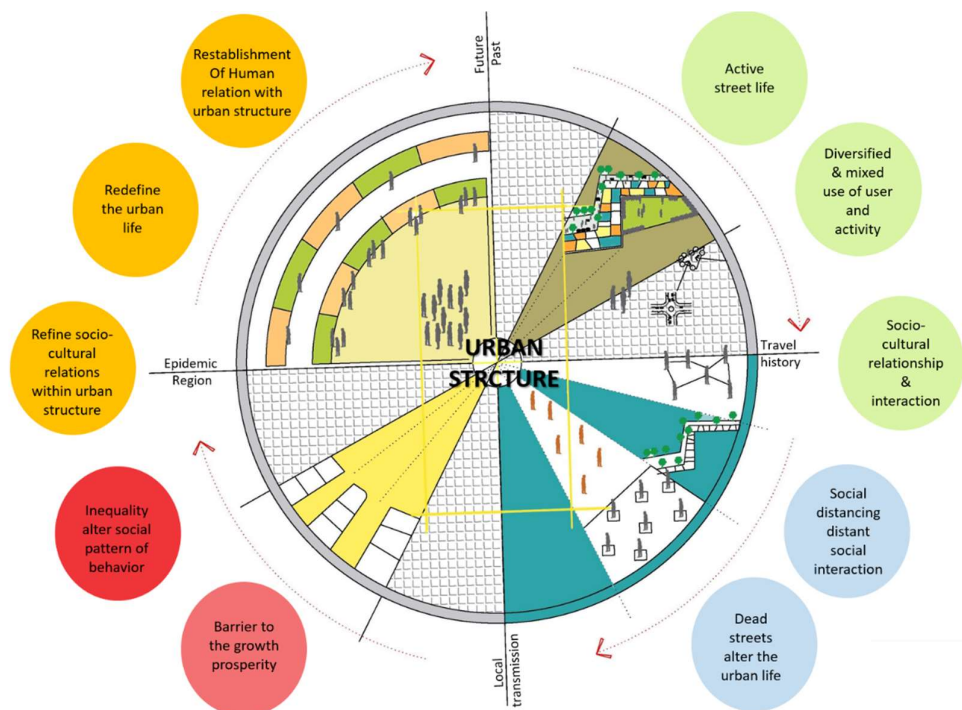


Figure 21. Transforming quarters of Delhi during covid-19
 Source: author

Figure21: Representing different quarters of covid-19 and their impacts on urban structure in Delhi. Last quarter intimates towards a resilient humanized future of Delhi where it needs to look beyond immediate COVID-19 crisis to re-establish the relation between urban structure and human aspects of city.

Check your activity : On-line questionnaire for data recording

1. Tick among the following urban structure in which you live ?
 - a. Compact urban structure
 - b. Standard urban structure
2. Tick among the following options as your intermediate response during pandemic?
 - a. Face to face contact
 - b. Secondary contact
 - c. Online approaches
 - d. Informality
3. Describe degree of engagement into social activities you faced during COVID-19
 - a. Engaged
 - b. Not engaged
 - c. Actively disengaged
4. Describe the pattern of social disconnection you followed ?
 - a. Isolation
 - b. Low interaction
 - c. Average interaction
 - d. High interaction

Towards a New Paradigm of Humanized Urban Structure

With COVID-19 Pandemic in place, the urban structures of the Delhi need to get a strategic direction and approaches for growth in a manner acceptable and supported by the people. The pandemic has thrown major challenges in order to balance between people aspiration and resultant urban fabric. This can be deciphered from different perspectives which nevertheless converge to become a set of shared values with a standard and compact urban structure.

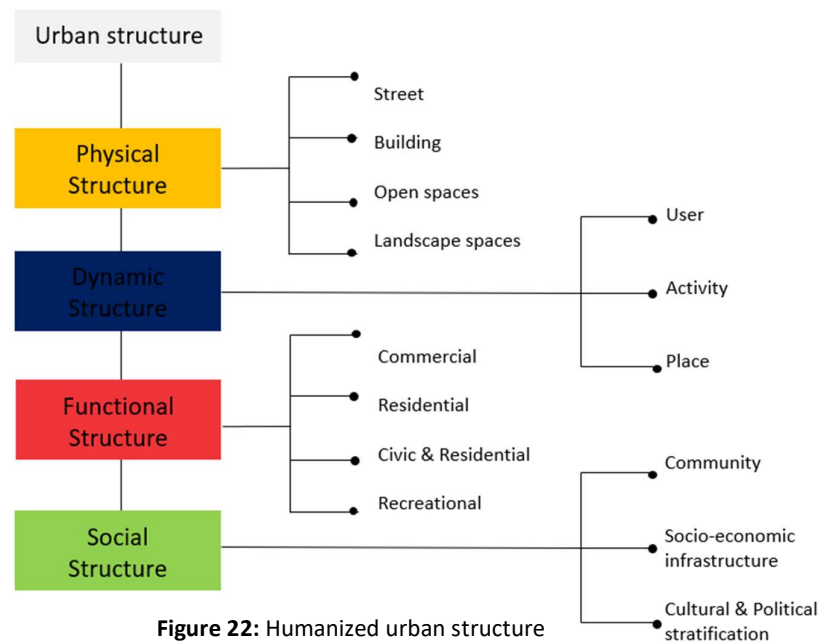


Figure 22: Humanized urban structure
 Source: author

Conclusion

The COVID-19 Pandemic has transformed the quality of life. The dilemma made people strangers which has resulted into deterioration of the humanizing aspects of the urban structure within the city. It is a general observation that, people in Delhi are carving and deriving their own ways to overcome this pandemic depending upon the prototypes of urban structures. Initially, the compact urban structure was under a huge threat of infection spread because of the high density and compact fabric. However, gradually the standard urban structure was becoming the epicenter of community infection spread. Thus, the prototypes of urban structure contributes in shaping a humanizing attribute of the city along with people's participation, as people from the close knit group managed to overcome the pandemic.

During the pandemic, contrasting context of Chandani Chowk and Connaught Place in Delhi suggest that only physical attributes of urban structures (street, open space, buildings) in isolation may not govern what humanization is, but it should also integrate with dynamic, functional and social structure. The need of time demands newer definition of “Humanized urban structure”. To achieve it, we must integrate the imperative elements of identity, social integration, flexibility and placemaking which may contribute to a higher degree of humanization. The notion of a humanized urban structure addressing to high intervention of physical, dynamic, functional and social structure, will help to balance the knot between the – a) sphere of aspiration of people from urban structures and b) sphere of resultant from urban structure.

This paper proposed an integrated framework of humanized urban structure in order to re-establish the relationship between urban structure and humanized city. Further the research may contribute in formulating a qualitative and quantitative value systems for the derived imperative elements of humanized urban structure.

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