

## The Setting of Communal Spaces in an Apartment through the Indonesian Architectural Regionalism Approach in Kampung Keputran Pasar Kecil, Surabaya

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**Abstract.** The aim of the study is to identify the ideal layout of communal spaces in an apartment through the design approach of Indonesian architectural regionalism in *kampung*. Kampung Keputran Pasar Kecil in Surabaya is the locus of study. The relocation of the *kampung* to vertical houses, which are not suitable to the cultural context of life in *kampung*. This problem then leads to the disappearance of some places in *kampung*-lifestyle's identities and decreases the quality of social and economic life of the apartment's habitants. Qualitative analysis by the identification and reinterpretation of spaces' and places' values are used as the research methods which the form of elements of spaces and places required, based on the needs of the habitants of *kampung*; then spaces conceptualizing in accordance to the regionalism context of *kampung* and authorized regulations; and design simulation is done based on *kampung* existence as the final result of the study.

**Keywords:** *kampung*, urban village, apartment, communal space, Indonesian architectural regionalism

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### 1. Introduction

Surabaya as one of the developing cities by the existence of a river channel (Kalimas), which creates a strategic area for trading activities. As the city developed, many immigrants came and started to create settlements along the riverside and became the center point of the city. The natives, on the other hand, started to create their own settlement behind them, called as *kampung*/urban village. And it continues to evolve organically until nowadays, and *kampung* has been identified as the original and traditional type of settlement in Surabaya. The development of *kampung* phenomena eventually creates a new problem related to the poor quality of living

environment [1]. Besides all the lacks of living environment quality, *kampung* has lots of values of living held by the habitants, from a strong historical identity, spirit to fight, the struggle and cooperation, and many more that have become their life identities [2]. Kampung Keputran Pasar Kecil is one of the precedents that located in the center of the city and has been developing since 1930s until now [3]. Kampung Keputran Pasar Kecil, then increasingly congested as immigration continues, especially environmental quality is getting worse and land prices are getting higher.

One of the best alternatives to these problems is the design of high-rise apartments. High-rise apartments have been regulated by the government as a multiple stories building, with a maximum of 8-20 floors built in an environment; vertically and horizontally structured and divided into several functions; equipped with private spaces (apartment units), communal objects and communal sections; and apartments must be organized in an effective, efficient, affordable manner, consider aspects of the habitants' sustainable cultural life [4]. The living culture of the *kampung* habitants community, until now still holds the paradigm of duality urbanism [5]. A normative value of typical rural life behavior, in the setting of urban place. These life values of *kampung*, have not been accommodated in the case of apartment living cultures nowadays, which they tend to lose their selling place (*warung*) and their social life aspect [6]. Therefore, to be able to accommodate these cultural values of habitants' community, the comprehensions of the local values that grow in the community are necessary. All these issue of local values comprehensions can be reached through the Indonesian architectural regionalism approach, which contains values of universality, locality, and identity.

According to the issues, it is a necessity to create a setting of communal spaces that accommodate the life values of habitant community in Kampung Keputran Pasar Kecil, those notice the function of economy, and social aspect through the structure of apartment unit composition, zoning and the composition of the social space in the residential area. All these aspects can be done by finding the values of universality, locality, and identity through the approach of Indonesian architectural regionalism [7]; then the process of finding the place values in *kampung* by Damayanti using the spatial recognition of *kampung* as the derivative of regionalism theory [3]; and to the specific element of spaces in *kampung* using the method of figure ground, linkage and places mapping to find the typology of spaces [8].

## 2. Literature Review

Literature review will explain about the terminology of *kampung* apartment based on theory and regulation. Indonesian architectural regionalism are needed as a tool to accommodate the values of *kampung* habitant living culture, and spatial recognition which are derivative theory of regionalism is used as a tool to discover the meaning of the spaces in the *kampung*.

### 2.1. *Kampung*

*Kampung* is one of the typology of traditional housing in Indonesia with a characteristic of a strong binding social system and culture [9]. Other than that *kampung* still holds the strong identities of history, spirit to fight the struggle and cooperation, and many more have become their identities of life [2]. But the organically growth of *kampung* development has created a bad quality of living environment, starting with poor drainage or systems, sewage, to poor quality daytime lighting and air flow systems. Basically, government has a regulation regarding living zone area guidelines including *kampung*s in Indonesia. According to the regulation of Ministry of Home Affairs, it is said that every residential area needs to have a good quality of 3 basic elements, namely: infrastructure, facilities and utility systems [10]. Unfortunately, all of these elements are mostly found in a poor quality on every *kampung* area. One of the precedents found in Kampung Keputran Pasar Kecil, which is the locus of the research. Kampung Keputran

Pasar Kecil is a district of *kampung*, which has been developing since the 1930s until now, and it grows between the central business districts and becomes denser and poorer in terms of the quality of living environment with the necessity of living place of the worker in the area. The *kampung*'s habitant themselves are mostly categorized as low-income people. Since the *kampung* areas became denser and people began to lose spaces to act, some spaces in *kampung* were used creatively as multi-functioned space, such as *gang* which in *kampung* which is a circulation areas but in reality are used as a social and economic areas as well, see Figure 1. Some areas of *kampung* might contain the cultural activities at some specific moments.



**Figure 1.** *Gang* as a Multi-Functioned Place (Source: Documentation of PCU Architectural Design Studio, 2018)

All the characteristics of multi-functioned space in the context of *kampung* living, referred to versatility of spaces, which means a meaning of space that has ability to adapt or function for several different uses at the same time [11](Chandra & Sunaryo, 2019). Characteristic of *kampung* can be found in every activity and necessity that will create a specific place in *kampung* area, which are the values of identity of *kampung*.

## 2.2. Apartment

Based on the information about economic status of the community it can be concluded that the general type of apartment is the most ideal type for them (Indonesia, 2011). According to the regulation, apartment in Indonesia is a multiple stories building, with a maximum of 8-20 floors that is built in an environment; vertically and horizontally structured and divided into several function; equipped by a private spaces (apartment units), communal objects and communal sections; and apartments must be held in an effective, efficient, affordable manner, consider aspects of the habitans' sustainable cultural life. The communal sections of apartment is mostly in the form of building infrastructure such as corridors, utility systems, connection systems, emergency systems, etc. which are integrated to the building, and the communal objects are in the form of facilities of the living area which are integrated with the site of the living area building [12](Indonesia, 2011). Every single apartment unit is limited to 30 m<sup>2</sup>, including 1 living area, 2 bedrooms, 1 bathroom, and 1 service area.

In Indonesian national standardization stipulates that each hectare of site should accommodate 1,736 people that contains of 50% residential area; 10% public service facilities; 20% of open green space; and 20% of building infrastructure. Public service facilities are suppose to be applied in the ground floor or separated from the building.

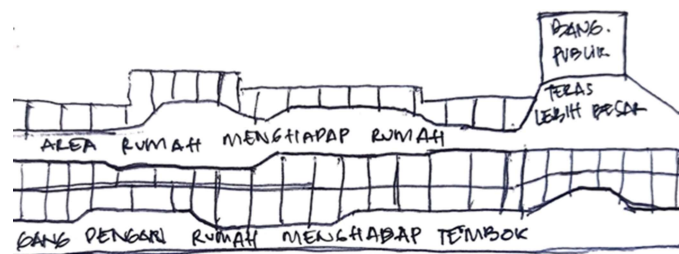
## 2.3. Element of Spatial Recognition in Kampung Keputran Pasar Kecil through Indonesian Architectural Regionalism

Indonesian architectural regionalism can be seen a representation of values and qualities of architectural users in Indonesia. Explained by Hidayatun (2018), this theory contains three main

elements of value, namely: universality, the comprehension of the balance between humans as users, and nature as the place and their universal characteristics; locality, variety of knowledge, problems, and specific characteristics of people and place; and the identity which is a real representation of the user's life culture[7]. Moreover, Indonesian architectural regionalism is understood as a mindset or paradigm, not as a style of design.

Indonesian architectural regionalism in context of residential areas is found in *kampung*, which is explained by Nugroho (2009), where there is almost none of the space of *kampung* that is available nowadays, that people in *kampung* unintentionally create a behavior to find a creative way of using the left-over spaces in *kampung* based on their necessity [9]. This typical kind of behavior is one of the values that contained in locality aspect of regionalism. The way people of *kampung* interpret the meaning and value of spaces in *kampung* found in the Damayanti (2015), the spatial recognition of *kampung* [3].

The spatial recognition of *kampung* contains four values of spaces, which are the historical values of people and place, which are bases that might impact the behavior of the people of *kampung*; social space creation, which emerges by the needs for social interaction and the existence of the circulation path and nodes; territorial creation, which made by the edges of the area or a similarity of the characteristics of a community which creates a district; and point of reference which are referred to as landmarks and are always related to intrinsic values created and belong to the community. In case of Kampung Keputran Pasar Kecil, it is obvious that *gang* as the their circulation paths are concurrently becoming their social space creation where they routinely used as their place to interact each other or children's playing area on daily basis, a place to hold a ceremony as they put a temporary tent to cover the road, and the place for them to hold a bird competition (*adu doro*) which is basically the historical and cultural value of their people. The organic composition of building mass in the *kampung* might create some recesses area which potentially become the social space creation area, see Figure 2.



**Figure 2.** Recess Area in *Kampung* (Sources: Chandra & Sunaryo, 2019)

*Gang* in the *kampung* area has another function to create territoriality, which is created by the sections and edges of every *gang*. Since *gang* potentially creates a social activity, it might as well create communities, which create a district and territory. Some of the nodes between the circulation paths might also create a social activity or provide a public places which become the point of references in *kampung*. This discussion of places in *kampung* is the example how *gang* has a universality value as a circulation path, but also has the locality values such as the four values of spaces based on the identity of the community needs.

### 3. Research Methods

This research is related to the comprehension of spatial quality in the *kampung* area, which will be reinterpreted and used in the process of making high-rise apartment design concepts. This is a qualitative research study with the rationalistic approach by combining theories of Indonesian architectural regionalism with the result of field observation in the form of visual

elements of *kampung*.. Data collecting such as observation, archive document, artifacts collection, and interview are done in the process of the research (Groat & Wang, 2013). Documents for the research are in forms of journals, theses, and books relating to the history, terminology and spatial characteristics of the *kampung*. Theory of Indonesian architectural regionalism, was used as a paradigm of a research approach to examine the content of *kampung* habitant community life values [7]. Theory of spatial recognition of *kampung* was used to find the value of space in the *kampung* [3], and theory of finding lost space was used as a tool to identify elements of spaces in the *kampung* [8]. Some variables to be studied are physical elements of space; ambiance of spaces created by the activity; and the meanings of space that is read in the process of observation in the field.

Analysis process starts from finding the values of Indonesian architectural regionalism [7] based on in the element of spatial recognition of *kampung* [3]. The existence of identity, universality, and locality value of life in *kampung* will be identified in four elements of spatial recognition, such as historical value, social space creation, territoriality creation and point of reference.

Then, the theory of spatial recognition will be used to identify the value of space in Kampung Keputran Pasar Kecil based on the activities and the meaning of spaces. In the process of finding the values and meaning of places, theory of land figure, linkage and places are used to identify the spaces of *kampung* [8].

The third step, every identified space will be analyzed by using the theory of Indonesian architectural regionalism to find the values of locality and identity. Some regulation of apartment will also be used on the discussion as consideration to formulate the ideal findings.

The fourth step, based on the result of analysis process through a regionalism approach and discussion with the regulation, the findings will be formulated in the form of spatial typology. This typology of space will describe the general criteria of space that should be fulfilled such as the quality of space or the activities held in the space.

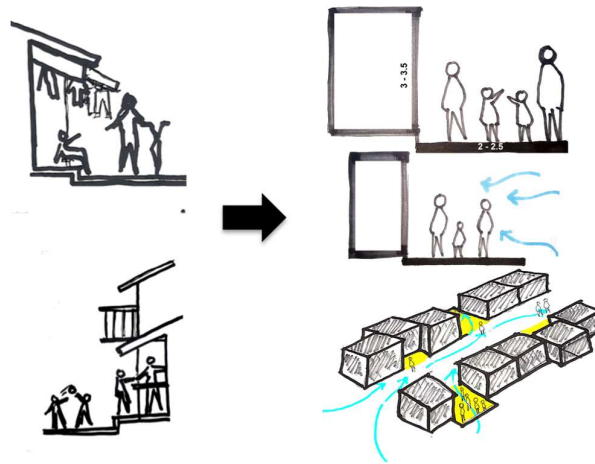
The fifth step, the findings of typology of space will be developed to create a big picture of the space that is expected to be achieved, the big picture will be in a form of a descriptive design concepts.

In the last step, the design concepts will be applied into a setting of communal spaces based on the Indonesian architectural regionalism values found in Kampung Keputran Pasar Kecil.

#### 4. Results and Discussions

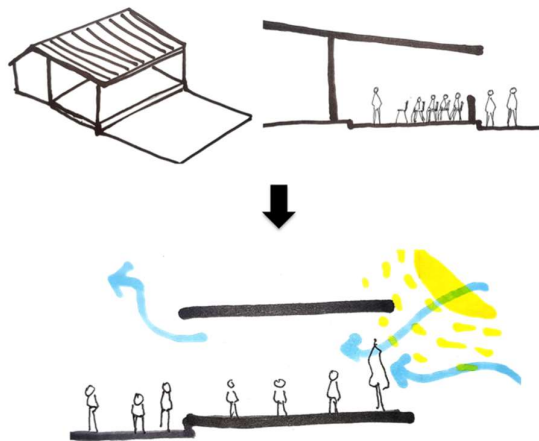
There are several types of space found in the area of *kampung*. The typology of spaces is found by the identification of ground figure, linkage and place in *kampung* and it's found that all these three elements of spatial elements identification are related to each other. Places that contain the value of meaning; function and culture of the user are found to be one element that is able to represent all of them. There are some of typologies of space found; the following are the analysis and descriptions:

1. *Gang emperan*, in the context of *kampung*, it is meant to be a circulation path which is a linkage of the *kampung* area between one and the other sections, and it is categorized as an urban void. *Gang* as the linkage of *kampung* contains many values of community life; it can adapt to be a place for socializing or even a place for trading goods. *Gang* as a space always has side physical enclosure, but the ambiance of outdoor space can still be felt there; caused by the airflow circulation and daylight availability. *Gang emperan* always has a recessed area created by an organically grown building mass along the *gang*, the place becomes a node for social space creation. *Gang emperan* in the context of apartment will be applied as the corridors of the residential areas, see Figure 3.



**Figure 3.** Typology of *Gang Emperan*

2. Area pernaungan, is typology of social space which is originated from the behavior of the community that uses the environment around as their gathering place, see Figure 4. It's found that these places of gathering are mostly natural shades or shades building as a shelter. This explains the characteristic of the space that needs to be in shade but also has the ambience of an outdoor area, illustration can be seen in Figure 4.



**Figure 4.** Typology of *Area Pernaungan*

3. *Lapak omah*, it is known as the terrace area or the recessed area of the house in the context of *kampung*. It functions not only for a place where domestic activities are held, but also as a place to socialize and trade goods just by the installing of some additional elements, see Figure 5. The ability of space quality improvement is known as one of the characteristics of *kampung* life that creates a space as a multi-functioned place. It is connected to the living zone by a door connection, and it may become a barrier between the living zone and *gang emperan* and functions as a semi-private space in every apartment units.

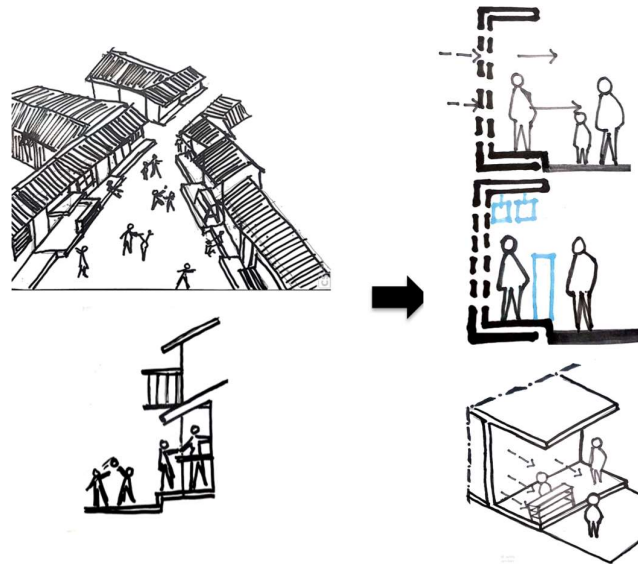


Figure 5. Typology of *Lapak Omah*

4. *Lapangan doro*, a communal space that is able to accommodate a big amount of participant activities. It is the implementation of the open spaces in the context of *kampung* and is applied every three stories. *Lapangan doro* has to be easily accessed and placed in the center part of living zone. The spatial characteristics of *lapangan doro* are that it should be in the outdoor and used to hold communal activities that may contain values of historical and cultural aspects of people in *kampung*, illustration of *lapangan doro* can be seen on Figure 6.

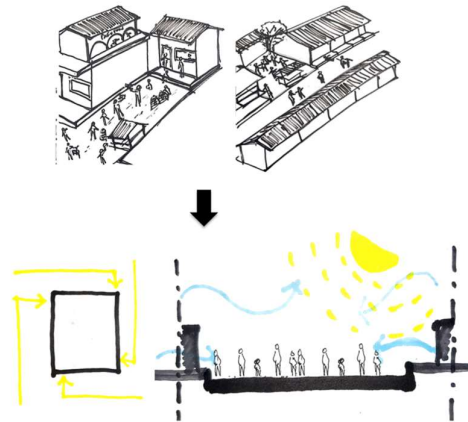
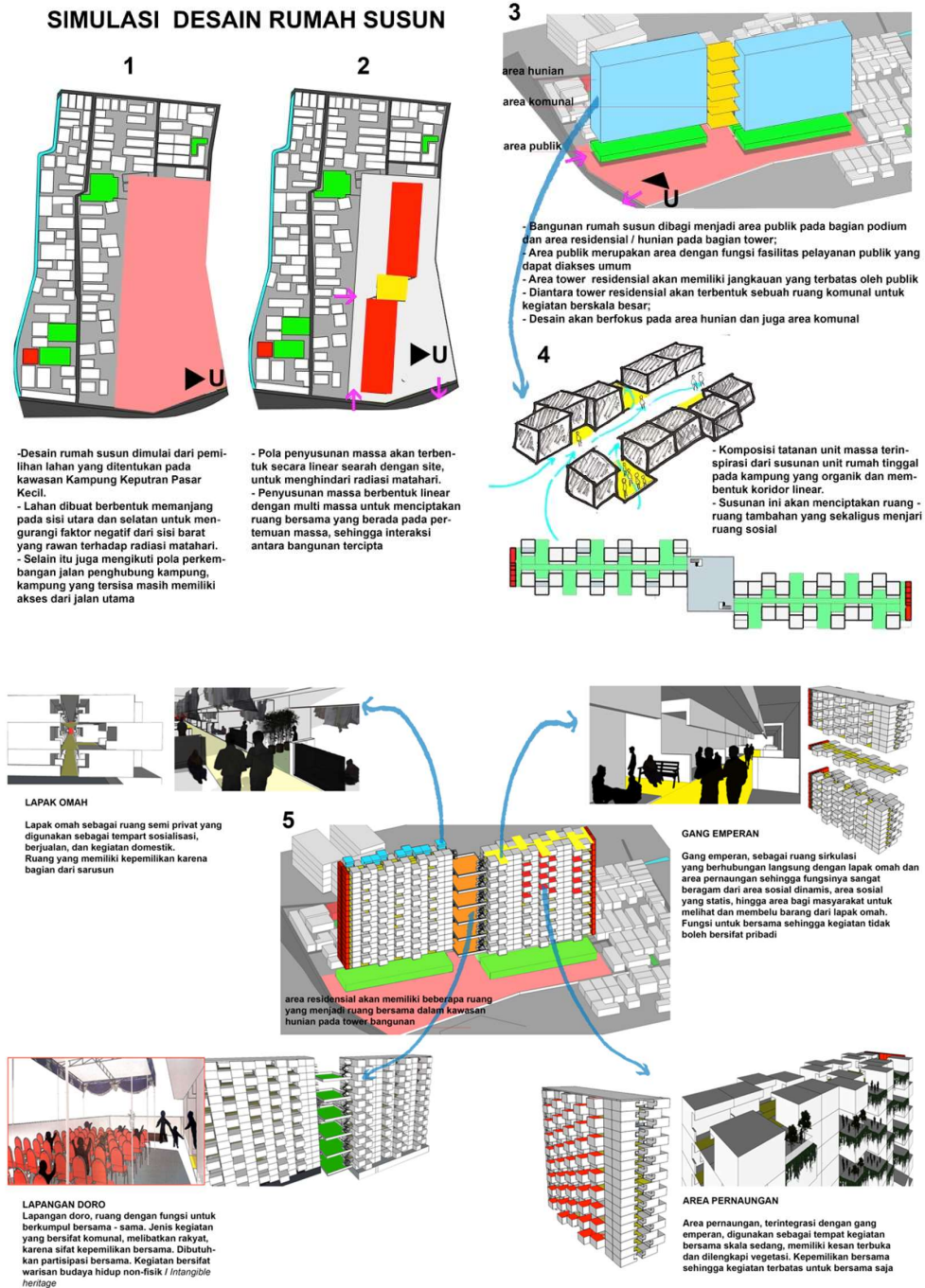


Figure 6. Typology of *Lapangan Doro*

## 5. Summary and Conclusions

According to the results of research and study of government regulation on apartments, there are some communal spaces found to be necessarily injected in the residential area of the apartment. These additional communal spaces are meant to be spaces that cover the social and economic functions in residential area. The application of the spaces can be seen on Fig. 7.



**Figure 7.** Formulation of Communal Spaces Design Concept

These additional spaces may only be occurred specifically in Kampung Keputran Pasar Kecil area, as this research and method are done qualitatively. Based on the research there are four spaces emerged, those are *gang emperan*, *lapak omah*, *lapangan doro*, and *area pernaungan*. All of these spaces contain the values of regionalism which grow by the identity of *kampung* community life, in context of regulation, these four spaces are categorized as the communal objects that should be applied separately from the building. In fact, according to the research,

these four spaces were found to be integrated with living zone in *kampung* living context, which underlies decisions on the application of communal spaces that are integrated with the residential areas, and they become the communal section in the apartment. These four spaces have their own values of regionalism, which emerge from the values of habitant community life, these are the description:

- a. *Gang emperan*, used as circulation area, by the regionalism paradigm has to accommodate other functions such as a social space, economic space, etc. Spaces are formed by the community lifestyle that tends to create a multi-functioned space as they used to live in a limited land area. But by the local problem, they creatively started to create a multi-functioned circulation space as the solution.
- b. *Area pernaungan*, departs from the *kampung* living context where people try to find the shade as their gathering place. Shade that varies from natural to building as their gathering place soon became their landmark. The value of this place, which is applied in the context of apartment and placed integrated with the façade becomes one of the points of reference that can be seen from the outside.
- c. *Lapak omah*, the space that will specifically represent the life values of each habitant, creates potency for increasing the quality of habitants' life. This place potentially used as an economic space for selling goods; social spaces; and domestic activities can be done here as well. This type of space does represent the values of terrace in the context of houses in *kampung* very well.
- d. *Lapangan doro*, a communal space that accommodates the specific identity of activities found in *kampung* requires a big quantity of participants. Activities such as *mantenan* (wedding ceremony), *adu doro* (birds competition) and many more, which contain the values of non-physical historical culture, are known as intangible heritage. Therefore this space is the physical form of space that might represent the identity of historical values of people and places in Kampung Keputran Pasar Kecil.

Through this research, it was found that the Indonesian architectural regionalism could ideally be used as an approach to design a communal space in an apartment. Some points are necessarily understood that this approach has the values of identity and the locality context of a specific place, therefore it is necessary to make further observation and research before applying this approach to the other design processes in different contexts of place. This research still needs development in many ways, some aspect such as the habitants' living space, public service function area, and aspects of design affordability for users need to be reviewed. The development of this research are necessary to be studied through the Indonesian architectural regionalism approach to create a good residential building that suit to the context of Kampung Keputran Pasar Kecil, and it is expected that research can be studied further.

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