

Architecture for Living: Do We Design Architecture for Humans?

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ABSTRACT

Since Bruce Archer and Nigel Cross proposed a new culture of 'Design with a capital D' in the 1980s to stand alongside the previously established cultures of science and the humanities, the development of design has been profound. However, the recent rapid expansion of construction and technology has stretched the design process to include more pragmatic activity since the cultural, social, political, and historical aspects of the city and its people have been largely ignored. Architecture has become a tool for making an impression rather than a place for accommodating people's activities, especially given the hegemony of visual attributes that dominates how a building is appreciated and the spread of digitalism that champions efficiency as the main measure of success. The significance of human living traditions as the ultimate shaper of architecture has been excluded from making room for a utopian vision of the architect and authority that are usually insensitive to the people's real-life problems.

This paper offers a critique of a commonly sterilized design process in which the human aspects are frequently disregarded. Architecture has become an intellectual exercise by experts and is treated as scientific, logical, and able to be imposed in a top-down template manner. Jakarta's housing problem, which involves the eviction and relocation of informal settlements to Rusunawa, demonstrates how architecture has become a power-assertion tool for imposing governmental ambition, not only to create a modern city but also to control and discipline the urban poor. Nonetheless, the case studies of Kampung Pulo and Kampung Aquarium offer evidence that some activists have moved to a new, more inclusive method that is considered a starting point for challenging the orientation and purpose of architecture towards an end goal of 'humanizing humans'.

Keywords: *Architecture Critique, Humanizing Humans, Kampung Aquarium, Kampung Pulo*

1. INTRODUCTION

The rapid development of construction and technology has made architecture less sensitive to context, as progress is mainly treated as an intellectual exercise of knowledge expansion. People, the end-users of architecture, are sometimes pushed aside to make room for the expected rapid development to meet quantified targets as a measure of success. In this case, architectural design is no longer about accommodating the people but rather about making an impression and showcasing power. Many critics have problematized this kind of development; however, the hegemony of capitalism seems too strong to resist it, leaving architectural design to become a tool for creating a visual-oriented object disconnected from the complex social-political context of the people.

This paper discusses the position of architectural design against the background of these intertwined tensions. In the first half of the article, the relation between 'architecture' and 'design' is explored, starting by scrutinizing the emergence of 'design as a discipline' in the 1980s and revisiting its pragmatism and practicality traits. Following this, the problematic terminology of 'architectural design' is discussed, where 'architecture' is placed alongside 'design': two terms that, I argue, are distinct. The next section problematizes the current development of architecture as a stage for architects to showcase their design acrobats, creating spectacles rather than living containers. The second part of this paper discusses the case study of informal settlement evictions in Jakarta as examples of 'dehumanizing' architecture. Jakarta's context is studied against the background of post-colonial global-south cities, following which specific

focus is given to the city's informal settlement that has been continuously scapegoated for various urban problems to justify the massive urban evictions that make room for formal development. In this situation, the voices of the poor are largely discounted, while the top-down, 'one-size-fits-all' solution in the form of the templated rusunawa design is promoted as an 'ideal' solution, illustrating a problematic approach to industrializing architecture. Amidst the questioned approach, two cases are highlighted as examples of attempts to break free from the mold, offering alternatives for dealing with complex urban social problems, which will be necessary if architecture is to remain design for humans.

2. DESIGN AS A DISCIPLINE

Design, which is considered to be a new discipline in general education, is regarded as the missing 'third area' that fills the gap left by the previously established science and humanities, following the research findings presented by the Royal College of Art (RCA) in London in the late 1970s. In 1979, Bruce Archer, an RCA Professor, wrote an article *The Three Rs* for the first issue of *Design Studies* that marked the establishment of 'Design, spelled with a capital D' as a separate educational culture, independent from its previous counterparts [1]. Archer critiqued the notion of 'the three Rs' (reading, writing, and (a)ritmatic) as leaning too far towards the humanities and being an instrument of the Church's monopoly over educational developments. He proposed a new set of the three Rs that included Design, claiming that not only did 'reading and writing' lead to literacy (the humanities) and 'reckoning and figuring' lead to numeracy (the sciences), but also 'wroughting and wrighting' lead to making and doing (Design). Trying to accommodate the 'left-over' subjects that did not belong to either of the two previous streams, he argued that Design comprised areas that should demonstrate "a level of awareness of the issues in the material culture, ... [including] the artifacts themselves and the experience, sensibility, ... intervention, validation, implementation, ... and skill that goes into their production and use" [1].

Nigel Cross developed this 'designerly' (as opposed to 'scientific' or 'artistic') way of thinking, further refining the definition as "the collected experience of the material culture, and the collected body of experience, skill, and understanding embodied in the arts of planning, inventing, making, and doing" [2]. He emphasized that Design focuses on the human-made world as the phenomenon of study; used modeling, pattern-formation, and synthesis as the 'appropriate'

method; and promoted the values of practicality, ingenuity, empathy, and appropriateness. Furthermore, he considered Design to be similar to technology as it involves a synthesis of a way of thinking for practical tasks [2], aligning with Alfred North Whitehead, who argued that "there are three main methods ... [in the] system of education: the literary curriculum, the scientific curriculum, the technical curriculum" [3]. Furthermore, Cross emphasized that Design is about 'knowing how', instead of 'knowing that', making it skill- rather than knowledge-focused, although he argued that a designer should not only be trained, but also educated, hence they require more than vocational training. In support of this argument, Bryan Lawson, in an experiment involving two groups of architecture and science students, found that science students operated a 'problem-focused strategy', while architecture students adopted a 'solution-focused strategy'. He further argued that architecture students, and hence designers, are taught mainly by example and practice and are judged by the solutions they produce rather than the methods they use. Thus, designers show greater ability to provide solutions while having less ability to recognize the problem, mainly because they do not rely on the problem analysis being completed before moving to the synthesis stage [4].

Since the emergence of the 'design methods movement' in the 1960s, together with the beginning of computer programming for problem-solving, design has been treated as a more objective and rational process [5]; hence it is seen to be measurable, explainable, teachable, and repeatable. Herbert Simon in *The Sciences of the Artificial* set a standard for a repeatable creative cycle [6], followed by later design scholars such as Robert McKim, Peter Rowe, Rolf Faste, David Kelley, and Richard Buchanan. In the 1970s, the pioneers of this movement reconsidered their arguments and opposed the scientific frameworks; for example, John Christopher Jones stated, "I dislike the machine language, the behaviorism, the continual attempt to fix the whole of life into a logical framework" [5]. Archer also emphasized that design should rely on not only quantitative measurements but also the qualitative aspect that has been largely overlooked [7]. Horst Rittel and Melvin Webber supported this anti-scientific movement in design by proposing the term 'wicked problems' to describe design problems, in contrast to the 'tame' problems faced by scientists and engineers [8]. Therefore, after the first-generation methods of the 1960s, the second generation began "moving away from the desire to 'scientize' design towards the ambition to understand design in its own terms" [5]. However, this second-generation was too focused on developing cognitive

science, dubbed 'cognitivism', alongside the emergence of digitalism, which provides a 'mental model' for the design process. Although cognitivism demands that all senses participate in receiving information in the mental model, Tim Ingold argued that ocularcentrism, which puts sight as dominant over the other senses as a source of human knowledge, has been prevalent in the Western tradition [9]. This further focuses on designers' attention on 'visual thinking', meaning the over-reliance on the graphic image's models and codes to communicate ideas. As a consequence, the role of design tools, such as drawing, sketching, and the recently emerged Computer-Aided Design (CAD), including digital and parametric instruments, has gained an immense significance that, in some cases, position them as more worthy of exploration than the people for whom the architecture is designed.

3. HAS DESIGN REALLY KILLED ARCHITECTURE?

Design has an intrinsic value that is distinct to the sciences and humanities, particularly in its technicality. The discipline of Design has been developed to explain the complicated process of creativity that underlays the design process itself. Regardless of whether the design process is considered in a structured or unstructured way or as a quantitative or qualitative process, most design studies focus too heavily on the designer as the process's subject, strengthening the sense of subjectivity in design. Kees Dorst's 'Abduction-2' reasoning mode for design, in contrast to the common deduction and induction approaches [10], offers the best chance for designers to interpret the problem, design, and methods in any way possible. In this sense, any design conjectures proposed by designers are plausible and somewhat acceptable, especially when it is almost impossible to design a metric to measure the design proposals' suitability.

Moreover, since the design process is inherently tacit, unstable, and ill-defined, 'design framing (and reframing)', as suggested by Donald Schön, as an essential part of determining the design problem and crucial to creativity, relies on the presence, ability, and sensitivity of the designer as a reflective practitioner. Schön argues that the design process is a conversation between the designer and their work, adding that "the situation talks back, the practitioner listens, and as he appreciates what he hears, he reframes the situation once again" [11]. In this sense, there is an individuality in the design process that designers, and hence architects frequently adopt as "their own frame of reference in forming conceptual structures, ... [since the] design process and its result [are] mainly

dependent on the subject's problem-solving approach" [12]. This makes design a subjective process that is mainly driven by the mind of the designer, which, to an extent, justifies the arbitrariness of design that is sometimes driven by the designer's ego and ambition.

In contemporary architectural practice, architects seem to endorse the idea of subjectivity as a justification for their unexplained design methods, legitimating the proposition of the 'designer as a magician' [13] or a 'sole genius' in the discipline. The concept of 'starchitects' reflects the idea of extraordinary architects whose superior knowledge makes their decisions undisputed and whose ambition drives a built form of architecture. The vagueness of the design process and the unexplainable 'creative leap' appear to justify any design conjectures that architects adopt, making the design process one way and unquestionable while discounting the importance of capturing broader voices, for instance, through participatory methods. The design process "establishes attitudes and values that are then played out in the black box of the profession" while rejecting outside intrusions. These traits profoundly shape the architect's character [14]. Although the starchitects themselves, such as Frank Gehry and Rem Koolhaas, hate the label, which they deem to be "a sloppy, derogatory term that is ... insulting to the architects" [15] as well as "snarky [and] patronizing" [16], the charm and appeal of their big names are present in architectural discourse. Thus, this becomes a type of "cultural imperialism" in the discipline since "no one dares dispute the master[s] as [their] plans unfold ... [although their] ungainly creation [becomes] a sort of fetish object, or at worst, an urban catastrophe" [17]. Extraordinary architectural projects are respected as significant advancements to the design process and are regarded in a positivist way, regardless of how alien they may be to the local culture or how dissociated they may be from social, political, cultural, and historical contexts.

Since design studies focus more on the designers and the design process, there is little discussion of the contextual aspects that surround design. Rittel and Webber's conception of 'wicked problems' does succeed in capturing the complex character of the social problem facing design; however, designers have to position themselves among these under-explored forces. The main focus of development in this area remains how designers operate in creating a design and how technological advancements and design tools can generate extraordinary new results, a process that Heylighen and Nijs referred to as a "predominant cognitivist stance and laboratory-style experimental methods" [5]. However, the process's appropriateness and contextual effect seem to have been omitted from

the discussion. Jeremy Till argues that architects, as designers, continue to resist the fact that architecture depends on external factors and contexts since they are unwilling to admit that their authority in their design is limited. Confidence in disrupting the current reality and predicting the future has become a strong characteristic of the profession, creating a sense that architects have a 'higher' position by, according to Magali Sarfatti Larson, "possessing a special and superior knowledge, which should, therefore, be free of lay evaluation and protected from inexpert interference" [14]. Architects sometimes 'play God' as they consider themselves to have the right and capability to "manipulate and mold an ideal version of 'how [things] should be'" [18]. Le Corbusier attributed this to the simplistic educational process, as architects are educated in a design studio that is kept sterile of the real-life context. This educational system does not greatly differ from its original, Paris's l'Ecole des Beaux-Arts, a design culture that Le Corbusier called 'the cancer of architecture'. He further explained his opinion of the design studios, stating:

"They have brought about immense progress in the domain of the exact sciences; they have warped activities dependent on imagination, for they have fixed 'canons', the 'true' and 'right' rules, which are recognized, officially stamped, legally accepted. ... [T]hus they are against life ... they have killed architecture by operating in a vacuum, far away from the weight of materials, the resistances of matter, the tremendous progress in the field of machinery. They have vilified crafts associated with matter, time, expense. This ugliness is not the result of bad intentions; on the contrary, it comes from incongruity, incoherence, from the separation which occurs between the idea and its realization. Design has killed architecture" [19].

The pragmatism and practicality of design have reduced architecture to a focus on the result, or the building, by adopting a solution-based and visual-thinking approach. The architects' buildings, which demonstrate an extensive design acrobat, are even placed 'above normal' architecture, creating 'Architecture with a capital A' that seeks attention and demands to be continually in the spotlight, despite its detachment from the everyday real-life context. These 'funny-looking buildings', no matter how much they are hated initially, are appropriated as attractions or spectacles to draw international eyes and, hence, tourism and investment. Thus, architecture is far separated from laypeople's real-life politics and everyday struggles, and it appears as though Design as a discipline, at least in the way it is studied, developed, and taught, has allowed this to happen.

This begs the question of how 'architectural design' should be positioned in the context of these conflicting tensions, as placing the term 'design' alongside 'architecture' would indicate a middle ground between the pragmatism and practicality of design, and architecture that is ideally based on a different paradigm. Architecture, as many scholars have proposed, should relate to the real-life culture of the people, their day-to-day activities, their daily struggles, and their constant social and political negotiations. Therefore, architecture is a social art that reflects the society's value and meaning, rather than a medium of individual expression [20]; thus, architecture should be "humanistic ... [and] accompanied by empathy and rationality" [17]. However, design often removes architecture's depth, leaving a merely superficial exercise of visual forms and shapes that disregard the otherwise complex multi-layered facets of society. Focusing only on tangible aspects for design development has been extensively questioned, especially when understanding the context is primarily achieved through site analysis that, unfortunately, merely becomes a part of a prescribed design routine, framed solely to align with the architects' biases and preferences. This practice is problematic because site analysis does not offer significant contributions to the design itself, and architects are sometimes obliged to describe rather than critically analyze it, suffering what Margaret Grose termed 'analysis paralysis' [21], which leads to 'death by site analysis' [22].

Since the era of the design methods movement, Archer has emphasized that design is supposed to be about not only quantified methods but also qualitative methods [7]. With his famous 'critical regionalism', even Kenneth Frampton argued that design context goes beyond discussing the site's physical traits, such as climate and topography [23]. One of the problems with today's education and practice is that architectural design is still imprisoned by the old conception of Vitruvian Triumvirates, where durability, function, and aesthetic become metrics of 'good architecture'. Context, or locality as Greg Misingham calls it, which "ought to be considered a key determinant of architectural design", is missing from the triumvirate [24]. This paradigm calls into question where context is positioned in the design process and the extent to which architectural design can reach beyond the domination of the tangible aspects of context. People, or the human element, are one prominent contextual facet that must be considered, but people's interests, which encompass social, political, economic, and historical layers, sometimes conflict with the end goals of capital owners. This polemical situation challenges

how architects position themselves and which interests they would favor.

Christopher Jones recognized this problem as a ‘moral design dilemma’, deeming it omnipresent in today’s design process because the effects of any design decisions are growing faster than the design itself, particularly in architecture as a human living place. In contrast to “empirically minded designers [who] might ignore the whole question of acting outside his sponsor’s interests”, he argued that good designers are those who “are stepping outside their role [as a designer] and taking decisions on behalf of society as a whole” [13]. This statement illustrates the contemporary challenges faced by architects amidst the strong hegemony of capitalism in which money and power direct the development of the built environment. More often than not, architects succumb to this domination, treating architecture as a tool for merely pleasing clients while choosing to disregard the social, historical, economic, and political damage it causes to the surrounding laypeople. This situation raises several questions. What is the purpose of architecture? For whom is it designed? Whom does it serve? Is architecture still considered a place for human activity? If so, why are the human aspects largely omitted from the design process? Do we really design architecture for humans?

4. JAKARTA’S HOUSING PROBLEM

Jakarta is characteristic of post-colonial cities in that informality has become an inseparable aspect of urban development. Urban kampungs and informal settlements flourish in many parts of the city, creating an indivisible connection with the broader urban fabric and forming a mutual work system that benefits the city. However, an issue arises when the informal sector is scapegoated for many, if not all, of the city’s problems, and its presence is condemned. Through legislation and regulation, illegalization puts pressure on the marginalized people living and working in these settlements, as they live under the constant threat of removal and eviction, thus blamed for any bastardization of the urban aesthetic livability, safety, and security. Removing these people is necessary to achieve the ‘ideal’ image of a utopian city free from the urban poor.

Many scholars strongly oppose the criminalization of informal urban life. Ananya Roy criticized eviction, which she deemed an extension of the commodification of lands and the state’s capitalization, and a form of dispossession of the poor through criminalization and legalization that might lead to racial banishment [25]. Kim Dovey supported this view, emphasizing that the

demolition and dispossession of the urban poor can be considered a ‘state crime’. Consequently, he highlighted the need to ‘informalize’ architecture, meaning to “move onwards from both the fixity of form and the fixation on forms that dominates the profession” [26]. Furthermore, he challenged ‘formal’ architecture to be more adaptive to the social context by giving space to the transgressiveness of informal development, stating:

“Informal construction transgresses some definitions of architecture, and our engagement with it requires modes of practice that transgress normalized boundaries of architectural practice and ideology. These transgressions are multiple: towards research-based participatory practice in multidisciplinary teams; towards the design of dynamic adaptive assemblages as well as the shaping of formal outcomes; towards a truly ‘critical’ architecture and a radical informalization of architecture as socio-environmental art” [26].

In this case, architects should focus on the design exercise and determine their positions within the architectural contexts’ intertwined challenges. This focus may not be a popular standpoint amidst the discipline’s pragmatism; nonetheless, there is an apparent movement among Indonesian architects to treat architecture as a means of advocacy for unprivileged groups.

A long history of development has transformed Jakarta into a metropolitan city with soaring skyscrapers that fill its horizon, in the form of housing complexes, office buildings, shopping malls, and superblocks. These tall buildings are visual landmarks, incorporating a modern, audacious design whose sophistication signifies both its owners and its architects’ glory. These buildings not only mark the role of architects in shaping the face of Jakarta but also demonstrate that the profession largely serves a limited group of people: capital owners and middle-class consumers. In contrast to this extravagant development, urban kampungs, as a housing zone for the urban poor, have developed and continue to grow organically without any visible order to their appearance. There is extremely limited, if any, interference from architects in kampung development, and architects usually only play a role when a kampung is formalized through an in-situ upgrade scheme or displacing its residence and moving them to vertical rented housing known as a ‘rusunawa’.

The absence of the architect’s role in the urban poor’s life is not unique to Indonesia. In most countries, if not all, architects predominantly serve the middle class who can afford to pay for design. Most architects

position themselves at a level that is only reachable for the elite, separating the profession from the daily hustle and bustle of laypeople. Marginalized people, including the urban poor, are outside the scope of the target consumers of architectural businesses. Nevertheless, why do architects seem so distant from a specific class of people? Has architecture been isolating itself and playing only a limited role in society? Is this something that architects can, and are willing to, change? This section attempts to dissect and further problematize this issue of separation, which is evident in Jakarta, by focusing on eviction as a social cost of formalizing informal dwellings. Following this, examples are examined, which propose an alternative method for incorporating the marginalized voice, offering evidence of the possibility of extending the roles of architects in the urban context to serve humanity better.

4.1 Evictions in Jakarta and state-dominated urban development

The discussion of architects' limited role in the urban context cannot be separated from the general policy on urban planning and urban development. Urban planning features, which focus on modernizing cities, enable architects to remain in their comfort zone. The more city planning serves the middle class, the more architects find their world limited to this community segment. Moreover, since architecture and its aesthetics have become a key political instrument to create a city's image, it is crucial that the government display the 'right' objects in the urbanscape. In this respect, Margus Vilahem argued that politics needs to be visualized, not just conceptualized, and since it is a showcase that acts as a representation of a fantasized promises, it, therefore, needs to be decorated and staged [27]. Thus, the city is treated as a simulacra collection to picture this fantasy, and architects play a vital role in executing the government's ideal perception. Consequently, architects are positioned more as image-makers, with close relationships to the people in power, than humanists or philanthropists who engage with laypeople's everyday struggles.

In Jakarta, most of its governors, if not all, have had the ambition of making the city a symbol of Indonesia's modern metropolis; this has affected the government's policies, including its housing policy. To achieve this ambition, it has been necessary to eliminate informal housing and slums, resulting in many forced evictions of poor urban settlements and creating a rupture in the city's social fabric. The government's politics of aesthetics, as described by Jacques Rancière, is evident here, as it tries to disguise the existence of the 'unwanted', based on its flawed logic of what a 'good

city' represents [28]. The government delimitates the visible and the invisible, and the audible and the inaudible, curating what can and cannot be present in the cityscape. The implementation of this political direction was accompanied by a wave of mass eviction in Jakarta under Governor Basuki Tjahaja Purnama between 2015 and 2016. According to a report by Lembaga Bantuan Hukum Jakarta, a legal aid NGO, more than 3,500 families became homeless in 2015, rising to over 5,700 families in 2016 [29,30]. The evictions' victims were reallocated to vertical housing developments called *rusunawa*, an abbreviation of *Rumah Susun Sederhana Sewa*: government-subsidized high-rise apartment blocks that were built before the evictions took place. However, availability became a problem as there were not enough units to house all the victims, forcing many people to remain on the evicted land. Moreover, some people intentionally refused the reallocation offers, preferring to stay in their old housing areas, although this meant living among the demolitions' debris, like the residents of *Kampung Akuarium* and *Kampung Kunir* in North Jakarta.

In addition to the problematic eviction methods, the reasons for the eviction itself are considered to be obscure and inconsistent. One of the narratives used to justify eviction is that the riverbank's occupation by the urban poor is responsible for narrowing the river and impeding the flow of water downstream. Not only does this violate Jakarta's spatial planning, which requires a 15m setback from the river, something that is almost impossible to achieve in a city as densely populated as Jakarta, but it is also blamed for degrading the environment around the river, causing a broader impact on the city. The urban poor is scapegoated for Jakarta's cyclic floods, which occur more frequently than in the past decade; therefore, their 'illegal' dwellings must be removed. However, the implementation of this is far from consistent since the Jakarta government fails to recognize that such violations are committed by the urban poor and the rich. Deden Rukmana highlighted the under-discussed land conversion violations between 1985 and 2005, during which time the initially designated water-catchment and green areas were converted into commercial zones, including shopping malls, residential areas, apartments, office buildings, hotels, and golf courses. He problematized the incapability of the Jakarta government to impose sanctions against these conversions, particularly in the five major areas of the city (*Kelapa Gading*, *Pantai Kapuk*, *Sunter*, *Senayan*, and *Tomang*) and, interestingly, "the Jakarta spatial plan 2000–2010 accepted the conversion of those five areas and validated the violations of the Jakarta spatial plan

1985–2005” [31]. Aside from the land conversion problem, the city’s building code has also been under scrutiny. Elisa Sutanudjaja critiqued the government’s ‘soft’ treatment of the formal sectors that violated the Floor Aspect Ratio (FAR) regulation and questioned the vague revision of the regulation that allows the addition of the building FAR without setting any specific limit. Furthermore, she challenged Jakarta’s spatial planning, which only accommodates formal land ownership and fails to capture the city’s informal aspects, including temporariness in urban space [32].

The forced evictions are an example of a top-down policy imposed by the government to solve the urban poor housing problem while shaping Jakarta into a utopian modern city. Post-eviction development usually involves new construction projects, most of which are dedicated to the middle class. At this stage, the role of architects starts to appear, as they are hired to concretize the expected visual image largely reflects the latest trends in architectural style. In this situation, architects act merely as pragmatic professionals who work on projects for their clients, fulfilling the capital owners’ desires while erasing the image of informality that formerly occupied the space. These architects do not address, or intentionally avoid addressing, the complexity of the social-political tensions around the new designs’ site. In most, if not all, architectural projects, the urban poor are treated as an eyesore: a visual disturbance that creates an unpleasant ambience for the proposed concepts; therefore, they must stay hidden behind high walls. This formal-informal separation is evident in various city projects, from the gated residences to the shopping malls and apartment buildings. This approach creates ‘islands’ of formal developments surrounded by but sharply separated from the informal kampungs’ sea. As a result, the formal sector seems to deny its dependence on its counterpart, disparaging the informal sector’s role and forgetting that this informal sector supplies the resources for the formal one. With this mindset, the urban poor is considered inferior and insignificant; hence they are neglected and excluded from the decision-making process, leaving them mere recipients of any policies imposed. In particular, the ‘government knows best’ attitude means that any decisions are considered final, despite the absence of any contribution from the poor. The government’s top-down implementation demonstrates that its decisions are never intended to accommodate the marginalized. As they are unaware of the overall development plans and become an ‘object’ of this top-down coercion that leaves no room for negotiation, the urban poor tend to resist any plans imposed on them, leading to vertical conflicts as a means of defending their housing rights.

4.2 Rusunawa and housing design tyranny

Following the 2015 to 2016 evictions, poor urban residents were relocated to various rusunawa complexes in Jakarta, most of which were newly built, such as the complexes in Muara Baru and Marunda (North Jakarta), Jatinegara Baru and Rawa Bebek (East Jakarta), and Pesakih (West Jakarta). There are currently more than 30 rusunawa complex locations that house the victims of evictions. Each family is offered a 36m² two-bedroom apartment unit that includes a living room, a kitchen, and a bathroom. This is a living space to house a nuclear family instead of an extended one; moreover, the rusunawa management forbids extended families and visitors from staying or living in a designated unit. To ensure the residents obey this restriction, the rusunawa management, with support from a security company (Satpam), controls the residents through regular ID checks. In Pesakih Rusunawa, residents are even obliged to undergo regular fingerprint checks to ensure that no outsiders are illegally living in the rusunawa unit.

The attempt to sterilize the unit from inhabitants’ wider family members is a stark contrast to Indonesia’s urban migration pattern, which positions extended families as central supporting units for incoming migrants. Newcomers usually temporarily stay with relatives while finding a job and a place to live before moving out when they are ready. Given this social pattern, which was especially prevalent in the 1980s, a family house is never restricted to members of the nuclear family since there are always other relatives living there as part of their relocation process. In the case of the rusunawa regulations, forbidding extended family members from staying temporarily in the unit means imposing an individualization process on families, detaching otherwise tight-knit extended families, and uprooting the values and practices that were entrenched in kampung life. One of the inhabitants of the Rawa Bebek Rusunawa stated that “it really breaks my heart not to be able to accommodate my relative coming to Jakarta who needs a temporary place to stay”. As a result, he has to not only adjust to the individualization process but also renegotiate his position and relationship with his family members [33].

Moreover, besides limiting access for extended families, the rusunawa residents’ individualization is also apparent in separating the units’ utility supplies [34], which contrasts sharply from kampung practices where water and electricity connections are shared between nearby houses or families. Thus, rusunawa residents have to adjust to individual monthly bills for energy usage, creating new problems since many of them have lost their jobs and other sources of income

due to moving away from the informal accommodation and into the rusunawa units. With more bills to pay, the monthly overhead costs have become one of the reasons why relocation has the effect of further impoverishing the urban poor.

When the design aspect is closely examined, it becomes apparent that informal settlements are heavily characterized by their versatility and adaptability to inhabitants' changing needs. There is a sense of temporality, both in activities and design, that requires flexibility in space and function arrangement. This flexibility can be seen in the interior of houses, for instance, a living room that can be used for multiple purposes as a family room during the day and a place to sleep at night; or a cupboard that also acts as a temporary partition to separate two functions in the house; or a mezzanine with limited headroom that is added to create an additional bedroom. Such adjustments can also be seen in the size of a house, as people might add another floor on top of their original house as a vertical extension or expand horizontally to occupy under-utilized land. However, this architecture's flexibility and temporality must be abandoned in the rusunawa since the 36m² units are a fixed space with permanent walls and do not accommodate as many changes and adjustments as the informal housing. In an informal dwelling, the house is adapted to suit the inhabitants' needs, whereas in rusunawa housing, the inhabitants must adjust to the design of their living space. Thus, the inhabitants are unconsciously forced to adopt a directed way of life chosen for them. It is consequently evident that design can be a means of disciplining the people it contains. Therefore, this rusunawa scheme does not only force the individualization of the poor from their broader social fabrics but also showcases the tyranny of housing design by architects and decision-makers, and presents a control mechanism that is strictly applied to the poor and alters their values and way of life under the close surveillance of the management.

5. PARTICIPATORY DESIGN AS AN ALTERNATIVE SOLUTION: TWO CASES OF JAKARTA DEVELOPMENT

In recent years, the utopian vision of a good city and deterministic planning practices have been challenged by dissenting voices that fight for an alternative urban praxis that can accommodate the complexity of social, political, economic, and ecological issues [35,36]. Recent studies have extensively promoted a radically different perspective of informal dwellings. Instead of seeing them from a derogatory angle, academics and

activists have highlighted the potential and opportunities hidden in their disheveled appearance. Brillembourg and Klumpner suggested that an informal settlement “represents potentially vital opportunities, ... [and] holds the promise of extraordinary design innovation (where) scarcity and adversity breed ingenuity and resilience” [37]. They further criticized the government, planners, and architects for failing to reverse the so-called ‘forest-and-tree’ perspective; in decision-making, these experts cannot see the tree, that is to say, the individual who occupies the informal dwellings, as they can only see the forest: a bird’s eye view of the city grid. The remote viewpoint of the latter perspective is considered insufficient as it only produces what Clifford Geertz termed a ‘thin description’ that is narrow and empirical. To deal with complex social problems, a ‘thick description’ is necessary, which includes an in-depth understanding of a multiplicity of complex conceptual structures that are entangled into one another, creating a strange, irregular, and inexplicit condition [38]. Aligned with this, in proposing the term ‘situated knowledge’, Donna Haraway emphasized the importance of engagement with people to guarantee that enough individual and particular perspectives are taken into consideration in any actions or decision-making processes, arguing that objectivity is a collection of particular and specific embodiments and is not achieved through a generalized and false vision that splits the subject and object [39].

Rem Koolhaas suggested that to respond to ‘the death of urbanism’, it is necessary to adopt ‘the new urbanism’, which he defined as an urban realm that is no longer based on order and omnipotence, an arrangement of the permanent, or a stable configuration; rather, it encompasses uncertainty, deconstructs the definitive form, and expands notions and denies boundaries [40]. Thus, a new framework that involves participatory development is required, as not only can it comprehend the dynamic qualities of contemporary urbanism without being tied to fixity and certainty, but it can also strengthen the role of local knowledge as a means of achieving beneficial social change and leveling the power imbalance. Despite criticism that this method has become a new kind of tyranny in urban development as it ignores conflicts and power differentials at the intra-community level and is inclined to romanticize the local in a naïve and essentialist way, participatory engagement is still seen as a more democratic, just, and effective way of decision-making and has a far-reaching effect in the community when compared to the centralized, top-down method that relies on the premise that the ‘experts’ know best [36,41].

The recent development of urban Jakarta offers emerging examples of non-government organizations' attempts to apply participatory design in finding a solution to the informal settlement 'problem'. Instead of applying the template eviction and relocation plans offered by the Jakarta government, these philanthropists create a space for discussion with the inhabitants of the area to allow their voices to be heard.

5.1 Case 1: 'Kampung Susun' model in Kampung Pulo, South Jakarta

Kampung Pulo was one of the informal kampung areas targeted for eviction for the city's formal development. Before the eviction, Yu Sing, an architect, and Ciliwung Merdeka, a non-government organization advocating for housing rights, suggested a participatory design process to find a middle ground between the two contrasting interests. With the kampung residents' participation, the Kampung Susun (Stacked Kampung) project was proposed as an alternative 'win-win' solution for the regulator and the poor. This Kampung Susun scheme would offer an in-situ vertical upgrade of the kampung consisting of several rows of houses built on top of each other, with ramps connecting the levels to allow people to bring their selling carts upstairs. It would house 4,000 households on five hectares of land, and the residents would be given certificates for ownership of 100m² of land. The housing complex would have public areas that resembled kampung corridors' character in which people could socialize, as this model tried to integrate living, economic, and social activities in one place [42,43].

Kampung Susun was intended to offer a modern version of an urban kampung where people could continue their normal day-to-day activities in improved conditions. This scheme would avoid eviction and relocation since these two approaches, instead of becoming a solution, create more problems for the people, worsening the urban poor's lives as they lose their incomes due to moving away from their previous homes and are consequently impoverished. This judgment is supported by the fact that most, if not all, residents of informal developments rely on the informal sectors around the area; in the case of Kampung Pulo, its inhabitants earn an income through various informal occupations within 5km of the settlement. For this reason, the in-situ upgrading of Kampung Susun was considered a promising solution and has been described as "[the] most applicable and acceptable alternative to the lively atmosphere and environment of a real kampung" [43].

Nevertheless, despite the plan's promising prospects and the immense support shown by urban activists, the Kampung Susun project was not realized. When the project plan was presented to the Jakarta Governor, Purnama, he initially approved it, setting 2016 as an implementation date; however, he reversed this decision in the latter phases of the project, and the eviction of Kampung Pulo went ahead as initially planned, on 20 August 2015 [44]. Following the 2017 election, the new Governor, Anies Baswedan, promised to continue the Kampung Susun project, but it has yet to materialize [45].

5.2 Case 2: Participatory-based design in rebuilding Kampung Akuarium

The eviction of Kampung Akuarium took place on 18 April 2016. While some residents agreed to be relocated to Rusunawa Marunda and Rusunawa Rawa Bebek, located 30km from the evicted site, others refused the offer, and around 80 households (some 166 people) persisted in living in the debris in poor conditions, with no water or electricity supply. Anies Baswedan, who became the Jakarta Governor in 2017, promised to secure these people's housing rights and rebuild their kampung as part of a political deal with the urban poor in the gubernatorial election [46]. The reconstruction process was facilitated by the Rujak Centre of Urban Studies, employing participatory methods, and the project was called the Community Action Plan (CAP) [47]. The proposed kampung would have four stories to house units of 27m², funded by the Jakarta Government using the Jakarta local budget [48,49].

This plan, however, faced at least three hurdles. First, the housing problem is a multi-sectoral issue for Jakarta's governmental body, as it covers various aspects (such as housing, infrastructure, social challenges, and land status), each of which is managed by a different office. Unfortunately, these offices do not always coordinate effectively; therefore, decision-making, especially on a custom case such as the CAP project, presents a real challenge to this bureaucracy. Secondly, bureaucrats are not yet familiar with the participatory methods in decision-making that require constant and multiple interactions with the urban poor. The top-down culture is still too entrenched in the mindset and working patterns of the bureaucracy. Finally, the evicted people's intra-community dynamics present a challenge, making reaching a unanimous decision extremely difficult and thus delaying the process. Moreover, there is a concern that any decisions reached do not entirely represent the community's aspirations despite the participatory process.

Consequently, due to these challenges, what was supposed to be a people-led post-eviction reconstruction has been 'bureaucratized' and become another state-led project.

In a bureaucratized project like this, the role of experts such as planners and architects is, once again, put under the spotlight as they incline to work in a vacuum without substantial input from the community. As identified by Till [14] and Mohan and Stokke [36], these experts position themselves as distant and superior, claiming the right to decide and manipulate how things 'should be', without the burden of inexpert interference. A project like CAP requires a new framework; thus, challenging the related professions' role is crucial to avoid the business-as-usual attitude that only leads to a pragmatic and partial approach. The reconstruction of Kampung Aquarium is currently still in progress.

5.3 Participatory design is possible

Recently, a new movement called 'community architecture' has emerged, emphasizing the importance of user involvement in the process of design, construction, and management of the environment [50]. This has arisen in response to the modern architecture and planning systems that are deemed to cause more problems than offer solutions. In Bangkok, for instance, a program called 'Baan Mankong' (Secure Housing) has been launched to solve housing problems for the city's poor. This project, which was initiated in the mid-1990s and started to be implemented in 2003, complements the problematic Bangkok housing provision, which is similar to Jakarta's housing regulations. The Baan Mankong program has successfully attracted public attention and support for the housing problems facing Thai nationals living in Bangkok. Various stakeholders are involved in this program, and architects have finally been willing to shift their paradigm and begin operating within the spirit of collectivity and participation [51].

In Indonesia, Yusuf Bilyarta Mangunwijaya, a priest and architect, is an example of this community architecture movement. In the context of the poor's complex conditions in a kampung in Code River in Yogyakarta, he helped the community rebuild itself and its environment while maintaining a close, even intimate, community position. This in-situ development successfully improved the kampung's physical conditions and the community's social conditions, transforming from a crime-infested kampung into a safer community for all its inhabitants [52]. Mangunwijaya's student, Eko Prawoto, employed a similar approach to helping Ngibikan Village people

rebuild their kampung in the aftermath of an earthquake. As an architect, while maintaining close engagement with the people, Prawoto offered a simple structure design made from coconut wood, abundant on-site. Moreover, he allowed the people to improvise based on their capabilities and needs while using what they could find among the rubble. The result exceeded expectations, as the process of working together with the people in the community not only made the construction process faster but also rebuilt the self-esteem and sense of belonging of the people, which had been lost after the disaster [53].

Another notable participatory design project for the poor was undertaken by the Urban Poor Consortium and the Uplink network in Aceh following the 2004 tsunami. A participative method was adopted for the housing reconstruction project in 24 kampungs on the Western coast of Banda Aceh. Like the effects seen in the Code River and Ngibikan Village projects, this reconstruction process in Aceh has also become a way of healing for the tsunami survivors who had been devastated by the loss of their families and friends. In this project, the people took a central role in redesigning their houses, their kampung, consequently, their lives. This project became a people-led rather than a contractor-led housing reconstruction, despite claiming that the latter is more effective and efficient than the former. As a people-led project, the community was an active and independent player in every stage of the process (mapping, participatory design, and execution of the physical reconstruction), while the architects only acted as facilitators [54]. The Urban Poor Consortium and Uplink applied a similar approach to post-earthquake reconstruction in Yogyakarta in 2006 [55].

The success stories discussed above are evidence that participatory design is possible and achievable. The close engagement demonstrated by this method has a far-reaching effect on the community, beyond the level of physical construction. It requires a different approach and mindset, whereby architects have to adopt a new role as a facilitator instead of the main and sole designer. As a result, architects must leave their comfort zone and experience firsthand the urban environment's intertwined complexity while moderating their ego as an 'expert' who 'knows all and knows best'. Architectural design is no longer an individual exercise of architects; instead, it becomes a tool through which people's perspectives interact through bargaining and negotiations to achieve an optimum solution in the context of certain limitations. Therefore, architecture must depart from its pragmatism and extend into the realm of social science, in which the complexity of social and political

interactions is incorporated as an intrinsic part of the discipline. Architecture should relate to ‘humanizing humans’ where the urban poor’s problem is seen through the lens of agonism, instead of antagonism, as Chantal Mouffee suggested [56]. With this perspective, the poor and the informality of their living conditions are not seen as an enemy of ideal city planning; thus, they do not need to be eliminated; rather, they are considered as one part of the supporting systems of the urban fabric that need to be nurtured and ‘organized’ for the improvement of their livelihoods as urban citizens. Therefore, this architecture is expected to contribute to the people’s empowerment, the mediation between different social classes, the improvement of social and ecological conditions, the facilitation of the lives of the marginalized, and equality despite differences, hence the betterment of society. No matter how utopian it might sound, social justice should be *the* agenda in practicing architecture, moving away from the former focus on aesthetics and functions. This is where architecture as a discipline and a profession should rethink its purpose.

6. CONCLUSION

This paper problematizes the narrow focus of design that limits the practicality and efficiency of how a building performs, rather than trying to accommodate its inhabitants’ complex needs. Design as a discipline focuses too heavily on ‘knowing how’ instead of ‘knowing that’, offering excessive scope for arbitrary reasoning that strengthens this knowledge’s sense of subjectivity. For many years, critics have identified this problem, demanding that architects be more sensitive to the real-life context, to give meaning to the surrounding area and people of the building, beyond the trivial meaning that only deals with metaphoric imagination. The ‘moral design dilemma’ that Christopher Jones highlighted should be considered since the effect of any design decision grows more widely and rapidly than the physical construction of the design itself. This research gains significance in challenging a pattern that has been established for decades and, in the context of Indonesia, has become a template for architectural practice and education.

The Jakarta housing problem provides an example of how architecture can become a suppressing instrument for authority to control the marginalized and detach them from their values and possessions. Illegalization and criminalization become a ‘disease’ in dealing with the proliferating informal settlements in Jakarta, and architecture plays a significant part in imposing this in a top-down, autocratic manner. The ‘one-size-fits-all’ rusunawa scheme illustrates that

social problems are pernicious and cannot be solved with an obsolete approach of template design since the eviction and relocation process provokes many more problems. In the fight against this tyranny, some designers and activists have adopted a more inclusive approach by incorporating the various, albeit conflicting, needs of the people and finding a middle ground that satisfies both the regulator and the poor. The two cases discussed above illustrate remarkable efforts in ‘humanizing humans’ in architecture, and this is the direction that should be taken. The projects in Kampung Pulo and Kampung Aquarium showcase the possibility of participatory design within governmental projects’ scope, although this would require a radical shift in attitudes and approaches to architecture and planning.

Establishing social justice as the end goal of a project and believing that every human being has a right and role in the urban space could help develop a sense of inclusivity in architecture and planning. The question ‘do we design architecture for humans?’, which features in the title of this paper, thus becomes a reminder that the idea of ‘good’ architectural design should be repeatedly contested and constructed, as there is no such thing as an ‘ideal’ way of creating design. Although there are still many unanswered questions about participatory development, since it appears to offer a promising way of including the marginalized, further study is needed to refine this method or find an alternative way to achieve this aim.

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