

## Housing Behaviour of Urban Migrants Occupying *Ngindung*<sup>1</sup> Lands in Yogyakarta

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### ABSTRACT

*This article seeks to explore the housing behavior of urban migrant and re-theorize Turner's model on housing priority by linking it with the housing career of urban migrants in a particular locality and condition of land occupancy. The study is aimed at investigating housing priority and career of urban migrants occupying ngindung land in Yogyakarta through comprehensive quantitative analysis with crosstab technique. Five ngindung communities in Kelurahan Pringgokusuman were examined in this study. The research finding demonstrates that Turner's model is irrelevant to explain the middle-income migrants' behavior in choosing moderate standard housing but not maintaining proximity to jobs in the city as their income increases. This is argued to have several rationalities including their circular-mobility behavior and willingness to pay more transportation cost to workplace. Besides, homeownership is found to have no correlation with increase of income. It is therefore suggested that security for urban poor migrants is more about opportunity of livelihood rather than accumulation of assets. In conclusion, this research reflects on the limitation and uncertainty of housing options for urban poor migrants and suggests a radical shift from perceiving 'housing as a product' to 'housing as a process' – of becoming along with the livelihood betterment of a community.*

**Keywords:** *Housing priority, housing behaviour, urban migrants, ngindung occupancy*

### 1. INTRODUCTION

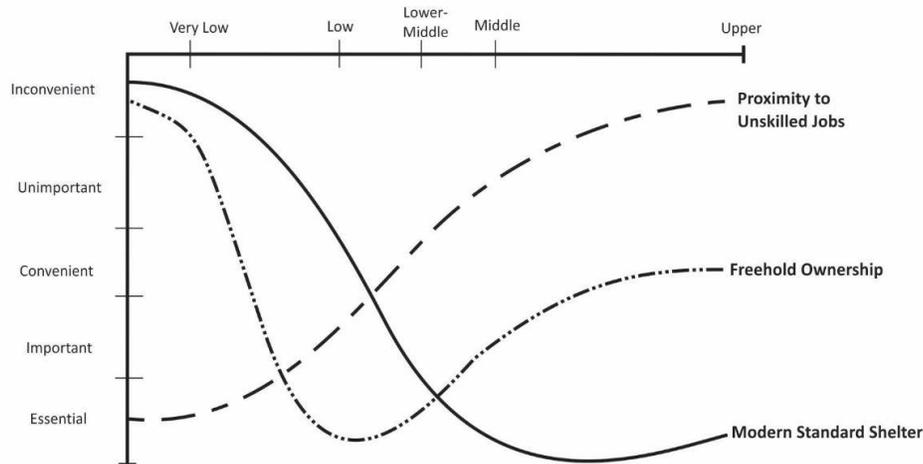
While urban migration has been an influential issue in Global South countries since colonialism due to labor and resource extraction in rural areas, little is known about the contemporary housing behavior of urban migrants in Indonesia. Migration, consequently, impacts on the production and economic growth of cities and results in the use of public facilities and life-style alteration as a form of consumption (Roseman in Bell & Ward, 2000; McIntyre, 2011). Relevantly, this circumstance occurs in developing countries with high urbanization level and abundant resource for informal sectors from where most poor urban migrants establish their livelihood. Meanwhile, obstacles in finding appropriate and affordable shelters is obvious to low-income migrants living in urban area, not only due to the low earnings, but also high price of shelters and low provision of public social housing (Teixera, 2010; Wu, 2004)

In Peru, Turner (1972) postulated a model of urban migrants housing priorities where he argued on three major factors affected by the increase of urban migrants' income, including (1) location, in terms of the adjacency to informal employments, (2) home-ownership status, in terms of the urgency of owning a shelter, and (3) minimum standard shelter, with permanent structure, separated bedrooms, and modern utilities (see Figure 1). The theory was also explained as a phase of urban migrant's housing behavior, indicating a housing trajectory during intra-urban mobility. Meanwhile, Robinson et.al (2007) argued that housing priorities is a result of experience and expectation of migrants to their shelter as he underlined social environment and physical standard of a shelter as a contributing factor. Other factors that influence housing

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<sup>1</sup> Traditional way of occupying a land without ownership upon the land with the consent of the owner yet without any contract. This system of land occupancy requires a close relationship between land owners and renters, such as working or family relationship. This however does not secure the occupancy of the settlers as the owner may use or sell the land anytime.

priorities were emphasized by Turner (1976), including employment access, security, land ownership, social access, and shelter standard. According to Li et.al (2009), economic factors, such as employment, saving, and opportunity to a better work leads to a housing decision. There are also other issues to deal with, such as life course and family life cycle (Clark & Onaka, 1983) and external factors, such as housing provision system which results on different types of shelters (Mahadevia & Shah, 2009). Housing decision is therefore a “package” valued over a shelter; the type, environment, ownership status, and location (Rossi in Curtis and Montgomery, 2006).



**Figure 1.** Housing priorities of urban migrants (Turner, 1972)

This stages of housing is also explained as housing career, as Clark et.al (1984) suggested, that is a housing sequence in terms of housing ownership and quality or price of a shelter afforded by households when they are in a particular extent of career, employment, or family status. Housing career is determined by life-cycle, which results in housing consumption, and life course comprises life-events occurred in one’s life such as education and employment (Clark et.al, 1984; Clark & Dieleman, 1996; Clark et.al, 1983). Initial definition of housing progress is explained by Myers (1982) as a progress of a household in terms of its aim of occupancy. Upward housing progress occurs when transformation of a shelter should, firstly, meet the preferency and aim of the owner, and second, indicates an increase in terms of physical quality. In fulfilling its aspiration of a shelter, household can also upgrade its house physically, other than moving (Morris et.al, 1976). In general, households tend to undergo an upward adjustment with homeownership on its peak (Chevan & Goodman in Clark et.al, 2003).

The progress of housing career, as suggested by Chevan & Goodman in Clark et.al (2003), is inseparable with the idea of ownership. This too often becomes an obstacle, particularly for poor urban migrants, as urban lands are becoming more and more expensive thus there is few options left for poor urban migrants, including settling in substandard houses and occupying land without security. Among the options is *ngindung*, which is a traditional way of occupying other parties’ land that could be a privately-owned, government-, or Kingdom-owned land (*magersari*). Therefore in bringing the theories into local context, this paper seeks to explore how priorities for housing are explained in the context of urban migrants living in *ngindung* land. Neighborhoods in Kelurahan Pringgokusuman is purposively selected to be the locus of this research as many *ngindung* lands are found in Kelurahan Pringgokusuman. This research attempts to identify the housing behavior of urban migrants and relate them to the needs for

housing planning and intervention. However, the limitation of this research is acknowledged in a sense that the quantitative surveys may reduce the essentiality of explorative study as performed. Essentially, this research responds to the call for a new approach in planning housing for the marginalized society in urban area through identifying their obstacles in achieving appropriate housing for living.

## 2. METHODS

### Sampling

The sampling frame includes a list of all urban migrants living *ngindung* in Kelurahan Pringgokusuman then multistage-clustered sampling is opted to identify individual respondents from a homogeneous population (Garson, 2012). According to the multistage-clustered sampling technique, as many as 150 respondents in 5 different neighborhoods were selected to ensure enough data are available for quantitative measurements (see Figure 2). A questionnaire was tested for 150 respondents during January-February 2013. Before data were collected, survey and interviews were conducted in the local administrative to obtain a brief overview about the region, particularly the neighbourhoods occupied by urban migrants in *ngindung* land.

### Measurement

Data analysis for migrants' housing priority emphasized on four variables; home-to-workplace distance, modern-standard housing, home ownership, and income. This study uses the approach of actual housing action, not deeper analysis on motivation and social behaviour of the migrants, to identify the priority as reflected in the existing circumstances (Turner, 1972). Quantitative analysis with crosstabulation is used to analyse the housing priority. Data classification is based on natural breaks to minimize significant difference in a class of data yet contrasting the difference between classes (Caspall in de Smith, 2012). Data of dependent variables are grouped into three classes ranging from essential, convenient, to inconvenient (see Table 1 and 2), whereas income data are grouped into three classes from very low, lower middle, to upper middle (see Table 3).

**Table 1.** Home-to-workplace classification

Distance (km)	Class	Level of priority
0-4.99	3	Essential
5.00-7.99	2	Convenient
>=8	1	Inconvenient

**Table 2.** Classification of housing materials and assets value

Value of housing asset and material	Class	Level of priority
>=Rp12.500.000,00	3	Essential
Rp4.500.000,00-Rp12.499.000,00	2	Convenient
Rp0,00-Rp4.499.999,00	1	Inconvenient

**Table 3.** Income classification

Daily income (Rupiah)	Class	Classification of income
0 – 24.999	1	Very low
25.000 – 49.000	2	Lower middle
>=50.000	3	Upper middle

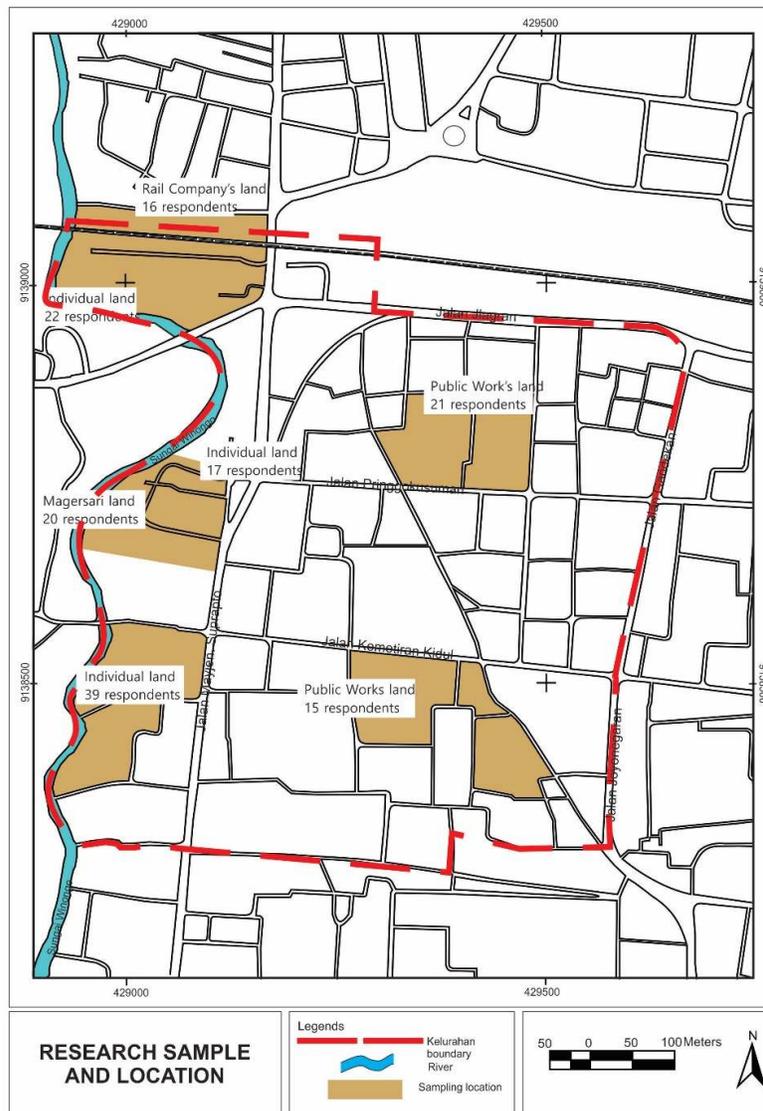


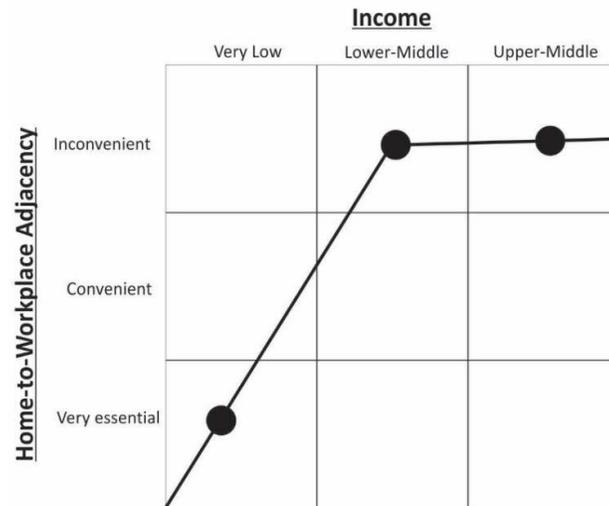
Figure 2. Research Sample and Location

### 3. RESULTS AND DISCUSSION

The results of crosstab analysis between income level and home-to-workplace adjacency and modern standard shelter are demonstrated in Figure 3 and Figure 4 below:

Table 4. Crosstab analysis of income and home-to-workplace distance

		Income classification		
		Very low	Lower-middle	Upper middle
Priority level	Inconvenient	5.26%	62.50%	75.56%
	Convenient	5.26%	16.67%	11.11%
	Very essential	89.47%	20.83%	13.33%
Total		100.0%	100.00%	100.00%

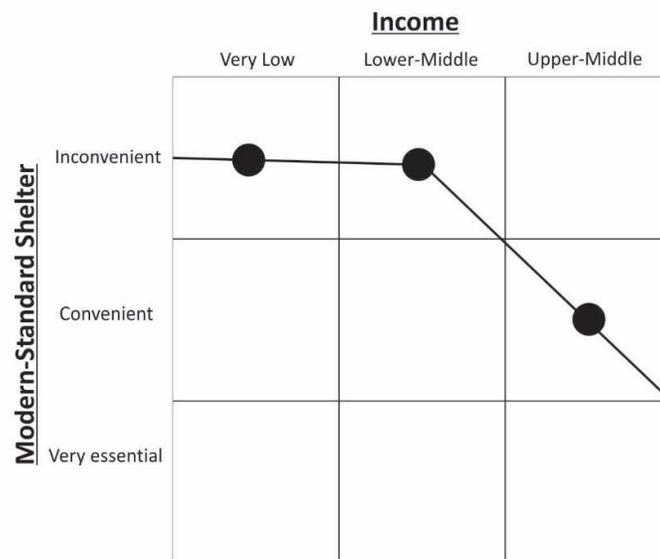


**Figure 3.** Crosstab analysis between income and home-to-workplace distance

The chi-square ( $\chi^2$ ) test indicates that there is a correlation between income and the priority to shelter close to the work-place;  $\chi^2(4, n=150) = 77.647, p = 9.49$ .

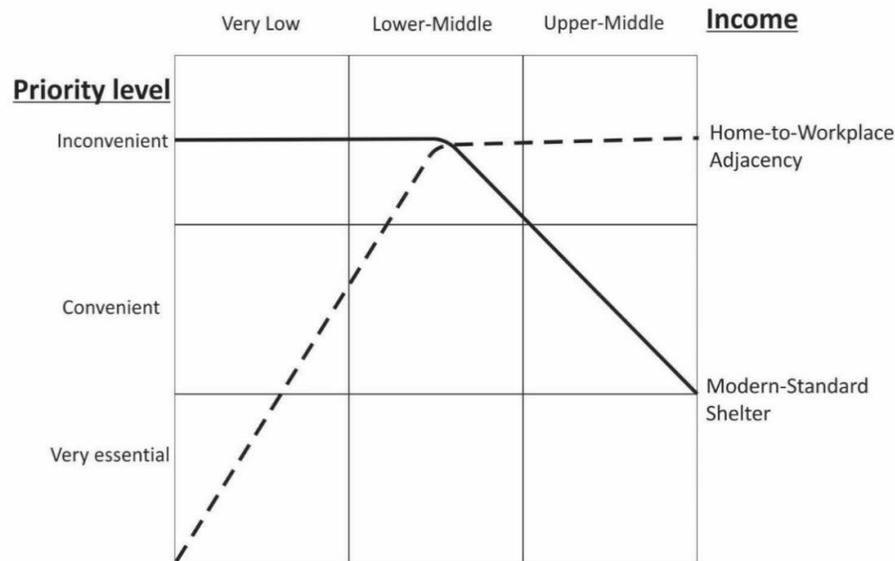
**Table 5.** Crosstab analysis of income and modern housing standard

		Income classification		
		Very low	Lower-middle	Upper middle
Priority level	Inconvenient	52.63%	50.00%	20.00%
	Convenient	31.58%	37.50%	55.56%
	Very essential	15.79%	12.50%	24.44%
Total		100.00%	100.00%	100.00%



**Figure 4.** Crosstab analysis between income and modern standard shelter

The chi-square ( $\chi^2$ ) test indicates a correlation between income and the priority live in a modern-standard shelter;  $\chi^2(4, n=150) = 13.21818, p = 9.49$ . However, the chi-square test ( $\chi^2$ ) between income and home ownership shows that more than 20% of the cell is valued less than 5. Therefore, it is suggested that there is no correlation between income and homeownership. In this context, an increase in the income does not result in mobility to a more secure shelter in terms of occupancy.



**Figure 5.** Housing priority according to income level

Overlaid graphs between prior two assessments on housing priority variables are served in Figure 5. The finding of this research implies that there is a tendency of very low income urban migrants to live adjacent to the workplace in the city. A shift then occurs for higher income migrants who does not prioritize to live nearby their workplaces. However, the finding also indicates that earning upper-middle income does not necessarily influence the behavior of the respondents to live in the best quality of shelter. Meanwhile, homeownership is found to be uncorrelated to the income level of migrants. An increase in the earnings does not necessarily influence their security of ownership. Even migrants tend to occupy by *ngindung* after undergoing an increase in the income.

It is suggested that mobility cost is the main factor determining shelter location. While very low-income respondents attempt to secure their earnings from cost of mobility to workplace, middle income respondents attempt to make use of their higher income to achieve better employment although distant with their houses (Curtis & Montgomery, 2006; Huinink et.al, 2011). Meanwhile, regarding the shelter quality, the housing behavior is driven by the income of the respondents, ranging from Rp24,999.00-Rp50,000.00 per day or equal to \$2.50-\$5.00 per day, which is too low and far beyond the possibility to have a very modern shelter. Secondly, another determining factor is the circular mobility of the respondents – many of the respondents come to the city only for the sake of employment while they own assets and properties in the rural area (see Huang and Yi, 2011). Thus they tend to not prioritize having a modern shelter in the city as their existence in the city is temporary. Orientation for daily savings is also determining this behavior (see Li, et.al, 2009).

Peisker & Johnson (2010) identified the homeownership behavior as an effort to achieve an ontological security or independency upon the property. Ontological security can be achieved through economic benefit from the ownership of a house without paying mortgage, and notified through the linkage between residents, and physical material and activities inside (Dupuis & Thorns in Bounds, 2004). However, as the analysis reveals that homeownership and income level of urban migrants are not correlated, it has to be acknowledged that the idea of security must surpass the dichotomy of owning and not owning houses. Close relation between land owners and settlers could explain the rationality that landowners also rent the house while land settlers remain working for the owners as the income increases – although it is not sufficient to conclude to that point.

As this study investigated the housing behavior of urban migrants, in terms of their housing priority and career, linked with the context of insecurity and poverty, it is argued that in a wider sense, poor urban migrants are lacking of options of housing that they have to live in substandard housing and insecure land occupancy. Their livelihood progress is however reconstructed in a way that their house is adjacent with the workplace, that the city sustainably offers wide ranges of opportunity, and that their housing and settlement (*kampung*) are beyond constant bricks and mortar – it is always in a process of becoming. The understanding of *kampung* too has been transforming from being disenfranchised into being acknowledged as an integral part of the city (Setiawan, 2010). *Kampung* is associated with irregularity and informality for its unsuitability with housing standards, layout, even location as it could be spotted in marginal zones. Although it cannot be generalised, negative stereotypes of poor dwellers, slum, and substandard housing have to be admitted to be the other face of *kampung*. Despite of that, 80% of urban housing supply in Indonesia is provided in *kampung* through self-help process (Setiawan, 2010), demonstrating independency along with Turner's concept of 'housing as a verb' (Turner, 1972).

#### 4. CONCLUSION

This article started with the idea of re-conceptualizing Turner's (1972) 'model' of migrants housing priority with specific character of land occupancy, which is *ngindung*, in Yogyakarta. The result implies that migrants respond to different behavior according to the income level. At the lowest level of income classification, migrants tend to settle adjacent to the workplace, in lower-moderate shelters, and in self-owned shelters disregarding the illegality of land occupancy. As the income increases, migrants manage to live in still a modest housing but are willing to travel further to work. Although there is a difference in the way urban migrants see their priority and progress in housing compared to what Turner (1972) discussed, it is argued that the progress that poor urban migrants made in terms of housing improvement should be seen that housing itself is a liberating process, not a close-ended product.

Today, government and scholars recognize the importance of low-cost shelter provision for low-income workers. Therefore, affordable housing provision for migrants in form of public social housing is needed to secure their livelihood in the cities. Rather than single-landed building, housing provision for migrants can be focused based on their priority and need; in terms of location, standard, and ownership. Various standards (area, number of rooms, and facilities) and ownership status (freehold or rent) should be applied to accommodate various incomes and preferences of the migrants. Further research on migrant housing behavior should also include motivation as part of housing priority analysis as the issue of motivational behavior presents one of the limitations of this study. Housing priority is ascribed as current action of the migrants, while motivational behavior should reveal the real need, aspiration, and priority for housing.

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