

Navigating Intersectional Realities through Smart Urbanism: Gender, Media and Design



Date: April 12 2023

Time: 9:30- 16:45 CET

Location: MCW Lab ((theater space at Kromme Nieuwegracht 20, room 005) & Sweelinckzaal (Drift 21)

Or

Join online: https://us06web.zoom.us/j/856436 19564?pwd=OGZqOUkrRzNTU1J4eW U3cHE4VkVKZz09

> Meeting ID: 856 4361 9564 Passcode: 058972

Conference Organizers:

Inclusion in the Datafied City- Governing Digital Society, IOS-Open Cities Platform, & NWO-EQUIMOB project

Prof Ajay Bailey and Seama Mowri, Department of Human Geography and Spatial Planning. Dr. Michiel de Lange, Department of Media & Culture Studies



Programme Agenda

9:30- 9:45 (CET)	Welcome & Introduction
9:45 - 10:30	Keynote address by Arul Chib, Institute of Social Studies, Erasmus University Rotterdam
	Subverted Agency: Digital Self-Representation of Transfeminine Sex Workers in a Global Smart City
10:30 - 11:30	Session 1 - Gender and mobility
	 Transport deserts: The role of pilgrimage-leisure trips in the everyday lives of low-income older women
	 The Role of Smart Transport in Managing Transportation System in Third World Countries. The Case of Kigali City - Rwanda
	 CoDiMaP: Co-Designing an Inclusive Collaborative Mapping Tool with People with Disabilities
	Discussant: Wendy Tan
11:30-11:45	Coffee break
11:45 - 12:45	 Session 2 - Gender and media Gendering the 'Transportscape', Public Art and Delhi Metro Performing gender and agency through Hanfu Photography in Chengdu, China Instagram representation of Hijra identities from Bangladesh Discussant: Adnan Hossain
12:45 - 13:45	Lunch at Sweelinckzaal
13:45 - 15:00	Session 3 - Gender and the smart city
13.45 15.00	 Co-designing the digital for South Asian cities
	 Interrogating inclusion in the smart city: The Indian Scenario
	 Building the Future on Safe Spaces, Transfeminist and decolonial urbanism as the foundation of Smart Cities Discussant: Arul Chib
15:00 - 16:00	Final Panel
16:00	Wrap-up & Drinks



Call for Abstracts

Smart cities are touted all over the world as bringing benefits to all citizens, but in reality the fruits are not equally sweet for everyone. The smart city discourse positions itself on a path to achieving sustainability, equity and safety in urban spaces through the use of data, sensors, dashboards, platforms and infrastructures. Vulnerable groups and people on the margins (including women, older adults, people with disabilities, low-income communities, people of color, migrants and sans-papiers) remain largely absent from these discussions and developments. Despite calls for more inclusive approaches (e.g. people-centric smart urbanism, smart citizenship, social cities) the proposed 'smartening' of cities in practice continues to center around cookie-cutter technological fixes designed and implemented from a dominant and rocentric perspective, without accounting for users with intersectional vulnerabilities. Oftentimes, these proposed 'smart' solutions benefit only a small section of the population while excluding and harming vulnerable groups and individuals. For example, the use of sensors, data and algorithms for increasing safety in public spaces may lead to exacerbating inequalities through over-policing. Mobility platforms and the 'sharing economy' benefit the able-bodied while disprivileging and even posing physical threats to elderly and people with disabilities on city streets, and by exploiting often undocumented people living on the margins. By contrast, a variety of projects and apps attempt to increase (the experience of) safety in public and transit spaces of women and LGBTQ+ people. How can we understand processes and discourses of in- and exclusion in today's datafied smart cities? What can we learn from smart urbanisms in the Global South, and from street level experiences from vulnerable people? How can we contribute to more inclusive 'smart urbanisms' that are tailored to local histories, situations and needs?

For academics: abstracts of about 250 words, plus 3-5 key words;

For **practitioner**s in art, design or otherwise: a proposed art/design case, accompanied by two images of the work & short answers to the following questions:

1. What is the project trying to achieve?

2. What perspective does the project bring to the discussion (if possible, relate your work to one or more clusters below)

A. Gender and intersectional urbanism;
B. Smart and digital urbanism;
C. Cultural perspectives and local contexts;
D. Phenomenology, art and design perspectives.

With an interesting mix of conceptual, methodological and empirical submissions, the succeeding sections in this booklet present nine (9) extended abstracts that have been shortlisted for the symposium.



Session 1: Gender and Mobility

Abstract 1: Transport deserts: The role of pilgrimage-leisure trips in the everyday lives of lowincome older women

Prajwal Nagesh, Ajay Bailey, Sobin George, Lekha Subaiya

Introduction

The role of leisure activities in healthy ageing and well-being has been extensively researched (Adams, Leibbrandt, and Moon, 2010; Marhánkova, 2011). The individual benefits, range of practices and contribution to the community have been well acknowledged. As the age-friendly cities report (WHO, 2007) suggest, lack of urban transport facilities can hinder access to leisure in urban life. Geographies of ageing and transport literature indicate transport inequity (Miciukiewicz and Vigar, 2012) to access leisure and social life (WHO, 2007; Rantakokko et al., 2010; Gardner, 2011; Loo et al., 2017). Movement in old age is often hindered by gradual physical debility (Webber et al., 2010; Barman and Mishra, 2020) and, in general, by any loss of capital across four domains such as cultural, individual, social and infrastructural capital (Musselwhite and Scott, 2019). Low-income settlements are often underserviced by public transport networks (WHO, 2007). The preoccupation of researching leisure amongst privileged or middle-income class has devoid grounded understanding of access to leisure in low-income geographies for older adults.

Leisure in later age has a geographically concentrated conceptual history restricted to Europe and North America. Ito, Walker, and Liang's (2014) review of leisure studies journals highlights that only 4.1 per cent of all publications between 1990 and 2009 were non-western. Valentine, Allison, and Schneider's (1999) review argues that the nature of non-western leisure behaviours and practices is acutely ignored. However, despite recognising the rise in the ageing population in low-income contexts of the Global South, the heterogeneity of leisure experience is seldom explored. With sketchy empirical backing, older adults from low-income households and their leisure life remains a blind spot. This study explores the social life of older women in one of the oldest slums of Bengaluru, and the role transport plays in their participation in social activities.

Conceptualising leisure and mobilities in later age

Leisure participation in later age has an extended focus in gerontology on its benefits to social connectedness and well-being (Kaplan, 1979). A range of activities, from hobbies to volunteering, has been researched through the lens of the 'ability to participate' using activity and disengagement theories (Adams, Leibbrandt and Moon, 2010). Arai and Pedlar (2003) argue the emerging discourse in gerontology has moved from consumption and privatization of leisure to the communitarian conceptualisation. There have been significant attempts to theorize leisure in industrialised societies. Wearing (1995), using Foucault's dominant discourse framework, argues that leisure in later age can be a form of resistance to the ageist power structures. However, post-Veblen's (1899) seminal work, The Theory of the Leisure Class, there is a narrow focus on leisure among the privileged (e.g. Putnam, 2000).

Gender as an influential layer of leisure has been focused on since the 1980s (e.g. Deem, 1996, Wearing, 1998). The micro-feminist perspective has focused on gender opportunities, patterns and constraints. Meanwhile, the macro studies explored women's leisure from the perspective of the politics of space



(Khan, 2011; Bhageri, 2014), the patriarchal power structures (Wearing, 1998) and the 'urban' dynamics (Deem, 1996; Linn, 2020). However, as Henderson and Shaw (2006) argue, leisure studies with gender as organising principles have slowed since the end of 2000 and have skewed focus on North American and British/ Australian research. Instead, the primary focus is geography and cities as an intersection of later-age leisure.

Religion and spirituality are predominant social activities for older adults across social groups. Reviews such as Harper and Laws (1995) have consistently prescribed closer engagement of geographical gerontology with the cultural turn. The role of spatial mobilities in later life is often researched from a utilitarian perspective and a hierarchical structure. For example, Musselwhite and Haddad's (2010) pyramid structure assumes the order of mobility needs in later life to proceed strictly in the order of practical, psychosocial, affective, and aesthetic/discretionary needs. The complex nature of mobilities for social and cultural geographies is often understudied. Pilgrimage is one of the oldest forms of human mobility. Transport research often focuses on everyday mobilities and tourism studies on the tours themselves. However, the mobility stream across the time continuum is relational and influencing. In this paper, we juxtapose everyday mobilities in urban geography with the annual episodes of religious tourism to understand the overall relation of gender, mobilities and leisure.

Method and field site

This paper employs an ethnographic approach to understand the social lives of older adults. An ethnographic approach is necessary to provide a thick description and understanding of the oftenunspoken aspects of everyday life (Van Maanen, 2011). The researcher used the participant observation method to conduct go-along interviews. During the fieldwork in the monsoon of 2022, the researcher stayed in the neighbourhood, frequented their milieu, and participated in their cultural activities. The researcher undertook a one-week go-along religious tour with older adults visiting Vetkali Amman Temple and other pilgrimage places in rural Tamil Nadu. The primary sources of information were field notes from participant observation, recordings and transcripts from in-depth interviews of older adults (20) and key informants (12) and archival material from a local monthly magazine, Slum Jagattu (2000-2022).

Lakshman Rao (LR) Nagar is one of the oldest settlements of Bengaluru (India), formed incrementally since 1974. Older adults who migrated from the neighbouring state of Tamil Nadu and other urban sprawls of 1970s central Bengaluru populate this area (Pottinger-Glass and Pfeffer, 2021). Scheduled castes, Muslims, and other backward classes, as well as overlapping groups of Tamil migrants, constitute most of the neighbourhood's population. Most older adults have in the past, and many still work in the informal sector, such as – construction, garments, street vending, small-scale retail shops and domestic housekeeping. They draw a nominal salary or pension. In this context, this study explores their transport access to leisure.

Results

In LR Nagar, most families are headed by women as the primary earners. In many cases, the husband addicted to alcoholism has either expired or is indifferent to the household needs, inevitably pressuring women to remain in informal labour and manage expenses for rent, food and children's school fees. The neighbourhood, otherwise known to be hostile to women in the form of eve teasing and domestic abuse, offers greater agency in the daily operations of the Om Shakti¹ temple affairs. Since the early



2000s, women of LR Nagar majorly undertake a five-day religious tour of 1000 miles in a bus to visit Vetkali Amman temple and nearly twenty other temples. Incidentally, it is the only time most women of LR Nagar travel by motorised vehicle in the entire year as no public transport services the slum. Harake, an act of asking for a favour from the divine by promising worship/sacrifice/pilgrimage, is the central motivation for these pilgrimages. Most women began these pilgrimages in their thirties and forties, praying for the health of their children and spouses, economic prosperity, and personal fulfillment. The annual religious tour to these remote temples in rural Tamil Nadu combines a spiritual journey, an escape from the annoyances of urban squalor, and a break from their arduous work schedule.

Affordability is central to this religious tour. The trip costs Rs. 3,400 per person, including meals, bus fare, irumudi², and temple entry fees. For many older adults in LR Nagar who lack the affordability to visit temples in cities or their natives, signing up for these religious tours made sense. To afford the trip, they saved their pension, planned appropriate reasons for leave (if employed), and arranged for substitute caretakers at home. All four nights of the journey were spent on a moving bus to reduce the lodging costs. Women from low-income households slept on the floor, in the aisle, and the leg space between seats, whereas others slept on cushioned seats, exemplifying the power dynamics of LR Nagar. The snores did not stop, despite the floor being covered by neem leaves, beach sand, and rainwater. Second, the same driver drove in the morning and night. He could rest only when the pilgrims were in the temple. The low-cost tour could not afford a spare driver for all three buses. Third, all the meals of the pilgrimage are prepared by co-travelling cooks using supplies stocked in the boot space of the bus.

The bus equipped with JBL³ speakers could play music at high volumes and produce vocals and music that were clear and distinct. The playlist has been curated to emphasise the adulation of Vetkali Amma and her subsidiary forms. Naturally, all songs were in Tamil, the native language of the immigrants. The beats are catchy and lively, and as the tempo of each song increases progressively, everyone on the bus chants the chorus with familiarity. The middle-aged and older adults danced in pairs amidst the hooting, applause, and cheering. Intriguingly, a semi-recliner bus is chosen instead of a sleeper just to ensure the aisle is available and visible for dance, possession and socialisation. The bus also had a disco-theme illumination for the final day. Older women said they enjoyed the freedom to use the aisle as it was their private space in public, surrounded by familiar faces. The pilgrimage demanded physical endurance from older adults already suffering from mobility issues. During interviews, they express the hunger, tiredness, and pain that vanishes amidst the reverence and euphoria of entering the sanctum sanctorum. As much as the trip was spiritual, it was also annual intimacy and leisure for many older adults.

Conclusion

This paper presented the context and contours of the annual religious tour of older women to Vetkali Amman and other places in rural Tamil Nadu. Navigating the risk of being anecdotal, the paper highlights a few important themes of gendered leisure, later age mobilities and secular religiosity with the urban life as the canvas. The precarity of urban citizenship is visible in the interactions between older women in LR Nagar and the larger city of Bengaluru. Despite years of residence, the only spaces considered safe by older women are the streets of their homes in LR Nagar, the bus to their native and the religious tours. In the context of a transport desert, these annual religious tours organised by older women collectives in the neighbourhood can be seen as an act of resistance to their immobilities. The micro-choices the religious tours offer women, such as the ability to choose buses, seats, routes, meals,



and religious and tourism spots, is a niche space carved consciously by women often working in informal sectors and living in urban slums. Overall, the paper juxtaposes everyday mobilities in an urban slum next to the curated geographies of religious tours to rural Tamil Nadu. This provides an opportunity to understand the restricted mobility and access to leisure and the city.

Notes:

1 Om Shakti temple in LR Nagar is the central temple group which organises religious tours.

2 Irumudi refers to a traditional bag or bundle that devotees carry with them during their pilgrimage to the temple. 3 JBL is an American audio equipment manufacturer. The audio system is a premium brand and is expensive.



Abstract 2: The Role of Smart Transport in Managing Transportation System in Third World Countries: The Case of Kigali City-Rwanda. David MIHIGO1, John Lukenangul

Smart transportation and smart city are revolutionizing how cities approach mobility, while reducing congestion in cities through the use of sensors, advanced communication technologies, automation and high speed networks. Currently, more than 1.35 million of people die on World's road network per year by car accidents while other 20 millions of people to 50 millions of people are severely injured (Patey & Wickham, 2021).

In fact, transportation system (i.e. ground, water or aerial) is very essential in facilitating people's movements. However, the continuously increase of traffic volume may also cause the traffic congestion, air pollution, ruined traffic systems which also results from population increase and deficiency of city planning (Richter & Ruhl, 2013). This is because all community members residing in neighborhoods, towns, cities and countries need to travel from one destination to the other for their daily life activities so as to achieve their desire and self-development.

Moreover, the increase of transportation facilities like vehicles is taking place in many African countries including Kigali city. In order to manage traffic problem, transportation system has to manage the issues related to transportation such as traffic jam, etc. For instance Third world countries keep on investing in physical setting like mobility and infrastructure, as never been there before (Bamwesigye & Hlavackova, 2019). Artificial intelligence and other means of technologies must be used to manage the traffic in developing world (Singh, Bansal, & Sofat, 2013).

Currently Rwanda recorded 221, 000 vehicles comprising of 52% motorcycles and 38% passenger vehicles. Where Kigali city count at least 30,000 Vehicles (Bajpai & Bower, 2020). Which means the number of vehicles is rapidly increasing with 12% each year and all of these put the government of Rwanda under pressure. This situation might weakening air quality in the city and increase of fuel consumption bills as well as fuel import bills which is 12% of total imports. Recent study of Electrical Vehicles (EV) suggested that the Government of Rwanda must aiming in changing 30% of motorcycles, 8% of cars, 20% of buses and 25% of mini buses into electrical power by 2030 (Bajpai & Bower, 2020). Therefore tradition methods were adopted to monitor traffic and organize traffic signs, traffic lights as well as round about. But all these methods are getting out-of-date daily. In this days of emerging technologies. Thus, the study aims (1) To explore the importance of smart transport in managing transportation system in Third world countries; (2) To examine technologies used in transport system in Kigali City, country of Rwanda; (3) To assess community perceptions on adaptation of smart transport in managing transportation system in Kigali city. On methodological fronts, observations, and both household interview and officials interview were used to get community understanding on the idea of smart transportation. 100 respondents including Kigali city residents were selected using Yamane

formula N= $\frac{N}{1+N(e)^2}$

- N= Size of population under study; n= Sample Size; e=Margin error (here is 0.1)
- Where the Simple Size equals = $\frac{N_{1+N(e)2}}{1.745,555} = 100$ Households.

According to the 5th Rwanda population and housing census (PHC) which was conducted in August, 2022, Kigali city has 1,745,555 people, equivalent to 13.2% of entire Rwanda population of 13,246,394



people. Additionally, One (1) Nyarugenge District Professional and One (1) representative from Kigali city Transportation Company (Jali Transport Ltd) were asked to explain on smart transport. Table 1 details socio-demographic characteristics in this study:

N⁰	Description	Category	Frequency	Percentage (%)
1	Marital status	Single	73	73
		Married	27	27
2	Gender	Female	68	68
		Male	32	32
3	Age	20 - 40	30	30
		40 - 60	36	36
		Above 60	34	34
4	Education	Primary	20	20
		Secondary	32	32
		University	48	48
5	Occupation	Public Employees	60	60
		Private Employees	40	40

Table 1: Socio-demographic informationSource: Field work, 2023

The study has revealed that transportation technologies commonly used in Kigali city include Drone, Tap and Go and Road cameras. Over 75% of Kigali city residents complemented that emerging transportation technologies in managing city transportation solved various problems which used to take place in Kigali City transportation system which could not be managed by human being themselves. Figure 1 below shows drone in the sky transporting blood as well as blood samples in Rwanda in time so that high number of patients can be treated and get their responses without delay the same time saving their lives.



Figure 1: Medical Items Deliveries by Drone Technologies Source: (Kolodny, 2019)

The use of Tap and Go technology was responded by all respondents (100%) interviewed during data collection. According to the respondents, people in Kigali City use this technology in their everyday life and everyone must own Tap and Go Card, where they upload the money at the Tap and Go station in the city depending on journey and destination as well. In the bus there is Tap and Go machine and people tap on it using the card then money is deducted in electronically without carrying money in their pockets and pay to the Driver or Aid-Driver (Old System). The figure 2 illustrate Tap and Go machine and traveler.





Figure2: Tap and Go Source: (Girinema, 2020)

Road Cameras to monitor traffic movement in the city of Kigali was mentioned by 83% of the respondents as high utilized technology to manage ground transportation in providing accurate, recent and past information associated with road traffic movement in the city as well as crimes, accidents happened on the road and high speed driving through high speed cameras mounted along the road in the city and other Districts in Rwanda. Figure 3 demonstrates Road CCTV Cameras on the road checking road condition.



Figure 3: Road CCTV Camera Source: (aptantech, 2020)

Nyarugenge District expert from infrastructure management unit confirmed 100% that smart transport can manage urban transportation system in case transportation apps and associated technologies are used. Jali transport ltd representative said that increase of smart technology in Kigali city's transportation system will assist in transportation problems.

Lack of high internet connectivity during smart transport concept adaptation is the challenge. The majority of the respondents argued that though there are professionals in the city, still a large number of professionals is needed to implement the concept of smart transport. For example programmers to offer systems which are in line with time.

According to (Shah & Dal, 2007) Intelligent Transportation Systems (ITSs) could help to manage and solve transportation problems in local transportation system while helping community reach their destinations on time and safely for accomplishment of their projects.



Moreover smart transportation systems could support in managing crimes happening during the night on the roads when none is watching what is going on or what happed in what time on which road. With technology real time information can be available for further necessaries anytime as well as who committed the crime and affected person. It is not only that, but also once professional experts are planning driverless cars to come into existing transportation system, they must also think how all these infrastructure will be connected for future smooth navigation of Unmanned Cars in cities. By concluding this gives hope that in the near future, Third world countries smart transport will play critical role in solving different problems which used to be in African countries transportation system not only in cities but also rural areas. However, Aerial transportation, Ground transportation or Maritime transportation. Connected transportation system is highly recommended in urban and rural areas and for the future management of autonomous vehicles coming into existence in the near future. In addition to this use of bicycles in African cities and rural areas is highly recommended for communities' health not only in Kigali city but also other African countries where it is missing.



Abstract 3: CoDiMaP (Co-Designing an Inclusive Collaborative Mapping tool with People with Disabilities)

Jane Strugar Kolesnik, Dr. Karin Pfeffer, Dr. Johannes Flacke

Persons with disabilities, regardless of whether they are physical or intellectual disabilities, face large quantities of obstacles in their daily life. Such obstacles take on multiple forms, ranging from societal obstacles such as discrimination and unequal opportunities, to physical obstacles in the environment. The primary production point of disability is in the relationship between bodies and any problematisations thereof that society may find within these bodies, and their social, political, and physical environment (Terashima and Clark 2021). This so-called 'social model' of disability seeks to spatialise disabled bodies and thus focuses on the lived and embodied experiences of persons with diverse disabilities and impairments, such as may not identify as disabled but still experience adversity in social and other contexts (Hansen & Philo, 2007). Such a model is instrumental to understanding inclusivity within both digital technologies and their applications and urban spaces such as cities.

Urban spaces function as places of intersecting struggles and opportunities for a variety of social, economic, and demographic groups. The extent to which these individual groups have access to services and infrastructure is essential in not only the construction of urban areas, but in addressing problems of inequality and inaccessibility in urban space. Planners have made concessions in urban planning in the West for persons with disabilities for several decades now – from the focus on disability as a humans right issue in the late 1990s onwards (Vanhala, 2015) – but such concessions tend to have weak points in relation to the diversity of disabilities and mobilities which persons with disabilities experience. Furthermore, the emphasis has been on automotive mobility and accommodating it into the urban landscape, which in turn has resulted in non-automotive mobility becoming secondary.

An enhancing factor within the lives of persons with disabilities and impairments in the West has been the application of digital technologies in their daily lives. Digital technologies allow for more seamless integration of diverse user needs, and allow persons with disabilities more inclusive and exhaustive ways to engage with their immediate environment. However, they also create new disabling conditions by way of the requirements they impose on their users (Edgar and Hansson, 2021). The process of digital exclusion – also referred to as a 'digital divide' (ibid) – is evident in tools designed to provide disabled persons with an insight into the design and makeup of their immediate social and physical spaces. One of these tools is digital mapping.

Mapping tools allow citizens, including persons with disabilities, an insight into the urban space around them and the spaces within which they move on a daily basis in a critical and co-operative manner. Collaborative mapping tools take on multiple forms, but are principally understood to be mapping tables or applications which allow multiple persons to engage in mapping processes simultaneously. Through these processes, citizens and mapping participants have the capability to identify and discuss obstacles, impairments, and other problematic areas within public space and offer suggestions to each other, or to any urban developers and/or researchers who may be present for improvements to these urban spaces.

Historically, mapping tools such as digital maps or collaborative mapping tools excluded persons with disabilities. Tools designed specifically for map tables may not be suitable for visually impaired users (Henning et al., 2017), or for persons who use wheelchairs as they are generally higher up and not



reachable by persons who are forced to sit. Such mapping tools are none the less a vital tool for the process of participation and mutual shaping of urban spaces and cities.

The goal of this research was to address the research gap present in collaborative mapping development. This gap can broadly be summed up as hinging on the fact that current collaborative mapping tools are not developed with an eye towards inclusive use. The CoDiMaP project sought to create and develop an inclusive, accessible, and open-source collaborative mapping tool. The design process of this tool entailed co-operation with persons with disabilities, who acted as co-researchers. These co-researchers, being experts-by-experience, helped define which user needs the mapping tool should be directed towards, and offered insight into its usability and accessibility. The Universal Design Principles underpinned the development of the tool. Its overall purpose was to support a design process of urban spaces which was itself inclusive and designed to meet the varied requirements of all people, with and without disabilities, and allow these persons a direct insight into the shaping processes of their urban environments.

Certain adaptations had to be made in the course of this process. During workshops, participation of all co-researchers equally was facilitated through methods of open communication, inclusive mapping sessions with all co-researchers present, and open communication segments during which co-researchers could freely discuss the problems which they experienced with the mapping tables, their suggested improvements, and their views in regards to the feasibility and application of the CoDiMaP application and its associated mapping tables. By fostering a co-research community at these regular workshops, processes of democratic inclusion and universal design allowed researchers a deeper insight into the varied and complex nature of social and physical needs of persons with disabilities.

This workshop will focus on the processes of inclusion and participation which were undertaken by researchers in the course of this co-design process. It will examine how the equal participation of co-researchers was ensured, and what the basis for their participation in the project was. It will further examine the feedback of these co-researchers as to the sessions themselves, and to the mapping tool, and discuss the potential impact of both mapping co-research and co-research at large on the development of collaborative technologies such as the mapping tool.

Methods of CoDiMaP Research

The methodology of the CoDiMaP co-research process is divided into four steps: preparations and developing co-design approach, identification of user needs and tool conceptualisation, iterative tool development, and lastly, application and evaluation of mapping tool. Within each of these steps, co-researchers were consulted and participated in discussions with researchers, notably in the second and third steps of the development cycle. What follows is a brief summary of each phase of the co-design process:

- In the first phase, the objective was to establish co-researcher roles, acquaint co-researchers with researchers, and finalize a methodological approach, with input from the co-researchers on the structure, execution, and potential expected inputs during the co-design process.

- The second phase was constructed around three co-design workshops. These workshops sought to isolate the user requirements for an inclusive mapping tool, and included a tour of the city of Zwolle with an application of the Photovoice (Annang et al., 2016) and geo-narratives (Kwan and Ding, 2008)



methods. This workshop resulted in geocoded photos from all co-researchers alongside descriptions which illustrated good and poor examples of accessible planning and design in the city of Zwolle. These were then discussed in the final workshop and subsequently categorized by the co-researchers themselves.

- The third phase consisted of three 'sprints' of six weeks, during which the software was developed on the basis of the requirements put forward by co-researchers. It included two test workshops, at the end of the second and third development sprint respectively, during which co-researchers tested the prototype and provided feedback.

- The final phase, which is still to be carried out at time of writing, is to consist of a presentation of the mapping tool to the municipal government of the city of Zwolle. During this workshop, the data which was collected by co-researchers in the second phase will be presented to municipal officials of the city of Zwolle, with an eye to potential interventions which could be used to improve accessibility.

The methodologies used, such as the aforementioned photovoice and geo-narratives, will be discussed in greater detail during the workshop at the University of Utrecht.

Key discussion and presentation points

In the course of this presentation and subsequent workshop, I will present the above outlined phases of the CoDiMaP research, and the feedback received from the co-researchers during every phase. I will likewise discuss both the pending and actual outputs and impacts of the CoDiMaP project, and how its approaches to inclusive co-design may be useful for urban designers, planners, and technology designers in future.

During the discussion, participants will be encouraged to share their perspectives on inclusive design approaches and conditions and the impacts of these conditions on the processes and outputs of any projects they may have been involved with until this point.



Session 2: Gender and Media

Abstract 4 : Performing gender and agency through Hanfu Photography in Chengdu, China *Xu Chu and Ajay Bailey*

Since the explosion of User-Generated-Content online, people increasingly share everyday life and express the self as embedded in (preferred) urban space in visual-dominant media platforms. This research addresses issues to do with agency, identity, gendered media usage, and the technologies and data as a component of the everyday environment. It examines how women use social media to perform identities as encapsulated in the imaginaries of heritage space. This study thus makes two primary contributions: 1) moving forward to the digital turn in cultural geographies by engaging with affective technologies; 2) enriching the understanding of the possible digital empowerment for women in reimagining inclusive urban space. Ultimately, it investigates the agency in which women generate new expressions of space through self-representation on the digital platform.

We take Hanfu performance in Chengdu, China as an empirical study. Hanfu here generally refers to a traditional Chinese style of clothing rather than a rigid, defined costume category. Wearing Hanfu and visiting heritage spaces to be photographed and presented in a particular style, is an emerging experience for women in urban China. In this study, we examine how the material aspects of online platforms are shaped by and simultaneously integrated into culture in everyday uses of *Xiaohongshu* or "Red". Red is a Chinese lifestyle sharing platform whose vision is to inspire lives to discover and connect with diverse lifestyles; it aims to empower, guide, and bind users to create neotribes that are relevant to practical topics. By collaborating walkthroughs of everyday social media use, content analysis of photographs, and online ethnographic methods, we examine three parallel aspects of digital geographies of photograph: 1) the production and transmission mechanisms of spatial image, considering the platform algorithmic and interface design; 2) the narrative strategies of the video, image, and textual content and women self-performance; 3) the users' experience of encountering, learning, sharing, engaging and negotiating the digital place's meanings.

The empirical materials show that women selectively involve cultural elements of heritage space – they imaginatively create cultural and gender scripts that are usually linked to a romanticization of idyllic ancient China – integrating many poetic aesthetics and symbols in visualization. Specifically, the digital photographs on the platform affectively appreciate the heritage space through intensity, sensation, and value. First, due in part to platform's algorithmic design, photographs that have been edited with eye-catching color, brightness, and descriptive title are encouraged and receive more views, likes, and comments. Second, the visual narratives of those photograph utilize camera language, music, and texts and other emotional expression tools to make resonance with viewers. Third, through these digital practices of posting, sharing, commenting, and editing, users exchange the information and value about heritage space, and new ways of "knowing the place" have been emerged. Photography, used for personal performance, also enhances the public image of those heritage sites as "cultural enclaves" by resonating with the ancient Chinese culture that values the poetic life, where women can resist and escape the everyday suppression and pressure from fast and homogenous urban life. In this process, women reimagine and recreate the urban space by communicating their use value and situated knowledge with the *self*, peers, and wider audience, on social platform in practices of self-performance.



Under the recognition of media and communication environment as part and parcel of urban experiences, the analysis presented in this paper thus contributes as part of a broader endeavor to investigate the intersection between social media and urban areas in the context of profound mediatization. This study claims that women reflexively create Hanfu scripts which facilitate their unique, diverse performances of the intersectional identity composed of gender, nationality, and traditional culture. Their spatial scripts are documented, circulated, and perceived in social media, constituting the imaginary heritage space. In this way, media also function as a participatory means to reclaim the public space to draw attention to women's emotional and private needs, and thus challenging the masculine nature of urban space.



Abstract 5: Gendering the 'Transportscape', Public Art and Delhi Metro Subhadeep Mondal, Aisarya Bhattacharjee, Monidip Mondal

Since the 1980s, that the urban transport sector had started attracting immensely the growth of 'public art' that made transport systems more attractive, locally distinctive and dispensed with an image of a positive public transport system. Likewise, it has been gradually integrated into the urban transportation planning process, thereby, contributing to the urban regeneration and city development process, drawing into its domain the specificity of 'city making'. In this connection, Amundsen (1995) had reiterated that, 'Public art can draw out the identity of a space, aid the understanding of the historical or cultural significance of a neighborhood and its residents'. Moreover, as (Salina M. Almanzar, Almanzar and Zitcer) argue, '... it (art) used to be a "self-conviction" in the modernist understanding and now art can serve as an iconic placemaking function'. In context of this, locating art in the city making process not only along the theoretical dimensions, but also deciphering the everyday interactions of the 'public' with 'public art' and how the nexus between these paves much space to the public to (re)imagine a city and (re)plan accordingly, is crucial to understand. Given that public transit riders reflect upon a diverse demographic picture of the daily commuters with regard to gender, age groups and likewise, art in mass transit systems has over time facilitated informal mixing of urban society across class, race, gender, age and location. It has heralded a paradigm shift that broadens the dimension of the perception of public art to the audience. Infact, as Zebracki and Bekker (2018) note, '... art is not only confined within the private domain, it is public now, it has the potential for social inclusivity as it can reach to a larger audience.' In this backdrop, the parade of public art in cities, especially cosmopolitan ones started gaining momentum, especially in terms of the neoliberal paradigms of 'city branding', and also taking into account that the quality of the public transit experience affects directly the ridership levels. In context of this, the meaning attached with the art in transit is more of what the audience perceived, it is not only psychological rather social and physical too. The question of gendering is central here. The public artworks in the public transportation system brings out differential experiential connotations which can only be decoded from a gendered lens. In this backdrop, it is necessary to decrypt certain questions, as to whether the inclusion of public art in mass transit systems has been fecundate enough? How public art in transport has catalyzed the city development process? In what way has the inclusion of public art in transport contributed to everyday interactions with the 'public' both in the physical and virtual domain? The article intends to seek answers to these questions.

Objectives

Converging the kernel of the existing studies that have been carried out with regard to public art, the central thrust of this article has been oriented to locating art in the city making process. In this backdrop, a meticulous analysis has been carried out to understand how the domain of public art has been incorporated in Delhi Master Plan 2021. Second, an exploratory attempt has been made to locate and decipher any existing discourse on metro art, especially focussing on the public's take on the art in Delhi Metro. In this context, the Hauz Khas metro station has been selected for a case study, specifically to understand how the *Public* of the station are engaging with the Art. Further, a novice attempt has been carried out to delve into the perception of people towards public art in the metro stations of Delhi, Mumbai and Kolkata, also specifically drawing in gender aspects



Database and Methodology

While answering the first question, the 'content analysis' method has been adopted, incorporating close reading of grey literature consisting of planning documents like 'Delhi Building Bye-Laws 2015', 'Master Plan 2021' and Annual Reports of three agencies. We have relied on social media platform to locate the discourse around the art of Delhi Metro, and have thereby used 'Discourse Analysis' method for the analysis. In the field, participant observation methods have been used to understand how people are engaging with the art. In the context of the third objective, the analysis of the data has been entirely based on qualitative research methods of 'theme identification'. A sample survey was conducted through online interviews with daily commuters in the three megacities of India (sample size confined to 30 for each city), namely the urban agglomerations of Mumbai, Delhi and Kolkata regarding their perception of the depiction of public art in metro railway stations during June–July 2021.

The urban landscape is inordinately shaped by transportation networks, primarily by the location of socio-economic activities in the urban space and then, the spatial patterns that have emerged is a reflection of the demand for transport linkages enabling spatial interaction, or rather, to quote (Castells, 1977), 'the fluctuations of the system of circulation express the internal movements determined by the differential location of the activities'. The spatial imprint of transportation in terms of its material and non-material aspects confer a distinct configuration to the urban space, which is shaped and reshaped/reproduced by everyday interactions of commuters who use the transport services. It is necessary to mention in this context, that the transport landscape emanating out of such interaction between the transport infrastructure and urban space is not necessarily confined to tangible elements of the landscape, but are even reflected in terms of non-tangible aspects pertaining to 'place' making; to reimagine and to reproduce the urban space and thus create visions of the city and also the essence of safety and security. Specifically, the feelings, imaginations, feedbacks and notions about the 'place' or 'city' of the users of transportation services frames plots in reconfiguring the urban space. Drawing this aspect in connection with our preceding discussion on public art, it is necessary to mention in this context, that the interaction between art, transport and the urban landscape not only reframes the spheres of interactions but also, as Amundsen (1995), note, plays a part in 'humanizing transit stations'. Hitherto, 'transportscape' encompasses an umbrella term consisting of the materiality (built environment, wall murals, infrastructure, modes) along with the non-materiality that are produced and reproduced by perpetual interactions with the former, be it physical or virtual.

Now, converging the discourse towards the nub of this article, the essence of such non-tangible aspects of the transportscape, especially pertaining to the interaction of the 'public' to art/visuals in transit stations has been rarely studied particularly due to a historic top-down approach to transport architecture planning, which Jamie Hand (2017) argue, has 'rarely engaged the public in a meaningful way'. Nevertheless, depiction of public art in transportation has come up in the neoliberal agenda of 'city branding', a number of discrepancies on public art spending in transport systems have also come to the forefront. By theorizing the transportscape we argue that the process of transport infrastructure developments and decorating the sites are co-constituted with each other. In developing countries like India, the infrastructure development for transportation is carried out through public funding, it has been seen from the vantage point of utility derived from it. Hence, the use of taxpayer's money for building the transport infrastructure is being legitimized by the development discourse. In the developed nations, decorating the transit sites are perceived as aesthetic utility; these are the spaces



produced by the tertiary circulation of capital as (Harvey) argues. The art in the transportscape in the global south is seen as producing such art form is a waste of taxpayers' money. Due to the utilityoriented development discourse, the public sphere often is very critical about the motive behind such public investment. On the outset of such a political economy of development discourse it would be very interesting to unpack the nuances of Public Art in (re)conceptualizing the transportscape with spatial reference to Delhi Metro. Thus, in this article, we try to understand how the spatial agency of artwork is manifested through the interaction between materiality and non-materiality. Hence, we ask how the Public Art in Delhi Metroscape can generate the 'Limited Publics' through the 'Everydayness' of the Commuters who perceived the art works from their social locations. The second motive of this article is to understand how the transportscape is being perceived differently from a gendered lens.

To sum up our discussion, it is discernible that public art is itself embedded in the concept to make the art available for 'the public', rather, it paves the room for the art to become more democratic. To streamline this in context of our research carried out in this article, especially with regard to the role of public art in the city development process, it can be inferred that the self-conviction of the modernization project (the art) has now became a part of the city planning process as DUAC has recommended for the incorporation of urban art in the Master Plan. Thus, art is no longer restricted to the private spaces of museum and art gallery, but is becoming more public (omnipresent) in the 'public' realm (street art, metro art, etc.), as metro stations are transforming themselves as a gallery to reach to the larger public and recreate the canvas of the city. However, experience so far from the surveys have unveiled that the discourse of public art is very limited with its aesthetic value as the audience fails to engage with the situated meaning of public art in the metro railway stations. However, the sight of artworks in underground spaces of metro stations does create a sense of safety among the females, besides ameliorating the beauty of the place and also (re)creating visions of the cityscape.





Abstract 6: Instagram representation of Hijra identities from Bangladesh *Tanvir Alim*

This presentation of line drawings will particularly examine the presence of Hijra identity on Instagram which they use with a very little digital literacy skill. There can be fluidity of different identities in the social media which gives the scope for performativity (McLelland, 2002, p 390) but this observation will find the relation of their produced content in comparison to their lived reality and how modernity has impacted this indigenous gender ambiguity in a digital platform.

In Bangladesh the government has a sovereign view towards queer community as well as freedom of expression (Ahmed, 2019) however there is little tolerance from the government for the hijra community members and a transgender bill is in a draft phase.

Studying a virtual platform is not like traditional ethnography of text or discourse analysis because the profile consists of contents and that is not fixed in the way that a printed text is (McLelland, 2002, p 389).

It is expected that they present them differently in the social media as their second personality where the representation is co-produced through their appearance and perhaps that is a relief for them to escape from the harsh reality that exists in their society. I have chosen Instagram for this presentation as there is no work done on their representation on Instagram. In the end, my images will address the question if technology is unable hijra community in Bangladesh to represent their identity in the platform or restricting them to negotiate the space.



Illustration:: Instagram representation of hijra identities



Session 3: Gender and Smart City

Abstract 7: Co-designing the digital for South Asian cities

Ripin Kalra and Ipshita Basu

Building on empirical evidence of conducting co-collaborative design workshops with urban local authorities and vulnerable communities in Nepal, India and Bangladesh, the authors will highlight how design remains a fundamental and essential tool for democratisation of Smart Cities and digitalisation programmes in building green, resilient and inclusive cities of the future. Vast numbers of vulnerable populations in South Asian cities remain at the digital backfoot, in terms of envisioning digital space, access to it as well as reaping the full benefits that can come from digital and smart infrastructure. Collaborative design methodologies, facilitated by built-environment professionals can play a significant role in raising awareness and empathy amongst both urban local bodies as well as vulnerable populations on the multiple benefits of co-crafted digital environments. Democratisation not only comes from co-collaborative work but also from optimisation of digital technologies for equitable distribution of scarce resources such as education, healthcare and water. With continual push for investment in digital and smart technologies, the authors will highlight how investment into co-design techniques is an efficient way to shape harmonious, equitable and resilient cities of the future.



Abstract 8: Interrogating inclusion in the smart city: the Indian scenario Jeemut Pratim Das

The debate on the idea of the 'developmental state' has widened to include questions of the kind of intervention that such a state invariably undertakes. Located within a techno-bureaucratic neoliberal framework, the modern nation state has come to embody all the trappings of an earlier, nay failed, perspective of the 'problem-solving' policy orientation. The gap between the ideals and the realities of implementation makes it pertinent for the state to relook its policy orientation. What emerges as a result is 'high modernism', when the developmental states are sought to be transplanted across contexts and irrespective of local specificities. The questions of 'embedded autonomy' are no longer the relevant to ask, with the state receding to a traditional role of that of a functionary that works from above.

In the Indian context, a large body of literature has already captured the numerous categorisations of the state's developmental interventions. As concerns the 'newer' policy framework of being a facilitator of governance, the Indian state's Smart Cities mission is again a manifestation of the state seeking to bring about synergy from above. In its bare output, the focus has merely been on improvement through infrastructural growth, thereby conflating, yet again, the twin ideas of growth and development. Questions of inclusiveness and 'coproduction' have been sacrificed for instrumentalist and capitalist gains. As a result of the 'policy paradox', what is witnessed is a return of the 'anti-politics' machine, where the state intervention for poverty alleviation is but an extension of the state apparatus itself.

This paper will be divided into three broad sections. The *first* will trace the discourse of the developmental state, while the *second* will locate the idea within the context of the Indian developmental model. The *third* would use the plank of the Smart City to argue for newer forms of looking at the state, the more it resorts to scientific restructuring of the society.

The concept of the 'developmental state' (henceforth DS) must begin with a caveat: the zero- sum game assumption of the state and market forces, which has become more pronounced with the influx of neoliberal theorists. The departure point occurs when questions of coproduction and human security enter the picture, which attempt to move away from this interlinked image towards a more humane face. The idea of the DS is sought to be located within the framework of the Indian Smart Cities Mission announced in 2015, the results of which has been more or less confined to infrastructural growth with a pronounced economic bent. Besides the usual conflagration of the twin ideas of growth and development, and the constant malpractices that accompany governmental initiatives at multiple levels, the mission has been criticised for consuming vast resources without taking the human element into consideration. Within the mission, renewed emphasis on quality-of-life improvements rather than recreating earlier paradoxes of development must be given due focus. The concepts of synergy and coproduction can be taken into account to frame more societally receptive policies.

The paper is divided into four primary sections. The first offers a glimpse into the various trajectories that a DS can emerge from. The second deals with the inherent policy paradox of development that continues to occupy prime space in contemporary policies despite being questioned nearly seven decades ago. The third section outlines the economic emphasis of the Indian Smart Cities Mission, which tends to take precedence over the non-economic dimensions that continue to exist in a subservient role.



The fourth section details certain factors that constitute development from a more people-centric perspective.

Aimed at countering the dominant neopositivist methodologies in the public decision-making domain of the state, with their overwhelming focus on achieving economic efficiency over and above anything else, the proponents of the postpositivist frameworks (Lasswell, 1973; Fischer, 1998; Jones and McBeth, 2010; Fischer and Gotweiss, 2013) sought to bring to the forefront the inherent limitations of such a vantage point. Lasswell (1970, p. 3) was one of the foremost proponents of conceptualizing the 'policy sciences' in terms of 'problem orientation' procedures. For him, the art of policy-making must be oriented towards it evolving into a problem-solving science. This operationalising of scientific methods towards policy framing though is marked by a major flaw, the relegation of the 'political' role to the background. Turnbull (2018) has critiqued this over-emphasis on scientific methodology as severely contingent and merely idealist, rendering its actual useability slightly questionable. Fischer (1998) has stated that the neopositivist methodologies have neither provided effective solutions, nor a coherent body of usable generalizations. To give both Lasswell and Dewey their due credit though, the cornerstones of the idea of policy as science are still relevant. The scientific study of problems, together with scientific policy-making to overcome them, are still the definitive principles that any administrator must adhere to.

Lasswell's conceptualisation was borrowed from Dewey's vision of the policy sciences. From him, Lasswell adopted the idea of policy being framed by experience. This experience is a result of the disconnect that invariably happens between the stated goals of the policy and its actual or anticipated result. To qualify for the status of a science, this gap must be as closely narrowed as possible, which can be achieved through the experience of scientific principles resulting in the idea of a problem-solving science. The limitations of the overemphasis on the problem-solving approach were to be seen in the move away from it in the latter part of the twentieth century towards a more interpretive analysis of policies themselves, rather than forcing them into predesignated frameworks. The exclusion of the symbolic dimensions of policy framing were not recognised by Dewey. Even though the applicability of his ideas in the notion of the Smart City continue to exist nearly seventy years later, the drawbacks of his rigorous categorisation were evident early on. In India, policies tend to be more populist in nature than matured western democracies. In its quest to achieve greater penetration in the electoral domains, parties in power and the opposition alike announce freebies to the masses irrespective of financial and budgetary constraints on the exchequer. The policies themselves are rooted much more in emotion and perception of largesse rather than a reflection of the success of governance. The failure of any benefits trickling down to them due to the capitalist machinery has conditioned people to view these policies as acts of benevolence rather than images of failure of the techno-bureaucracy that they really are. In Dewey's ideas, there is insufficient attention that has been given to both the setting of and framing of policies. The lack of a political agenda setting also cannot be excused, as the political realities of the policies are entrenched with the societal pressures. The not so new way of looking at policy saw it from a much broader perspective, becoming even an alternative way of looking at things. What did not recede though, and continued to be widely accepted, is the question of understanding politics with the aid of science.

Datta (2015) has, in the global context in general and India in particular, made two characteristics of technology-driven global neoliberalism that have come to be witnessed in the vision of the Smart Cities Mission. Firstly, the wrongful pre-supposition that technology is invariably a driver for economic growth.



And secondly, the usage of technology-based governance solutions is wrongly seen as improving transparency, effectiveness and inclusiveness with minimal negatives. It is in line with the notion of technological solutionism (Morozov, 2014), which reduces societal issues to technological ones to be solved through greater accessible and scalable technology. The aim is the use and applicability of technology, not the consequences or requirements of it. The overriding technological determinism renders claims of inclusivity and participatory governance rather opaque. The avenues for participation in a technocratic bureaucracy is discussed in the succeeding sections.

The idea of the Smart Cities Mission, as stated by the Government of India and the Ministry of Housing and Urban Affairs, is located along certain key parameters that aim to better the quality of life of the citizens through the applicability of smart technology that is *inclusive, sustainable and replicable*. Citizen involvement is envisioned as participatory rather than performative, leading to the emergence of smart citizens in the long run. These core areas of transformation through Information and Communications Technologies (ICTs) involve the following broadly defined goals- placing the community at the core of planning and implementation; optimal utilisation of scarce resources; a robust model of cooperative and competitive federalism; integrating innovative methods to achieve sustainable solutions; technology as a means to an end and not the end goal itself; and multi-sectorial and financial convergence. The idea of development is sought to be made comprehensive, aimed at making governance citizen friendly and cost-effective.

The core areas have to abide by three overarching principles- liveability, economic-ability and sustainability. Since cities mean various things to various people, the aspirations for a better life also involves the realisations of different sets of goals across categories. As per the Census 2011 data, about 31% of people live in urban areas, but their share in the GDP amounts to 63%, showing widespread disparity in regional income distribution. By 2030, these are projected to rise to 40% and 75% respectively (Deloitte, 2017), requiring overhaul of the social, political and economic spectrums. The necessitation of newer forms of technology has led to innovative ideas of Public-Private Participation (PPP), Urban Local Bodies (ULBs), Special Purpose Vehicles (SPVS) and Integrated Command and Control Centres (ICCCs) being amalgamated under a common umbrella of the Smart City.

The idea of the city being made smart is often seen as the culminating point of urban planning and management, intended to make better use of scarce resources for the wider public good through the deployment of high technologies (Aurigi, 2016, p. 9). With the advancement in the use of technology and the internet, policies are supposedly aimed to make the quality of life of the residents much better. Massive infrastructural projects are initiated with the objective of increasing inclusive policies, mostly pertaining to housing the population through a number of state-led technocratic interventions. A smart city is a culmination of efficiency-maximising interconnected potential of people, data and devices. The reach of this mission, though now encompassing other policies of the government within it- the Jawaharlal Nehru National Urban Renewable Mission, Swacch Bharat Abhiyan, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) among others, has always been to provide citizen-friendly and sustainable infrastructure. The policy itself is not a new manifestation but rather a repackaged formulation of older, and arguably much more broader frameworks. What has not changed however, is the imposed synergy that is sought to be achieved between the Union and the state governments. This top-down flow results in a gradual stiffening of the society rather than the malleability that the government visions. Questions of smart urban management continue to preside



over the decision-making of the authorities, despite repeated instances of scientific rationalism not working out as planned, which has already been discussed in the previous pages.

The use of technology is seldom a neutral affair. What is of note is that despite the effects being predominantly technocratic, the goals envisioned draw from existing inclusive documents that have well-laid out mechanisms of a more robust sense of development. The idea of the city being made smart was seen as a watershed moment in the achievement of the United Nations Conference on Housing and Sustainable Urban Development, known as the Habitat III Resolution 66/207 of 2016, held in Quito, Ecuador. This saw the push towards what was termed as 'The New Urban Agenda' through sustainable urbanisation. It was a follow-up to the earlier Millennium Development Goals (MDGs) of 2000 through the creation of more focused Sustainable Development Goals (SDGs), to be implemented from 2016 onwards. New avenues were brought in to the picture, where the idea was to implement sustainable development practices in villages, towns and cities. In particular, Goal number 11 of the SDGs to "make cities and human settlements inclusive, safe, resilient, and sustainable" (New Urban Agenda, n.d.). It was seen as an ideal successor to both Habitat I at Canada in 1976 and Habitat II at Turkey in 1996, both of which are credited for raising awareness around the question of rapid urbanisation in the twenty first century.

Among the myriad of Policy Papers and Issue Briefs that were formulated at the gathering, the focus was on themes such as- The Right to the City and Cities for All; Socio-cultural Urban Framework; National Urban Policies; Urban Spatial and Economic Strategies and the like, with the overarching emphasis on deconstructing the urban being amply evident. While accepting of the fact that urbanisation has indeed widened the inequalities among the people, the Habitat III envisaged a two-pronged approach to tackle this problem and put the cities on to a path of inclusive growth. *Firstly*, political commitment to inclusive urban development that is thwarted by stakeholders who thrive on maintaining non-inclusive status quo. In the case of India, the neoliberal state and the policy framers within it have continued to espouse already refuted claims of a problem-solving state, that has already been discussed in the previous pages. *Secondly*, a wide-ranging set of mechanisms to ensure participatory developmental planning must be strengthened.

Nowhere is the move away from a statist perspective more evident than in the context of bringing the factors of the society back into the debate, where the focus lies more on ideas of a larger idea of development rather than mere economic growth. This model is seen as the most 'effective' way of achieving the target of a welfarist notion of development in the global South. For Evans, the best form of a DS is one that has embedded autonomy in terms of its relationship with the society. However, the degree of embeddedness and autonomy is critical for any DS to formulate successful collective action measures in terms of policies of general welfare. He sees the state bureaucracy in a Weberian sense, though not totally insulated from the society. The notion of embeddedness ensures that the state is in a better position to seek information and feedback from the society, together with achieving proper dissemination of that information and implementing policies of decentralization. On the other hand, autonomy ensures that it is relatively free of the societal pressures and changes. This aspect is also seen in Leftwich (1995), who maintains that the state must be relatively autonomous from the clamor of special interests in the society, in order to attain the broadest definition of national interest possible. Thus, the notion of 'embedded autonomy' is about the DS managing to strike a critical balance between these two apparently divergent sets of factors, to help it reach its goals of development.



The state-society complementarity is seen in greater light in the context of the debates on 'synergy' and 'coproduction', in the respective works by Evans (1996), Ostrom (1996) and Heller (1996), among others. In a simpler sense, synergy and coproduction is a result of the factors of complementarity and embeddedness. It connotes a process of an organic cooperation between the public/ state and the private sectors, wherein they are both engaged in a mutually beneficial and efficient production of goods and services towards an increased productivity, a level that none of them are capable of reaching on their own.

This perspective finds an echo in Migdal (2004) and Gupta (1995) as well. Migdal perceives these relationships in terms of disaggregated face-to-face interactions, leading to the constitution of a "state-in-society" vantage point, where the idea of what a DS means varies from each point. On his part, Gupta (1995) identifies the collapse of a distinction between the public and the private, the lines appearing as "blurred boundaries" instead.

The shift towards an enhanced role of the civil society is one of ensuring greater participation in the development process, an aspect visible in the critiques of neo-liberalism (and globalization too) from which emerged the debates on synergy and coproduction. Taking the human rights perspective, Evans (2009) states

A 21st century developmental state must be a capability enhancing state. Expanding the capabilities of the citizenry is not just a welfare goal. It is the inescapable foundation of sustained growth in overall GDP.

While it is easy to disseminate the intricacies of policy making along lines of claimed inclusiveness, finding inspiration from policies that have been designed from the bottom-up to be more citizen friendly rather than nutmegged in is an arduous task. In this light, the Yokohama Urban Design Sketchbook encapsulates the motif of 'translating a community-led vision into practice', by making the citizens active shareholders in the governance process. The urban design initiatives, by being made more inclusive, are sought to generate greater support among the people. Through the use of cross-sectional sketches, comprising of animate and inanimate illustrations accompanied by verbal explanations and maps are designed to appeal to a wider audience cutting across age groups. Through focused workshops that involve policy makers, academics, common citizens and practitioners, in line with what the Smart Cities Mission also seeks to deploy, the Sketchbook can act as a tool for making governance both inclusive and accessible.



Abstract 9: Building the future on safe spaces, transfeminist, and decolonial urbanism as the foundation of smart cities.

Bianca Bellucci, Leda Bartolucci

Introduction

In recent years, the concept of "smart city" has been increasingly discussed by academia, international organisations and practitioners. Anchored to the promise of a more sustainable, efficient and accessible city, the "smart city" is the contemporary and ever-changing notion of a city that has optimised its quality of life through modern technologies in a variety of procedures, including but not limited to urban planning, infrastructure design, and the digitalization of public services. The task of defining the concept of smart city appears today to be appealing to places of power. Besides public institutions, definitions are eagerly proposed by entities which can be largely understood as multinational companies -- which, of course, also happen to offer a service or a product needed to fulfill such definition. These are companies mostly dealing with technology or data, respectively the bone and the currency within the vision of "smart".

Although this concept may be primarily linked with the idea of technology improving the quality of life, together with keywords such as innovation and efficiency, in recent years, most likely seconding the general public's considerable shift of interest, a certain idea of sustainability appears to have been integrated into the discourse. Sustainability as a key term for smart cities naturally seems to haul more concepts from the same pool of key terms which are usually aimed to attract young people. The two main secondary terms are inclusivity and diversity, often mentioned as standard features but factually bearers of a significant layer of politics.

In this paper, we will address how urban governance seems to abundantly draw inspiration from an aesthetic understanding of smart city that is built on private interests on public spaces, systematically perpetuating the androcentric white perspective that is key to a marketing take on urban life; where marginalized communities are further excluded by planning strategies and the privileged portion of the population tends to have their bias confirmed. We will argue that a truly smart city should prioritise the concept of intersectional safe spaces as its foundation. We will explore the overuse of the term "safe space" as a nebulous metaphor and then remodel a porous definition of "safeness" by using the concept of "feminist city" outlined by Leslie Kern as a paradigm for what a city should be to overcome the malewhite design that distinguishes it. We will use gender as a key to open the door of safeness and investigate which elements, along with gender, need to be involved to make a place safe. Finally, we will use the theoretical apparatus resulting from our work on these issues as a paradigm to create a reference model of what a space should look like in order to be considered both safe and smart by its inhabitants. In the last part of our work, we will apply this model to the city of Turin, Italy. We will present examples of design projects and institutional communication which are allegedly pursuing the transition to a smart city, and we will then advocate for a radical intervention on the factors that create authentical safe spaces as vital milestones to succeed in creating smart cities which are democratically beneficial to their citizens, functioning beyond their communication strategy for institutions.

Theoretical Framework

In recent years, the concepts of "smart city", "safe space", and "feminist city" have gained a certain popularity in academia, following their increasing use in the political and social spheres. These three concepts, although much debated, are still lacking a systematic and coherent definition. The term "smart city" has been defined in various ways by different scholars and practitioners. According to



Giffinger et al. (2007), Smart City is "a city that uses information and communication technologies (ICT) to enhance its livability, workability, and sustainability". Similarly, Caragliu et al. (2011) define Smart City as "an urban area that uses different types of electronic data collection sensors to supply information used to manage assets and resources efficiently".

In general, a smart city offers its inhabitants a high quality of life with minimal resource consumption through the intelligent integration of information and communication systems. Similarly, the concept of "safe space" has become increasingly popular in recent years, particularly in discussions about diversity, equity, and inclusion. A safe space is typically defined as a physical or digital environment where individuals feel comfortable expressing themselves without fear of judgement or discrimination. The concept has been often associated with marginalised communities, such as LGBTQI+ individuals, people of colour, and individuals with disabilities, who may face systemic discrimination and hostility in broader society. In general, safe spaces have been defined as a place where not only the subjectivity is not attacked but where they feel welcomed and free to express their identity.

The conversation around the topic of safe spaces has recently produced works of great interest, which move around the concept of safe space in different ways. Scientific literature from Queer studies, specifically the one concerning the LGBTQI+ community, can provide excellent insights into the concept by widening the issues of gender identity to gender expression and attraction. While in other contexts the term is used to define a metaphorical space of safeness in which people can express themselves, some researchers such as Melanie Bertrand and Elizabeth Saewyc (2017) and Allan G. Johnson (2014) have tried to offer a theoretical framework for creating effective safe spaces for the LGBTQI+ community, emphasising the importance of relationships and networks in creating change. In this paper, we will take our cue from gueer academic literature and attempt to redefine the concept of safe space by marking its location-specific features. We will therefore ask ourselves how an urban space must be in order to be considered safe by those who inhabit it. We will also take a cue to Johnson's argument that safe spaces are also social networks that support individuals and promote social justice, and we will remodel this definition in an urban context. Secondly, we will suggest how the concept of "smart city" and "safe space" are (and should be more) interconnected. Drawing from preexisting literature on the subject, we will formulate two exhaustive definitions of the latter two concepts, and we will then emphasise which aspects are naturally interdependent when dealing with urbanism.

To do so, we will use gender as a lens to show that just as for a safe space, on an urban level a smart space can only be so if it simultaneously takes into account all people, including the generally marginalised community. We will take the definition of "feminist city" proposed by Leslie Kern (2019) and implement it through other definitions from feminist geography and feminist urbanism literature. We will then argue that the resulting intersectional definition of a feminist city can be used as a keystone to interconnect "smart" and "safe" places in the city, and therefore to assess which terms must be met for a place to be considered *both* smart and safe. The main research question we will try to answer in this paper is therefore: (i) what does a city have to be like to be a *truly* smart city?

In order to answer this question, we felt it necessary to first create a theoretical framework of reference, defining more clearly what we mean in our work by the terms 'safe space' and 'smart city'. We therefore started by attempting to answer two further research questions, which were preparatory to outlining the foundations of this framework: (ii) what is a smart city, and how close to an effective definition is the media usage of this term?; (iii) since, as we have shown, to be effectively smart for everyone a space must be safe, what is a safe space that is not only theoretical, but also a real urban



space within the city?

Methodology

To conduct our research, we employed a mixed-methods approach that combined both quantitative and qualitative data collection and analysis methods. We began by conducting a literature review of relevant academic publications and policy documents on the concept of smart cities. At the outset, we deepened the concept of "feminist city" (Kern, 2019) by addressing part of the academic literature about feminist geography and feminist urbanism; then, we implemented all the issues that, in addition to gender, need to be taken into account in order for a space within a city to be defined as truly intersectional and transfeminist. This procedure was backed by a systematic and comparative analysis of the scientific literature on the topic of "safe space".

After the theoretical analysis, we thought it appropriate to test the model obtained directly on the field. We used the city of Turin, Italy, as a case study, identifying it as an ideal setting for our study, Turin being a metropolis that has been steadily allocating resources on city-imagining initiatives towards the transformation into a smart city - and having, at the same time, a complex social and political history, being home to a diverse range of communities of diverse needs and experiences of the urban space. We conducted a series of semi-structured interviews with urban planners, city officials, and community activists, to gather insights into their perspectives on the intersection of smart cities and safe spaces. Additionally, we conducted a survey of residents in the Barriera di Milano district of Turin, in order to gather data on their perceptions of safety and their use of a variety of urban spaces. We also conducted a series of site visits to several urban spaces in Turin, including neighborhood centres, women's shelters, and cultural clubs, to gather first-hand observations of how these spaces are designed and used by residents.

Alongside the interviews, residents survey, and site visits, during 2022 and 2023 we also conducted a survey of the events sponsored by the Turin city council and by private companies and associations. The events were presented and advertised as regeneration and/or innovation projects with the intent of turning Turin into a fully-fledged smart city. Applying the conceptual apparatus developed as a result of our work, we compiled an assessment on whether these projects properly met the conjuncted criteria of smart and safe, and whether they ultimately achieved the results promoted in the media and communicated to the population. To obtain better results, in this case we narrowed our field of study, conducting our analysis specifically on four Turin projects: Torino Stratosferica, Turin Cities Forum 2023, Future Urban Trends and Torino Smart City.

The analysis of the communication carried out around these very same projects was key during the process. We focused on the implicit meaning of "smart city" as used within articles, social media content, newsletters and event promotion. We found how the expression is often emptied of its necessary intersectional meaning, coming to be an indication of technological improvement of the city with no mention of the implicit restricted recipients of this benefit. Furthermore, it is important to emphasise how the majority of the effort seemed to be on a communication and promotion stage, first by prompting a need for the population and then offering a pre-conceived solution. We therefore analysed these needs and found that, at best, they represent a small part of the demographic, often white, male, middle class, and able-bodied; the needs of other subjectivities as emerging from the mentioned solutions are almost always not taken into account at all. Finally, we analysed the data collected through our literature review, interviews, survey, and site visits using both quantitative and qualitative methods to try to answer our research question: how should a city be to be both smart and safe for everyone?



Findings

First, we found that the concept of a "smart city" is often used as a way to brand a city as modern and innovative, without necessarily addressing deeper issues of social inequality. The emphasis is often on technology and efficiency, rather than inclusiveness and diversity. In particular, as far as the city of Turin is concerned, we have analysed how the expression "smart city" is used by the media and by companies and organisations working in the field of urban regeneration and urban design. From this analysis we concluded that despite its radically innovative potential, the expression tends to be more of a catchphrase useful during the communication stage, while its principles are not applied to the projects it buys for.

As we explored the idea of a "smart city" in relation to gender and intersectionality, we kept in mind the upgraded concept of "feminist city" we created to assess that the concept of "smart city" is currently used in Turin to define a city designed as a product of a male-dominated society and which the needs and experiences of women, as well as other marginalised groups, have been largely ignored. In our case study of Turin, the parallel analysis of shortcomings of project such as Future Urban Trends, Turin Cities Forum, and the city imagining events by Torino Stratosferica and their mediatic use of the concept of "smart city" created a "boomerang effect" that has led us to argue the need to reconsider the media's use of the "smart city" concept, so that *smart* can once again describe a urban design that is effective, helpful and simple for all citizens. The research conducted has widely highlighted how much these kinds of projects are short-sighted due to the gender and race inequalities they eventually create and feed.

Moreover, in our fieldwork we found that there are many spaces that can be already legitimately considered "safe spaces" for particular groups of people. These include District Centres, self-directed social and cultural hubs, and grassroot urban regeneration projects that were led and carried out by the inhabitants directly, often with the involvement of local facilitators and community organisers. These spaces, which match the definition of safeness as developed in our theoretical work, while not presenting themselves in the media as "smart" often respond more effectively and successfully to the definition of "smart city" we have outlined through our literature review. By examining the aforementioned spaces and identifying the elements that qualify them as safe, we tried to develop a better understanding of how to create safe spaces. Then, we employed these features as an expanded foundation of the concept of an intersectional and radically inclusive "feminist city" as further developed during the research. With this paradigm, we can now provide successful evidence that it is a necessary condition for a city to be truly "smart". In conclusion, we argue that, in order to achieve the vision of a fully functional "smart city", the concept of "safe space" can and should be used as a key element, because securing truly intersectional and inclusive spaces would enable the access to all city renovation benefits to all members of society, regardless of gender, race, class, and all other factors.