

Potential limitations in the present study include the low number of sites in the study. The study was conducted in situ, and is based on observational data with low scientific control, as opposed to experimental data. Taken together, this means that the results cannot be generalized, and can only be taken as indicative.

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ID 1455 | ASSESSING THE PUBLICNESS OF ‘PLANNED’ PUBLIC OPEN SPACES PROGRESSIVELY: THE AU MODEL OF PUBLICNESS

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ABSTRACT: Over the last three decades, public open space literature has been critical of the increasing involvement of private sector in contemporary practices of public open space planning and development. Critiques on private actors’ involvement in public open space development are largely based on the notion of a ‘highly public’ public domain, argued to have existed in the public open spaces such as parks and squares in pre-WW II cities of Western Europe due to strong state presence in their development. However, as counter-critiques argue, the involvement of private actors in contemporary practices of public open space development is inevitable and could also be beneficial, particularly in emerging Asian economies whose cities are majorly built by private initiatives. And, as such counter-critiques argue, a reconceptualization of publicness as a phenomenon independent of sole state participation, and policies for public open space development based on novel combinations of state, civil society, and private sector participation are strongly warranted. Along these lines, this paper presents a model and method for assessing publicness of ‘planned’ public open spaces empirically – termed as AU model. The proposed

AU model is progressive, as a public open space is assessed in various stages of its development beginning from its planning - as part of an urban space - to its design, development, and management. Here, publicness is conceptualized based on two attributes – access and use, considered to be its core ideals and that the freedom of which makes a space public, and thereby the name AU. To assess the attributes of access and use, AU model is broadly conceived to constitute of two sub-models: quantitative publicness and qualitative publicness. While sub-model of quantitative publicness is conceptualized to measure the degree to which ‘planned’ public open spaces are developed into publicly accessible spaces, sub-model of qualitative publicness is conceptualized to measure the degree to which publicly accessible spaces - based on three dimensions viz., physical configuration, control, and civility - encourage use by the larger public of the city. Besides, sub-model of qualitative publicness is explicated furthermore into an operational model in which the above-mentioned three dimensions are measured and graphically represented through 14 indicators. Compared to existing pragmatic publicness assessment models, the proposed AU model is significant in providing a progressive, systematic, and comprehensive assessment of public open spaces and related policies. Primarily, it can be used to comparatively assess publicness of public open spaces that emerged under different planning policies, forms of provision, and management regimes. The paper is in five parts. The first part discusses the contemporary practices of public open space development and the associated debates on private sector participation. The second part discusses and then conceptualizes the nature of ‘planned’ public open spaces and their process of development. Third part conceptualizes publicness and explains the proposed AU model of publicness. Fourth part shows an application of the model to the case of parks in the city of Chennai, India. The final part discusses the model’s applications in urban design research and practice and future research directions.

KEYWORDS: Publicness, Public Open Space, Assessment Tool, Emerging Asian Cities, Indian Cities

1 INTRODUCTION

Public open spaces such as parks, plazas and squares are widely accepted as important for creating a safe, liveable, and sustainable urban environment (Thompson, 2002; Villanueva et al., 2015; Woolley, 2003). Conventionally, public open space development is the subject matter of the state. Recently, this scenario is changing in several cities around the world which are undergoing neoliberal economic transition with associated changes in spatial development and governance (Carmona & Wunderlich, 2013). In these cities, the state is slowly reclining due to shrinking municipal funds and capacity, and private sector is playing an increasingly greater role in public open space development (Madanipour, 2014). Such forms of public space development with private sector involvement have come under the scrutiny of several researchers over the last three to four decades, evolving into ‘the end of public space’ debate (Langstraat & Van Melik, 2013; Madden, 2010; Paddison & Sharp, 2007; Sennett, 1992; Sorkin, 1992; Tyndall, 2010).

While substantial efforts have been taken to understand the nature and implications of private sector participation in public open space development in the American, European, East, and South East Asian contexts (Dimmer, 2013), little effort has been taken with respect to the South Asian context. Such context sensitive studies are crucial for the future of public spaces as they can aid in elucidating how local histories, planning cultures, actor networks and spatial conditions have shaped the developmental process of public open spaces, and how such process have influenced the quality of such spaces under local geographical and socio-economic contexts (Dimmer, 2013). Along these lines, the present research aims to examine the developmental process of public open spaces in the context of Indian cities, to understand the nature of private sector participation, and develop a model to assess the extent to which private sector participation in local development processes have produced successful public open spaces in Indian cities.

The paper is organized in five parts. Following this introduction, the next section discusses the developmental process of public open spaces in Indian cities along with the ‘nature of’ and ‘debates on’ the emerging private sector participation. In the third section, a pragmatic model called the AU model is conceptualized and proposed to assess the publicness of public open spaces in the various stages of their development to understand the implications of private sector participation in the context of Indian cities. The following part shows an operationalization of the AU model with respect to public open space development in Chennai, India. And the final part elucidates contextual specificities in the nature of private sector participation in public open space development in Indian cities, and discusses the applications of AU model in urban design research and practice.

2 PUBLIC OPEN SPACES IN INDIAN CITIES – DEVELOPMENTAL PROCESS AND NATURE OF PRIVATE SECTOR PARTICIPATION

Public open spaces that are planned in Indian cities usually take the form of parks or playgrounds which occupy an important place in the public culture of these cities. In these megacities, which are fragmented by vehicle crowded streets and burgeoning shopping malls, parks offer a unique opportunity to socialize in a non-commercial public setting (Merchant, 2013) in addition to the facilitation of physical activity and engagement with nature (Choudhury, 2012). Parks also serve as a venue for several citizen-driven communal activities such as public speaking and visual arts (Hindu, 2016; TNN, 2016), which can hardly thrive in these cities otherwise. Park, as a spatial typology, was introduced in Indian cities, by the British colonial powers (Kaviraj, 1997). They established few parks in all major cities, many of which exist till date as important city level public spaces (Kalpana, Muthiah, & Schiffer, 2003). Apart from these, most other neighbourhood parks seen today have been developed in the postcolonial era (since 1947) due to the modernist town planning principles adopted from the West.

Typically, land for the development of parks is generated as part of the planning process through two approaches. In the first approach, land parcels are reserved in different parts of the city during the preparation of master plan for the purpose of public open space development. For example, the 1991 development plan of Mumbai has reserved around 2000 open spaces under the different categories of Gardens, Parks, Playgrounds and Recreational Grounds (Das, 2011). In the second approach, in the case of large planned spatial developments, a portion of the land in the development is reserved as public open space. For example, in the city of Chennai, India, any planned residential development with a land extent greater than 10,000 square metres, must reserve 10% of the land extent for the development of public open space. The land parcels reserved through both these approaches are subsequently designed, developed, maintained, and regulated by the respective local municipal authorities. Overall the development of these 'public' open spaces is the responsibility of the state, except for the designation of land parcel which involves the private sector who owns the reserved land or who is responsible for the large planned spatial development.

However, over the last few decades, especially after the adoption of neoliberal economic policies in India since 1990, this process of public open space development is changing. The private sector is increasingly playing a decisive role in shaping these open spaces, broadly due to two reasons. Firstly, due to budget deficits, the local municipal authorities are encouraging the participation of private sector in the development and management of public open spaces in most major cities such as Delhi, Mumbai, Bengaluru and Chennai through 'park adoption' or 'care taker' policies (Sripad, 2014; TNN, 2014).

Secondly, the broader pattern of urban development is changing to one driven by the private sector resulting in super block office complexes, gated communities and shopping malls (Banerjee-Guha, 2009). In these emerging fortified developments, the private sector plays a dominant role in the provision of basic services and security either formally or informally, which also extends to the public open spaces designated as part of these developments. In both these cases, the private sector is involved in the developmental process of public open spaces in varying degrees extending from design and development to undertaking management also. What is happening is a kind of gradual 'privatization of public open space' as coined by Loukaitou-Sideris (1993) who describes 'privatization of public open space' as the passing over of its production, management, and control to the private sector.

Review of media articles and research reports suggests diverse implications of such forms of increasing private sector participation in the development of public open spaces. On a positive note, private sector participation has led to the complete development and management of notable public open spaces in Mumbai which would have remained vacant lands otherwise, but are now freely accessible and usable open

spaces for the benefit of the larger public of the city (Deshpande, 2016). Likewise, private sector participation has contributed to the upliftment of the quality of public open spaces in the city of Bengaluru by providing financial support for the installation of special armature for play and physical activity (Hindu, 2012).

On the contrary, private sector participation is also seen to challenge the 'publicness' of public open spaces in Indian cities. For instance, in the case of public open spaces under 'care taker policy' in Mumbai,

several of them have been found to be restrictive due to limited opening hours, ticketed entry, and several other constraints which limit the use of open spaces (Rishi Aggarwal, 2015). Also, in Mumbai, several open spaces that fall under 'care taker policy' have been developed into clubs for exclusive private use with no public access (Manasi Phadke 2014). Likewise, several public open spaces developed as part of fortified developments in the cities of Bengaluru and Chennai are under the exclusive use of residents within the fortified developments with no access to larger public of the city (Patel, 2016; Raqshan, 2016).

The above-mentioned evidences of the diverse implications of private sector participation over the 'publicness' of public open spaces in the context of Indian cities, portray a scenario quite different from the popular 'end of public space' notion developed in the West. Review of Indian scenario shows both potentials and challenges of private sector participation in public open space development. Besides, it is also important to acknowledge the fact that much of the Indian cities or broadly the emerging Asian cities are built by the private sector either formally or informally (Hogan, Bunnell, Pow, Permanasari, & Morshidi, 2012) and therefore their participation in public open space development which is largely a derivative of the larger urban development dynamics is inevitable.

Therefore, the present research aims to approach the phenomenon of private sector participation in public open space development in the context of Indian cities from a unprejudiced position; so as to systematically understand the degree of its diverse implications and to identify opportunities to augment the positive implications; along the lines of De Magalhães (2010) who points out that "regardless of how one might position oneself in the debate, there is certainly an urgent need to better explore conceptually and empirically the risks and also the opportunities associated with these new public space governance practices". As a first step in doing so, a publicness assessment model is developed which is based on the process of public open space development and the nature of private sector participation in the context of Indian cities, and is discussed in detail in the following section.

3 ANALYSING PUBLICNESS OF PUBLIC OPEN SPACES IN INDIAN CITIES – CONCEPTUALIZING THE AU MODEL

Recent advancement in public space research has been the development of pragmatic or empirical tools to analyse the effects of privatization on publicness of public spaces. At least three models have been conceptualized so far: the 'tri-axial' model (Németh & Schmidt, 2011); the 'star' model (George Varna & Tiesdell, 2010); and the 'OMAI' model (Langstraat & Van Melik, 2013). All are based on a multi-dimensional interpretation of what 'publicness' necessitates in a public space; and provide a graphical representation of the same (Langstraat & Van Melik, 2013). But, all three models lack in the following ways to aid in assessing the effects of private sector participation in the context of Indian cities: publicness is conceptualized as the quality of publicly accessible space with a lack of focus on the availability of access which is severely challenged in the Indian scenario; and public open space development is conceptualized as a product of ownership and management and not as an ongoing process in which different actors are involved in the different phases of its development as in the case of Indian cities. This necessitates a broader conceptualization of publicness that moves beyond the notion of publicness: as merely a quality of publicly accessible space; and as an 'end-product' of specific forms of ownership or management of public space.

Overall, publicness is conceptualized moving beyond the common political and civic conceptions "as a state of thrown togetherness which consists of multiple actors, groups, and identities" as defined by Qian (2014). Such a conceptualization is based on the ideas of (a) 'public' referring to the larger public of the city (Iveson, 1998); (b) 'liberal model of public sphere' put-forth by Habermas (1989) referring to the political conception of 'openness and access to everyone'; and (c) 'public realm' suggested by (Sennett, 1992) as "not only a region of social life located apart from the realm of family and close friends, but also . . . [the] realm of acquaintances and strangers". Besides, the ideals of 'accessibility, inclusion and tolerance of difference' posited by Young (1986) in the 'unoppressive city' and the conception of public space as 'one which is not only accessible, but also usable by all' put forth by Arendt (1958) in *The Human Condition* – also shape the conceptualization of publicness in the present research.

Based on these notions of 'public', 'public sphere' and 'public realm', 'public open space' is understood as a space which is open and accessible to all and in which there is room for interaction and casual

acquaintances between strangers. And the publicness of a public space is conceptualized as put forth by De Magalhães and Trigo (2016) in terms of 'the access' it offers to the larger public and 'freedom' it offers with respect to their 'use of' and 'behaviour within' the space. Or quite simply, publicness of a public open space is understood as the freedom available to the larger public of the city to 'access' and 'use' the space. However, among the two attributes, 'access' and 'use' - as posited by Madanipour (2014), 'right of access' is considered fundamental.

A common criticism on public space research is that "often questions of spatiality are underemphasised by public sphere theorists while questions of publicity are underemphasized by public space scholars (Madden, 2010)". Moreover as Carmona and Wunderlich (2013) caution, "both approaches are equally troubling: the first advancing a space-less perspective and the second a place-less vision for a phenomena that will always be rooted in both place and space". To address this issue, a layered approach is adopted here wherein the fundamental ideals of publicness of public space is derived based on the theoretical concepts of public sphere and public realm, which is then translated to a spatial vision comprising of desired physical and organization qualities of public space.

To translate the proposed attributes of publicness, i.e., the freedom to 'access' and 'use' spatially and to overcome the limitations of the existing pragmatic assessment models, a progressive model is proposed here in which a public open space is assessed in various stages of its development beginning from its planning – as part of an urban space – to its design, development, and management. The proposed model is termed AU, denoting the fundamental attributes of publicness, i.e., 'access' and 'use', and to assess the implications of the developmental process of public open spaces over the same, the 'spatial' idea of publicness is differentiated into two viz., quantitative and qualitative publicness. Quantitative publicness refers to the degree to which 'planned' public open spaces are developed into publicly accessible spaces, and qualitative publicness refers to the degree to which publicly accessible spaces encourage use by the larger public of the city through their physical and regulatory qualities.

The proposed AU model is thus conceptualized as two sub-models: quantitative publicness and qualitative publicness elucidated in detail in the subsequent sections. Differentiating publicness in such a manner, not only offers the advantage of assessing the extent to which the basic right of access has been forbidden in public spaces, but also provides a deeper understanding of how publicness is affected in the various stages of the developmental process of public open spaces. It should also be noted here that this model conceptualizes publicness as constructed in the different stages of the developmental and operational phases of the public open spaces through the different actions of the multiple stakeholders and does not encapsulate the publicness as constructed by the perceptions of the users of the space.

3.1. CONCEPTUALIZING QUANTITATIVE PUBLICNESS

The quantitative model is developed to assess all spaces that are designated to be public open spaces in an urban area based on local planning regulations. Quantitative publicness is understood here as the degree to which all public open spaces planned in an urban area are developed into publicly accessible open spaces that are usable by the larger public of the city. Figure 1 shows the graphical model of quantitative publicness which is developed as a multilevel donut pie chart with concentric rings showing the different phases of public open space provision and management, i.e., designation, design and development, and use.

Centre of the graphical model represents the total extent of public open space that is planned in an urban area according to local planning regulations. In the case of Chennai city in India, 10% of large planned developments (plot extent exceeding 10,000 square metres) need to be designated as public open space as mentioned earlier. In the case of corporate buildings in the American cities like New York, San Francisco, and Los Angeles, provision of different types of public space entails additional floor space (Loukaitou-Sideris & Banerjee, 1993; Németh & Schmidt, 2011). Similar planning regulations aimed at provision of public open space is also evident in other cities like Hong Kong (Cuthbert & McKinnell, 1997). It is the total extent of these public open spaces that are to be provided as per the local planning regulations in an urban area – a district or planning region - that forms the centre of the graphical model of quantitative publicness.

Subsequent concentric rings in the graphical model of quantitative publicness represent the degree to which the planned public open spaces are public in terms of designation, development and use. The first concentric ring outside the centre of the graphical model represents the extent of the planned public open spaces that are designated in reality for the same purpose. For example, in the case of Indian cities, there are incidences in which the public open spaces are proposed in the planning schemes that are not designated.

The second concentric ring outside the centre of the graphical model represents the extent of the total planned public space that is both designated and developed as public open space. Here the development of the designated space into a public space is considered as publicness. This conception is quite similar to the notion of viewing the development of 130 new or refurbished public spaces in London as an expansion of public domain by Carmona and Wunderlich (2013). The possibilities for the designated public spaces to remain undeveloped is quite high in Indian cities due to the lack of municipal funds for the same. Such issues could also be expected in similar cities of emerging economies elsewhere. Hence, the development of the designated space into public space is also an important milestone in achieving publicness.

The third concentric ring outside the centre of the graphical model represents the extent of the total planned public space that is designated, developed and usable as public space, i.e., open to the access and use of the larger public of the city. Here, the designation and development of the planned public open space into a publicly accessible and usable open space is considered as publicness or precisely quantitative publicness. Empirically it is the extent of planned public open space that falls under the category 'Designated, Developed, and Usable by Public', which signifies the quantitative publicness of planned public open spaces in an urban area. All the remaining categories represented in the third concentric ring connote the challenges faced in the realization of 'public' public open spaces even though they are planned so, such as unavailability of funds for public space development, 'closing off' of public space due to exclusive private use and so on. To summarize, the proposed quantitative model of publicness captures graphically and assesses the degree to which public open spaces that are planned as per the applicable planning regulations are developed into 'publicly accessible and usable' public spaces in an urban area besides showing the different ways in which quantitative loss of publicness has occurred.

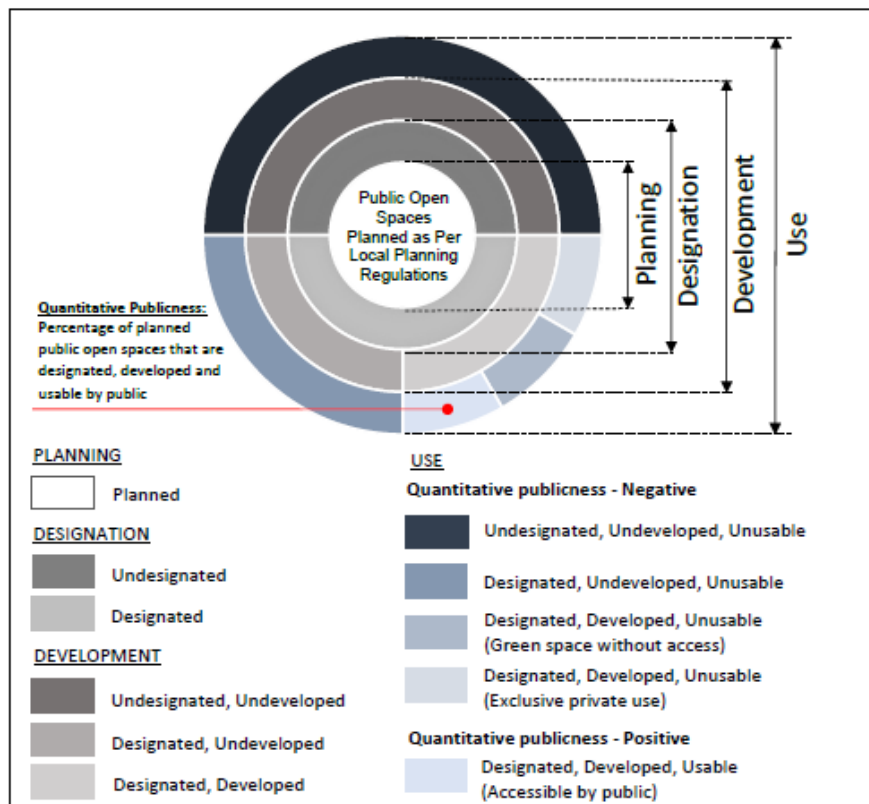


Figure 1: AU Model – Sub-model of Quantitative Publicness

3.2 CONCEPTUALIZING QUALITATIVE PUBLICNESS

The qualitative model of publicness is developed to conceptualize the quality of a 'publicly accessible and usable' open space, i.e., what is denoted as 'quantitatively public' in the sub-model of quantitative publicness. Even though public open spaces that are planned in an urban area are developed into 'publicly accessible and usable open spaces', they cannot be considered to be ideally public, as quite often a number of design and management techniques are employed in such spaces to discourage certain types of users, users and forms of behaviour in the name of sanitizing or securitizing such spaces thereby reducing their publicness (Németh & Schmidt, 2011). In such 'publicly accessible' open spaces, although access, i.e., the fundamental attribute of publicness is available, the other important attribute, i.e., freedom of use is challenged. Thus, 'freedom of use' or more particularly, the freedom the space offers with respect to their 'use of' and 'behaviour within' (De Magalhães & Trigo, 2016) that forms the focus of the sub-model of qualitative publicness. Specifically, the concern here is on how the developmental process of public open space has affected the qualitative publicness.

Qualitative publicness is thus conceptualized through three dimensions viz., physical configuration, control, and civility, which are further detailed out into 14 indicators, graphically represented as a pie diagram as shown in Figure 2. While the dimension of physical configuration and its set of indicators denote the design and physical qualities of the public open space, the other two dimensions and their set of indicators, i.e., control and civility denote the managerial aspects of the space. Conceptualization of the three dimensions is greatly inspired by the conceptualization of the Star Model by Georgiana Varna (2014). Together all three dimensions and their set of indicators assess the extent to which the design and managerial aspects of public open space encourage and do not discourage the larger public of the city to use the space.

Regarding the graphical model, each segment represents one indicator of qualitative publicness, which is assessed on a scale from one to five, represented through the five divisions of the segment. The colour of the segment denotes the dimension to which the indicator belongs to. The innermost division of the segment represents the value one which represents 'low publicness' and gradually increases to five in the outermost division which represents 'high publicness'. The higher the number of divisions is filled in each segment, the higher the qualitative publicness of a publicly accessible space. Representation of the model shown in Figure 2 represents an ideal public open space whose quality of design and management encourages the larger public of the city to access and use the space freely; and therefore, all the divisions in the segments are filled in the model.

As described above, the three dimensions are part of five dimensions of publicness conceptualized in the Star Model of public space by (Georgiana Varna, 2014). However, principles of the three dimensions as envisioned by (Georgiana Varna, 2014) are adapted in the proposed model based on the purpose, i.e., to assess the implications of the developmental process as manifested in the design and managerial aspects of the space, and local context, i.e., the socio-spatial context of planned public open spaces in Indian cities. Thus, based on a detailed review of international literature on contemporary practices of securitizing public spaces, relevant literature (including newspaper articles) on public spaces in Indian cities and a series of field observations on public open spaces in Chennai, India, a set of 14 indicators were developed in the present research.

Physical configuration: Physical configuration is conceptualized as both the quality of macro- and micro-design. Macro-design means the relationship of the space with its surroundings and measuring its quality is to assess whether "the public can reach and enter the place, and how much effort it takes (George Varna & Tiesdell, 2010)". The first indicator, i.e., centrality, connectedness and accessibility is concerned with the macro-design and assesses the degree to which the public open space is integrated in the surrounding public realm so that the space caters to a large section of people in the surrounding areas as noted by Hillier (1996). Micro-design denotes the quality of design within the space, and is measured as the "degree to which the design of the place supports and meets human needs in public space (George Varna & Tiesdell, 2010)". The other six indicators under the dimension of physical configuration viz., armature for basic use; opportunities for engagement, discovery, and display; favourable microclimate; lighting facilities; provision of restrooms and dustbins - assess the different aspects of the micro-design that encourage the use of public open space by multiple publics of the city. These sets of indicators regarding the micro-design are developed based on the highly important recommendations of key public space researchers such as Carr (1992), Gehl (2011), Gehl and Gemzoe (1996), Whyte (2012), and Tibbalds (2012) and are explained in further detail in the Table 1.

Control and civility: The other two dimensions of the proposed qualitative model of publicness, - control and civility - which are the managerial dimensions of public open spaces are conceptualized as a set of five and two indicators under each respectively. Control corresponds to all aspects of the management regime, which are aimed at restricting the 'use of' and 'behaviour within' the public space. Common control mechanisms in a public open space may include controlling through: presence - the physical presence of police personnel or

private security guards; ordinance – enforcing rules through security personal or other dominant persons; technology - surveillance through CCTV cameras; signage - imposing restrictions on the use of space through signage and timing – restricting use through limiting opening times of the space (Langstraat & Van Melik, 2013; Németh & Schmidt, 2007; Georgiana Varna, 2014) which form the five indicators of this dimension. Civility connotes “how a public place is managed and maintained and involves the cultivation of a positive and welcoming ambiance” (George Varna & Tiesdell, 2010). Civility includes both cleaning routine - the quality of everyday cleaning routines and physical maintenance - the attention to periodic maintenance and repairs and is emphasised by several public space researchers as one of the fundamental requisites that influence the use of public spaces (Tibbalds, 2012; George Varna & Tiesdell, 2010).

Thus, the three dimensions of qualitative publicness and the set of 14 indicators under the three dimensions cover some major fundamental and universal qualities of public open space design and management that can encourage the larger public to visit and use the space. The set of 14 indicators are further operationalized into several variables with an elaborate scoring criteria to aid in the empirical assessment as presented in Table 1 below and is explained in greater detail in the following section. Compared to the existing pragmatic publicness assessment models mentioned above, dimensions pertaining to the type of ownership and management are avoided in the present research as it argues against the normative notions that a certain type of ownership or management leads to more 'public' public space (generally believed as 'state' ownership or management), while certain other types may negatively affect the publicness of a space (generally believed as 'private sector').

Also, it is important to mention here that, in the context of emerging Asian cities, as observed in Indian cities, several times, public and private sector work in combination towards urban development and in turn public space development. Thus, reducing such complex partnerships of actors in public space development into few types and assigning them a value of publicness would be fundamentally flawed. Hence, in such conditions where the public sector and private sector work in combination towards urban development and in turn public space development, it is important to understand the implications of the different complex partnerships taken for public space development. In order to do so, the present research suggests a qualitative analysis that has to be carried out and correlated with the qualitative model of publicness proposed here. In doing so, conceptualizing 'type of ownership and management' as a normative is avoided, but a systematic understanding of the implications of the involvement of different actors is gained.

Overall, the AU model of publicness with the two sub-models viz., quantitative and qualitative publicness, conceptualizes the publicness of public open spaces as a progressive quality gained and augmented in the different phases of the developmental process of the space in which multiple actors are involved in each phase. The main significance of the model lies in discerning how publicness is affected in the different phases of the developmental process of public open spaces, which when combined with a detailed analysis of actor participation in the different phases of the developmental process can aid in systematically understanding the implications of complex partnership forms of public open space provision and management as evident in the case of Indian cities.

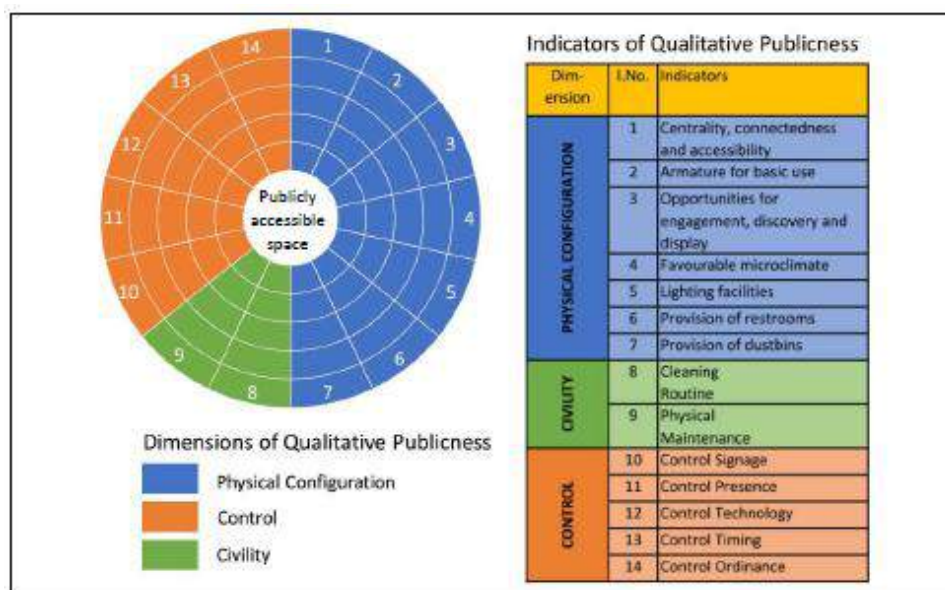


Figure 2: AU Model – Sub-model of Qualitative Publicness

4 OPERATIONALIZING THE AU MODEL: ASSESSING THE PUBLICNESS OF PUBLIC OPEN SPACES IN INDIAN CITIES

In the proposed AU model of publicness, the sub-model of quantitative publicness assesses the degree to which public open spaces that are planned in an urban area are designated and developed into publicly accessible spaces. Such an assessment is quite straight-forward and would mainly involve an audit of the present status of public open spaces that have been proposed in the planning schemes in an urban area and/or within a certain time-period, which can be conducted through several means such as field observation or through analysis of official data, if available.

However, the sub-model of qualitative publicness analyses the quality of design and managerial aspects of publicly accessible open spaces to assess the degree to which freedom is offered to the larger public with respect to the 'use of' and 'behaviour' within the space. Such an assessment, on the contrary, would require a complex understanding of the multiple qualities of the design and management of 'publicly accessible space', which contribute to its qualitative publicness both positively and negatively. Thus, as Kohn (2004) asserts, "publicness as a term has multiple and often contradictory definitions and the best way to approach it is to enlist a range of possible meanings or criteria which could then be grouped to form subsets that would then qualify a space as 'public'". The present research adopts such an approach and has developed an assessment framework that operationalizes the 14 indicators of qualitative publicness further to a set of variables each with a defined scoring criteria and is presented in Table 1.

The variables proposed in the framework are discernible or measurable qualities of public open spaces than can represent the 14 indicators. And the scoring criteria proposes the score of publicness to such discernible or measurable qualities and higher the score, higher the publicness of the space. The average score of variables under each indicator would form the value for the indicator and the total measure of qualitative publicness would be the percentage of the total scores under each indicator. The variables and the scoring criteria have been developed through literature review and field observations in Chennai, India, based on two premises: there are certain universal traits of public open spaces that make them highly public; and there are different shades of publicness that can be assessed on scale from low to high (Georgiana Varna, 2014).

Particularly the scoring criteria of each variable encompasses both qualities that encourage use and discourage use as suggested by (Németh & Schmidt, 2007). Qualities that encourage use are given the score of high publicness while the qualities that discourage use are given the score of low publicness. Besides, the scoring criteria includes qualities that represent both hard and soft methods of control, i.e., discouraging use, as posited by Loukaitou-Sideris and Banerjee (1998). Another key criterion that formed

the basis while developing variables and scoring criteria is the socio-spatial context of public open spaces in Indian cities. For example, under the indicator control presence, maintenance staff is included as a variable and the degree to which they exercise informal control is graded in the scoring criteria. Such a phenomenon has not been mentioned much in the international literature but is a common phenomenon in Indian cities. Overall, the operationalization of the sub-model of qualitative publicness can offer a more fine-grained understanding of the ways in which publicness is affected by the design and managerial aspects of public open spaces.

| Dimension | Indicator | V. No. | Variables | 1 | 2 | 3 | 4 | 5 |
|-----------|--|--------|--|--|---|---|---|---|
| 1 | Centrality, connectivity, and accessibility (Hiller, 1996; Laspina & Van Molk, 2013; Loukaitou-Sideris & Bracene, 1998; Nair, 2002; Varma, 2014) | 1.1 | Physical access - position of entry points in relation to the surrounding public realm | Strategically located entry points providing physical access to a large section of people in the surrounding area, well-integrated within the overall movement network. | Medicine location of entry points providing physical access only to a moderate number of people in the surrounding area, moderately integrated within the overall movement network. | Medicine location of entry points providing physical access only to a moderate number of people in the surrounding area, moderately integrated within the overall movement network. | Medicine location of entry points providing physical access only to a moderate number of people in the surrounding area, moderately integrated within the overall movement network. | Medicine location of entry points providing physical access only to a moderate number of people in the surrounding area, moderately integrated within the overall movement network. |
| | | 1.2 | Physical access - barrier free design | Entry points designed to cater the differently-abled - eg. Ramp for wheelchair accessibility | None present | None present | None present | None present |
| | | 1.3 | Symbolic access - signage orienting public open space | Signage showing public open space in all entry points | Signage showing public open space in at least one entry point | Signage showing public open space in at least one entry point | Signage showing public open space in at least one entry point | Signage showing public open space in at least one entry point |
| | | 1.4 | Active footpaths | Large range of functions along the perimeter - highly active footpaths with a few passive footpaths and no blind facades | Moderate range of functions along the perimeter - moderately active footpaths with many passive and blind facades | Moderate range of functions along the perimeter - moderately active footpaths with many passive and blind facades | Moderate range of functions along the perimeter - moderately active footpaths with many passive and blind facades | Moderate range of functions along the perimeter - moderately active footpaths with many passive and blind facades |
| | | 1.5 | Treatment of the boundary of public open space | No physical restriction to access - no fence along the boundary of the public open space | Fence provided along the entire boundary of the site; Type of fence provided - see through and lower than the average person's height | Fence provided along the entire boundary of the site; Type of fence provided - see through and lower than the average person's height | Fence provided along the entire boundary of the site; Type of fence provided - see through and lower than the average person's height | Fence provided along the entire boundary of the site; Type of fence provided - see through and lower than the average person's height |
| 2 | Amenity for basic use (Black & Cima, 2015; Gull, 2011; Gull & Grenow, 1996; Nene & Schmitz, 2007; Varma, 2014) | 2.1 | Facilities for sitting | Diversity of seating types (formal and informal) available; comfortable seating options (with backrest) available | Basic seating available for uncomfortable (without backrest) | Basic seating available for uncomfortable (without backrest) | Basic seating available for uncomfortable (without backrest) | Basic seating available for uncomfortable (without backrest) |
| | | 2.2 | Facilities for walking | Even and non-slippery paved surface available for walking; paved walkway reaches all activity zones; specially treated walking paths available | Even and non-slippery paved surface available for walking; paved walkway reaches activity zones partially | Even and non-slippery paved surface available for walking; paved walkway reaches activity zones partially | Even and non-slippery paved surface available for walking; paved walkway reaches activity zones partially | Even and non-slippery paved surface available for walking; paved walkway reaches activity zones partially |
| | | 3.1 | Facilities for passive engagement | Art, cultural or visual enhancement opportunities for watching people, activity and active footpaths; diverse seating types well positioned to watch people, activity and active footpaths | Art, cultural or visual enhancement opportunities for watching people, activity and active footpaths; basic seating well positioned to watch people, activity and active footpaths | Art, cultural or visual enhancement opportunities for watching people, activity and active footpaths; basic seating well positioned to watch people, activity and active footpaths | Art, cultural or visual enhancement opportunities for watching people, activity and active footpaths; basic seating well positioned to watch people, activity and active footpaths | Art, cultural or visual enhancement opportunities for watching people, activity and active footpaths; basic seating well positioned to watch people, activity and active footpaths |
| | | 3.2 | Facilities for active engagement | Diversity of activity and event spaces meeting the demands of all age groups for physical and cultural activities | Diversity of activity and event spaces meeting the demands of certain age groups for physical or cultural activities | Diversity of activity and event spaces meeting the demands of certain age groups for physical or cultural activities | Diversity of activity and event spaces meeting the demands of certain age groups for physical or cultural activities | Diversity of activity and event spaces meeting the demands of certain age groups for physical or cultural activities |
| 3 | Opportunities for discovery and display (Varma, 2014) | 3.3 | Seating facilities for social interaction | Diverse seating types providing various opportunities for social interaction | Basic seating providing few options for social interaction | Basic seating providing few options for social interaction | Basic seating providing few options for social interaction | Basic seating providing few options for social interaction |
| | | 3.4 | Facilities for discovery and display | Availability of flexible and uncontrolled spaces that can support a variety of uses | Unavailability of flexible and uncontrolled spaces that can support a variety of uses | Unavailability of flexible and uncontrolled spaces that can support a variety of uses | Unavailability of flexible and uncontrolled spaces that can support a variety of uses | Unavailability of flexible and uncontrolled spaces that can support a variety of uses |

Table 1 – Variables and scoring criteria for each indicator under the three dimensions of qualitative publicness

5 CONCLUSION

This paper has made two key contributions with respect to the issue of privatization of public open spaces in South Asian cities that formed the focus of this research. Firstly, this paper has brought out the characteristics of private sector participation in the developmental process of public open spaces in Indian cities along with the associated debates with respect to their influence on the publicness of such spaces. The nature of private sector participation in the case of public open space development in Indian cities is quite different from the Western context, as here private sector is involved in different degrees either formally or informally in the different phases of the development in a 'complex partnership form' of public open space development. Also, private sector participation has affected the publicness of respective open spaces both positively and negatively and therefore, more detailed research is needed to discern the specific reasons for the positive and negative influences.

Secondly, this paper proposes the AU model of publicness to assess the degree to which public open spaces planned in Indian cities according to local planning regulations are 'public'. The significance of the AU model of publicness lies in the progressive assessment, i.e., in the assessment of public open spaces in the different phases of their development, which can give a more nuanced understanding of how the developmental process of public open spaces affects publicness. Furthermore, the differentiation of the model into two sub-models aid in assessing both the fundamental attributes of publicness, i.e., 'the availability of access' and 'the quality of access and use'. However, the model does have its own limitations. Most important is that it relies on a qualitative analysis of actor participation to precisely understand how different actors' participation in different phases affect publicness. Future research could mitigate this by developing this model further to represent the nature of actor participation in the developmental process of public open spaces also graphically.

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ID 1463 | THE URBAN DESIGN REVIEW IN THE PROCESS OF URBAN RENEWAL: A CASE STUDY OF ZHONGSHAN ROAD HISTORIC BLOCK

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1 INTRODUCTION

Historical districts are important components of urban image and urban quality carrying the core content and significant material of urban history and culture. As the policy Chinese Economic Reform: Reform and Opening-up is implemented for more than 30 years, accompanying with the blossom of national economy, the national government are attaching more attention to revitalising the urban cultural heritage, as evidenced by the continuous policy and fund support devoted to the protection and regeneration of historic blocks. However, in the process of concrete implementation, there are emerging some negative phenomena damaging urban image and cultural heritage such as excessive similarity in urban form and construction of fake relics, due to the deviations in the understanding of historical and cultural heritage protection, extreme market-oriented thinking and mechanised mode of operation and many other factors, resulting in the frustrating reconstruction of the historic railway stations in Qingdao and Jinan, which rebuilt the sites imitating the original architecture after the reasonless demolition. As a consequence, during the period of urban renewal, the historical characteristics of the neighbourhood should be taken into consideration, the precise analysis on the historical background and development pattern of the blocks is worth deliberating, and accurate orientation of historic districts are of vital importance as well, so that the