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Well – being Parameter Evaluation for Athlete Homestead in Jakarta

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Abstract. This research discusses Koen Steemer's theory of human well-being for athlete village. The sustainability of an athlete village, post-event, proves to be a modern controversy. Architecture often omits the sustainability factor of the athlete village. As a result, the main question would be "how to design an effective well-being athlete village?" where Steemer's parameters or an enhanced version of it, could be incorporated into Indonesia's own athlete village. This discussion will utilize the first person phenomenology method. Koen Steemer's "Seven Design Strategy" parameter is used to analyze four precedent Olympic Village studies between the years 2004 to 2016. In addition, an interview with an Indonesian "athlete village" specialist was conducted. As a result, an enhanced parameter of Steemers's theories is established.

Keywords: Architecture, Sustainable, Well-being, Koen Steemers, Athlete Village, Indonesia

1. Introduction

1.1. Background

Currently, the concept of a nation's brand is increasing [1]. Hence a nation can globally introduce their identity to enhance their nation economic aspect [2]. Nowadays, international sporting events are usually used for a nation's branding, which has big influence on its economy, social, and political aspects [3]. This strategy affects a nation's infrastructure, which in turn, also affects their development process [4]. Considering the implication of the event, more often than not, sky-rocketing budget buildings were built for the event and have since become an unsustainable architecture.

1.2. Problems

Sustainable architecture design for international sport event was considered seriously from London and Beijing 2018. It was proved by, some sport venue that was designed by sustainable architecture approach. The building was designed very adaptable with post – function after the Olympic event. Thus, sustainable architecture should connect human needs presently with future needs [5]. Refer to Koen Steemers opinion, sustainable architecture should be adapt with many different kind of needs, user, and the local context [6].

Concluding from the examples, to conceive a sustainable building, human well-being would be fundamental in creating such architecture, using a holistic approach, which takes the shift in human lifestyle and needs into account. The definition of human well-being would be a person in a good state of health, happiness, and welfare, which could be well-kept by a good lifestyle. Interactions and activities are commonly known to increase that lifestyle's quality. In the case of International Sporting Event venue, the most used feature would be the public space area, where participants and visitors would be interacting and doing activities, hence, this area would be the main focus to enhance the quality of human well-being [7]. There are cases where this point has been neglected or has failed to serve the future needs, especially athletes' housings, which were rendered pointless post-event, prompting the whole venue as unsustainable.

Jakarta would be the Host for Asian Games Jakarta 2018, constructing a public building of an International sporting venue. It boasts a colossal capacity of the housings (22,000 people could occupy the housings), 7 towers, and a spacious public area. There has been a plan to alter these housings into rented residential area for public post-event. However, the recurring question has surfaced, could it sustain itself?

2. Research Methods

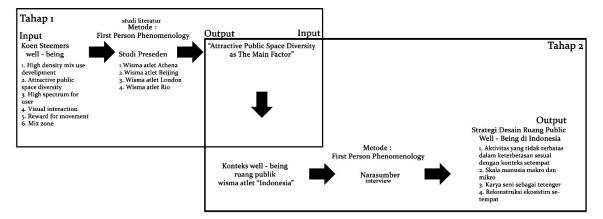


Figure 1. Research Processes

Research process is going to be held in two phases. The method, First Person Phenomenology, would be applied to each phase, and in result each phase would have different inputs, outputs, and theories. Utilizing Human Well-Being Theory by Koen Steemers as a parameter, phase 1 would be conducted to test and to study cases of four precedent Olympic Villages. The main objectives in this phase would be to judge the sustainability and human well-being of the study objects, as a result, it was found that an attractive public space diversity is the main factor to sustain the venue post-event. This founding would then be used as an input for phase 2, which has the objective to study Indonesia Asian Games 2018 Athlete Village. The final outcome of this study is to discover

an augmented parameter of Koen Steemers. The parameter from this study would be specifically constructed to study Indonesian Athlete Village.

This research is conducted by qualitative first person phenomenology, a study utilizes first person perspective to look and analyze the phenomenon by literature study and interview with specialists. In first-person phenomenology inquiry "the researcher uses his/her own firsthand experience of the phenomenon as a basis for examining its specific characteristic and qualities". [8] – Linda Groat and David Wang. The data would then be presented by table data format and narrative citation from the specialists.

3. Results and Discussions

3.1. Precedent studies

Olympic Village **Design Strategies Olympic** Olympic Village **Olympic** Well - being place Athena 2004 Village Beijing London 2012 Village Rio 2008 2016 High density mix use development Attractive public space diversity High spectrum for user Visual interaction Reward for movement Mix zone Productivity space for consumption Post activities plan Private house Private house Rent house (after) (after) (before – after) apartment

Table 1. Precedent Studies Conclusion

A public space must have features that would be well adapted to high spectrum users; visual interaction for private and public sector horizontally or vertically; including a mix zone activity which triggers RFM (Reward for Movement) and productivity space for consumption. Thus, public space is the connection for high density mix use facility. Applying Koen Steemers Design Strategic on public space facility, a conclusion could be drawn from the table data above that diversion of a public space is an important factor to create Human Well-Being Design approach for the athlete village.

Consequently, Koen Steemers Design Strategy could be applied as a human well-being parameter in athlete village design context, and that public space is a movement space which could fulfil human well-being parameter by Koen Steemers. In Table 1, the data shows that Olympic Village London 2012 has become the most sustainable village post-event where it has the most attractive public space diversity. On the other hand, Olympic Village Athena 2004 came out as the most unsustainable village of the study, as it did not cultivate features that support human well-being design. Another case of Olympic Village Rio 2016, it had succeeded in presenting attractive public space diversity, however, a complication occurs on post-event's planning and another parameter point that could not be fulfilled made it unsustainable.

In conclusion, attractive public space diversity is the fundamental factor for human wellbeing, yet it could not be implemented effectively if other parameters are not fulfilled. A public space could be a space for movement, and this space is designed to fulfil the parameters of well-being by Koen Steemers, such as connect, keep active, take notice, keep learning, and give.

3.2. Athlete Village Asian Games 2018 Indonesia

Analyzing Jakarta Asian Games 2018 Athlete Village, there are attractive public space and visual interaction to be found, however, from seven design strategies, only those two were fulfilled. The venue's design itself is still in the developing stage and thus post-event facilities are not completed yet, hence improvement plans to enhance human well-being in support of sustainability are possible to be added upon completion.

Design Strategies

Wisma Atlet
Kemayoran Asian
Games 2018

High density mix use
development
Attractive public
space diversity
High spectrum for
user
Visual interaction
Reward for
movement
Mix zone
Productivity space
for consumption

Table 2. Analyzing Table for Athlete Village Asian Games 2018

3.3. Entanglement Analysis for Attractive Public Space Diversity with Human Well - Being

In the human well-being concept by Koen Steemers, offers seven strategies design as the parameter approach. In those specific strategies, attractive public space diversity became the main factor of human well-being, resulting in sustainability on athlete village design. Based on interview data, the most attractive public space diversity was Olympic Village London 2012.



Figure 2. Olympic Village London 2012

Figure 3 was chosen by four specialists as the most attractive public space diversity post-event. The space itself became the hub of the Olympic Village area and functioning as a circulation and nodes for the region activities. Its landscape, building, and environment were designed thoughtfully so it interconnects human and environment. Every specialist who were shown of this picture has been able to interpret some activities in the space. This result has proven that specialists' interpretation and study precedent analysis have the same conclusion of that Olympic Village London 2012 is the most sustainable athlete village in this study.



Figure 3. Olympic Village Athena 2004

On the other hand, figure 4 is the most unsustainable public space diversity. Olympic Village Athena 2004 is deemed as the most unattractive public space diversity by specialists who were drawing their conclusion from the pictures that were shown to them. There was a lack of balanced scale between the spacious area and human occupancy. A vast public space was designed in the middle of residential area and surrounded by for stories residential housing. This space looks sparsely lack in human presence and thus visual interaction is inaccessible, hence the human well-being factor failed to materialize.

This result has further proven the importance of human well-being approach by Koen Steemers to be implemented in the design to keep the venue sustainable, which could be established through an attractive public space diversity. A public space has two kind of forms, one where has a corridor or circulation function and a space functioning as nodes for activities without any movement, which in entirety functioning as a place for human interaction. Public space become a social space if there is social interaction [11]. Public space as a nodes could be the reward for movement, supporting human well-being theories by Koen Steemers. As it is hinted on the term, a public space becomes public by accommodating activities and communities of high spectrum users. Therefore, the most attractive public space must be able to entice communal activity to happen in that space [12].

In general, a public space is a highly utilized space that would accommodate various activities by a wide range of communities. Accordingly, a public space for a city must be universal, because the space would have to accommodate a high user spectrum. The more publicized a space is, the more it could be interpreted by larger variants of communities [13]. On the other hand, a smaller public space must have a specific form and design depending on local context [14]. However, it would still have to fulfill its function for a high user spectrum. Additionally, it should position itself within the local context.

This specifically designed public space's main function is to connect the zoning areas in the athlete village and this connection could be achieved by interactions of human – environment – activity. The entirety regarding human well-being, is about living as a human [15]. Humans are social creatures, naturally, social interaction would be their basic necessity, specifically designed to live with others [16]. Consequently, attractive public space diversity has an association with human well-being in the context of Indonesia's athlete village.

3.4. Enhancement Parameter Well – Being Analysis in the Context of Athlete Village in Indonesia

From the interview with the specialists and studying Steemers theories in Indonesia's Athlete Village context, there are three additional parameters that are applicable in this particular framework. Firstly, limitless activities in a limited space. Secondly, human scale in a macro and micro context. Finally, the installation of art or visual signage as a landmark.

3.4.1. Un Boundaries-boundaries Activities Depend on Local Context



Figure 4. Olympic Village London 2012

The human perception of a space must be unrestricted. The space itself must be formed to freely enhance the human perception and interpretation based on a local context. Hence, the space is limited but it has unlimited function, where the limit could be physical or pseudo. London's 2012 Olympic Village could be seen as a good example to this parameter. Its combination of architectural elements clearly outlines the pseudo limitations of space. The design for its outdoor space allows activities to be freely interpreted. On the other hand, Rio's 2016 Olympic Village differs to London's, where it is created with more physical limitations of space and numerous nodes. Its design depends on circulation and building placement, basing it on the connection between the nodes and circulation. From the two examples, it could be seen that London's 2012 Olympic Village is more supportive towards human well-being due to its local-context approach for local activities as the foundation of its design.



Figure 5. Olympic Village Rio 2016

The attractiveness of a public space is based on the local community's activities, where it appears in the form of a space with clear physical limitations. The wider the space area, the wider the context it must possess. As a result, a high spectrum of users is necessary. However, in a smaller area, the design must have specific space activities and boundaries based on the local context [17].

3.4.2. Macro and Micro Human Scale

The human scale could be used in a micro or macro context. Using a pedestrian as an example, what they perceive from a building is its macro context. In contrast, the podium of the same building could be perceived in a micro context by the pedestrian. Scale is very critical in shaping how people perceive space, which would cause the inability to interpret space if it is lacking.



Figure 6. Olympic Village Athena 2004

Figure 6 illustrates the Olympic Village Athens 2004, where the figure represents issues with human scaling, public space, and the building itself. Firstly, the public space looks vast, while the human scale is very small. This photo shows no space limitations in addition to the four-story building placed so far. A lack of social interaction could be interpreted from this Olympic Village due to its lack of scale, connection, and the loss of activity perception [18].



Figure 7. Olympic Village London 2012

In the case of Olympic Village London 2012, it showed a comfortable human scale. Vegetation was used to bridge the perception between high vertical buildings and its horizontal environment. Furthermore, its public space was designed with many kinds of elevations, and it would create pseudo boundaries. The elements of architectural, such as trees, buildings, and environment were connected in a good scale and composition, propelling a sustainable human interaction in its space.

A space could be perceived more clearly by human scale. The feeling of limitation and proportion of the space affects the interpretation and perception of a user. Elements such as vegetation, soft-scape, and landmark could be utilized as pseudo boundaries that would heighten the perception of the scale of a space which in turn would affects visual interaction of a user.

As a design concept, Athlete Village Kemayoran has the potential to play a big role in the city's function. To start with, the position of Athlete Village Kemayoran is at the edge of the city, making it possible to connect middle low residential area with middle up residential area. Additionally, there is a direct axis from the street to public area in the middle of the Athlete Village.



Figure 8. Athlete Village Kemayoran Site Analysis

However, despite its potential, the architecture planning was not concerned with the scale of the city. In evidence, the circulation axis from the street was closed by fences, and there is no landmark that interacts with the surrounding environment, resulting a limitation on the activity perception.



Figure 9. Public Space and Axis from the Street

In Figure 10, it demonstrates that the scale of the public space area and the vertical building is immensely imbalanced. The vertical tower felt intimidating, and the podium area was positioned very closely and on higher elevation. A conclusion to be drawn from here is that human micro scale appeared to be missing in this design and thus, visual interaction, vertically, would have been failed to materialize.



Figure 10. Public Space Area in Athlete Village Kemayoran

3.4.3. Art Installation or Visual Signage as Landmark

Art installations and visual signage would be a great addition to enhance the visual interaction in a public space, furthering the Steemers' well-being theories.



Figure 11. Visual Signage Landmark in Olympic Village London 2012

Figure 11 depicts Olympic Village London 2012 Landmark. An art installation yet also functioning as a playground. It was constructed with wood materials, and functioning as a playground for residences post-event. The playground would act as a point where it would trigger the concept of RFM (reward for movement) by Koen Steemers. With the London Village's playground as an example, this concept would be plausible to be imparted in Indonesia's context as well. As social media users grow rapidly in recent days, it has become one of the most successful tools to promote and to feel belonging socially and globally. It rings true especially in Indonesia's younger generations. They have been generating many social new trends by sharing them on the

media platforms. Should there be an interesting landmark on Indonesia's athlete village, it would attract community to gather and have interaction with. A landmark is always defined by visual and functional [19].

4. Conclusion

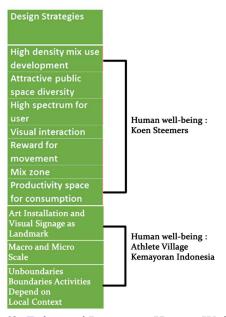


Figure 62. Enhanced Parameter Human Well Being

In conclusion, the study has found there are additional parameters that support well-being parameter by Steemer that are applicable in the case of Indonesia's athlete village. Those additional parameters are: Limitless activities in a limited space on local social context; Macro and micro scale on human perception; and art installation and/or visual signage as landmark.

4.1.1. Un Boundaries-boundaries Activities Depend on Local Context



Figure 13. Un boundaries - boundaries Activities Sketch

On figure 13 drawing, to heighten Steemer's human well-being parameter, a limited space with limitless possibility of activity that depends on the local social context. As drawn on figure 13, a

person has a free perception of a space, and other people who are doing activity in that particular space could stimulate and influence others' perception over that space.

4.1.2. Macro and Micro Human Scale

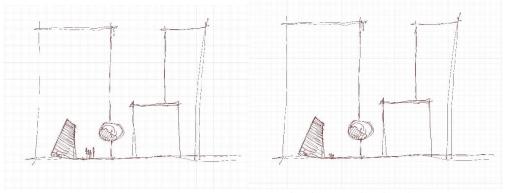


Figure 14. Macro and Micro Scale Sketch

On figure 14, there are two almost identical drawings. The difference was on the objects' proportion against the humans. As commonly human becomes the standard for the scale proportion, macro and micro scale of an object ought to be considered deeply as human would be enjoying the outcome as a user. Scale make interpretation and emotional effects for users.

4.1.3. Art Installation or Visual Signage as Landmark

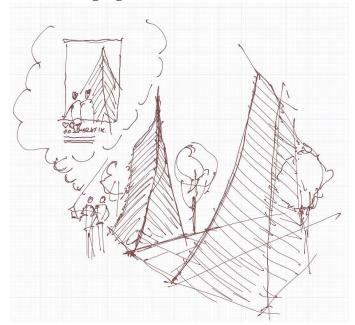


Figure 15. Art Installation and Visual Signage as Landmark

Art installation and visual signage have often used as a landmark. With a strong social media context in Indonesia, it would boost the visual interaction between people and the landmark. In the context of a city, a massive scale landmark is needed to provide a comfortable proportion of the space. On the other hand, with smaller are, smaller landmark with a specific feature of local social context would be well considered.

To conclude, Steemers' human well-being parameter has the capability to become design method for athlete village's human well-being design. Resulting from this study, there are additional parameters to heighten Steemer's parameter further. They are: Limitless activities in a limited space on local social context; Macro and micro scale on human perception; and art installation

and/or visual signage as landmark. These parameters are to reinforce Steemer's human well-being theory.

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