

# **The Urban Planning Process Paradigm**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **The Urban Planning Process Paradigm**

“There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans.” (Jacobs, 1961, p. 238) Jane Jacobs expresses the nature of cities as to be designed for their people, by the people, and therefore the needs of all are to be prioritized within its urban planning. Jacobs’s perspective towards city planning challenged Manhattan in the 20th century, and it still proposes opportunities for analysis of cities being shaped today. This paper analyzes the process, the factors of city planning, and the implementation and impact of infrastructure design on society by analyzing and discussing the factors influencing planners who design and enable implementation of the built environment, and the community members who interact and disrupt the interpretation.

The limitations and opportunities dictated from national, regional, and local policies and regulations establish a hollow structure for city planning to build upon when designing the built environment. The individuals and groups of ideas, varying abilities, and identities impacted by certain planning design decisions can create tensions and divides within the community. This paper questions the ideal users that planners envision in the context of the marginalization that stems from their frequented narrowed mindset. Friction arises in city planning around mobility and accessibility due to this narrow mindset, perception, and assumption of user ability and public need. The areas of friction, heightened by universalizing user ability and public need, call to action the evaluation of the two main paradigms of city planning: mobility and accessibility. In order to encourage alternative perspectives, I consider STS scholar Nieuwma’s critiques and studies of how theories like universal design and appropriate design within community planning can influence urban planners and leaders to pay more attention to “unequal power relations embodied in design” (Nieuwma, 2004). Through the assumption that within their core, cities are

destined to continue to grow, develop and redevelop, they do so to better serve their communities, this thesis will analyze the process of city planning and design, shifting paradigms of design, and the community's interactions with the built environment.

## **LITERATURE REVIEW**

### **Defining City Planning**

City/urban planning is often described as an equation or a puzzle of which planners are an essential piece. This is exemplified by the American Planning Association, who state that “Planners take a broad view and look at how the pieces of a community — buildings, roads, and parks — fit together like pieces of a puzzle”. The way in which these factors work together, influence each other, and output a contribution for the built environment is a characterization to whether the pieces of the puzzle are requirements of one another.

It is difficult to clearly set a definition to the purpose of city/urban planning due to its procedural existence being bound to produce a different result depending on the factors of its application. Pløger (2006) states if cities focus on the everyday life factors such as “life forms, multiculturalism, phases of life and schemes of signification” (p.202) to be the motive behind their urban planning, they can signify the meanings behind what brings life to their communities. “Planning for place identity, sense of belonging to place and inclusive communities must in particular be seen as a matter of generating meaning for places, their communities and everyday lives” (Pløger, 2006, p.215). The meaning of place to whomever comes across it, interacts with it, or even just passes by, is an element worth exploring in order to unravel why and how it came into existence.

Bettencourt offers a theory in terms of quantifiable characteristics of cities through principles of mathematics, sociology, and economics. The study presents systems of scaling

relations which determine the interdependencies between a city's spatial, physical, and social aspects. The developed mathematical model of the spatial city and its social and dissipative processes describes an efficient city that exists at the point in which dissipation costs overcome benefits. Bettencourt questions how the urban patterns that are formed from increasing density and space of cities remain the same regardless of the city analyzed. "Together these assumptions predict scaling exponents for a wide variety of urban indicators, from patterns of human behavior and properties of infrastructure to the price of land" (Bettencourt, 2013, p.1439). Bettencourt (2013) claims that cities are not defined by their appearance, the make-up of their density, or by their growth; instead, they are fundamentally a collection of connections made between people, and "...their primary function is open-ended social reactors" (p. 1441). A social reactor, an analogy of cities as stars by "attracting people and accelerating social interaction and social outputs in a way that is analogous to how stars compress matter and burn brighter and faster the bigger they are" (Garcia, 2013). His framework offers an opportunity for planners and local policy makers to consider the patterns for connectivity within the growing social, spatial, and infrastructural networks of their communities. The attractions, connections, and trends that contribute to the existence and growth of the city can be determining factors of a city's function and definition.

### **Paradigms of Planning: Accessibility vs Mobility**

For the purpose of this research, accessibility-based planning is defined as a focus on the ease of people reaching and interacting with places. In contrast, mobility-based planning is defined as a focus on the efficiency of movement to and from places.

Accessibility-based planning places people, the users, at the center of the transport system. Litman (2007) analyzes the contrasting city planning methods to evaluate the factors

which affect accessibility through his study, *Evaluating Accessibility for Transport Planning, Measuring People's Ability to Reach Desired Goods and Activities*. “Many factors affect accessibility, including people’s transport needs and abilities, the quality and affordability of transport options, the degree to which various links and modes are connected, land use patterns, and the quality of mobility substitutes... Some of these factors tend to be overlooked or undervalued in conventional transport planning, particularly non-motorized travel demand, alternative mode service quality, user information, integration, affordability, prioritization and the value of inaccessibility” (p.53). Litman carries on the previously identified factors which affect accessibility to define ways in which multi-modal transportation-based communities can exist with universal design principles and pedestrian focused design.

In order for successful accessibility planning to exist, Chapman and Weir (2008) state that its integration has to be horizontal and vertical across the localities with involvement from multiple community stakeholders throughout the entire design and developmental process. “Central government must work with regional and local governments as well as the private sector and a range of stakeholders to ensure a cross-sectoral approach is taken that meets national outcomes without negatively impacting the stakeholders and the ‘end users’ (ie the people)” (p.19). Individuals with physical disabilities affecting their mobility and ability of interaction are one of the groups mentioned “at risk of accessibility-related social exclusion”. This exclusion stems from the expected interactions entwined within the structures that establish the built environment’s identity. Chapman and Weir propose planners to prioritize infrastructure and community improvements that propose to eliminate the division of user-ability based interactions by ensuring accessibility to all users since “improvements to infrastructure and public transport that are crucial for the disabled, [provide] benefit [to] everyone” (Chapman & Weir, 2008, p.17).

Mobility based planning focuses on efforts for enhancing the efficiency of transportation systems within a city. Although mobility and accessibility are both considered when determining transportation systems, the specific planning approach prioritized in cities can have a significant impact on how proposed technology implementation projects are treated by planners and policy processes. The U.S. Department of Energy (DOE) collaboration, led by the National Renewable Energy Laboratory (NREL), developed the Mobility Energy Productivity (MEP) metric to measure and track changes in mobility within a specific city and location over time given implementation of new technology or design. The metric considers the current opportunities for individuals within a community to access various destinations through different modes of transportation, and the location, distance, and energy that is a result of their usage. This methodology “will give transportation researchers and city planners a metric to assess mobility, energy, and quality-of-life outcomes of new technology on existing road systems, airport infrastructure, curb-fronts, parking capacities, and overall urban architecture” (NREL, 2019). The information gathered from this analysis offers localities an opportunity to assess the existing built environment's abilities to support future technological implementations and predict the mobility and accessibility impacts on the community's members.

In their research, Handy (2002) addresses automobile dependence in the US by thinking about transportation in the U.S with mobility-enhancing strategies. The dominant strategies implemented have regarded road building, the construction of new roads and the expansion of existing roads and highways. “The primary goal of both road building and ITS [Intelligent Transportation Systems] is to increase the potential for movement... The primary issue is the degree to which mobility-enhancing strategies increase actual movement and, by doing so, offset improvements in the potential movement” (p.6). New and improved developments to

transportation systems can create more obstacles before providing benefits. Known as the “induced travel” effect, new road capacity can increase travel and generate additional traffic initially before showing indications of beneficial mobility enhancement (Handy, 2002). Handy explains how mobility-based planning encourages lower density development by offering connections with automobile transportation instead of multiple options in an accessible mode of transportation. “Although planning for mobility can be compatible with planning for accessibility, the entrenched focus on mobility in transportation planning in the U.S. has over time helped to decrease accessibility, primarily by encouraging sprawling patterns of development that limit choices” (p.5).

### **Design Ideologies & Methods of the Built Environment**

The relationships between individuals and the physical aspect of their surroundings is characterized through the elements of their interactions with the built environment. As Susan Handy, et al, defined in their additional research, “The ‘built environment,’ as we define it, comprises urban design, land use, and the transportation system, and encompasses patterns of human activity within the physical environment” (Handy et al., 2002, p.65). Density of development, mix of land uses, street connectivity, scale of streets, and aesthetics qualities of a place are the five defined dimensions of its built environment. These dimensions are elements of characterization city planners equip when labeling neighborhoods as “pedestrian-oriented” or “automobile-oriented” and therefore encourage either an accessibility-based or mobility-based approach to their planning.

Nieusma presents a redirection of design thinking towards supporting social groups often marginalized from the user groups initially identified by planners and designers. “Alternative design” scholars analyze the factors that contribute to the transformation of a design’s intention

from initial design processes, to implementation, and finally within the interactions between various social groups in the community. Nieuwma (2004) calls on designers and planners to challenge the box they have been restricted within: “The governing mentalities that shape what is “good,” “right,” and “true” are the most difficult to identify and the most important to challenge. While governing mentalities cannot be rejected outright, they can and should be continuously challenged in design practice” (p.23). The “universal design” ideology directs awareness to the “persistent narrowness in the way designers imagine users’ abilities” (p.14). The shift in emphasis on not just the factors of planning design itself, but the importance of the designer's own perception, bias, and “narrow minded” approach to community individuals’ abilities and needs is a claim Nieuwma begins to unravel.

## **DISCUSSION**

The presented literature touches on aspects of the current planning paradigm existing within modern development design approval processes equipped by city/urban planners. Different stakeholders from government officials, private land development designers, community members, and city planners all give different weights to the same design problem and solution based upon their own ideals and values, but their stances and perspectives can be lost in the process. This creates a multi-dimensional approach to an already complex planning design methodology structure. It is critical for city/urban planners to realize that the life of a city is shaped by the life of its inhabitants. The constant interactions between society and the built environment is what gives purpose to a city’s streets and buildings. Increasing the recognition and representation of underrepresented groups in design and planning, and expanding our own conceptions of the uses of urban spaces, are important to break down the lines of social division existing within physical design today.



This discussion will urge to uncover areas of disparities which exist in the built environment and the need for planners and designers to reconsider their role within the new urban design decision making processes. There are multiple reasons and complexities that can contribute to the gaps in the planning process equipped for designing holistic and accommodating urban spaces. The reasons that will be analyzed in this discussion are what I have identified as the single-issue approach, the capacity of an urban planner, and the existing planning toolbox.

### **Single-Issue Approach**

The scope of planning in today's cities were built while embracing big and bold visions. Visions for these cities included projects with large footprints, maximum physical impact, and full development. These ideologies often aimed to solve a single, often physical, issue while filtering out the underlying impact and interaction at the root of societal systems. Cities, home to the majority of the country's population, were built upon this narrow and singular planning approach. But limitations are being stumbled upon as cities are evolving to keep up with the implementations of recent technologies. While city planners and users of these designs scramble to keep up with the consequences of the interactions between existing built environment structures, their prioritization of one solution can ultimately enforce limited perspectives upon others.

The gradual shift of city planners' attention from immediate physical design to the distribution of function, questions of social power, and the meanings behind public interactions can be attributed to contradicting reactions to implemented urban design (Steinø, 2013). Questions that arise within planning circles while discussing this gap need to consider the impact of a physical environment's change onto its society's inequalities.

## **Beyond the title of an Urban Planner**

Urban/city planners can come from a variety of backgrounds, identities, and disciplines, but the depth of social capacity between them is rarely a complete representation of the community members whom they are supposed to reflect in their city's urban developments and communities. The fields of planning and architecture lack racial diversity as supported by the 2018 Equity in Architecture Survey, which identified 90% of the surveyed 14,360 individuals in the architectural and planning profession as white or Caucasian (Association of Collegiate Schools of Architecture, 2018). Race, and all the other intersecting factors of ethnicity, religion, ability, socioeconomic background, and age, affect an individual's relation and interaction to space and place. The representation and background perspective that encompasses these characteristics are factors that can heavily influence design decisions. It is a consideration that many planners can have difficulty registering without increasing interactions with communities with diverse perspectives. As previously mentioned by Pløger, the meaning behind the interactions with a place is unique to the individual and is influenced by the values, actions, and relations that the individual imposes. The capacity of a planner's proposed impact on the history, the power balance, and the culture of local communities can go unmeasured if their value statements are not checked by residing community members.

## **The Planning Toolbox**

The enclosed box planners might find themselves in when commenting/approving plans for their local communities is often drawn by the planners themselves. The lines that narrow their perspective edge out the users whose identities, abilities, and backgrounds were not initially considered in the proposal of the design. The toolbox planners equip when approaching proposed designs meant to serve their communities often caters to users that are able-bodied, relatively

young, and male (Chan, 2018). Therefore, it can be assumed that the solutions of today's society are not designed for the existing wide range of needs. It is impossible to fully gain the perspective of those who cannot navigate the city's streets at the same capacity and comfort as those who are able bodied, but as planners it is important to consider the varying interactions possible with the infrastructure that is currently provided. It is a fact that navigating a rampless entrance to a building is a lot more difficult in a wheelchair than on two legs able to climb stairs.

Planners need to be confronted; they need to be audiences to the difficulties they helped create. The box most planners and designers find themselves within have drawn lines dividing the community's members into weighted boxes of identities, abilities, backgrounds to which planners can then check off as being "served". I argue that the built environment constructed only to check off the boxes containing the ideal user is not a true representation of the entirety of members within the community which planners are meant to serve. The public does not acknowledge accessibility through a proposal of accessibility-based plans, but proves its existence through the growth of interactional possibilities with the built environment due to the elimination of previously existing limitations.

### **Stakeholder Representation and Influence**

The sectors that define society, and are often perceived as the main stakeholders in planning are the public civil society, the public sector (government), and the private sector. Therefore, every single person that is a part of a community is also a critical stakeholder and potential spokesperson for it. A discussion about the relationships between these groups and the resulting planning designs are to be highlighted through their tensions. Their interactions should be seen as partnerships, dynamic engagements, with constant contact and questionings in order to keep each other in check. The benefits from these relationships are increased with the

existence of friction. Difference is embedded in all relations, but the intensity of their existences comes to light through tension.

Positive tension is necessary - by simultaneously applying and reacting to pressure and actions from one another, we are able to better consider various perspectives and opinions. In order to gather the possible results of the projects' implementations into the community, local governments officials and staff need feedback and support. Through community meetings, council meetings, and public hearings, community members have an opportunity to engage and put on their stakeholder and spokesperson hat. It is up to them to do so. This step, for planners, offers an insight to the public's reaction to the proposed development/technology/design implementation. However, it is just insight. In the end, change relies on both the members of the community and the city planners. Citizens must choose to attend the meeting and voice their opinions to the policy officials and the planners. The planners must then choose to listen and consider their voices within their designs. This is the step where tension has to exist in order to create change. Tension turns into a positive catalyst, for everyone involved, in order to go towards a better solution and ultimately a successful implementation that benefits all.

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