THE NEW PUBLICNESS AND URBAN CITIZENSHIP IN POST INDUSTRIAL ISLAMABAD, PAKISTAN

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ABSTRACT

THE NEW PUBLICNESS AND URBAN CITIZENSHIP IN POST INDUSTRIAL ISLAMABAD, PAKISTAN

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The capital city of Pakistan, Islamabad was designed in congruence with the prevalent zeitgeist of the 60's - grid iron plan, functionalist planning, aggressive zoning, vehicular preferences etc. The axial city is defined by differentiated zones that effectively bifurcates the city both functionally and socially and defines territoriality for the urban citizen in an overt, enforced, and top-down administrative manner. The way the urban fabric is envisioned and enforced for the city allows segregation and bifurcations to become the defining face. It forces urban living, social interactions, encounters, aspects of inclusion and exclusion, and the notions of citizenship and membership within the city to be defined by bifurcated lines – by virtue of the form of the city and its control mechanisms for maintaining an idea of how the physical and the social aspects of the city coincide. However, while the city still follows its original zeitgeist, the world has seen some essential shifts in the sixty-two years since its inception. With technological affordances there has been an economic shift from the secondary to the tertiary sector. The ubiquitous nature of wireless technology and digitization has allowed a shift in scale where relations can be managed. These shifts have allowed the creation of new urban digital platforms that mold and orchestrate political,

economic, and social interactions. A primary example for a digital urban platform within the urban landscape of Islamabad is Careem – a platform for ride hailing. The platform allows curation and rethinking of social interactions between urban citizens and results in a remaking of the way the urban fabric comes together – both socially and materially. The research posits that the infusion of the platform reality into the urban landscape redefines existing stratified realities and remakes the notion of being an urbanite within the post-industrial Islamabad. It explores the alterations in urban specificities that the platform generates, the new norms and practices are generated that redefine and remake older social practices. The aim of the research is to explore if and how urban citizenship, membership, the notion of the public, and by extension publicness previously defined by the notions of segregation is being redefined by the infusion of the platform logic. It further explores the role of the individuals and the public in the reconstitution of the original linear relationship exhibited through the physical city and social city of Islamabad.

Keywords: Urban Citizenship, membership, agency, platform urbanism, public, publicness, Islamabad.

YENİ KAMULUK VE KENT VATANDAŞLIĞI POST ENDÜSTRİYEL İSLAMABAD, PAKİSTAN

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Pakistan'ın başkenti İslamabad, 60'ların yaygın ruhuna uygun olarak tasarlandı - 1zgara demir planı, işlevselci planlama, agresif imar, araç tercihleri vb. ve kentsel vatandaş için bölgeselliği açık, zorunlu ve yukarıdan aşağıya idari bir şekilde tanımlar. Kent dokusunun şehir için tasavvur edilmesi ve uygulanması, ayrımcılığın ve çatallanmaların tanımlayıcı yüz olmasına izin verir. Kentsel yaşamı, sosyal etkileşimleri, karşılaşmaları, içerme ve dışlamanın yönlerini ve kent içindeki yurttaşlık ve üyelik kavramlarını, kentin biçimi ve kontrol mekanizmaları sayesinde, bir fikri sürdürmek için çatallı çizgilerle tanımlanmaya zorlar. şehrin fiziksel ve sosyal yönlerinin nasıl örtüştüğü. Bununla birlikte, şehir hala orijinal zeitgeist'ını takip etse de, başlangıcından bu yana geçen altmış iki yıl içinde dünya bazı önemli değişimler gördü. Teknolojik olanaklarla birlikte, ikincil sektörden üçüncül sektöre ekonomik bir geçiş olmuştur. Kablosuz teknolojinin ve dijitalleşmenin her yerde bulunan doğası, ilişkilerin yönetilebileceği bir ölçekte bir kaymaya izin verdi. Bu değişimler, politik, ekonomik ve sosyal etkileşimleri şekillendiren ve düzenleyen yeni kentsel dijital platformların yaratılmasına olanak sağlamıştır. İslamabad'ın kentsel peyzajı içindeki bir dijital kentsel platformun birincil örneği, araç çağırma platformu olan Careem'dir. Platform, kentsel vatandaşlar arasındaki sosyal etkileşimlerin küratörlüğünü ve yeniden düşünülmesini sağlar ve kentsel dokunun hem sosyal hem de maddi olarak bir araya gelme biçiminin yeniden oluşturulmasıyla sonuçlanır. Araştırma, platform gerçekliğinin kentsel peyzaja aşılanmasının mevcut katmanlı gerçeklikleri yeniden tanımladığını ve postendüstriyel İslamabad'da kentli olma kavramını yeniden yarattığını öne sürüyor. Platformun ürettiği kentsel özgüllüklerdeki değişiklikleri araştırıyor, eski sosyal uygulamaları yeniden tanımlayan ve yeniden yapan yeni normlar ve uygulamalar üretiliyor. Araştırmanın amacı, daha önce ayrışma kavramlarıyla tanımlanan kent vatandaşlığı, üyelik, kamu kavramı ve buna bağlı olarak kamusallığın platform mantığının aşılanmasıyla yeniden tanımlanıp tanımlanmadığını ve nasıl tanımlandığını araştırmaktır. İslamabad'ın fiziksel şehri ve sosyal şehri aracılığıyla sergilenen orijinal doğrusal ilişkinin yeniden oluşturulmasında bireylerin ve halkın rolünü daha da araştırıyor.

Anahtar Kelimeler: Kent Vatandaşlığı, üyelik, aracılık, platform şehirciliği, kamu, kamusallık, İslamabad.

To my parents

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CHAPTER 1

INTRODUCTION

1.1 Problem Definition

Pakistan's formation in 1947 resulted in the ideation and creation of a new capital, Islamabad, in 1959. The ideation rested on the hope to 'start afresh', and to build a city which would become a symbol for the whole nation'. It would prove Pakistan's potential to become a robust and modern nation. It was a vision for a city that emphasized 'unity, strength and modernity'.

This vision was translated as an attempt to carve out a 'pure and empty' space, untroubled by the chaos and poverty reigning in much of the country. It was to be a space that was truly 'Pakistani', that could embrace all Pakistanis' – an exclusive urban space that 'unites' the people of the country. With a departure from the traditional forms of sociality, it was to be a 'socially just space that is free of traditional hierarchies and injustices.'

It represents the hopes for a city with distinct mechanisms to determine social outcomes. The ambition became to produce specific forms of physical cities where urban populations can lead ordered and disciplined lives within healthy environments. It was meant to be a place where they could develop and improve physically and spiritually. The city's notion became one of an appropriate microcosm that would foster ideologies of hope, conditions for a better living, and an 'improved society.'

In line with these notions, Islamabad was designed in congruence with the prevalent zeitgeist of the time. Within it the city represents a distinct reality where a linear relationship between the physical aspects of the city and the social aspects is exhibited

in its ideation, translation, and production. This linear relationship presents itself in the way the physical aspects of the urban landscape is used as a control mechanism to streamline and sanitize the social city.

This resulted in the generation of specific mechanisms utilized by the Architect and Urban planner, Constantinos Apostolou Doxiadis, appropriated within the design of Islamabad. He developed a 'holistic layout' for a 'new human habitat' in the attempt to create a 'pure and empty' space free of past influences. He developed the science of human settlements (Ekistics) that included a multitude of aspects, ranging from geography, psychology, anthropology, culture, politics, etc. One of the goals of these studies was to develop certain rules and principles that identify what is most suited to the human dimensions and can allow him to establish a distinct identity and routine and achieve a desirable relationship with the environment. The primary ones in focus that determine the resultant relationship between the physical city and social city in Islamabad are the employment of the ideas of borders, both physical, social and functional, notions of distance, and the way the 'ideal city' is meant to grow. These three aspects helped concretize the linear relationship between the physical and the social aspects of the city, where the physical aspects are used to bring out an 'ideal citizenry' and dictate the mannerisms and behaviours of the social city.

Distinct mechanisms were generated to achieve a physical materialization of the 'new human habitat'. It dictated control over how individuals and groups utilize space, come together, and generate spatiality. Doxiadis employed mechanisms that range from distinct functions and land uses to the reduction of the fabric of the city into regularized, objective, and replicable units following the iron grid layout. To create harmony amongst the urban citizens and to avoid unrest, the city was bifurcated into sectors and sub-sectors for specific socio-economic groups. An idealized environment was generated for an idealized community, distinct from reality.

Within this lay the city's propagation of how it bifurcated the city, and the role segregation plays in the distribution of space and distribution in space. Urban space acts as the medium that dictates limitations on interactions and encounters and aims to prevent specific types of contacts to generate determinate social aspects of the city. This linear relationship between the physical and social city generates distinct repercussions as well. It creates a passive membership for the urban citizens, creates distinct ideas of who the public is, the nature of social interactions that can generate publicness, and produce space.

This segregatory logic in terms of how the relationship between the physical and social city is materialized, the way social interactions and restricted encounters are choreographed in determining the social city and its aspects are still prevalent in defining urban life in Islamabad. However, since its inception, ideation and execution, the world has seen some essential shifts. These can be divided into three milestones. First, the worldwide rule to urban habitation ration has reached an 'unforeseen peak.' Second, with technological affordances there has been an economic shift from secondary to the tertiary sector. Third is the ubiquitous nature of wireless networks. These changing landscapes have allowed the city to move from an industrial city to a postindustrial city¹ and have altered the way the city performs and orchestrates relationships.

Collectively, these shifts alter the nature of social interactions, the potential of interactions and encounters, the nature and role of the 'public', and their relationship to how space is produced. They generate frameworks and structures for altering the relationship between the physical and social city that Islamabad exhibits. These also provide revised conditions for individual and social relationships.

With the shifts mentioned above, a variety of our daily activities have developed digital alternatives – communication, employment, commerce, governance, etc. This extension allows the public space to be broadened into the digital world. It allows new platforms for social interactions to be created, it generates new spaces for participations and opportunities. It creates a new scale of social interactions that is accessible by a greater number of people and by a wider range of people. Within this, there is a generation of creating frameworks and structures that are less dependent on the

¹ These shifts in performance have allowed the city of Islamabad to move from a traditionally industrial city towards a postindustrial city. The design of Islamabad resulted in the establishment of an industrial area whereby the sectors G-6 and G-7 were allotted with light industries, while the sectors 1-9, I-10, and I-11 were reserved for larger industries. The shift, however, has allowed the service industry to outperform the manufacturing industry. The city contributes one percent to the country's GDP while holding 0.8% of the country's population. The shift is evident in the overall growth of the domestic industries impression within the country whereby the service industries growth was recorded above 4% with in the fiscal years 2017-2021. Industry has seen a gradual rise with the advent of shifts mentioned above. This has allowed and enabled multiple social consequences – whereby knowledge becomes a 'valued form of capital', 'producing ideas becomes the main way to grow the economy' etc.

traditional locative spatial limits that dictate interactions, experiences, and production of space. It also exhibits potentials of creating an interrelated subjectivity between individuals. Collectively, the shifts have generated collaborative frameworks and structures with the existing performance structures and mannerisms.

This alteration in performance and mannerisms is infused into every facet of life with digital platforms. It alters the conditions that dictate mannerisms, performances, interactions etc. Within the urban context, platforms act as middlemen for traditionally location specific aspects - traditional printed and mental maps that aid movement, hailing a taxi through location specific taxi stands, hotels for recreational accomodations. These represent mediated interactions between urban actors and space, with the platform acting as the mediator. Urban space and its segments are used as elements that cater to the mediation and alter the way social life is conducted and organised. The infusion of these platforms into how individuals conduct their lives on a daily basis is allowing the platforms to become increasingly central to both private and public life. Primarily, it alters conditions through which social interactions are conducted. This alteration is a result of the intermingling our daily tasks, routines and social practices - like hailing a taxi, navigating through the city, getting groceries, consulting a doctor, finding friends and socializing - with the logic of digital platforms. There is an underlying interaction set based on practices, routines etc. in every paltform that has become ubiquitous. While google maps, Uber, AirBnb, for example, are dominant urban digital platform that mediate interactions and routines, in essense they have an underlying interaction set that they become mediaters for. Google maps, for example, becomes the mediater for way finding and allows a reformation of the interaction set between people. Uber, on the other hand, becomes the mediater for ride hailing and alters the interaction set between riders and hailers. AirBnb becomes the mediator for accomodations and alters the interaction sets between renteers and renters.

This mediatory logic of the urban digital platforms; where the diverse social interactions between urban actors, basis itself in the way urban actors perform within space. It utilizes the logic of actors and the social interaction that are conducted and transforms it in a manner that takes out certain existing urban logic and induces another logic within the urban spatial vocabulary. It places itself within the physical and social frameworks of the urban landscape and utilizes urban space as the medium through which the mediated social interactions are materialized. This mediation of traditional interactions generates a revised spatial vocabulary for urban settings by virtue of revising exisitng mannersims of urbanites. By doing so, the urban digital platforms intersect with the social and material fabrics of the city. This transformation of mannerisims allows the plaforms to alter the conditions through which society, space and time, and thus spatiality, are produced.²

It generates multiple mannerisms which differentiate its performance within urban space with respect to the way people interact, encounter, communicate, organize and the way individuals consume, use, and produce urban space. It alters the way the city produces the link between the physical and social aspects of the city. Within this, it generates conditions where social interactions become the prime mode of production of space. It contrasts the original logic of Islamabad whereby urban space utilizes mechanisms to generate specific social outcomes and the way it detemines the nature of social interactions and encounters within it. It further allows a regeneration of the notion of who the city considers the 'public', the nature of social interactions that determine and produce publicness and spatialty and how it determines who is to be a member of the city. The thesis is an investigation of how the platform infusion into the urban landscape of Islamabad is altering its inherent logic. Where the built frameworks and nature of the city dictates social interactions, and the role individuals play in the production of their city comes into contact with platforms that propagate production of space through social interactions. The research posits that the infusion of the digital platforms alters the nature of the city in terms of developing frameworks that contradict its original logic of the relationships it manifests and materializes and further the way the social city functions and contributes to the city. It further posits that the change in the nature and role of social interactions allow the passive and docile conception of the urban inhabitant allows an alteration of the nature of the

² As a basis logic in terms of how the digital platforms perform in their relationship with the involved actors and their inter relations the the economics and statistics administration of the US commerce department issued a report in 2016 that defines the platform sector using four characteristics – the use of information technology (IT systems) typically available via web-based platforms, such as mobile apps on internet enabled devices, to facilitate peer to peer transactions. They rely on user based rating systems for quality control, ensuring a level of trust between consumers and serice providers who have not previously met. They offer the workers who provide services via digital matching platforms flexibility in deciding their typical working hours. To the extent that tools and assets are necessary to provide a service, digital matching firms rely on the workers using their own.- Uber, Airbnb and consequences of the sharing economy: Research roundup (2016). Available at: https://journalistsresource.org/economics/airbnb-lyft-uber-bike-share-sharing-economy-research-roundup/ (Accessed: 8 June 2022).

'conceived individual' into one that is an active member and citizen of the city.

A potential outcome for this research is the effort to change how Islamabad is viewed by the authorities that control the built environment. The city regulates the social behaviors of its citizens by generating distinct conditions under which they must perform. For example, in recent years, the Capital Development Authority, which looks over the development of Islamabad, has periodically restricted development of projects that do not fall under the given criteria of the assigned usage of space. For example, according to the Capital Development Authority ordinance 1960 and building and zoning regulations, residential houses cannot be used for any other purposes. The city regulates social behaviors by employing planning mechanisms to create conditions that serve its agendas of 'social harmony'. However, it utilizes and is driven by overarching agendas of social behaviors, which nullify the importance of social interactions and their ability to define and produce space. It effectively reduces the city to a fixed entity without any potential of growth. Allowing the city to be recognized as a product of social interactions also helps to develop directions for future studies. While this thesis focuses on the social interactions producing alterations in the physical urban landscape, a way forward can be looking at the alterations in social organizations that the urban platforms manifest through urban space. Islamabad represents an explicit lack of research regarding how the urban landscape is changing with new technology and modalities of living. One of the results of these changes is the problematic forms of disembodied control that workers are subjected to when engaging in paid tasks assigned through platform companies. The platform represents alterations in the spatial organization of work and social relations. Moreover, this approach can be analyzed in terms of how the workers demonstrate agency by focusing on the spatiality of their collective actions.

1.2 Aim of the Thesis

The aim of the thesis is to explore the changes in the nature of the city produced by the urban digital platform, Careem. To begin with, it generates frameworks for the segregated logic of Islamabad whereby it uses mechanisms to determine the linear relation between the physical and the social city. These frameworks allow an understanding of how the city streamlines the social interactions and generates an 'idealized urban citizen' within a curated, carved out space that 'unites all the people'. This generates mannerisms whereby the physical city is used as a medium to control the social outcomes. Within these mannerisms, it also produces notions of who the city considers the public and a member of the city, the ways publicness can be generated, and the ability of social interactions to produce urban space. Once a substantially relevant framework is established, the research aims to study the change in these mechanisms produced by the logic of platform reality introduced by the urban digital platform, Careem.

The platform was established in 2012 in Dubai, UAE with a website offering corporate car bookings. Overtime it developed its business model and became a transportation network company for the mass market of the middle east, Africa, and South Asia. It was introduced in multiple cities of Pakistan including the capital Islamabad in 2016 with an overarching agenda of 'simplifying people's lives and moving our region towards better living'. While it started as a ride hailing platform, it expanded into the food delivery and digital payment platform in April 2022. While the basic propagation and understanding of the company 'Careem' is that of a super application that incorporates diverse interactions and 'instances', it includes within it multiple urban processes - e.g., ride hailing, food delivery, etc. The platform manifests through urban space by becoming an intermediary that co-ordinates social interactions between multiple urban actors - rider/driver, residents and restaurants, restaurants, and riders, etc. The aim of the thesis is to utilize the urban digital platform, Careem, and exploring the changing mechanisms, frameworks, and mannerisms that dictate the way the city of Islamabad functions, develops and is produced. The postulate is further examined by the changing nature of how social interactions are conducted, that alter notions of public, publicness and, membership that the platform imbibes within the city.

1.3 Methodology of the Thesis

The study which is titled, "The New Publicness and Urban Citizneship in Post-Industrial Islamabad, Pakistan" attempts to explore the before mentioned concerns through a qualitative and quantitaive analysis. It utilizes on-site documentation to explore the physical changes in the urban landscape of Islamabad brought by the infusion of platform logic through Careem.

The methodology for the analysis looks at quantitative data via on site documentation of material and social changes Careem has introduced. It allows viewing the way the city is physically reacting to the digital platform. Qualitative data, on the other hand, is gathered from twitter to analyze the different forms of social interactions and encounters. This allows exploring the different forms of narratives being developed with respect to Careem.

The individuality of this research stems from distancing itself from the dominant foci of critical study of platforms which emphasizes it as a company, an on screen interface, and a hidden algorithm. This perspective is exemplified in Srnicek's elaboration of 'platform capitalism'. For Srnicek, platforms are first and foremost understood as companies; "economic actors" that pursue courses of action for business needs, unfolding within a changing but nonetheless relatively linear logic of capitalism. The latter focus on the platform as on-screen interface and algorithm is apparent in questions of "platform labour", which consider the problematic forms of disembodied control that workers are subjected to when engaging in paid tasks assigned through platform companies. However, without dismissing these perspectives, platforms cannot be reduced to the organization of the company. Instead, the study focuses on examining the way it manifests in urban space and utilizes Islamabad as a case study for it.

Urban digital platforms, by virtue of its inherent mechanisms, alter the way the city is organized in terms of the role of people, the way they interact with others and urban space, the role of the physical elements of urban space, and the impact of social interactions on the production of space. In doing so, the study explores the way socio-spatial relations are produced in this new context, the way the social city is perceived, its link to the physical aspects of the city, and consequently, the notions of who the public is and, how publicness is produced.

1.4 Structure of the Thesis

The body of the thesis is divided into five chapters. The first chapter is the Introduction that frames the thesis. It is then followed by the second chapter.

The second chapter is titled, 'Segregation as the status quo'. This chapter contains two sections. The first section outlines the ideation, conception, and implementation of the city of Islamabad, and the thought processes and ethos of the time that impacted its design. It investigates the distinct faces that the city exhibits – the physical and the social city – where segregation becomes a primary mode of representation. It explores how the designed and ideated aspects of inclusion and exclusion define the nature of social interactions and encounters. It defines the manners in which segregation within the implemented modern planning principles sanitizes the city to generate an organized, frictionless landscape where social harmony dictates the social behaviors. The second section explores the ramifications of these ideologies on the way the city generates its social aspects. It looks at the way the physical city becomes a physically bounded space with distinct characteristics that propagate segregation and reduce the agency of the citizens and the nature of interactions and encounters in claiming and producing space.

The third chapter is titled, 'Platformization and the urban condition of Islamabad'. It is composed of two sections. It explores the way the platform reality alters the manner in which social interactions occur by virtue of the way the platforms function and its impact in the production of space. The first section looks at the development of the platform reality, the underlying mechanisms that allows its ubiquitousness. It then looks at how the revised frameworks of mannerisms and social interaction sets within urban contexts depict a revised spatial vocabulary of simultaneous embedding and disembedding processes. The traditional rules that govern the way aspects of the city come together are disembedded, and newly revised mannerisms are embedded. From location-specific interactions, it allows data to be the prime motivator for interactions and alters the scale at which relations occur. Consequently, altering how spatiality is produced within this dynamic. In the second section, it explores the revised frameworks introduced by the urban digital platform, Careem, in Islamabad. Within it, it investigates the new frameworks of social interaction sets that are utilized, the urban

characteristics and logics that are embedded and dis-embedded, and the impact of the 'agents that use the platfoms' in producing urban space. It explores the altered relationship between the physical and the social city and the mechanisms that produce urban space.

The fouth chapter is titled, 'Refomulation of Urban Citizenship and the nature of publicness'. It explores how social interactions, fostered by the platform logic that Careem propagates, between urban actors are altering the makeup of the physical and social city, and the way it is produced. It explores the impact on the way 'public' is conceived; publicness is enacted and how citizenship as a form of active membership within the city is transformed to allow greater access, visibility and inclusion for a cohesive existence based on plurality and collectivity.

The final chapter concentrates on the interlations between the dynamics of the original ideation of islamabad, its translation mechanisms and the way the urban digital platform, Careem, is changing the nature of relationship between the construction of the social city by means of the physical city. It uses the before mentioned themes to understand the changing nature of 'public', 'publicness' and 'membership' in the production process of Islamabad. Furthermore, it develops an understanding of the city's production by means of social interactions which allows the city to be a state of 'work in progress' rather than the determinate nature the original ideaology propogated.

CHAPTER 2

SEGREGATION AS THE STATUS QUO

2.1 Problem Definition

Islamabad's urban logic represents a distinct reality in terms of how the relationship between the physical city and the social city is ideated, translated, and exercised. This relation presents itself in a linear fashion where the physical design is used as a control mechanism to streamline and sanitize the social city.

Designed by C.A. Doxiadis in 1960, this linear relationship is exercised through the construction of a specific science of human settlements. It allowed people to be distributed into groups forming 'communities' of various scales that were brought together under the principle of 'unity of purpose' – the purpose being to generate democratic societies capable of mental and spiritual growth. The physical form of this became a city where distinct notions of control dictate the way people come together based on rigorously defined functions and socio-economic groups.

The city exhibits two faces – a physical city and a social city – and they are represented through segregation on multiple layers. Aspects of inclusion and exclusion define the nature of encounters and interactions. The notion propagating this segregation lies in the original thoughts for the urban design – a sanitized zoned city defining the functions appropriate for it to run in an organized, harmonized and, frictionless manner.

This chapter explores the segregatory planning mechanisms utilized within the original ideation of the urban logic of Islamabad that define the performance and development of the social aspects of the city. It further explores its impact on the potential of encounters and the limitations on interactions that it propagates.

The underlying idea behind this exploration is that the city actively regulates the performances, social interactions, and encounters within the city based on an overarching agenda. It represents the rigorous monitoring of the public and the private realm. It streamlines the city along distinct identities, which hampers the growth of social life. The rigorous approach to sanitizing the city progressively excludes the possibility of action by urbanities because the city requires a certain behaviour from its members and contains the public accordingly.

2.2 Doxiadis's Vision of Islamabad

In accordance with the ethos of the time, Constantinos Apostolou Doxiadis developed a hollistic layout for a 'new human habitat' which was implemented in the design of Islamabad. An Architect and town planner by profession, he developed the science of human settlements (Ekistics) that included aspects of geography, ecology, psychology, anthropology, culture, politics, aesthetics, etc. One of the goals of these studies was to develop certain rules and principles that identify what is most suited to the human dimensions. The primary ones in focus that determine the resultant relationship between the physical city and social city in Islamabad are the employment of ideas of borders, both physical and functional, distance, and the way the 'ideal city' is meant to grow. These three aspects helped concretize the linear relationship between the physical and the social aspects of the city, where the physical aspects are used to bring out an 'ideal citizenry'.

The success of this settlement can be claimed when 'man can establish a system to maximize his potential contacts while minimizing the energy expended for accomplishing tasks.' It should, at the same time, allow man to establish a distinct identity and routine and achieve a desirable relationship with the environment. He developed principles to achieve these tasks that were created by 'observing man's function and interaction with space and creating boundaries based on territorial interests'. This illustrates the notion of 'distance' and 'boundaries' that helped develop the idea of the establishment of the settlement. It denotes the area an individual is willing to

cover comfortably during the course of his/her daily life. It covers both aspects of movement and function within the boundaries of territorial interests. Doxiadis states that, "The width of a street is of human dimensions if the number of people moving in it justifies it. The dimensions of squares are derived from the maximum distance at which people can hear or see events taking place in the square, which is seldom more than a hundred yards, in length or width."

This successfully allowed the establishment of any activity or settlement which relies on the 'demarcation of a boundary' with respect to human dimensions and functional convenience. It demarcates the scale at which interpersonal relationships are executed successfully, and activities are conveniently carried out.

The demarcation of boundaries based on human dimensions and functional convenience could, as per Doxiadis, only be executed with a 'gridiron plan'. It was to give the city a rational structure that could easily accommodate the automobile. However, it also allowed the settlement to be divided into smaller, repetitive parts, demarcating defined land use arrangements, thereby allowing efficient functional zoning that is easy to achieve and maintain.

This demarcation of boundaries also enabled the creation of a scale where human settlements can be divided into units of different sizes¹ ranging from the individual to the house, city, region, continent, and world city. Within this Doxiadis, analyzed functionally suitable territories and conducted studies on the evolution of settlements into villages, cities, megacities, etc. illustrated in figure 2.1. Starting from the individual, the hierarchical scale goes up to the level of the universal city with a distinct number of users and a bounded area that can accommodate them. While this elucidates the objective hierarchical order within which the scale of communities is organized, it also illustrates the intention to territorially demarcate and define socio-spatial relations by introducing regularity within the hierarchical systems of demarcation and

¹ Doxiadis states that: "If we closely and systematically analyse our living space, we shall discover that we live in fifteen different space units of increasingly greater dimensions. The first of these, and the smallest, is that of man himself – it is precisely the space occupied by the human body with all its limbs extended; the second is the room; the third, the dwelling; the fourth, the dwelling group; the fifth, the small neighborhood. Leaping upward, we come to the eighth unit, the traditional town of 30,000 to 50,000 inhabitants; then to the tenth, comprising the metropolis with around two million inhabitants; the eleventh, the conurbation with several million inhabitants, and the twelfth, a new type of urban concentration going by the name of 'megalopolis', like the one stretching along the east coast of the United States. Finally, we come to the fourteenth and fifteenth units, the urban continent and Ecumenopolis, the universal city". [The city (II): Ecumenopolis, world-city of tomorrow: from Impact of Science on Society, v.19, no.2, April - June 1969, p. 179-193]

dimensions based on occupancy.

Nomenclature	No. of Users	Area (m ²⁾
Anthropos	1	4.084
Room	2	28.059
House	5	200
House Group (Hamlet)	40	1400
Small Village	100	9,800
Village	250	68,650
Neighbourhood	1,500	480,570
Small polis (town)	10,000	3,364,000
Polis (city)	75,000	23,548,000
Small metropolis	500,000	164,836,000
Metropolis	4 million	1,153,850,000
Small megalopolis	25 million	8,077,000,000
Megalopolis	150 million	56,538,000,000
Small Eperopolis	750 million	395,772,000,000
Eperopolis	7,500 million	2,770,408,000,000
Ecumenopolis	50,000 million	19,392,857,000,000
Total Habitable Area	-	135,750,000,000,000

Figure 2.1: Ekistical units developed by C.A. Doxiadis elucidating the hierarchal scale of boundaries on which people and communities are organized.

This hierarchal order also recognized the problems associated with growth over time. He investigated the rate at which urbanization was occurring and concluded with the creation of a 'world city – an Ecumenopolis'. He saw rapid world population growth and urbanization as pressing global realities, necessitating massive urban expansions. In numerous writings, he projected the tremendous growth of the world's population from three billion in 1960 until its eventual stabilization at a figure between 15 and 50 billion between AD 2100 and 2200.

To cater to this growth and change, Doxiadis developed a 'four-dimensional city' called 'Dynapolis'. He notes, 'The city of the past was in practice a 3-dimensional

one, while the city of the future is 4-dimensional, the fourth dimension being time. The time factor becomes very important. The city of the past was not growing rapidly; the city of the present and the future does grow very rapidly. This is the reason why we cannot anymore afford to keep the center as it was, that is, always at the center of gravity of the whole area". Expansion of the city, in this context, would be allowed in one direction for the center to expand without any difficulty.

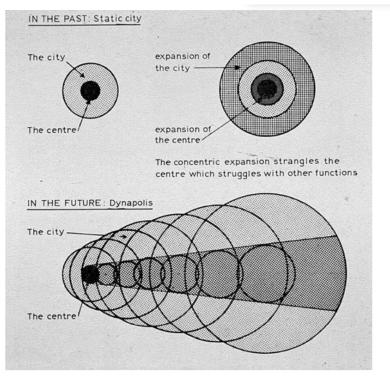


Figure 12. Expansion of city in the past and future modelled as dynapolis (Source: CDA Archives, Islamabad report DOX-PA 72)

Figure 2.2: Expansion of city in the past with a static center vs. future expansion where the center would grow in a linear fashion modelled as 'Dynapolis' by C.A. Doxiadis.

The agenda is to organize the human habitat in a better and more rational manner that would allow growth in time that does not alter and disrupt the original structure of the settlement. It was meant to accommodate the prevailing forces of modernization, industrialization, and developmentalism while ensuring a democratic society that consisted of populations that are not just accumulations of infrastructure but are 'organic human settlements' capable of evolution and change.

For the Dynapolis to materialize, he proposed four principles. The principles included

'unity of purpose', 'Hierarchy of Functions', 'consideration for the four dimensions', and 'the three scales'. Unity of purpose dictated planning in a comprehensive and inclusive manner that included distinct functions and social groups. The hierarchy of functions dictated the city be designed in an organized manner in stark difference from the 'haphazard' way of cities of the past were designed. The four dimensions emphasize the importance of time, where future growth is considered. The three scales incorporate the man and the car first and then later would include airplanes.

To counter the growing issues of the world – overpopulation, rapid urbanization, congestion in cities, etc. he proposed a mechanism that would allow the city to be organized in a rational manner and remain contained while allowing the potential for growth. Utilizing knowledge from diverse specialties, he devised a system that would control the physical city and, in turn bring out 'desired effects from the social city.' These mechanisms are materialized in the spatial organization of Islamabad.

2.2.1 The Spatial Organization of the City

The physical city of Islamabad exhibited distinct mechanisms used to control how individuals and groups utilize space and come together and generate spatiality. To counter massive urbanization trends, congested and polluted cities and to generate a tame and civilized polity, Doxiadis employed mechanisms that range from distinct functions and land uses to the reduction of the fabric of the city into regularized, objective, and replicable units following the iron grid layout. To create harmony amongst the urban citizens and to avoid unrest, the city was bifurcated into sectors and sub-sectors for specific socio-economic groups. An idealized environment was generated for an idealized community, distinct from reality.

He generated distinct hierarchies and structures within the city in an attempt to carve out a 'pure and empty' space, untroubled by the chaos and poverty reigning in much of the country. It was to be a space that was truly 'Pakistani', that could embrace all Pakistani's – an exclusive urban space that 'unites' the people of the country. With a departure from the traditional forms of sociality, it was to be a 'socially just space free of traditional hierarchies and injustices'. A 'civilized' polity was to be choreographed through thoroughly designed mechanisms. This is highlighted through Networked hierarchies that determine the structured distributions within the city, the sectoral formation that allows boundaries to be generated for convenience of movement and functions along with seamless growth, and finally, the human communities that are hierarchically structured to maintain harmony and generate a 'democratic polity.'

2.2.2 Networked Hierarchies

The city is designed around distinct hierarchies and structures to create a 'rational design' that can hold, foster, and nourish activities based on human dimensions. These hierarchies are evident in the way the city is formulated – by means of an orthogonal, iron grid layout, the distinct land use arrangements based on hierarchies of functions, and the hierarchal structure of streets that corresponds with the hierarchy of functions and land use arrangements.

The basic orientation of the city was formulated by two orthogonal axes. The first southeast-northwest axis is defined along the existing Grand Truck Road that connects Islamabad to the existing city of Rawalpindi. The southwest-northeast axis is placed parallel to the Margallah hills and defines the 'dynamic nucleus' of the city. It is the 'expanding axis' defining the future development and direction of the city, evident in figure 2.3.

Growth and time are some of the key factors that lay the foundations of the city. It was meant to accommodate growth in a way that does not disrupt the urban life already established. In line with this, an iron grid layout was spread over the city. The grid divided the city into smaller factions of 'self-contained', 'efficient', and 'independent' sectors. The orthogonal grid and the layout of the skeleton were to allow ease of expansion and movement to fulfill the vision of the 'Dynapolis'. The 'dynamic nucleus' on the 'expanding axis' was to follow the gridded system allowing ease in expansion and monitoring.

The gridiron skeleton of the city is served by a hierarchal structure of road networks of varying widths -1200 ft, 600 ft, 800 ft, etc. The emphasis is on the consideration of the three scales – the human, car, and later airplanes.

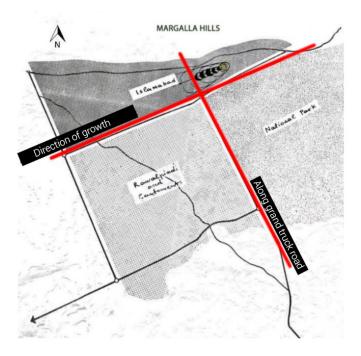


Figure 2.3: Orthogonal axis of Islamabad – a North-east South-West axis denoting the growth direction and a South-East North-West axis connecting Islamabad to Rawalpindi. (C.A. Doxiadis)

Within this ordered structure, the functions within the city are further distributed in a Euclidean-zoned manner. Commercial, residential, industrial, administrative, and recreational is individually grouped in various linear formations illustrated in Figure 2.6. The administrative capital complex is isolated from the rest of the city by placing it on the northeast and placing a long avenue leading to it. The avenue was proposed as the 'dynamic center' of the city with commercial and recreational activities referred to as the 'Blue Area'. The industrial sectors are placed in the city's southwest, while the residential sectors dominate the city's northern areas. The sectors are denoted with numbers and letters, placed along the horizontal axis to further allow unhindered, unlimited, and controlled growth – with letters for the vertical strips and numerics for the horizontal strips.

While the iron grid plan, Euclidean zoning, and street networks organized the city in neat hierarchal factions, Doxiadis further developed an architectural vocabulary to correspond to the various scales in the city. He says, 'As a whole, the city must have a hierarchy of spaces and volumes, and a hierarchy which corresponds to the hierarchy

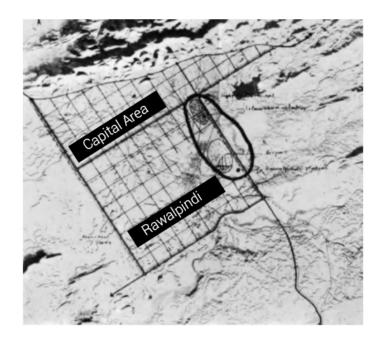


Figure 2.4: Formation of the urban structure of the capital with a Grid iron layout spread over the city to create independent and self-contained units/neighborhoods. (C.A.Doxiadis)

of functions.' The execution of this principle is evident in the way the scales respond to the hierarchy – relation of the dwellings, residences and the monumentality of the capital complex.

In line with this, a specific study was conducted on densities which correlated that the height of the buildings would give a rising effect towards the administrative center and conclusively, the height of any building should not surpass the roof of the president's house. For the design of the capital, 'the presidential palace is placed at the most important position of the city,' and the height and the dimensions of it will correlate to its stature. Figure2.7 illustrates the relative positions of the seat of the government and the main axis point that leads into the city with the purpose of it to 'dominate the city'. This relative vocabulary between the administrative complex and the surroundings is also translated into the larger scale, in line with the basic element a spectator would see when entering Islamabad being the administrative center. Doxiadis proposed the stories of the administrative buildings should be more than ten for them to be visible from the main entry axis point. In accordance with this, the CBD/Blue area was to

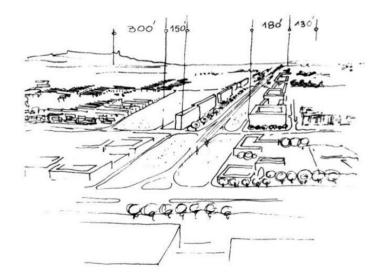


Figure 2.5: Sketch by C.A. Doxiadis showing the hierarchal structure of roads where the road width reduces with the land use.

have a pattern of blocks four to eight stories high while the low-density single-family residential sectors retain the least amount of profile.

The networks of the city are divided into hierarchies and individual territorial zones defining distinct dos and don'ts. These are also rigorously enforced by the zoning laws that maintain and secure for example, the intimate level of the house vs. the public level of the community. The core of Doxiadis's theory lies in countering the 'urban hell' – based on rapid population growth, socialization, mechanization of transport, industrialization and modern technology, urbanization, and economic development. In contrast, the ekistical heaven is the co-existence of these notions, but in a rationally organized setting that affords every individual and family the optimal setting for self-realization.

2.2.3 Sectoral Formation

'The city of the past and the city of the present, which we inherited, have a structure based on the block. However, the city of the past was static; the future one is dynamic. The city of the past was always small, but the future one is getting enormous. The city has changed, and so must its modulus, the block. The modulus of the city of the

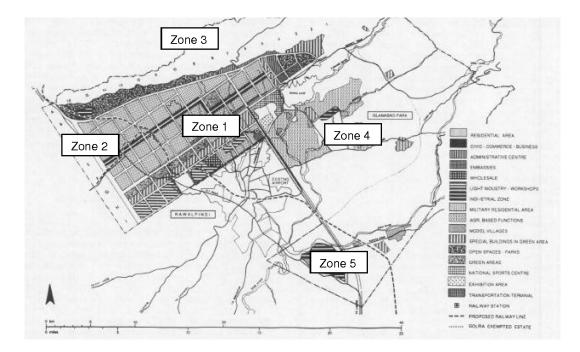


Figure 2.6: Euclidean Zoning of Islamabad demarcating the varying land use. Source - Capital development authority, Islamabad.

future has to be the sector, an area much larger than the block.'

Doxiadis's theory of designing Islamabad incorporated a change in the scale on which the city is designed to achieve optimum growth. The city was designed according to 'static cells' where people can feel safe and secure in the face of constant change. The city is permitted to grow along a predetermined axis, around which new cells can be built while older ones can grow. This ideal city's street pattern is a rectilinear gridiron, and the ideal Dynapolis is structured along this system of perpendicular axis.

The city or the human settlement within this frame is comprised of varying scales of 'communities' within a planned hierarchy. This hierarchy is based on the 'ek-istical units' defining territorial arrangements made by 'man/Anthropos for himself'. Accordingly, he utilized the smallest module of the ekistical units – Anthropos – to achieve the basic module of Islamabad's grid. The square is derived from a distance of 2000 square meters, a distance easily covered by man on foot. These organizational units of 2.2 km by 2.2 km were termed the 'sector'.

As denoted in Figure 2.9, this sector is denoted as a 'class V community', which was

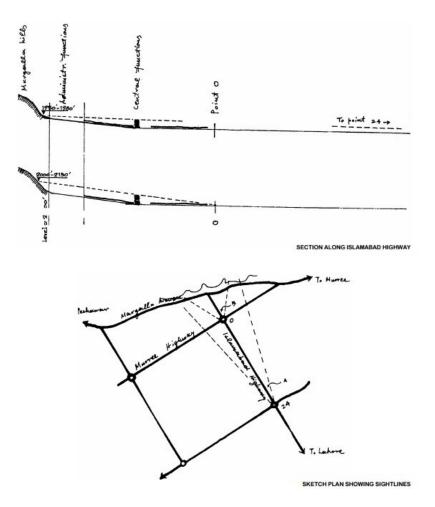


Figure 2.7: Sketch and section by Doxiadis determining relative heights (1963) of the administrative units and the remaining parts of the city with respect to the person entering the city.

to hold 30,000 to 40,000 individuals. This was then subdivided into four quadrants known as sub-sectors or class IV communities of roughly 10,000 individuals. The class III community was a further subdivision of the class IV community of 2500 individuals. Each class III community consisted of class II communities making up a block with a population of 100 individuals. The lowest level of this hierarchy is formed by class I consisting of a family or a gathering of more than one person.

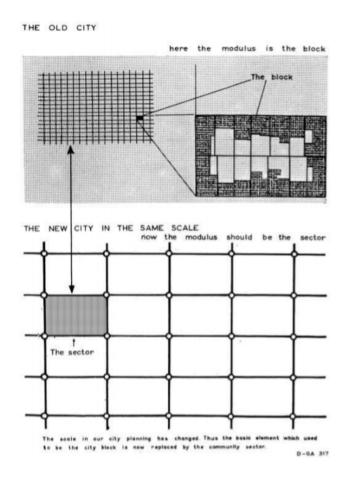


Figure 2.8: The new scale of the city envisioned by C.A. Doxiadis – whereby the city will be designed as per the scale of a 'community sector'.

2.2.4 Human communities

By examing the city of the past and the present, Doxiadis generated territorial systems that propagated he intimate and communal congregations to be run and to grow in an organized and controlled manner. The notions behind Islamabad were to be of social equity, democratic freedom, and a beacon of justice. The offshoot of this notion was the creation of pockets of settlements that allowed people to grow physically and spiritually within a secure environment.

While the networking, zoning, and sectoral development allude to the different disparate factions of the city working together, the scales at which the city is designed incorporates a 'social aspect' further illustrating the territorial basis of the design of Islamabad.

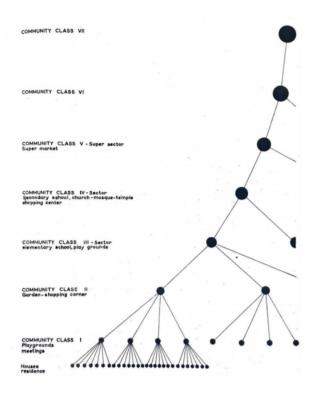


Figure 2.9: Community class and scale division within Islamabad where each class denotes a specific number of people. (Designed and illustrated by C.A. Doxiadis)

Within the territorial arrangements guided by the ekistical units, the functions of schools, markets, medical facilities, mosques, and recreational facilities were provided at every class IV community. Subsequently, every class V community was provided a community center called a 'Markaz'. The idea behind this notion was to provide a commercial and community center where people of the class V community can interact to fulfill the general functions of their lives. However, restricted to their own microcosms, the Markaz was intended to congregate the people within the 1 square kilometer while the grander functions are separated by grand roads.

Describing Dynapolis, Doxiadis explained the first principle as that of 'Unity of purpose', where the purpose was to be a pursuit of a democratic society. 'We must understand from the beginning that we are referring to nations, basically democratic, and cities in which everyone is provided for (...) and where inhabitants are considered to be entitled to equal opportunities.'

However, the pursuit of this purpose was also contingent on aspects of social harmony,

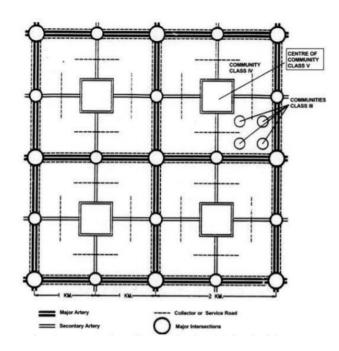


Figure 2.10: Sector formation of Islamabad, Pakistan. Each sector denoted for a class V community is divided into 4 sections of community class IV with a separate center. This is further divided into four section of community class III. (Designed and illustrated by C.A. Doxiadis)

and an irrational mix of social classes would cause problems in physical planning and social disturbance. In line with this, planning was conducted to help lower-income groups mature while maintaining the comfort of the high-income groups.

Some of the solutions to this were the gridiron plan and euclidean zoning and density segregation. Another was socio-economic segregation. Within the design of the city, spatial and functional segregation is based on this social order. Doxiadis writes, 'The structure of a residential community is that its physical pattern should be in accordance with the social organization of the human group which is to settle in it.'

The residential sectors are conceptualized as a population organized around the 'national bureaucratic hierarchy' where the hierarchy of lot sizes and housing designs correspond to the residents' rank. The master plan had the provision of construction of nine types of government housing. The allotment was based on the rank hierarchy of the civil service called the Basic pay scale, BPS (Figure 2.12). The scale suggested segregation based on the residents status within the civil service. This defined the plot size, housing system, number of stories, etc.

Income Group	Scale (BPS) – Grade	House type / House Area
A,B	1-4	350-800 sq. ft.
C,D,E,F	7-18	800-2000 sq. ft.
G,H,I	20-22	2000-3200 sq. ft.

Figure 2.11: Population division and classification within the urban landscape of Islamabad, Pakistan. The house type and area would progressively decrease with the decreasing Basic pay scale of civil servants. (Designed and illustrated by C.A. Doxiadis)

In the same line of thought, housing for the private sector was also designed on economic-based divisions – dividing the community into three income zones evident in Figure 2.12. The gradation of distribution allows the higher income groups to occupy the northern parts of the city, facing the Margallah hills and closer to the administrative area. The size of the plot and the economic or civil status reduces as it progresses towards the south.

2.2.5 Dillemmas of Doxiadis's Ideation

The city represents distinct patterns where the physical city is used to control and choreograph the way the social city functions and organizes within the modernist perspective of planning that Doxiadis infused within Islamabad. The overarching agenda behind the materialization of Doxiadis's vision was to preemptively cater to the ills of rapid urbanization and congestion, leading to social unrest and disharmony. The outcome, however, is an authoritatively controlled city with little potential for growth. It also exhibits overt control over its citizenry.

Each aspect introduced by Doxiadis into the urban landscape of Islamabad weaponizes the physical city against the social city. Euclidean zoning forces the city to act as a machine. Low-density development hampers the inclusion of a wider variety of people within the public realm.

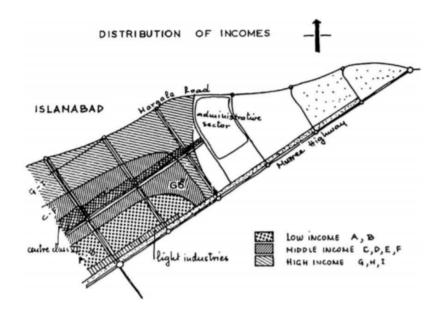


Figure 2.12: Sketch of income distribution within Islamabad, Pakistan, by C.A. Doxiadis. The image demarcates the northern sections of the city for the upper income groups and the southern sections for the lower income groups.

Euclidean zoning was introduced within the city to allow and foster order and rationality. However, it reflects a functionalist view of the city as a 'machine, rather than an ever-evolving organism' that Doxiadis envisioned. It supports the view that society functions best when cities and land are segregated into districts that limit their use. As a result, it is common for zoning codes to define restrictions to such an extent that the owners' freedom to use the property as they see fit is nullified. In the case of Islamabad, for example, the properties within the residential zones can not hold commercial activities in order to protect the sanctity of the private realm.

This form of zoning segregates land by use and building type, for example, singlefamily housing, commercial, industrial, etc. This separation of use and type was essentially a European idea intended to remove factories from residential areas. It was also used as a way to exclude poor and minority groups from middle and upper-class neighborhoods. In the case of Islamabad, it translates into socio-economic segregation where the upper and upper middle classes dominate the north of the city while the lower classes dominate the southern areas.

Distinct land use arrangements propagate urban sprawls where low-density, land-

consuming, automobile dependence and haphazard development along the fringes become the reality. It 'virtually guarantees that the automobile will be crucial in accomplishing one's daily business'. It generates 'isolationist patterns' that create conditions where one cannot walk to places. The structure enables a reality where people become dependent on cars, unable to accomplish daily tasks or engage in social and recreational activities without one. It effectively reduces the quality of life. In the case of Islamabad, the sectoral distributions within the city bordered by massive roads further highlight the isolationist pattern which hinders social encounters and interactions with unfamiliar people. It also restricts the benefits that come with mixed-use districts where the provision of different forms of housing catering to diverse socio-economic groups, offices, and shops would attract a wider range of people and spread activities over longer periods. It would instead allow a wider range of people to come in contact with each other ensuring an enriched public realm where difference and plurality are fostered instead of diminished.

Further, the demarcation of boundaries (sector) of 2000 sqm to ensure safety and security for the inhabitants was further materialized with hierarchal scales of communities. Seven classes of user groups are generated where each descending class of user groups would hold a lesser amount of people forming 'communities'. These user groups are allocated distinct functions and amenities like schools, hospitals, commercial, retail centers, etc. This is further narrowed down into putting an upper limit on the number of people that are to reside within a sector (30,000 to 40,000) to determine the number of inhabitants within the sub-sectors (10,000). While this initiates controlled populations inhabiting certain areas, it also propagates low-density consumption of space where interactions and encounters are limited.

This notion, coupled with distinct socio-economic distributions, inhibits the development of a dense public space where people from different backgrounds, professions, and preferences can come into contact with each other. It creates a space based on a homogenous totality. It diminishes the notion of a public space that is constituted through agnostic and dissonant relations. The idea of a public space is constituted by multiple 'publics' where its significance comes not from transcending contestation but from providing a medium of contestation and struggle through which the complexities of urban processes can be negotiated. Limiting differences and generating a homogenous totality also generates a publicness that acts as a one size fits all template. It limits the process for the negotiation of difference where subjects can be 'constructed heterogeneously.' This process is developed by practices, imaginations, and people's 'social, economic and cultural capacities' amongst other differences. By aggressively monitoring zones, limiting the number of people, and generating distinct socio-economic groupings, the city actively reduces the potential of generating a dense public space and collective publicness that would nourish difference instead of homogeneity.

The city, based on its modernist principles of zoning and social segregation, utilizes the physical aspects of the city to control the social outcomes. The physical city becomes a physically bounded space with distinct characteristics that propagate segregation and reduce the agency of the citizens and the nature of interactions and encounters in claiming and producing space. The following section looks at these notions of segregation through on-ground studies to examine the relation and impact between the physical and the social city.

2.3 Segregation as a Status Quo

The urban design and form of Islamabad were a response to specific conditions – urbanization, rapid population growth, the advent of machines, and the manners in which urbanities would intermix, to promote a setting where democratic citizens can be nurtured and flourish. The four principles that guided the design – unity of purpose, hierarchy of functions, the four dimensions, and the three scales – generated a reality where the unity of purpose segregated people along the lines of homogeneity, the hierarchy of functions restricts the city to grow organically, the fourth dimension only concretizes the current model. The three scales prioritize the car while diminishing the importance of the human. The territorial division of space based on the objective number of occupants irrespective of social and familial connections allows the different scales of settlements to be viewed in a manner akin to an ant colony where each citizen and inhabitant functions to fulfill a higher goal.

The city represents the face of two things - the 'physical' and the 'social' city - a

collection of structures linked by space and a set of human interactions linked by activities. It then becomes an entity of superimposed layers working together. The structural layer of streets and public spaces, the built layer of buildings, and the distinct cultural and social layers. The spatial form of the city allows the city to set in motion the processes of how buildings, people, densities, and diversities come together. Doxiadis and his scientific approach towards the design of Islamabad allow the physical to be dictated by an idealized and objective version of the social.

The representation of the city takes the form of segregation propagated by the urban form and mechanisms of control, with the end goal being a structured and sanitized city. The physical and the social city here represent multiple lines of segregation – the Iron grid logic of the city, functional segregation of the city to the grouping of humans into 'ideal' objective sizes; the physical city generates contexts that are reproduced by the social city. Here segregation becomes the representation of the city – from territorial and housing to bifurcated socio-spatial relations and interactions. Segregation here is looked at as a role underlying the distribution of space and distribution in space based on Linton Freeman's View of segregation as a restriction on interactions and Anthony Gidden's view of the role of encounter in social reproduction.

Freeman's notion of segregation rests on the idea that 'existing measures of segregation refer not to limitations on interactions but to restrictions on access to some physical space.' It becomes a procedure that aims to prevent certain types of contact, especially among socially different actors. This view parallels the idea of homophilia, the tendency of individuals to associate with those sharing similar characteristics. This also corresponds with Doxiadis's aversion to intermixing different social groups to maintain harmony and cohesion within the city of Islamabad. If the city is seen as a network in its own right , places of activities are viewed as 'attractors' around which social life is organized. Whether it's within the built structures or around it, the possibility of relating our acts to others crops up in this scenario. To partake in these activities can depend on whether one has a role to play in it, one's interests, aspects of affordances, etc. However, this illustrates how some activities may not interest some or not be socially or spatially accessible. These networks of appropriations reveal the potential for encounters to unfold within the city. Encounters are the most 'pure' and direct form of interaction where bodies are positioned within the boundaries of the same social situation and place, within a field where presence can be perceived by another actor.

The networks of appropriation that promote or hinder interactions and potentials of encounter ultimately impact the notion of urban citizenship within the city. While many empirical studies focus on the de jure (legal) citizenship aspects of urban life, de facto citizenship based on social practices illustrates aspects of inclusion and exclusion and, consequently the right to the city. 'The right to the city is not merely a right of access to what exists, but a right to change it after our heart's desire. We need to be sure we can live with our own creations [...]. But the right to remake ourselves by creating a qualitatively different kind of urban sociality is one of the most precious of all human rights.' (Harvey 2004: 236) The layered aspects of segregation within Islamabad restrict its ability to move beyond its original agenda and reproduces the city along the bifurcated social lines. The primary form of segregation within the city comes in the form of functions that are separated from each other such as housing, business, commerce, cultural, etc. This allows relations to be developed with the vision of Islamabad developed by Doxiadis first in the form of a hierarchy of functions that aimed to cater to the seamless functioning of the city. Thereby dividing the city based on specific social categories - family units, work units, leisure units, production units, and commercial units – by means of distinct land uses.

The distinct land uses, illustrated in Figure 2.13, indicate disparate cores, networks, and structures of the city. The base of the city, the gridiron layout, while streamlines the logic of spatial distribution, it also creates pockets for urbanities to function and streamline daily activities and networks of movement. The base of the city – the family units' mobility and interactions with different social units, creates distinct interaction networks and systems. For example, the mornings characteristically depict a mass movement out of the residential sectors, while the business cores become dense with activity during working hours, the leisure cores become it during off hours, etc. The patterns continuously reproduce and enforce the public-private divisions within the city – a house to live in, an office to work, a communal space for leisure, etc.

The disparate cores defined for each sector for communal and commercial activities, the Markaz and the central business district, define the social activity hubs and spaces

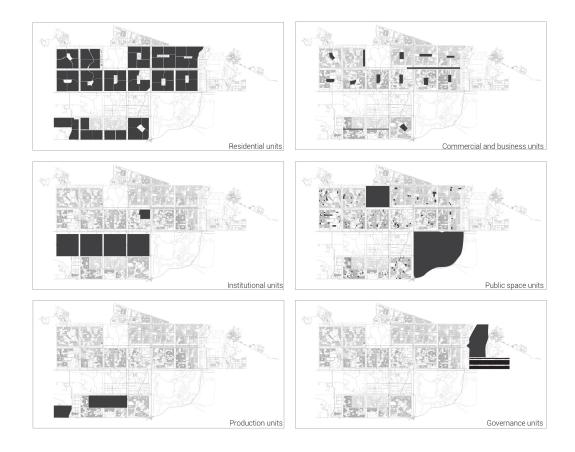


Figure 2.13: Euclidean zoning and Hierarchy of Functions within Islamabad, Pakistan. (Illustrated by the author).

of encounter. A google maps study of the city illustrates the activity hubs during different hours of the day in Figure 2.14. The activators here reinforce the idea of public and private divisions based on land distributions. The underlying notion of maintaining the sanctity of the private realm i.e., the house and, by extension, the single-family unit from the commercial, industrial, and the public realm.

Within these networks, restrictions on interactions become defined in the dos and don'ts of distinct territories with socio-spatial categories to be placed in a specific location and proximity. This is also furthered by the zoning principles through which the city is over-regulated. For example, according to the capital development authority ordinance 1960 and building and zoning regulations, residential houses cannot be used for any other purposes. This claim has periodically resulted in the capital development authority sealing non-conforming spaces. Within the residential areas, examples of the capital development authority sealing fifty-six residential buildings being

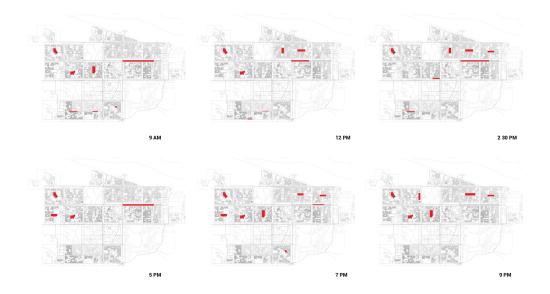


Figure 2.14: Activity hubs during varying times of the day found in Islamabad, Pakistan. (Mapped and illustrated by the Author)

used for commercial purposes, and sealing forty-two private schools operating within the residential sectors and regulated societies of Islamabad capital territory become commonplace. The underlying message is that of 'curbing the commercialization of residential spaces' by aggressively following exclusionary Euclidean zoning.

The city, by virtue of its aggressive Euclidean zoning principles, restricts the spatial usage and, by extension, the forms of interactions permissible within specific areas. By utilizing the same principles, it also enforces low-density land usage for residential areas. Figure 2.15 illustrates how within the residential sectors of the city and the sixty-sub residential sub-sectors, only fourteen allow high-density residential use. In contrast, the others enforce low-density single-family usage. Restricting the sectors to predominantly single-family low-density areas significantly reduces the potential of encounter by virtue of affordances to specific areas within the city.

The same principles of land use within the residential areas have also brought about socio-economic bifurcations within the city reminiscent of the limitations on the social intermixing of different socio-economic groups as an effort to promote social harmony. Kreutzmann explores this link between social stratification and spatial expression within the city and links each sector with the social status of its inhabitants. The E and F sectors are allocated for the upper/upper middle classes, diplomatic personnel, etc. The G sectors are reserved for medium-rank civil servants, and I sectors are for basic housing close to factories and industrial plants.

These bifurcations among the social classes are visible within the residential land distribution, evident in figure 2.16. The sectors north of the city occupy larger residential land units with an average of three Kanal ²land to one Kanal land, while the sectors south of the central business district have an average of one Kanal to four Marla residential lands. This distribution is also highlighted within the visual landscapes of the sectors. Figure 2.17 illustrates the resultant impact of this bifurcation on the built quality of these sectors. This is done through a photographic representation of the different Markaz within the various sectors.

The potential of encounter and limitations of interactions is further enhanced and reproduced by the activities within the commercial centers of each sector. Mapping the informal vs. formal eating spaces (Figure 2.19) within three successive socioeconomically distinct sectors – F-10, G-10, and I-10 further reinforces the idea of homophilia while reducing the potential of co-presence. The economically well-off sector F10 holds the most formal spaces, with the least informal ones propagating the intermixing of a specific social group. In contrast, the sector I-10 holds only informal eating spaces attracting specific groups. This notion of division based on economic groups also brings into question the idea of markaz as the space for communal gatherings. It is in stark contrast to the idea of a 'bazaar' predominant in the subcontinent – placed in between different residential units or Muhallas; the space attracted people from different social backgrounds, enhancing the idea of co-presence, encounters, and interactions. The form of the sector with the central markaz surrounded by major roads primarily enhances the bifurcations within the city along social lines.

While the mentioned cases above illustrate the lack of potential of encounters and limitations on interactions based on the urban form, its enforcement agents, and reinforced notions of homophila, it gets reinforced by constrained mobility options within

² A kanal is a unit of area used in parts of northern India and in Pakistan. Under British rule the marla and kanal were standardized so that the kanal equals exactly 605 square yards or 1/8 acre (0.051 ha); this is roughly equivalent to 506 square metres. A kanal is equal to 20 marlas.

the city. In a city designed for cars with major highways surrounding sectors, a lack of good public transport mobility options increases the dependence on proximity as a way to create social networks and creates limitations on opportunities for encounters.

Vehicle dependency and last of adequate public transport opportunities put 40 percent of the residents of the city in various transport-related issues. Public transport is controlled and regulated by the Islamabad Transport Authority. The principal mode of public transport within the city are Minibuses that run in the suburbs, Wagons that run on the main city roads, infrequent yellow taxis that run throughout the city, and the BRT that runs on the main two corridors of the city – the 9th avenue and along the Central business district (Figure 2.20). On average, 70% of the residents must walk fifteen minutes and more to access the public transport.

The metro bus system indicated in the red lines in Figure 2.21 was introduced in Islamabad in 2015 to cater to the rising transport-related problems. The bus lines connected the adjacent city of Rawalpindi and the lower- and middle-income groups of Islamabad to the city center. A major communal spot within its various stops came next to the Centaurus mall, located within the upper-income sectors. Devoid of public space culture, malls, shopping areas, and coffee/Chai spots act as places with the highest potential for encounters and interactions – places of co-presence. Aspects of homophilia and social segregation became apparent with the new large influx of people within the space. Except for 23 types of incomers, including women, children, and a select few professions, a charge of 100 Rupees was introduced as a ticket for entry. The underlying effort is the sanitization of public spaces and hampering the potential of encounters and co-presence.

These constraints further amplify the notions of localism- where proximity defines the creation of social relations. Interactions and encounters are reinforced especially near the residences that end up reproducing the relations within the individual sectors. Higher-income groups with a higher percentage of car ownership would have a greater opportunity to create relations on broader spatial scales, while the lower economic groups would experience the opposite.

The city, within its physical and social structures, presents a face of segregation on multiple layers. The notion propagating this segregation lies in the original thoughts

for the urban design – a sanitized zoned city defining the functions appropriate for it to run in an organized and harmonized manner. The science allowed people to be distributed into groups forming 'communities' of various scales that were brought together under the principle of 'unity of purpose' – the purpose being to generate democratic societies capable of mental and spiritual growth. The physical form of this became a city where distinct notions of control dictate the way people come together based on rigorously defined functions and socio-economic groups. Aspects of inclusion and exclusion defining the potential of encounters and limitations on encounters depend on the role one has to play in the space, affordances, and potential of access which is deeply hampered by virtue of the urban design, its application, and its reinforcement.

The city actively regulates the performance within the city based on an overarching agenda. It streamlines the city along distinct identities, which it hampers the growth of sectoral life – both social and physical. The rigorous approach to sanitizing the city progressively excludes the possibility of action by urbanities because the city requires a certain behaviour from its members. Action here requires plurality which entails the equality of men while being distinct. However, the predominant layer of homophilia within the city, actively propagated by the design, the intentional use of spatial segregation to foster a 'contained city', and the reinforced public-private divisions hamper the notions of co-presence and reinforce segregation limiting the possibility of action. It allows the city to determine and restrict social interactions based on its physical characteristics which hampers the agency of individuals in determining how urban space is produced, it limits the understanding of social interactions and its ability to generate a dense social city. Lastly, it limits the understanding of the idea of who the public is to what the city needs it to be. This limits the production of publicness and membership to the city's overarching agenda and reduces the individuals who occupy the city to passive consumers.

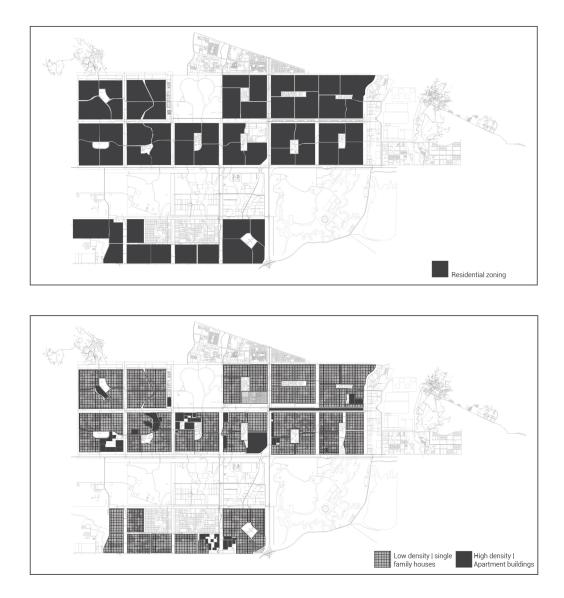


Figure 2.15: Low density vs high density regularized spaces denoted through apartment building distribution vs. single family housing within Islamabad, Pakistan. (Mapped and illustrated by the author).

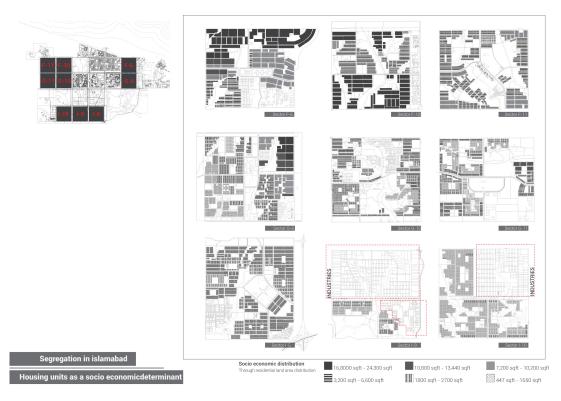


Figure 2.16: Mapping the housing unit size distribution as a socio-economic determinant within the sectors F-11, F-10, F-6, G-11, G-10, G-6, I-10, I-9, and I-8 of Islamabad, Pakistan. (Mapped and illustrated by the Author).

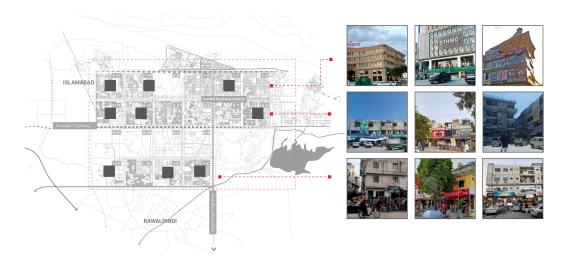


Figure 2.17: Mapping the physical condition of Markaz as a socio-economic determinant with the sectors F-11, F10, F-6, G-11, G-10, G-6, I-11, I-9, and I-8 in Islamabad, Pakistan. (Mapped and illustrated by the Author).



Figure 2.18: Mapping segregation within 3 sectors of Islamabad - F10, G10, I10 using the following parameters – Residential distribution, Road networks, mobility networks, presence of formal and informal eateries, Markaz conditions and open space networks. (Mapped and illustrated by the Author)

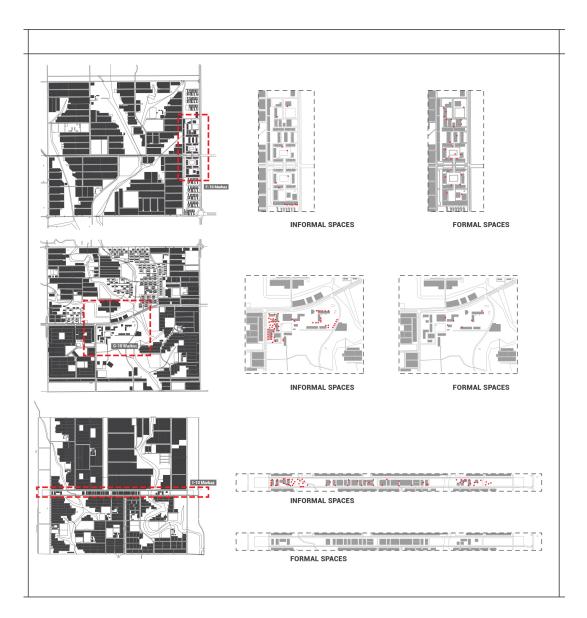


Figure 2.19: Mapping segregation within 3 sectors of Islamabad - F10, G10, I10 using Formal vs informal eateries in Islamabad, Pakistan. (Mapped and illustrated by the Author).)

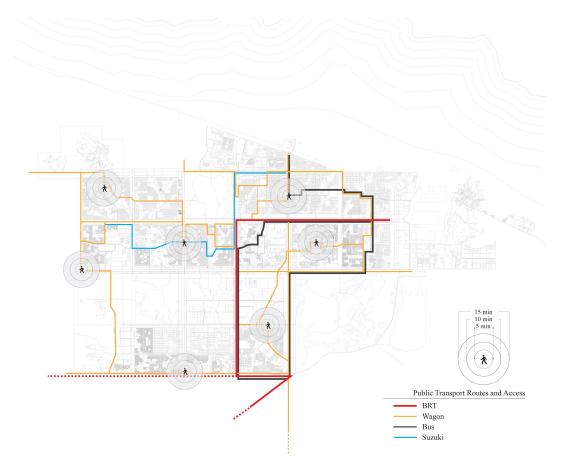


Figure 2.20: Public transport -Modes, Routes and Access – within Islamabad, Pakistan. (Mapped and illustrated by the Author)

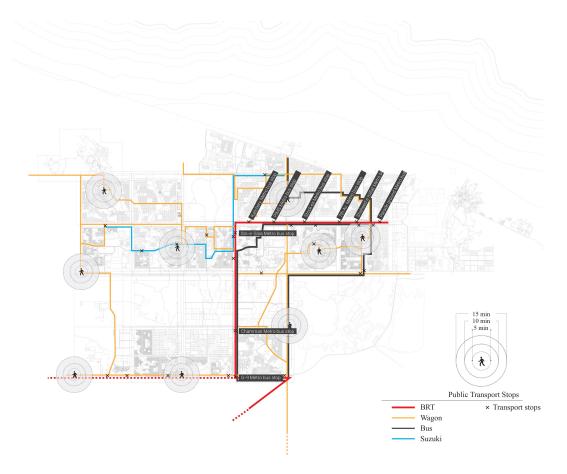


Figure 2.21: Public transport stops availability and distance within Islamabad, Pakistan. (Mapped and illustrated by the author)



Figure 2.22: Public transport access potential within the different sectors of Islamabad, Pakistan. (Illustrated by the Author)

CHAPTER 3

PLATFORMIZATION AND THE URBAN CONDITION OF ISLAMABAD

3.1 Problem Definition

Chapter two introduces the city of Islamabad through its stark distinction between the physical and the social city. Whereby the physical city dictates and controls the social city. It does so by formulating distinct rules and overarching purposes that define the city and its life, thereby engraving a segregative logic. However, the logic of the platform reality confronts the city and its inherent logic. The mannerisms and the interaction sets within the urban context depict a simultaneous embedding and disembedding process. The traditional rules that govern the way aspects of the city come together are disembedded, and newly revised mannerisms are embedded. This chapter explores the mechanisms that alter the segregatory logic of the socio-spatial structures of the city and its impact on how the physical city materializes.

This chapter focuses on the Urban digital mobility platform – Careem – to explore how it transforms urban logic with respect to the mannerisms that allow the physical city to dictate the social city. It explores the different social interaction sets utilized, the urban characteristics that are disembedded from the local context, and the revised logic embedded within the urban realm.

While the city of Islamabad depicts the notion of segregation discussed in chapter 2whether in ideological, urban design or sociological terms – the city is impacted by the global switch towards the platform reality. One of the primary urban platforms that induce a new logic is Careem. This chapter first looks at the ways different social interaction sets are utilized by other platforms. It looks at the potential of encounters and interactions that are introduced, which alter how the social city is conceptualized within the context of Islamabad.

It explores the way the platform reality alters the manner in which social interactions occur by virtue of the way the platforms function. From location-specific interactions, it allows data to be the prime motivator for interactions and alters the scale at which relations occur. Consequently, altering how spatiality is produced within this dynamic.

The methodology for the analysis looks at quantitative data via on-site documentation and data gathered from Twitter to analyze the different forms of interactions and encounters. The quantitative data through site documentation allows viewing of how the city is physically reacting to the digital platform. In contrast, the qualitative data accumulated from Twitter allows the social reaction to be mapped and viewed.

3.2 Platform Reality

The way we conduct our daily lives is contingent on certain conditions. For example, how a person moves within the city is contingent on various factors – location and specifications of distinct places, availability, access to public or private transport systems, etc. The condition of distinct zoning of cities enforces mobility within disparate places for distinct activities; the availability of pervasive public transport allows accessibility to a greater pool of people and translates into pronounced visibility, interactions, and encounters. These conditions dictate mannerisms on diverse scales. On a macro scale, these can define overarching notions of how public and private lives are conducted. On a narrower scale, it can represent the behaviors allowed in certain areas. These determine the mannerisms of how one exercises their daily activities, which one interacts with passively and actively, how one moves from one place to another or how a specific place is occupied and utilized. Overarching conditions allow experiences, interactions, and routines to be choreographed by determining the mannerisms.

This determinism of mannerisms through particular conditions within the urban landscape are traditionally based on location specific interactions. Walking to the taxi stand, hailing a ride, renting an accommodation etc all use specific segments of urban space to materialize different interactions. Urban space in and of itself traditionally the mediator that facilitates the interactions and mannerisms of people. Where, within the traditional public/private dichotomy, daily interactions are contingent on the urbanites active involvement with the bifurcated specificities of urban life.

However, with the infusion of digital platforms into every facet of life, the conditions that dictate mannerisms have been altered. Platforms act as the middle men for traditionally location specific aspects – traditional printed and mental maps that aid movement, hailing a taxi through location specific taxi stands, hotels for recreational accomodations – all represent mediated interactions between actors and urban space through platforms. Urban space and their segments are used as elements that cater to the mediation and alter the way social life is conducted and organised.

With platforms becoming increasingly central to both private and public life, the primary manner in which it chnages the conditions is is altering the way social interactions are conducted. It is done by intermingling our daily tasks, routines and social practices - like hailing a taxi, navigating through the city, getting groceries, consulting a doctor, finding friends and socializing - with the logic of digital platforms.

There is an underlying interaction set based on practices, routines etc. in every paltform that has become ubiquitous. While google maps, Uber, AirBnb for example, are dominant interfaces that mediate interactions and routines, in essense they have an underlying interaction set that they become mediaters for. Google maps, for example, becomes the mediater for way finding and allows a reformation of the interaction set between people. Uber, on the other hand, becomes the mediater for ride hailing and alters the interaction set between riders and hailers. AirBnb becomes the mediator for accomodations and alters the interaction sets between renteers and renters.

The intermediary logic of the platforms where it connects different interactions between actors' basis itself within the way urban actors perform within space. It utilizes the logic of actors and the interaction they have and transforms it in a manner that takes out certain existing urban logic and induces another logic within the urban spatial vocabulary. This mediation of traditional interactions generates a revised spatial vocabulary for urban settings by virtue of revising exisitng mannersims of urbanites. By doing so, the urban digital platforms intersect with the social and material fabrics of the city. This transformation of mannerisims allows the plaforms to alter the conditions through which society, space and time, and thus spatiality, are produced.¹

This transformation is generated by the intersections with the cultural, social, economic, state prerogatives with the digital capabilities. It allows the reconstitution of the idea of territory and by extension territoriality whereby virtue of the way platforms function, they embed new mannerisms and dis-embed the existing ones. An example of embedding logic of platforms is derived from the way the infrastructure of the platform that captures the data of all those who interact with it and generates territories. AirBnB, for example, matches people looking for accomodations in a particular ctiy with people willing to rent out their place. A match is successful on Airbnb if the host is willing to accommodate the guest. The platform embeds itself within the context by means of data sets of host and guest interactions. For example, 'a search for 'San Francisco' would thus skew towards neighborhoods where people would search for san francisco typically wind up booking, for example the Mission District or Lower Haight'.

This transformation of the way spatiality is produced, indicates mutilple manners in which differences are generated in the way people organize, consume, use, and produce within the urban space. On the one hand, the infusion of digital capabilties allows territories to be formed by virtue of data aggreggation ². It forms new ways of connections between urban actors, the manners in which the actors mobilize. It also highlights the revised mode of production where 'use' becomes a form of production. Every search, browse, glance, time spent allows an insight into behaviors, patterns, and interests. Territory or the 'primary form power takes' becomes the information

¹ As a basis logic in terms of how the digital platforms perform in their relationship with the involved actors and their inter relations the the economics and statistics administration of the US commerce department issued a report in 2016 that defines the platform sector using four characteristics – the use of information technology (IT systems) typically available via web-based platforms, such as mobile apps on internet enabled devices, to facilitate peer to peer transactions. They rely on user based rating systems for quality control, ensuring a level of trust between consumers and serice providers who have not previously met. They offer the workers who provide services via digital matching platforms flexibility in deciding their typical working hours. To the extent that tools and assets are necessary to provide a service, digital matching firms rely on the workers using their own.- Uber, Airbnb and consequences of the sharing economy: Research roundup (2016). Available at: https://journalistsresource.org/economics/airbnb-lyft-uber-bike-share-sharing-economy-research-roundup/ (Accessed: 8 June 2022)

² logic of platforms is derived from the way the infrastructure of the platform that captures the data of all those who interact with it and generates territories. This generation is akin to the way social media sites like Facebook or search engine sites like Google generates territories. Facebook focuses on the users' performances and patterns while google in turn relies on other territories to generate its own along with user patterns.

and collected data of users/activities/conditions.

Disembedding logic, on the other hand, refers to contextualization of the platform to the social and material conditions of the urban setting. It refers to the traditional logic of the social practices that no longer serve the urbanites. AirBnb, for example, takes out the location specific aspects of accomodation seeking by first connecting renters and renteers on a single platform. It further allows private property to act as temporary accomodations for strangers. While this disembeds the private-public dichotomy within the urban landscape, it also disembeds the traditional interaction set that required connections between accomodation seekers and providers.

This alteration in interactions and the embedding-disembedding process takes on a spatial form, The spatial vocabulary to understand the urban digital platforms then depicts a 'conjunctural' geography of simultaneous 'embedding' and 'dis-embedding'. This process allows new conditions through which spatiality is produced. It is further enhanced by the logic of the creation of territory that depends on the consumption of the digital where use of it also becomes a form of production. Online matchmaking enables two or more groups to interact and the 'platform' becomes an intermediary that brings 'together different users: advertisers, service providers, producers, suppliers and physical objects'. Without owning any means of production, they create means of connections. It then becomes an entity that offers an opportunity to 'act, connect or speak in ways that are powerful and effective' and can be seen as productive in its own right.

Within this process of the revised spatial vocabulary in terms of embedding and disembedding existing logic and the reformulation of the conditions that generate spatiality, there is a reassessment of scale and relations at which platforms perform. Traditional platforms have a long history as local arrangements in which people gather to exchange goods, collaborate, solve disputes, or make collective decisions. The Agora in ancient Greek cities is an illustrative example. The literal meaning of the word is a 'gathering space' or 'assembly'. It acted as the centre for the athletic, artistic, business, social, spiritual, and political life in the city. The twin functions of the agora as a political space and a commercial space also gave birth to two Greek verbs 'I shop' and 'I speak in public'. However, these platforms represented time-space limitations for the interactions and acts. New technological developments while reducing the dependence on the spacetime limitations also brings into question the drivers that allow the pervasiveness of digital urban platforms. By virtue of their inherent logic and the enablers of its pervasiveness, it alters the way the social city functions and its relation to the physical city.

3.2.1 Drivers of the Pervasive Platform Reality

Urban digital platforms find a social interaction and develop a digital platform that acts as an intermediary within that interaction and rely on network dynamics to scale the model which squeezes out all prior traditional forms of interactions. In the case of Careem, for example, the platform successfully allows the reliance on older modes of interactions to be discarded for example location-specific taxi dispatchers.

This process brings into question the drivers that allow the pervasiveness of platforms. Digitization is one of the primary mechanisms that allows urban platforms to generate a logic that counters the location specific nature of social interactions that guided the urban platform development. It also questions the role of localness and the urban dimension in the utilization of the platforms. Contemporary social practices can no longer be primarily defined by thier grounding, or embeddedness, in the local context of restricted place and time. Social practices are now, in a large part, removed from the immediacies of context, with the relations they involve typically being stretched over large tracts of time and space.

3.2.2 Digitization

The penetration of digital technology in the past two decades has been tremendous. 'The number of personal computers in use world wide surged from 100 million in 1990 to 1.4 billion in 2010 while in 2022 alone, 73 million computers were sold. Currently, there are 6.64 billion smart phone users around the world. This massive adoption of digital technoologies to generate, process, share and transact information has essentially allowed people to enter the age of digitization, where we can use platforms to access, share, create and communicate information.

Digitization is the process of converting information and data into machine readable formats and has allowed people and organizations to collect and store more granular data. This development coupled with the increased permeation of digital technology, has allowed a duality to exist within the material world. We now have physical stores and e-stores, physical payments and e-payments, reality and e-reality.³ While this transformation has allowed revised socio-economic opportunities, new levels of efficiency, greater transparency and more choices, the manner in which it functions is based on the platform logic.

For platform logic, reliance and integration of data utilization becomes key and digitization becomes the pivotal factor that allows the permeation of digital platforms. It also illustrates the shift in mode of production that digitization has allowed, and platform logic relies on - they shift in production from inside to outside.

With the increased accessibility of digital technology and the scale at which relations are executed, every individual becomes a producer of data. In 2021, 2.5 quintillion ⁴ bytes of data were created by people every day. While this data set includes personal communications, preferences, opinions, queries etc. it includes creation of data that is utilized differently by different platforms. For example, Facebook/Meta acts as a 'social media platform', where production of data through entries occurs outside of the platform but the engagement with the data is recentralized and done through the platform. The social media platform then manifests itself by allowing visibility of different 'decentralized' networks and generates conditions for creation of relationships between the networked actors and 'recentralizes' it via the platform. It creates a 'platform that others can build upon'.

On the other hand, urban digital platforms like Careem, utilizes this data in a different manner. The first and foremost goal for the platform is 'ride hailing'. The production of data is articulated through the different networks of actors involved within the pro-

³ While increased digitalization became felt in practically every realm of society since the 1960s, and the development of websites as a locus of online presence has served integrative functions since the 1990s, a new platform logic started to emerge more recently, associated with Web2.0 and the rise of social media in particular. Even if the increased role of user-generated content has been characterized as the critical novel element brought by Web 2.0 development, at the background it rests on platform logic (Andersson Schwarz, 2017).

⁴ A cardinal number of one quintillion is 1,000,000,000,000,000 (a million trillion).

cess and recentralizes the relationship between the hailers and the drivers via the platform through a projection of real time measures of the ride. The data is drawn from the capacities to act of the different actors engaged with the platform and their networks. The platform and the utilized data manifests itself through the co-ordination of the actors and networks.

Permeation of digital technology, the process of digitization, digital data production and shifting the source of production to the consumer represents distinct production models, private-public relations and the way contemporary society organizes and understands itself. In contrast to the 20th century industrial giants, platforms rely on users for production and do not rely on location specific nature of production (factories, for example) which helps them scale and network while incurring minimum responsibilities. Since the users are themselves the producers and the company serve as facilitators. The inverted model redefines traditional public private interaction models. For example, Uber does not own its own cars, Air Bnb does not own its rooms, Facebook doesn't create its own content.

Since data is driven from interactions whether in between driver/rider for rider hailing platforms, host-renteer or users and restaurants for hospitality platforms or interaction in the form of time and attention given to a Facebook/Twitter post. It allows data to become content that allows and facilitates interactions between various actors. It allows every individual to become a producer facilitated by digitization. It reformulates how people relate to others, the manners of production, of congregation, of revolutions, of social organization and how spatiality is produced.

3.2.3 Locational Aspects

While digitization allows platforms to utilize the production capabilities of individuals, reach different networks of urbanities, and scale it, the data interaction sets used by urban digital platforms are deeply spatial. Same platforms may exist across boundaries and in different urban, national, socio economic, regulatory contexts, however, the platforms are grounded in specific urban realities at the city, neighbourhood, street scale. Mobility platforms for example, work with specific urban transport conditions in specific cities in transporting people from point A to point B. Delivery platforms organize around specifically located restaurants/ grocery stores etc and connect them with people in a specific location.

For example, the food-delivery platform Deliveroo for instance while being a UK based platform, currently operates in over two hundred cities across United Kingdom, Europe, Middle and far East. It enables specific commodity focused economic exchanges that are bound to spatially specific nodes for example the address within a city where an order is to be delivered. The digital payment through a credit/debit card is enabled by the interface of the platform whereby a relation is generated between spatially fixed places of the credit/debit card corporations, servers the platforms own financial geographies. In this case, the specific geographical node and place where the exchange occurs becomes a key node and allows the platform to 'enable a view of the city in terms of its spatiality. Deliveroos example illustrates the spatial aspects that guide urban platforms in that while being digital solutions to specific interactions, it plays out in specific spatial context for example in the act of meal delivery. It is also done through the articulation of different networks of food service production through restaurants. The co-ordination of these networks is part and parcel of urban space.

While urban platforms spatial aspect is inseparable from its functioning, they are also dependent on local contexts to function seamlessly. This characteristic is deeply tied to the nature of the platform itself. Nieborg and Helmond analysis of the social media platform Facebook is also pertinent for urban digital platforms in that it can be segmented into separate 'platform instances' visible to specific user groups. Instances act as specific configurations within the overarching platform that facilitate interactions amongst tailored users. Within Meta, it is Facebook, Messenger, Instagram etc. Each 'instance' is for specific users and functions that provide 'a distinct view of the platform as a whole'.

This idea of instances is used to make location specific responses for urban platforms. While these instances are utilized in time, attention and digital content in platforms like Facebook, with urban platforms, calculated co-ordinations between different actors within spatio-temporal arrangements are panned out that are locally adjusted and orchestrated. In the case of mobilities platforms, for example, Uber's usage is predominantly based on Cars in the global North. In contrast, within the global south it exhibits locally engaged characteristics. There is a focus on motor-bike ridesharing. This is a response to the material conditions where urban congestion means motor-cycle transport becomes an attractive option for urban mobility. ⁵ It also represents instances tailored for specific local conditions.

Platforms utilize the densities and the populations that urban contexts bring with them. It allows analysing dense social interactions and utilizing urban space to embed new logics. They operate within the urban context by organizing different networks and functions by engaging different actors with the platform. This organization manifests in the co-ordination of the actions between the different actors through urban space.

While on the one hand, location specific contexts involve the territorialization through the act provided by the platform by the involved actors, for example, the delivered meal/ride/room. On the other, it involves the usage of specific contextual interactions of certain locations that enhance the significance of urban platforms.

The dominant foci of critical study of platforms to date has emphasized the platform as a company, as an onscreen interface and a hidden algorithm. This perspective is exemplified in Srnicek's elaboration of 'platform capitalism'. For Srnicek, platforms are first and foremost understood as companies; "economic actors" that pursue courses of action for business needs, unfolding within a changing but nonetheless relatively linear logic of capitalism. The latter focus on the platform as on-screen interface and algorithm is apparent in questions of "platform labor", which consider the problematic forms of disembodied control that workers are subjected to when engaging in paid tasks assigned through platform companies. However, without dismissing these perspectives, platforms cannot be reduced to the organization of the company. For a better understanding it would be helpful to examine how they manifest in urban space.

⁵ At the same time, other platforms, such as fin tech platforms, are key to the functioning of urban and national economies in Global South. They are, for example, central to the penetration of mobile banking in African countries, for example the global consulting company McKinsey estimates that there are 100 million African banking customers who access banking through smartphones, and that their transactions are worth \$2.1 bn annually. These transactions allow the urban context and actors to reformulate networks within the urban context while making different urban networks to be visible to others.

Digitization and the pervasiveness of urban platforms alter the way the city is organized in terms of the role of people, the way they interact with others and urban space, the role of urban space, and the private-public distinctions. In doing so, it alters the way spatiality is produced, the way the social city is perceived and consequently, the notions of who is public is and, how publicness is produced.

3.3 Careem as a Case Study

Careem was established in 2012 in Dubai, UAE with a website offering corporate car bookings. Overtime it developed its business model and became a transportation network company for the mass market of the middle east, Africa, and South Asia. It was introduced in multiple cities of Pakistan including the capital Islamabad in 2016 with an overarching agenda of 'simplifying people's lives and moving our region towards better living'. While it started as a ride hailing platform, it expanded into the food delivery and digital payment platform in April 2022.

Post the launch of Careem, Pakistan saw an upsurge in the ride hailing companies within urban areas. Uber, Bykea, Swvl, B4U Cabs, Rehbur, Vheels etc. While these are across the board transportation companies, the aspects of digitization and local-ness, the country has also seen niche aspects being accommodated by the ride hailing companies including women centric ride hailing companies.

While the basic propagation and understanding of the company 'Careem' is that of a super application that incorporates diverse interactions and 'instances', it includes within it multiple urban processes – e.g., ride hailing, food delivery, etc. The platform manifests through urban space by becoming an intermediary that co-ordinates interactions between multiple urban actors – rider/driver, residents and restaurants, restaurants, and riders, etc.

Consistent with the platform urbanisms logic, Careem collects and manages urban data and practices in a centralized and decentralized manner. Within its centralized aspects, it collects data from users, riders, stores, restauraunts, etc. and channels it in a streamlined manner through its interface. Decentralized manner, however, refers to the way each instance functions independently and give a distinct view of the application – whether its ride-hailing in the form of cars or bikes, ordering groceries, or hailing a Covid test. The process allows various forms of urban activity (historical, actual and speculative) to be better known and coordinated through the central point - the platform. The platform simultaneously affords differential levels of openness, access and services – depending on who is using them and which access, rights, and privileges are granted based on the instance that's granting the view.

Within this milleu, the model of Careem and the way it generates instances, rearticulates, and recentralizes relationships can be collapsed into three architectural perepectives - Social (how the actors come together), informational (modes of how data is captured) and technical (modes of expansion into other human interactions to generate self-sufficiency). All three combined allow a way to look at the different aspects that bring the platform together; interms of how the urban actors are identified and connected, the different facets through which data is accumulated, and the way different facets of society are incoporated with in the platform to establish growth and expand interaction sets.

For this purpose, Figure 3.1 illustrates these perspectives. While primarily the platform connects urban actors, it also articulates and recentralizes different networks that materializes efficiently with in urban space. The manifestation of the three perspectives is generated by combinations and relationships between a variety of services, products, and technologies. For instance, to increase driver and user base, the platform taps into the scarcely represented female mobility within the city that brings in new forms of data sources and peripheral relations etc. However, the interaction sets that the company utilizes are the ability to provide safe mobility options for women. As a further example, the platform encapsulates different mobility options for instance, motorbikes to enhance the networks within the platform. The interaction sets however is the low-cost option within over-crowded and predominantly middle-class urban reality of Islamabad.

This virtual framework catering to the connections and rearticulation aids how people mobilize within urban space. However, the way primary way Careem materializes within urban spaces is ride-delivery. The performance of this act is embedded within the urban logic. By connecting disparate actors and co-ordinating different urban

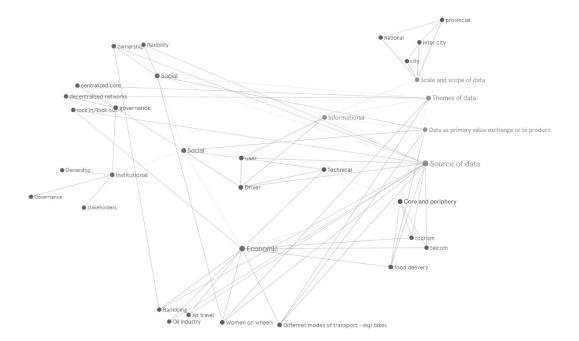


Figure 3.1: Social, Informational, Technical Aspects of Careem, allowing a way to look at the different aspects that bring the platform together. (Mapped and illustrated by the Author)

networks, the platform territorializes urban space through the act of co-ordinations. The manner in which mobility happens, the interaction of disparate networks, the ability to pay on the spot, etc. all include aspects of utilizing urban space to fulfill the original agenda – 'ride – hailing'.

An example of this co-ordinated interaction is the process of hailing the ride. As shown in Figure 3.2 the process for getting the ride - the ride hailer defines his/her current location, the destination and is then shown a variation of option for rides. Upon deciding upon the affordability by the user, the ride is selected and the notification sent to surrounding drivers. They are given a ten-second option to either take the ride or the request is transfered on to the next available driver. This illustrates the impact of the disembedding logic of the platform by virtue of the way the actors perform within the space and the dependence of spatio-temporal co-ordination of actors that allows the platform to materialize within the urban space.

By virtue of how the platforms functions - both in terms of how data is accumulated

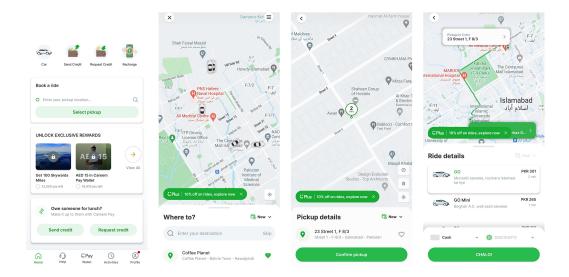


Figure 3.2: Ride hailing process for Careem illustrating the steps required to do to hail the ride. (Images extracted from the platform)

and the way co-ordination of relations are materialized within urban space represent disruptions. By altering the way people organize and have the potential to co-ordinate, primarily disrupts the distinctions between the physical and the social city. The physical city essentially acts as a mediator to enable social life to develop and flourish. It breaks the logic of Islamabad where distinct physical dynamics define the social organization of the city and redefines how spatiality is produced.

These disruptions materialize within the urban space by virtue of three basic specificities of platforms and their logic. Firstly, specific materiality's are engendered by every urban digital platform – Airbnb Condos, Careem Cars, ghost kitchens etc. It generates new terminologies for existing urban materials – cars, houses etc. – and introduces new typologies that support the platform for example ghost kitchens for Deliveroo that provides inhouse food services. The second specificity implies the modes of engagement with technology in urban everyday life – the interactive nature. One the one hand "Platform urbanism, enacted daily as we commute, transact, love, post, listen, tweet or chat, deeply implicates the everyday urban encounter" indicates the intimate relationship we have, however: since we trace our itineraries on Google maps, "like" restaurants on Facebook or order a Pizza on Deliveroo and thereby "willingly" expose our quotidian preferences and emotions. It illustrates the way the nature of social interactions is redefined. The third specificity combines the previous two. The platforms directly target individual customers and "by reaching into the pockets of urbanites, [they] express a potential for individualized influence".

The three specificities define the disruption within the embedding and dis-embedding process that Careem has introduced within the city of Islamabad. It Introduces a revised mode of social interaction and engagement that alters the scale at which relations can be maintained and exercised. It engenders new materiality's within the city – for example 'Careem cars' and their corresponding new terminologies, for example, Careem parking lots, pick up points, etc. It further alters the way people correspond with the urban space in a way that agencies of individuals interacting with the platform determine the way urban space is utilized. Lastly it incorporates local means – for example bikes for ride hailing, home kitchens etc. – that alters the urban functioning through prioritizing the local.

Each specificity, mentioned before, counters the authoritative urban logic of the city of Islamabad. It alters the private-public distinctions and distributions that are maintained and reinforced, it alters the functional authoritarian dynamics the city exhibits, it alters the way urbanites interact with the urban space by allowing them leeway to exercise their agency. By mediating interactions, it alters the way the physical city is used to influence the social city within the urban landscape of Islamabad.

3.4 Reformulation of the Social City with respect to the Physical City

The materialization of the logic of the platform is in terms of coordinating different urban networks. It stems from the arrangements and connections of different facets where the platform becomes the intermediary. While this intermediation results in squeezing out old unmediated interaction methods, for example local taxi dispatchers, the arrangement and connections determine and bring out meaning within the urban context.

Careem uses the basic interaction of ride hailing between a user and rider traditionally happening on ad hoc basis and becomes an intermediary that co-ordinates these interactions. The primary materialization within the urban space becomes the embedding of a new typology – 'Careem Cars'. Distinct from traditional commercial taxis, the interaction occurs between private individuals and private entities and manifests within the urban space by becoming an intermediary that co-ordinates interactions between diverse urban actors.

This disruption within the embedding of a new materiality, alters and blurs the fundamental social structure of a settlement in the way the relationship between the private and public is maintained and enforced. Where private space and its entities are owned and maintained by an individual, family or institution, public entities come under public ownership.

The new materiality it embeds within the urban space; by means of 'Careem cars' allows a distinct reality between the public and private realities of the city. Enabling private entities to act as public ones blurs the acute distinction that Islamabad's urban landscape portrays. The mechanism of the platform logic allows the agency of the individuals to convert a private space – space inside a car that is individually controlled and owned – to a public one – which allows restricted public access. The ambiguity the platform introduces into what is private and public reframes urban social life accordingly. One of the primary considerations that make these distinctions significant is the way these distinct types elicit specific behaviors. Where each offers different opportunities for privacy and security, or interactions and encounters.

The platform taps into existing urban networks of the city to reformulate theses social interactions. The primary agenda being articulating relations between 'riders' and 'hailers' – the platform co-ordinates interactions between 'car holders and providers' and 'ride hailers' and uses the platform to orchestrate the relationship between them.

Careem based on the platforrm logic, modifiess the manners in which interactions are conducted and utilizes urban space to territorialize it. Doing so, it alters and remakes how the urban networks and operations perform. While the co-ordinated and calculated orchestration of interactions between actors materializes through spatiotemporal arrangements, the succesful completion of 'delivering a ride' depends on the succesful co-ordination of the different urban networks.

The platform territorializes urban space by means of these calculated co-ordinations

and orchestration of interactions between actors. The successful completion of 'delivering a ride' depends on the co-ordination of different urban elements; the drivers within a two kilometer radius, the acceptance of the ride by the driver, traffic elements, distance parameters, location, etc. It is materialized and territorialized through the spatio-temporal arrangements.

This mediation of social interactions disrupts the urban landscapes and generates revised do's and don'ts within. It disembeds the logic of public infrastructure of traditional mobility modes like public buses and taxis. While these modalities were ubiqutous in the urban landscape and social life of Islamabad before the digital platform logic, they are located and found sparingly. Figure 3.3 illustrates the major nodes for public bus stops and taxi stands found now in Islamabad. While the reliable and time adherent bus stops are the Metro BRT stops located every twenty minutes by foot; the taxi stands predominantly cluster around the metro bus stops as documented in Figure 3.4 and Figure 3.5.

This alteration generates revised territorialities within Islamabad. The traditional manner in which a taxi is hailed or a bus is caught requires specific social itneractions between urban actors. Each instance requries a location-specific social interaction whereby each mode has a designated spot and hailer approaches, chooses the ride, haggles, and then travels. This social interaction set eliminates the process of hailing a ride where urban space is mediator to exercise the act. It instead allows the platform to mediate the social interaction of hailing the ride and co-ordinates interactions using urban space.

The choreographed manner of co-ordination dis-embeds and disrupts the way individuals interact with urban space by altering the way they mobilize, interact, and perform in space. One the one hand, it dis-embeds the public mobility platforms while embedding a new form of social interaction that utilizes urban space to materialize its logic. A form of this materialization is the ubiquitous 'pick-up points' that are found in every sector of Islamabad illustrated in Figure 3.6. The calculated co-ordinations between the rider and driver allow a different materialization for the traditional taxi stands.

Taxi stands and their materialization in traditional urban landscape requires desig-



Figure 3.3: Taxi and Public bus stops in Islamabad, Pakistan (2022) (Mapped and illustrated by the Author)

nated areas as 'stands' for the taxis and are clustered around dense areas. It allows reliable access to taxis. In contrast, with the traditional social interaction set of hailing a taxi being replaced by the coordinated actions between individuals displaces this and puts active points in dense areas. It dis-embeds the need for taxi 'parking spaces' and instead generates conditions where the 'pick-up point' materializes as a meeting spot for the individual's coordinated interaction. It shifts the nature of interactions between urban actors and the way in which it produces urban space.

The platform alters the way people interact and correspond with urban space which determines the way urban space is produced and utilized. It dis-embeds the location-specific interactions that are produced with the top-down, authoritative logic of Is-lamabad; where behaviors and interactions are determined by the title of the place. It further dis-embeds the location-specific aspects where boundaries and divisions are used to restrict social interactions, in an effort to streamline who interact with whom and where. The coordination criteria within the original logic of Islamabad utilizes



Figure 3.4: Taxi stops organized around the Wazir Khan metro Station, Islamabad, Pakistan.

urban space as the mediator and prime mode of social interactions. It represents mechanisms where production and utility of space is dependent on an overarching agenda of what should be done in the space and by whom. The platform alters this and utilizes social interactions dependent on calculated coordination's to determine the use and production of space.

With the use and production of urban space being dependent on the mediated form of social interactions, a further by product within the urban space is materialized with the infusion of a new typology – 'Careem Parking Lots'. Evident in Figure 3.7, three of the parking lots are located in the northern sectors of the city, while one is located in the southern sectors. The average capacity within these parking lots is 32 cars.

This further elucidates the ambiguous nature of private-public spaces whereby the domain and its production become blurred with the infusion of the platform logic. It also amplifies the way social interactions determine the needs of the city and consequently, produce space. The traditional logic of the city amplifies the importance of the urban space in determining social interaction. In contrast, the platform allows and propagates the use and production of space where the onus is on the social interaction sets between individuals.



Figure 3.5: Taxi stops organized around the Faizabad metro Station, Islamabad, Pakistan.

Alterations in the public transport modalities and the infusion of 'pick-up points' and 'Careem parking lots' explores the ways Careem is altering the makeup of the physical city by virtue of how social interactions and behaviors are altered by the platform logic. The revised social interactions based on calculated coordination's also embeds changes in the behaviors and performance of urban actors in relation to others, thereby producing urban space directly connected to the urban actors. This represents a distinct contrast with the original ideation of Islamabad where the agency of the actors is non-existence when it comes to their relationship with the urban space.

Figure 3.8 explores the changing and flexible behavior introduced by Careem through an on-site reading. It illustrates the changing time required to hail a car within the different sectors of the city. During the peak hours (8 am and 7 pm) the lowest time required to hail a car is predominantly around the commercial hubs of the city – the 'Blue Area' and the sectoral centers. The rest of the hours represents a flux based on the activities and activators within the city.

It illustrates how the calculated coordination's between the urban actors produces and translates into space. This allows a divergence from the original logic of the city, where the grid iron layout, euclidean zoning, spatial distributions, etc. generate an

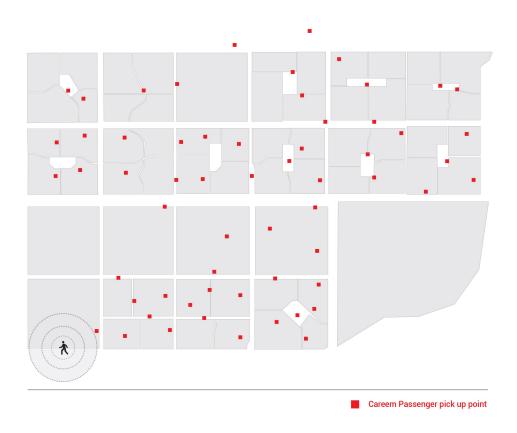


Figure 3.6: Ubiquity of Careem pick up points in Islamabad, Pakistan. (Mapped and illustrated by the Author)

unambiguous functional reality that dictates behaviors and interactions. The primary interaction set that produces space becomes that of the city's functional elements and the urbanites. In contrast, utilizing the social interactions and calculated coordination's between urban actors, the production of space becomes less dependent on the interaction between places and individuals. Instead, it allows conditions of production dependent on the social interactions between individuals. In the case of Figure 3.9, it further allows reading the city beyond the determinate relationship the city exhibits and through interaction sets between individuals that produces a flexible behavior based on urban activities.

The impact of the alteration in the primary interaction sets between the city's functional elements and the urbanites, and the social interaction mechanisms between the urban actors in producing urban space and spatiality is also evident in the interactions and resultant actions between the urban actors.

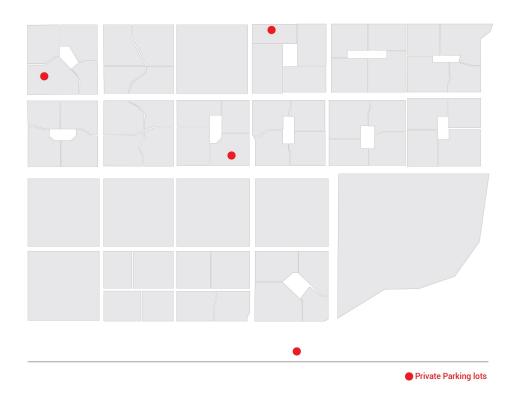


Figure 3.7: Careem Parking Lots within Islamabad, Pakistan. It represents a new urban typology introduced by virtue of the way the platform performs. (Mapped and illustrated by the author)

With the reliance on the urban actors and their social interactions, the way space is consumed is dependent on the actors agency. Figure 9 illustrates a comparison between rides taken and cancellations of rides within eight sectors of Islamabad. While the largest percentage of rides taken is in the G 10 and G 9 sectors (42%), the largest percentage of cancellations are from the northern sectors of the city. The common explanations cited for cancellations ranged from 'the route is too long' to 'a delay in pick-up because of traffic conditions'.

It alters generates an alternative form of social interaction set within the urban landscape. Traditionally, the social interaction that detemined the taxi hailing within the urban landscape demanded an intentionality of actions; walking to a taxi stand or hailing a moving taxi, etc. The production of space within these actions demanded physical interaction with the transport elements; where decisions on actions bypassed the interactions with other urban elements. In contrast, the social interactions generated by calculated coordinations brings the agency of the actors to the forefront. This agency is influenced by the multiple urban elements in the production of space i.e. if the driver is willing to successfully execute the act of ride delivery based on urban aspects.

This notion embeds a new logic within the city with respect to spatial performance, social interactions and behaviours. It further amplifies the lack of dependence on the traditionally location specific nature of social interactions. Instead, it exmphasizes the collective ability of individual actors to actively produce space. Urban space becomes actively reliant on the agency of the individuals involved.

The alternative mode of performance and social interactions that the platform introduces challenges the way the city actively regulates the performances and interactions of people based on overarching agendas. It's utilization of distinct physical characteristics to streamline the social city is countered by the platform's ability to allow social interactions to determine how space is produced. It's usage of location specific mechanisms like Euclidean zoning, social distributions etc to generate frictionless sets of urban citizens is countered with the reliance of the generation of relationships between disparate and distinct individuals. The generation of specific socio-economic groups that inhabit distinct places within the city as a way to create social harmony is contrasted with the creation of networks that link different groups and allow them to an active role in the production of space. It further allows the creation of spatial frameworks where co-presence, plurality and collectivity generate conditions of living; where each individual cannot be extracted from the narratives of larger groups.

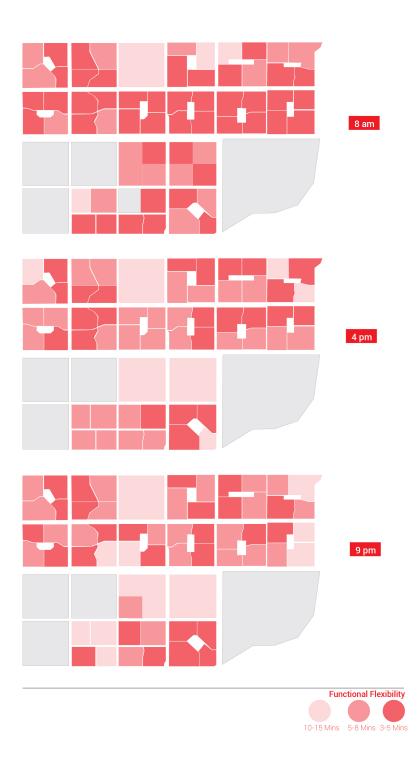


Figure 3.8: Functional flexibility induced by the logic of calculated and coordinated interactions of Careem in Islamabad, Pakistan. (Mapped and illustrated by the Author)



Figure 3.9: Actors agency in the production of space in Islamabad, Pakistan., illustrated and mapped by analyzing the rides taken vs. cancelled. (Mapped by analyzing data from Twitter and illustrated by the author)

CHAPTER 4

REFORMULATION OF URBAN CITIZENSHIP AND PUBLICNESS

4.1 **Problem Definition**

The previous chapter explored how interactions, fostered by the platform logic that Careem propagates, between urban actors are altering the makeup of the physical city and the way it is produced. It analyzed the impact of the social reality that Careem propagates. It changes the bounded notions of Islamabad, where the physical city determines the social interactions in a determinate and linear pattern. Based on the original notions upon which Islamabad's urban logic was materialized, distinct lines of what the 'public' is meant to be were concretized and, by extension, the nature of 'publicness.' As per the then Prime Minister of Pakistan, Islamabad's design was to be an exercise in 'carving out a pure and empty space' that is untroubled by the chaos and poverty reigning in the other parts of the country. It was to be an exclusive space that is 'socially just and free from traditional hierarchies and injustices.'

This creation along the lines of carving out a space distinct from the rest of the country resulted in a space distinct in how it performs physically and in terms of how 'public' is perceived and treated. It generated distinct hierarchies and order defining what is open and visible to whom. Consequently, it alters the notion of publicness where the 'common' that brings everyone together is segregation.

The public is seen to be made of sets of socio-economic groups with defined daily routines and needs in a hierarchal structure. Where performance in space is dictated, and voices are limited. This generates the preconditions that allow the social city to develop and define who is to be a member of the city, their rights and duties, and the rules that determine opportunities. Within this framework of a restrictive social reality, the chapter looks at Careems impact on the way 'public' is conceived; publicness is enacted and how citizenship as a form of active membership within the city is transformed to allow greater access, visibility and inclusion for a cohesive existence based on plurality and collectivity.

4.2 Dillemas of 'Membership' and 'Publicness' in Islamabad

Pakistan's formation in 1947 resulted in the ideation and creation of a new capital, Islamabad, in 1959. The ideation rested on the hope to 'start afresh', and to build a city which would become a symbol for the whole nation'. It would prove Pakistan's potential to become a robust and modern nation. It was a vision for a city that emphasized 'unity, strength and modernity'.

In line with the predominant ethos, this exercise was an attempt to carve out a 'pure and empty' space, untroubled by the chaos and poverty reigning in much of the country. It was to be a space that was truly 'Pakistani', that could embrace all Pakistanis' – an exclusive urban space that 'unites' the people of the country. With a departure from the traditional forms of sociality, it was to be a 'socially just space that is free of traditional hierarchies and injustices.'

Islamabad represents a distinct version of the public that is overtly controlled, where access and ownership within the public realm – spaces that belong to and are accessible to everyone and where visibility is maximized- are regulated to standardize the daily practices, interactions, and exposures. Organizing and distributing individual based on distinct socio-economic groups or generating conditions where daily activities and interactions are zoned distinctly as per the 'use of space' constructs distinct ideas of the 'public' that is organized and structured around similarities – whether in the form of economic backgrounds, interests, activities – and not around creating a common ground where plurality, differences and collectivity is nourished.

Generation of the idea of who the public is in Islamabad – exclusive groups organized around distinct identities - generates frameworks and structures for the public domain regarding how relations are maintained and structured. These agreements establish frameworks and structures that provide conditions for individual and social relationships. It determines who is to be a member and what are the defining qualities. What are the rules for determining distributions, access to opportunities etc. These determine the basis and nature of identities and social ties. It determines the relation between plurality and collectivity and how groups can generate collective life from diversity. These agreements are significant because they determine the relationship between the public as plurality and as collectivity or as homogeneous identities.

This is exercised by homogenizing actors within the public realm, enforcement of distinct public/private networks, controlled access to public spaces and the lack of local participation to determine urban life. Collectively, it diminishes the public sphere and generates a manageable and controlled citizenry where performance in space is dictated, and voices are limited. It generates a 'public' where plurality and collectivity are not based on generating conditions that foster differences and create a 'common world through negotiation.' Instead, it is based on generating homogeneous structures and frameworks that create distinct identities. It generates conditions where 'publicness' is generated through the daily interactions of predefined sets of individuals that make up the public.

4.2.1 Homogenizing Actors

Homogenization is a crucial aspect of the urban landscape of Islamabad. The urban actors involved within the city are standardized by virtue of the physical and social aspects. The sectoral formation of the city that categorizes and places actors together with common socio-economic factors – higher groups in the northern sectors, lower groups in the southern sectors; 'Markaz' as the central meeting places divided by highways, lack of provision of low-cost housing, bifurcated transport mechanisms that cater to a small portion of the city, etc. all cater to the creation of a specific citizenry and restricts the inclusion of multiple voices.

The city's layout generates distinct zones based on specific activities with distinct user groups. Distinct classes of individual groups are generated that are appropriated for specific facilities. The user groups are further divided into distinct socio-economic groups within specific spatial zones to promote 'social harmony'. The underlying idea is excluding diversity and plurality and generating socially homogenous zones

to avoid 'unrest brought by mixing different social groups.' It generates structures and frameworks which actively inhibit the development of a public domain where people from different backgrounds, preferences, etc. can come in contact and be visible to others. It generates frameworks for a space based on a homogenous totality.

It further diminishes the capacity of the public sphere constituted of multiple 'publics' where significance comes not from transcending contestation but from providing a medium of contestation and struggle through which urban processes can be negotiated. It limits the capacity of people's differences, practices, and imaginations to produce urban space. While the city represents an 'organized and structured' way of living for specific predefined groups, it periodically demolishes slums and shanty towns, for example, that caters to the labor and workers of the city and were left out of the master plan.

By reducing the opportunities that allow access to the opportunities present within the city, the actors involved within the public realm and who are part of the public sphere increasingly become homogenized. The routines and acts through which citizenship is viewed encompasses a narrow pool of actors whereby the city imagines and maintains its citizen in a particular manner.

4.2.2 Enforcement of Distinct Public/Private Networks

The shape of the city and the characteristics of urban life are determined by how the city's private and public networks are organized and monitored. The division and organizations define how life is conducted – how the household is conducted, its relationship to the scale of the neighborhood/city, places of inclusion and encounters, how open or exclusive places are, etc. The networks and their enforcements define the way people conduct their lives and if they have the potential to be 'subjects' or 'citizens'.

The overt control over the individual spheres and their internetworks and in turn, how it exerts control over the behavior of urbanites is evident in multiple ways. Primarily it controls the sorts of individuals who occupy specific neighborhoods evident within the spatial distribution within the city's neighborhoods consistent with the original ideology of C.A. Doxiadis that limits intermixing of diverse socio-economic actors to promote 'harmony'. It generates exclusive private networks based on socio-economic groups within the city that are not enclaved by walls but by land sizes and prices. This form of control is enforced through extensive Euclidean zoning which separates land by use and building type, private and public networks defining where people can live, congregate, etc. It is supported by the view that cities and their citizenry function best when land is segregated into districts that limit use, access, ownership, and visibility.

The city exhibits distinct enclaves where people are housed, educated, where they work, gather, protest etc. It represents a landscape where each distinct area is made to uphold the inherent values of each – a private realm that is not disturbed by the public realm and vice versa. This notion is exemplified by, for example, the closure of private schools operating within residential areas. While the reason behind it was the 'curbing of commercialization of residential areas', overt control is upheld when, for example, slums are also demolished. A low-cost housing category that is not present within the master plan of the city.

The ways in which urban life is conducted is subjected to the overt control of the networks and their formations. It turns users of the space into 'passive and docile subjects' where every day experiences are dictated and controlled, and change cannot be exercised by the users of the space.

4.2.3 Controlled Access to Public Spaces

The basic layout of Islamabad is the geometrical iron grid that allows the territorial division of space based on an ideal number of occupants irrespective of social and familial relations. The city represents a physically bounded space with distinct characteristics which propagate the reduction of the agency of citizens and the nature of interactions that can allow claiming and producing space. The agency of the 'public' that allows the production of space is further hindered by how the administrative unit is placed and how the iron grid layout is utilized to limit the access and mobility of citizens within the city in times of protests.

This specific selection of form facilities surveillance, segregation, and control over

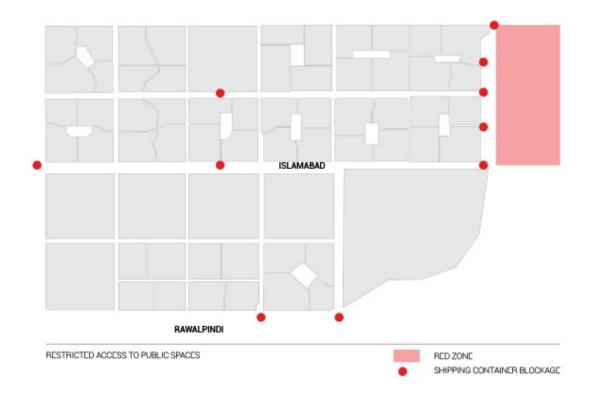


Figure 4.1: Islamabad utililizing its grid-iron layout to restrict access to public space, Islamabad, Pakistan. (Mapped and illustrated by the Author)

the citizenry. The placement and allocation of the administrative center on a focal high ground carefully orchestrates and implies the importance of the command of the state on the citizenry.

The spatial ordering of the city further reinforces and reproduces the social relations that depict overt control over the interactions conducted within the city. Figure 4.1 represents the blockage introduced at three major entry points within the city, which hinders people from entering the city and seven strategic blockages that restrict access to the administration center of the city. This pattern is exhibited multiple times over the years – predominantly during political protests in 2013, 2018, and 2022.

Through homogenizing the actors that produce space within the city, it generates a controlled and sanitized public to ensure social harmony. The spatial organization concretized with zoning determines the overtly controlled social relations where publicness and urban processes are not determined by the public through negotiations, interactions, and daily activities but are orchestrated and systematically controlled.

Controlling the access to public space and utilizing spatial ordering to authoritatively control movement and interactions exhibits the city's response to whom it considers a 'member' and whom it does not, the rights the citizens hold, and the rules that determine access and ownership.

4.3 Defining the 'Public' and 'Publicness'

Archetypically, the word 'public' means what is open and visible to everyone, in contrast to private, which is restricted and protected. It is defined by a sense of commonality that brings individuals together where they can be seen, in contrast to the private, which is defined by 'deprivation'. Ardent refers to the public as the existence of a 'world in common'. In Greek and Roman cultures, Ardent argued, it is the experience of the common that defines the public sphere as the place where things and people can be seen and acquire the status of 'public'. However, the common does not exist as a totalitarian and homogenous entity with standardized properties; instead, it is created by a plurality of perspectives.

The word 'public' is usually associated with a large number of people that share common interests. Within the political domain, it refers to civic affairs and citizens' decision-making processes. Social theorists, on the other hand, define it as a domain of people that have a common ground and construct normative orders of behaviors. In this manner 'public' becomes the product of social activities generated by individuals that share common meanings and emotions. This notion of 'public' is characterized by a move away from the political sphere into the sociological one, where every social agent that engages in social interactions becomes a public agent. In this way, 'public' becomes a combination of diverse social textures that act as a foundation upon which social experiences are built. This allows the recognition of the public not as a defined and fixed unit but as a 'work in progress' where countless frictions and quarrels acquire an indisputable social relevance.

'Public' acts as a noun defining the nature of the people it makes up. 'Publicness', however, emerges every day and every time in social intercourses within unmediated settings and acts as an adverb. This is developed and found in social interactions,

whether mediated or not. It acts as a process in mutation, where societies allow it to take the form it wants. Since the notion is based on social interactions, it has the potential to turn 'citizens into objects (re-feudalization of the public sphere) or, on the contrary, can be the cause of their autonomy.

In other words, publicness is generated within contexts of co-existence. It 'happens wherever and whenever two or more individuals – having previously acted singularly – assemble to interrogate and discern on their own interactions which are already embedded in broader relations of social power. Within these social interactions and contexts of co-existence, it generates a relationship between plurality and collectivity, where the different social textures have the capability of coming together and generating frameworks around which social life is organized on common grounds.

Within the public realm, this materializes by how encounters are organized within the urban frameworks of public spaces. Gehl characterized outdoor activities – depending on their rationale- as 'necessary', 'optional', and 'social'. Necessary activities are the ones individuals must engage in like going to work; optional activities are engaged in if the time and place is favourable, like leisure activities, and social activities are the result of the 'necessary' and 'optional' activities whereby there is a dependence on the presence of others in public space. Using these are the people who are living everyday lives, practicing their membership, producing publicness, and exchanging ideas with others in the public realm.

Islamabad's urban logic generates controlled and 'friction-free' spaces, where the intention is to create 'good outcomes'. These are translated within the public spaces by creating rigid spaces that are 'purposed, built and assessed with assumptions about what should be done in them and by whom'. This effort generates a universal and rational Public that implies an impersonal, abstract and aloof configuration. Reducing the notion of the public to specific user groups with distinct characteristics, segregating land as per use and building type and specifying use, thereby enforcing conditions for their presence within public space, restricting access to common places to control interactions and determine the relationship between the public and the administration all depict an environment where individuality collapses into a singular idea of what the public is, the factions that make up the public, the way they practice membership within the city and generate publicness. The city creates a spatial framework that creates and fosters notions of the public that are contained and would encourage social harmony. It generates conditions for presence, access and, encounters that depend on whom the city considers part of the public for example, specific socio-economic groups with distinct characteristics. Limiting the groups that make up the production process of 'public', it creates a predetermined form of publicness created by the interactions of a predetermined form of public.

4.3.1 'Membership' and 'Citizenship' as Practice

In the 'The social contract', Rousseau lays open the historical roots of the notion of citizenship, what it means to be a member of a community, what makes a 'public', and how publicness is generated. He establishes this by comparing two communal entities and how the people develop associations with them. It is between the people that make towns versus cities, and he notes that 'houses make only a town, but that citizens make a city'.

This link allows an association to be established that the residents have with the collective body and the way this link is exercised and practiced. However, this link is not established in an a priori condition but is something that is articulated and decided upon. While this link is fostered by the provision of collective goods and services, like roads and infrastructure, etc. rendering a collective identity, this association is dependent on understanding what the 'public' is. It, in turn, generates a public domain that constitutes the social and political conditions that make society possible and creates agreements that enable social life to proceed and develop and generates the premise of publicness that is established.

Traced back to ancient Greek city-states, citizenship as a concept was used to distinguish legitimate members of a community and formed an essential basis for systems of democratic governance. Within this legitimacy rested the notion of whom the public is, the rights inferred to them and the way they interact and encounter others.

This legitimacy within the system was based on exclusivity. The title 'citizen' was, for example, bestowed on 'free men' and excluded factions like women, children,

and slaves. Citizenship implied that one had a right to participate in civic life and, in turn, be able to access public privileges. The methods used to determine if a person was eligible for citizenship were dependent on aspects like wealth, identified by the amount of taxes one paid, political participation, or heritage if both parents belonged to the city-state. This determined the extent of membership within the community. Citizenship and membership here are not seen as seperate from the private life of the individual person, in the sense that there is no distinction between private and public life. It was deeply connected to the everyday life of the 'polis'.

This system objectively can be viewed as a way to structure society and regulate social and socio-spatial relations. The primary mechanism is creating boundaries that defines the access to social, political, and civic rights and access to opportunities for certain factions of the population over others. However, these structures and relations become visible through the enactment and practices of daily life.

The word 'practice' illustrates the dynamic social construction of citizenship and its constant renegotiation. This constant state of negotiation and interaction illustrates the territorial scale at which citizenship and its claims are played out. It exists near the surface of everyday life, within a broad spectrum of activities that constructs it in a variety of ways.

Citizenship and membership as a practice are related to the Deweyan idea of citizenship, where the act is brought to life by the way people perform and participate in activities in their daily lives. It refers to and constitutes the lived experiences of citizenship where the experience is not only linked to political activities but also day to day mundane activities that define the basic experiences as well.

It becomes the primary way individuals/citizens 'realize' their identities as 'civic and political agents'. Conceptualized as a 'practice', the notion involves both the rights and obligations enlisted by the state and the political and social participation joined in interaction. This converts the idea of citizenship from a passive role to an active one where the reciprocal relation between the state and its agents and the citizens are in a constant state of negotiation.

This approach of citizenship based on practices is also furthered by Dewey's sugges-

tion that 'human knowledge and action are fundamentally social' and are always in relation to others. It allows thinking and framing the idea of citizenship less along the lines of an individual citizen and his/her action/choice/identity but more along the lines of common and shared activities. It allows citizenship to be viewed in relation to the community and the actions of individuals with respect to it. The idea of citizenship can be viewed beyond the strict realms of what is considered 'political' and the 'traditional participation in political institutions' and encompasses within it social practices, which include broadly the private, public, and intimate spheres. It insinuates the idea that the political is deeply rooted in the social and guides the daily activities whether on the scale of the individual, family, neighborhood, city scale, etc.

Citizenship then is not only constructed through the overt political participation but also in a 'variety of daily, routine or more exceptional practices of citizenship across a diversity of levels, sites and places that are differently connected'. It illustrates the extent of membership in a context relevant to the peoples' experiences. Being a member of the public and enactment of membership and citizenship (and by extension generating publicness), in essence, is defined by inclusion and exclusion. It is practiced within the landscapes of daily life and becomes visible by enacting extents of inclusions and exclusions. For example, officially, the status of citizenship extends privileges like the right to private property, education, political participation, etc. The relationship between the state and the 'citizen' is established in a way that defines boundaries and includes individuals and gives membership for an imagined community around a collective agenda. However, status acts as a passive tool to claim citizenship. Practiced citizenship is what counts in how the daily routines define the way people come together and act within this imagined membership. It generates an active notion of the public that is based on the social interactions that determine membership and citizenship. Citizenship and membership within Islamabad are defined by the city's definition of 'public'. It establishes a territorial landscape where the existing and the potential members enact their lives based on various levels of inclusion and exclusion that reproduce the original agenda of creating a friction-less space with social harmony. While the base notions on how Islamabad defines its public and, by extension, the publicness, membership, etc. stem from homogenizing the urban actors, limiting access to public spaces, and reinforcing the segregatory logic, it also translates into an urban logic of restricted access to housing ¹, access to equal opportunities ² to public space, to appropriate transport mechanisms, to representation, to protest. The definition of the public and its derivations in terms of membership and citizenship defines a social and spatial structure of the city that actively maintains a certain category of 'public'.

The following sections looks at the changes brought by the change in the structure of social interactions introduced by Careem. It looks at the way the notion of the public is altered by the platform logic that is introduced within the urban landscape. Consequently, it looks at the impact on the makeup of the social city and the way in which membership and citizenship are altered for the urbanites.

4.3.2 Altering the 'Public' and 'Membership'

Islamabad's urban logic generates a spatial framework that creates and fosters notions of the public that are contained and would encourage social harmony. It generates conditions for presence, access, and encounters that depend on whom the city considers part of the public for example, specific socio-economic groups with distinct characteristics. Limiting the groups that make up the production process of 'public', creates a predetermined form of publicness created by the interactions of a predetermined form of public.

¹ Pakistan is the seventh most populous country in the world and is experiencing an unprecedented urban housing crisis (Jahangir 2018). According to a 2017 census, its population is 207.7 million and has grown at the rate of 2.4% per year. Its urban population, on the other hand, has grown at the rate of 2.7% per year during the same period and is estimated at 75.5 million. At present, the urban housing demand in Pakistan amounts to approximately 350,000 units per year. The corresponding supply of these amenities, which is 150,000 units per year, in no way bridges this gap. Of the 350,000 units demand figure, 62% is accounted for by low-income groups. The lower-middle income demographic takes up a 25% share. The remaining 10%, on the other hand, is attributed by statisticians to the country's higher and upper-middle income groups (Arif Hasan, 2018). With the migratory pattern and population growth mentioned above, there is an 8.5 million back log and illustrates a demand and supply gap. The unmet demand is taken care of by the creation of informal settlements of two kinds; occupation and subdivision of government land and informal subdivision of agricultural land on the periphery of the urban settlements. (Hasan, 2018)

² While the citizenship as a status allows equal access to opportunities and rights to all that are granted the status of 'citizen', the way life is enacted illustrates differentiated substantive citizenship. For example, religious minorities make up four percent of Pakistan's total population. Despite having the status of citizenship, the everyday experiences are dominated by violence, discrimination, and exclusion. Issues range from lack of access to education, sanitation, transportation, healthcare to occupational discrimination. This differentiated citizenship materializes within the socio-spatial relations and the daily experiences one has within the spaces. The differentiated citizenship with respect to religious minorities materializes for example with the Christian communities in the city of Islamabad. Exposed to exclusion and discrimination in all aspects of life, the majority o the community lives in precarious conditions within a slum. The interactions with the city and its spaces becomes one of occupying menial jobs and become the sub structure of the city.

Reducing the notion of the public to specific user groups with distinct characteristics, segregating land as per use and building type and specifying use, thereby enforcing conditions for their presence within public space, restricting access to common places to control interactions and determine the relationship between the public and the administration all depict an environment where individuality collapses into a singular idea of what the public is, the factions that make up the public, the way they practice membership within the city and generate publicness.

Amidst this logic, Careem alters the way social interactions happen. They reformulate how people relate to others, the manners of production, of congregation, revolutions, social organization, and how spatiality is produced. The platform, through its ability to revise the scale at which relations can be organized and mapped, alters the notion of the 'public'. It does so by allowing different networks of the city to become 'active members' and allows a different form of expression when it comes to claiming rights, use, and production of urban space. It allows the space needed to enhance and raise the diversity of voices that have a say in how the city is used and produced. Lastly, it increases the diversity of actors involved in urban space's active production.

The coordinated logic of the platform utilizes urban space to create different frameworks that allow the notion of the public to be inclusive, allows access to the production of publicness is extended beyond the predetermined idea of 'public' and where membership and citizenship are extended to new sets of urban citizens. Consequently, it alters the makeup of the social city and the way it functions.

It alters the social fabric of the city by initiating the involvement of women within the transport mechanisms. The figure 4.2 illustrates the mobility patterns of five female Careem drivers over the course of one day (5th March 2022). While the significant portion of urban interactions that the drivers encountered are predominantly within the northern sectors of the city, the illustration stems from the extreme disparity found in female mobility within Islamabad and all over Pakistan. It generates specific socio-spatial relations where women's mobility and use of urban space is constrained because of social values and norms. These reflect broader societal structures of gendered relations and translates into constrained visibility, access to resources, and the ability to be included within narratives and negotiations between larger groups and

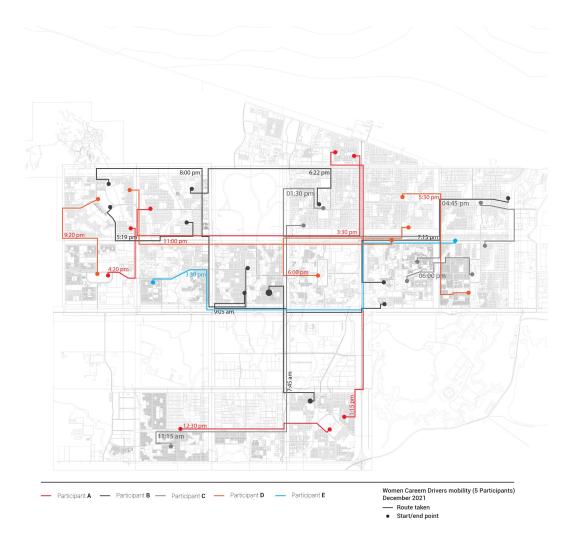


Figure 4.2: Mapping 5 Careem women drivers mobility using the platform in Islamabad, Pakistan. (Mapped and illustrated by the Author)

communities. It, thereby, creates conditions for the public that include distinct groups and generates boundaries excluding urban actors from exercising their membership.

Differences between men's and women's mobility have been ascribed to various components of gender roles, such as gender-related tasks, distinct family roles, and labor market positions. Labor force statistics for Pakistan show that, of the 5.67% total labor force employed in transport (in 2017-2018), on 0.35% were women (Pakistan Bureau of Statistics 2017). While this illustrates the unusuality of finding a woman in the transport sector, it also illustrates the scale of the interaction of women with the city and the gendered production of space within. This exclusion and restrictions reinforce the homogenization of actors by means of socio-economic distribution. It does so by enclosing a specific set of urban actors – women – out of the labor force. This stresses the mechanism utilized to maintain the sanctity of the public and the private realm, whereby distinct social relations generate frameworks and conditions of usability for each sphere, access to resources, and visibility for urban actors.

The differences between the men's and women's mobility stem from the societal norms and values concerning women's movement outside of the private realm (the house). Uteng elaborates, 'the cultural symbolism for the constrained mobility of women is one of the primary links between non-western countries.' This can be elaborated by the enforcement of strict purdah within a variety of non-western societies or the requirement to ask for permission from authorities to drive a car. These societal norms amplify the social exclusion of women in mobility and transport related aspects. It further negatively impacts their access to resources like educational, health care, employment, etc, generating socio-spatial frameworks with diverse levels of social exclusions and segregations. These cultural norms reinforce the spatial structures of urban areas. While space in itself is not gendered, 'the inequitable positioning of women in society relative to men's, structures women and men's use of urban space'. These structures are reinforced, for example, in the public transport disparity where in smaller ubiquitous transport modalities in Islamabad, only two seats are reserved for women, whereas on average, fifteen seats are for men. This disparate structure is further illustrated in the Punjab Gender Parity Report (2018), which revealed that the total number of vehicles owned in 2017 was 1,649,044, and only 1% was owned by women. These structures further aid the homogenization of actors and inhibit the notion of a public made of different social textures. These structures enable the conditioning of who has access to the public realm, restricting the visibility of certain actors and generating socio-spatial frameworks that enable the homogenization of actors by enforcing restrictions.

Careem, utilizing its logic of calculated co-ordinations and interactions, counters the cultural norms of reinforcing ideas of how the private and public realm of the city can be utilized, who can occupy which realm, and consequently, who can negotiate their claims and relations. It currently has employed over three thousand female captains

out of which eighteen percent are from Islamabad. The platform allows women who own a car to be registered with the company. Consequently, it alters the conditions which determine whom the city considers the public, and by extension, how they exercise their membership.

In line with this, Masood links women's' empowerment and negotiation of gender relations in public spaces in the city of Lahore, Pakistan, with driving a private car. She employs Lefebvre's (1991) spatial triad of 'perceived', 'conceived' and 'lived' mobility to illustrate how mobility for women in Pakistan is restricted based on cultural patriarchal values (perceived) and the material provision of transport services (conceived). According to her, women driving can be empowering as having a private vehicle within cities with constrained public transport modalities, and dense cultural values regarding womens' mobility can significantly impact their career opportunities and access to resources.

This use can be a negotiating strategy for gender relations in public spaces. These are spaces where women interact with strangers and where gendered relations are played out. Careem generates conditions where albeit a restricted amount of women with access to private cars, can utilize urban space by being involved with the transport industry. It generates conditions where the inequality of usage of urban space propagated by distinct conditions that dominate the performance of the public and private realm based on cultural values can be countered. It alters the homogenization of actors by generating conditions where a set of urban actors restricted to the private realm can negotiate their claims by being an active member within the public realm.

It further modifies the notion of the public, whereby a larger group of people can be included in determining communal narratives. It allows publicness to be generated by social interactions between groups that were previously invisible and separated from social discourses. It generates conditions and frameworks for co-existence where plurality and collectivity are fostered, and social life is organized on common grounds between a diverse public instead of a homogonous and rigid notion.

The previous example looks at how the platform initiates the inclusion of a set of urban actors within the overarching idea of 'public'. It generates conditions of visibility and access to spaces and opportunities that were previously not available. It allows and fosters social interactions where the gendered production of space gives way to a form of production enabled by a greater public. It alters the social city by bringing in more active members that have a say in the production of the city.

It effectively alters the homogenous actors that dominate the urban landscape of Islamabad by altering the socio-economic conditions and frameworks that restrict people to certain user groups. It allows more actors visibility and access to collective resources, enhancing the notion of public. It allows more active members to define the production of space beyond the distinct public-private categories that define the city. It further allows a greater public to be exposed to conditions where collaborative existence can generate negotiations and a greater amount of claims that help produce the city. This allows moving away from the universal and impersonal configuration of a public and more towards one where a world in common can be generated by fostering negotiations between the claims of a diverse and differentiated public.

This generation of a greater amount of claims is further enhanced by means of the technology that enables calculated co-ordinations, communications, and interactions. Figure 4.3 represents an aspect of digital technology that provides chances for horizontal and vertical communications and their translations in physical space. The figure maps communications related to Careem occurring on the digital platform 'Twitter' and the physical occupation of space to lay diverse claims to the authorities over the course of 2019-2022.

The social media platforms like Twitter allow urban citizens to raise, share and negotiate claims regarding multiple aspects. They ranged from labor rights (minimum income disputes, working hours and conditions, etc.), safety concerns (protection against unfound claims, muggings, murders), taxi rights (Careem displaced the taxi industry, which was previously a ubiquitous mode of transport with a private mode of public transport that can bypass commercial taxi laws) and data rights (the sharing of customer data with corporate entities). This exchange of information and communication of Careems' performance on Twitter has initiated multiple on-ground coordinated protests that claimed rights for multiple urban actors ranging from Careem's drivers and riders, taxi organizations, and women's' involvement within the transport systems. The conversations and the physical use of urban space to claim rights allowed negotiations within the larger narratives that determine the urban landscape of Islamabad. This is visible in the 2018 protest over taxi industry rights that led to laws forcing the company to perform within commercial transport laws and forbid the usage of cars not falling under commercial usage.

The mechanisms of digital technology and the urban platform Careem allow individuals that use them and observe them to play a pivotal role. Collective and collaborative communication allow other users, groups, and communities to define how individuals explore themselves and their identities. It generates spaces where individuals cannot be disconnected from larger groups, collectivities, and narratives.

It further illustrates how conflicts between different groups (for example, Careem and its users or Careem cars and the taxi industry) over how common resources of society should be divided and used become important. Coupled with ideas of justice and equality, it motivates people to participate in issues regarding how society is organized, socio-spatial relations are maintained, and how we co-exist in a common world. These conflicts and claims illustrate that urban actors negotiate and see themselves as part of a larger group and community.

It generates a public that moves beyond the rational and impersonal idea and towards one that incorporates and fosters differences and generates common grounds. It moves the notion away from a fixed construct to one that becomes a product of social interactions and activities. Diverse social agents engage in interactions not restricted to the rigid frameworks that determine the public domain of the city.

It further allows membership and citizenship to be defined by multiple social textures and lets them act as the foundation upon which social experiences are built. This allows the recognition of the public within the city as a 'work in progress' where frictions gain social relevance and negotiations over claims define the way publicness and membership are produced.

The urban process that Careem initiates, whereby interactions between individuals determine and produce the notion of public, publicness, and membership within the city disrupts the modernist ideology of Islamabad. It alters the relation between the physical and the social city, and the frameworks that determine the behaviour of the

social city.

It alters how Euclidean zoning is used as a mechanism to make society function frictionlessly. Within this, it disrupts the distinct land uses and homogenous actors that are utilized to enforce restrictions in order to protect the sanctity of the public and private realms. Careem, through its platform logic, puts individuals in pivotal roles in defining how space is produced. By generating frameworks and structures that allow more urban actors to become active members within the urban landscape or by fostering a private realm, that is traditionally defined by its separation from the public realm to become the foundation for putting forward claims to rights and allowing negotiations to determine common grounds, and it breaks the foundations of the spatial framework of a society that avoids contestations and frictions.

By fostering interactions where individuals cannot extract themselves from larger groups and communities, Careem fosters the generation of a world in common. However, the basis of this is not based on the elimination of differences but a recognition of plurality and collectivity. It does so by bringing forward diverse voices, allowing visibility and access to resources previously unavailable. It further fosters the production of space through a plural and multiple public whose membership is not determined by the logic of the city but by social interactions. It allows the construction of public space whose significance comes not from avoiding contestation but by providing a space and medium where through struggle and contestation, urban processes can be negotiated.

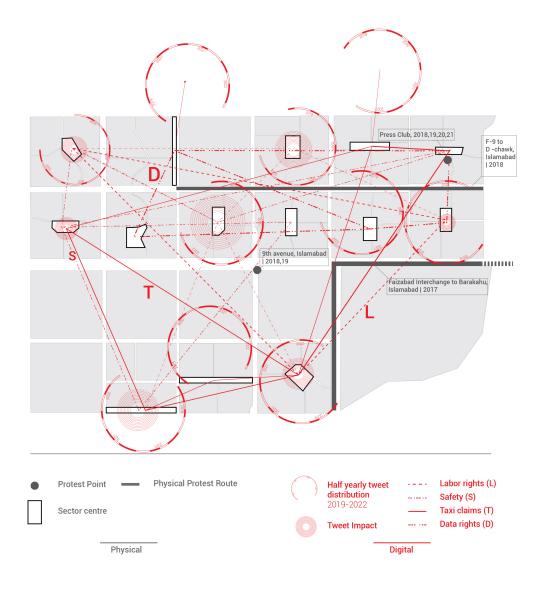


Figure 4.3: Physical and Digital protest mapping, Islamabad, Pakistan. It illustrates the increased claims for negotiations within the urban landscape. (Mapped and illustrated by the Author)

CHAPTER 5

CONCLUSION

The research began with the basic question of the distinction and the linear relationship present between the social and the physical aspects of the city of Islamabad, Pakistan. The way segregatory mechanisms are employed to determine social outcomes by restricting social interactions and encounters. The urban design for Islamabad emerged amongst the ethos of modern planning mechanisms which were a response to specific social conditions that dominated design thinking during the 1960's. It was a response to the industrial revolution, the consequent growth of factory towns, concentration of industries in city centers, rapid urbanization and the resultant unsanitary conditions that plagued the cities. Within this lay the social problems and unrest that arose with rising populations in cities. In essence, the planning mechanisms employed by Doxiadis in Islamabad represented ambitions to produce urban forms that can allow populations to lead ordered, disciplined lives in healthy and 'nourishing' environments. These cities were further meant to be places where individuals can grow physically and spiritually. Within these ideas lay the foundations for microcosms that will foster ideas of hope, conditions for a better living, and an 'improved society'. This was ideated within the design of Islamabad by means of specific planning mechanisms utilized by modern planning. It was meant to ensure that the urban landscape can present a controlled environment where individuals can live a comfortable life while establishing distinct identities, routines and having a desirable relationship with the environment.

These mechanisms enabled the generation of pysical and spatial frameworks and conditions that would produce specific 'favourable' social outcomes. Decentralization via Euclidean zoning was adopted in an effort to form a 'method to the madness' that surrounded new development. This aided in the development of new sets of regulations needed to combat health issues that eventually came about when industrial units were located too close to the residents. Automobile dependence became part and parcel of the distinct land usage mechanisms, which allowed 'people the power to live where they wanted, go wherever it suited them' in an effort to foster 'individual freedom'. This also resulted in the propagation of low-density land use development where dependence on automobiles can allow access to distinct and disparate areas.

Further, it initiated the propagation of individuals growth over fostering conditions that enable a sense of collective spirit within the community. The city by virtue of the inherent linear relationship it exhibits, actively controls how individuals and groups utilize space, come together, and generate spatiality. Doxiadis employed mechanisms that range from distinct functions and land uses to the reduction of the fabric of the city into regularized, objective, and replicable units following the iron grid layout. To create harmony amongst the urban citizens and to avoid unrest, the city was bifurcated into sectors and sub-sectors for specific socio-economic groups. An idealized environment was generated for an idealized community, distinct from reality. Within these mechanisms of bifurcations, urban space is utilized as the medium which dictates limitations on interactions and encounters and aims to prevent specific types of contacts to generate determinate social aspects of the city. This inhibits the development of a dense public space where people from different backgrounds, professions, and preferences can come into contact with each other. It further creates a space based on a homogenous totality. This diminishes the notion of a public space that is constituted through agnostic and dissonant relations. These relations are exemplified by the constitution of 'multiple publics', where its significance comes from the provision of a medium of contestation and struggles through which 'complexities of urban processes' can be negotiated.

The design and implementation of Islamabad represents a logic where social interactions between individuals are restricted by virtue of its physical design because it requires a certain behavior from its 'members'. The intentional use of spatial and social segregation fosters and nourishes a 'contained city', distinct land use hampers the benefits that come with co-presence, social segregation limits the understandings and importance of fostering diverse social interactions and its ability to generate a dense public that fosters and nourishes differences, plurality, and collectivity. These active regulations on social interactions using urban space also generates distinct repercussions for the individuals that make the city. It limits the notion of the 'public' to an overarching agenda that allows social harmony. It generates 'publicness' through social interactions between individuals by generating conditions that diminishes differences. It creates an idea of publicness that acts as a 'one size fits all' template. It limits the process for the negotiation of difference where subjects can be 'constructed heterogeneously. The aggressive monitoring of land use zones, limiting the number of people, and generating distinct socio-economic groupings, the city actively reduces the potential of generating a dense public space and collective publicness that would nourish difference instead of homogeneity. It further creates a passive membership for the urban citizens where dictated social interactions reduce their ability to become active members with a say in how space is used and produced.

The city generates frameworks and structures that defines social interactions in space as per what is needed. It generates conditions that determine how individuals conduct their daily lives and the nature of social interactions and encounters that can be conducted when moving around in its urban landscape. These conditions range from location and specifications of distinct places, availiability and access to public or private transport systems, etc. These conditions dictate mannerisms of restricted visibility, social interactions and encounters. This definition of permissable and determinate social interactions produces a version of the city that is stuck in time. It views the individuals and the interactions they conduct as a by product of the form of the city as opposed to social interactions determining the production of urban space.

Digitization and its capabilities, however, allow the city to be read and produced in alternate manners. The conversion of information and data into machine readable formats and the ubiquitous penetration and permeation of digital technology have allowed alterations in the way people access, share, create, and communicate information. While this transformation has allowed a duality to exist in the material world whereby parallel performance modes exist for example physical stores and e-stores, they also exhibit an alteration in the relationship between cities and people and the way cities are materialized. Consequently, it also remakes the frameworks around which interactions are structured.

The 20th century and the alterations it introduced within the city's structures and frameworks was possible because of a specific medium within the industrial revolution - the assembly line. It allowed rapid reproduction and replication of infrastructure, products, and repetitive urban patterns in cities around the world. Consequently, it produced standard patterns and forms of living. This illucidates the impact of every new medium that is introduced within society. Every new medium introduced within society presents new forms of possibilities on how information is gathered and used. Rail roads 'enhanced peoples ability to efficiently transfer goods by decreasing travel time', radio and tv perpetuated information. However, According to Mcluhan (1964), these social effects or 'personal and social consequences' of any given tech stem from 'the new scale' that the technology establishes in peoples lives'. For instance, with the advent of railways - considered a medium - travel time greatly reduced and resulted in the development of 'new kinds of cities and of work and leisure'. Further, Mcluhan proposes that media themselves, not the 'content' they carry, should be the focus of the study. His insight was that a medium affects the society in which it plays a role not by the content delivered over the medium, but by the characteristics of the medium itself. Mcluhan pointed to the light bulb as a clear demonstration of this idea. A bulb doesn't have the content in the way a newspaper has articles or a television has programs, yet the medium has a social effect. The bulb enables people to create spaces during night time that would otherwise have been inaccessible. He describes it as a medium without any content. It 'creates an environment by its mere presence'.

Simiarly, mediums enabled by digitization – like mobile technology or digital urban platforms – too allow social effects that stem from the 'the new scale' that technology establishes and enables people to be connected on. This new scale allows revised modes of interactions which alters the frameworks around which society is framed and structured. It alters the base on which every aspect of society was organized pre-digitization. This thesis focuses primarily on the contrary logic that digitization introduced and enabled with respect to the location specific nature of cities that choreographs people and relationships. It does so by allowing every aspect of life to be turned in machine reable data thereby introducing a new scale at which people and relationships are organized. Digital urban platforms and by extension, Careem, presents a distinct opportunity to explore this new scale. While the platform is a

priamrily for 'ride hailing'; it manifests within urban space by performing as an intermediary that co-ordinates interactions between diverse urban actors – rider/driver, residents and restaurants, restaurants and riders etc. It incorporates multiple urban processes for e.g. ride hailing, food delivery etc that stem from connecting different actors that require a 'ride'. Within this, the new scale that digitization initiates, allows the platform in a simultaneous centralized and decentralized manner.

Within its centralized aspects, it collects data from users, riders, stores, restauraunts, etc. and channels it in a streamlined manner through its interface. Decentralized manner, however, refers to the way each instance functions independently and give a distinct view of the application – whether its ride-hailing in the form of cars or bikes, ordering groceries, or hailing a Covid test. The process allows various forms of urban activity (historical, actual and speculative) to be better known and coordinated through the platform.

The new scale enabled by digitization allows an alteration in the relationships between people and urban space, mannerisms and the nature and role of social interactions between individuals. It generates, within the urban landscape of Islamabad, distinctions from its original ideation and has multiple social consequences. It enables alterations in the way people organize, consume, use, and produce within the urban space. It further alters the way 'public' is viewed, how publicness is generated and the way membership can be exercised.

These alterations in the construction of the social city and its impact of the urban form are generated by the way the platform mediates social interactions. It orchestrates social interactions between diverse and disparate urban actors while basing itself in the way urban actors perform within space. It utilizes the logic of actors and the interaction they have and transforms it in a manner that takes out certain existing urban logic and induces another logic within the urban spatial vocabulary. This mediation of traditional interactions generates a revised spatial vocabulary for urban settings by virtue of revising existing mannerisms of urbanites. By doing so, the urban digital platforms intersect with the social and material fabrics of the city. This transformation of mannerisms allows the platforms to alter the conditions through which society, space, and time, and thus spatiality, are produced.

The revised spatial vocabulary stems from the embedding and dis-embedding process it intitates. This process here, for example, refers to the way digitally revised modes of social interactions are introduced in place of traditional modalities. Within this process, there is a reformulation of the conditions that generate spatiality and there is a reassessment of scale and relationships at which platforms perform. Explored in chapter 3, this allows the generation of distinction of conditions that relate social interactions and location specificity within the original ideation of Islamabad. The alternative mode of performance and social interactions that the platform introduces challenges the way the city actively regulates the performances and interactions of people based on overarching agendas. It's utilization of distinct physical characteristics to streamline the social city is countered by the platform's ability to allow social interactions to determine how space is produced. It's usage of location specific mechanisms like Euclidean zoning, social distributions etc to generate frictionless sets of urban citizens is countered with the reliance of the generation of relationships between disparate and distinct individuals. The generation of specific socio-economic groups that inhabit distinct places within the city as a way to create social harmony is contrasted with the creation of networks that link different groups and allow them to an active role in the production of space. It further allows the creation of spatial frameworks where co-presence, plurality and collectivity generate conditions of living; where each individual cannot be extracted from the narratives of larger groups.

The revised mannerisms introduced by the new modes of social interactions also alters the nature of 'public' Islamabad enforces. urban logic generates a spatial framework that creates and fosters notions of the public that are contained and would encourage social harmony. It generates conditions for presence, access, and encounters that depend on whom the city considers part of the public for example, specific socioeconomic groups with distinct characteristics. Limiting the groups that make up the production process of 'public', creates a predetermined form of publicness created by the interactions of a predetermined form of public.

The restricted conception and enforcement determines who is to be a member and citizen of the city, and what their defining characteristics. It also determines the nature of social interactions that determine publicness that can be generated. The original ideation and execution of the city exhibits an underlying determination of nature of identities and social ties. It generates a 'public' where plurality and collectivity are not based on generating conditions that foster differences and create a 'common world through negotiation.' Instead, it is based on generating homogeneous structures and frameworks that create distinct identities. It generates conditions where 'publicness' is generated through the daily interactions of predefined sets of individuals that make up the public. In contrast, Careem enables conditions that alter the way social interactions are conducted. They reformulate how people relate to others, the manners of production, of congregation, revolutions, social organization, and how spatiality is produced. The platform, through its ability to revise the scale at which relations can be organized and mapped, alters the notion of the 'public'. It does so by allowing different networks of the city to become 'active members' and allows a different form of expression when it comes to claiming rights, use, and production of urban space. One aspect explored within the thesis is the inclusion of women within the larger narratives of the city and its production. The platform allows and generates a space for a distinctly underrepresented group of individuals. It alters the distinct social relations that generate frameworks and conditions of usability of the public and private sphere, access to resources, and the visibility for urban actors. It allows the space needed to enhance and raise the diversity of voices that have a say in how the city is used and produced. Lastly, it increases the diversity of actors involved in urban space's active production.

The mechanisms of digital technology and the urban platform Careem allow individuals that use them and observe them to play a pivotal role. Collective and collaborative communication allow other users, groups, and communities to define how individuals explore themselves and their identities. It generates spaces where individuals cannot be disconnected from larger groups, collectivities, and narratives. Furthermore, the logic of the platform utilizes urban space to create different frameworks that allow the notion of the public to be inclusive, allows access to the production of publicness is extended beyond the predetermined idea of 'public' and where membership and citizenship are extended to new sets of urban citizens. Consequently, it alters the makeup of the social city and the way it functions.

Explored in chapter 4, the platform allows the generation of a public that moves beyond the rational and impersonal idea and towards one that incorporates and fosters differences and generates common grounds. It moves the notion away from a fixed construct to one that becomes a product of social interactions and activities. Diverse social agents engage in interactions not restricted to the rigid frameworks that determine the public domain of the city. It generates frameworks that allows membership and citizenship to be defined by multiple social textures and lets them act as the foundation upon which social experiences are built. This allows the recognition of the public within the city as a 'work in progress' where frictions gain social relevance and negotiations over claims define the way publicness and membership are produced.

Explored within the chapter in Figure 33, the platform and the related capacities of digitization allow urban citizens to raise claims regarding multiple aspects. Ranging from Labor rights, safety concerns, taxi rights, data rights etc. the discussions and communications that connect diverse aspects of the urban digital platform, allow an exploration of wider narratives that utilize the inherent medium of the digital urban platform. Resultantly, the conversations and exchange of information initiated multiple on group protests that incorporated diverse urban actors. The conversations and the physical use of urban space to claim rights allowed negotiations within the larger narratives that determine the urban landscape of Islamabad. Inherent within this is the social relevance and negotiation over claims that arise from larger conversations and narratives. It illustrates how conflicts between different groups (for example, Careem and its users or Careem cars and the taxi industry) over how common resources of society should be divided and used become important. It incorporates ideas regarding how society is organized, socio-spatial relations are maintained, and how we co-exist in a common world. These conflicts and claims illustrate that urban actors negotiate and see themselves as part of a larger group and community. Consequently, It generates a public that moves beyond the rational and impersonal idea and towards one that incorporates and fosters differences and generates common grounds.

The platform, through its logic, allows the city to be produced in ways separate from the linear relationship present within its original ideation. It generates conditions where social interactions between individuals determine and generate the notion of the 'public', 'publicness', and 'membership'. It alters the determinate relationship between the physical and the social city, and the frameworks that determine the behavior of the social city. It alters the segregatory mechanisms of design used to make 'society function frictionlessly'. Within this, it disrupts the distinct land uses and homogenous actors that are utilized to enforce restrictions in order to protect the sanctity of the public and private realms.

This research allows an alternate manner of viewing the way Islamabad is produced, the way its citizens are percieved and conceived and the asymmetrical control the authorities exhibit over the city's production. It places individuals in pivotal roles in defining how space is produced. It generates frameworks and structures that allow more urban actors to become active members within the urban landscape or by fostering a private realm capable of hosting activities traditionally not under its domain. This alteration allows it to become the foundation for putting forward claims to rights and allowing negotiations to determine common grounds. Furthermore, it breaks the foundations of the spatial framework of a society that avoids contestations and frictions. This effectively generates, in Islamabad, the idea of a city as a 'work in progress' instead of one that is stuck in time. Lastly, there is a lack of research within the urban landscape of Islamabad, pertaining to the changes within its physical and social structures, brought by the adoption and permeation of new technologies and modalities of living. This thesis allows the city of Islamabad to be recognized as a product of social interactions introduced by the new and revised modalities of living, communication, and organizations. This research can be furthered by exploring the diverse modes of social interactions that alter social organizations. within the context of revised spatial organization of work and disembodied social relations and control workers are subjected to within the platform reality. The focus being on analyzing the way workers demonstrate agency by focusing on the spatiality of their collective actions.

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