

PAPER • OPEN ACCESS

Informality and Rapid Urban Transformation: Case Study of Kelapa Dua, Depok

To cite this article: H F Wasnadi and E Ellisa 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **248** 012043

View the [article online](#) for updates and enhancements.

Informality and Rapid Urban Transformation: Case Study of Kelapa Dua, Depok

H F Wasnadi¹ and E Ellisa²

¹ Postgraduate School of Urban Design, Universitas Indonesia, Margonda Raya Street, Pondok Cina, Beji, Depok City, West Java 16424

² Associate Professor Department of Architecture, Universitas Indonesia, Margonda Raya Street, Pondok Cina, Beji, Depok City, West Java 16424

hanifafjriah@yahoo.co.id

Abstract. Transformation is essential in the development of sustainable city spaces. Presently, the rapid changes in various aspects of life are progressing in unpredictable ways, and the unexpected directions of such change creates informal development. In addressing these issues, this research investigates the relationship between rapid urban transformation and informality. The research is conducted specifically in Kelapa Dua, Depok, a location in which major physical and functional transformation has taken place in recent decades. In addition to literature studies and field observation, this research conducted mapping and in-depth interviewing of inhabitants. The research found that informality by a way of unanticipated and unaccommodated transformational processes emerges as a substitute for actions by the formal sector.

1. Introduction

According to the dictionary¹, transformation can be defined as change in appearance in terms of form, character or function. Transformation is also a linguistic term referring to the change of certain grammatical structure to others, by adding, subtracting, or rearranging the constituents. In this paper, transformation is a basic phenomenon discovered by our research conducted in the area of Kelapa Dua in the city of Depok, specifically along Kombes. Pol. M. Jasin Road (widely known as Akses UI Road). This area has undergone several significant transformations, beginning two decades before Depok administratively became a ‘city’. The first paragraph after a heading is not indented (Bodytext style).

The area of Kelapa Dua has recently been surrounded by several strategic roads and locations. It directly connects to Margonda Raya Road, Lenteng Agung Raya Road of South Jakarta, Nusantara Road to the north, Raya Bogor Road and RTM Street, which cuts across the area to the alternative routes of Ir.H. Juanda Depok and Cijago toll roads. On the eastern side, Kombes. Pol. M. Jasin Road connects the area directly to the gates of Universitas Indonesia and Margonda Raya Road, while the Mobile Brigade Command Headquarter (Markas Komando Brimob) is located on the western side. The arterial road is used by at least three public transportation routes: D 11 – Depok terminal to PAL; 112 – Depok terminal to Kampong Rambutan terminal; and 129 –Mekarsari to Pasar Minggu. The area is also located around ten minutes by public transportation from the nearest train station.



Additionally, the era of public transports supported by online application makes this area even more connected to others.

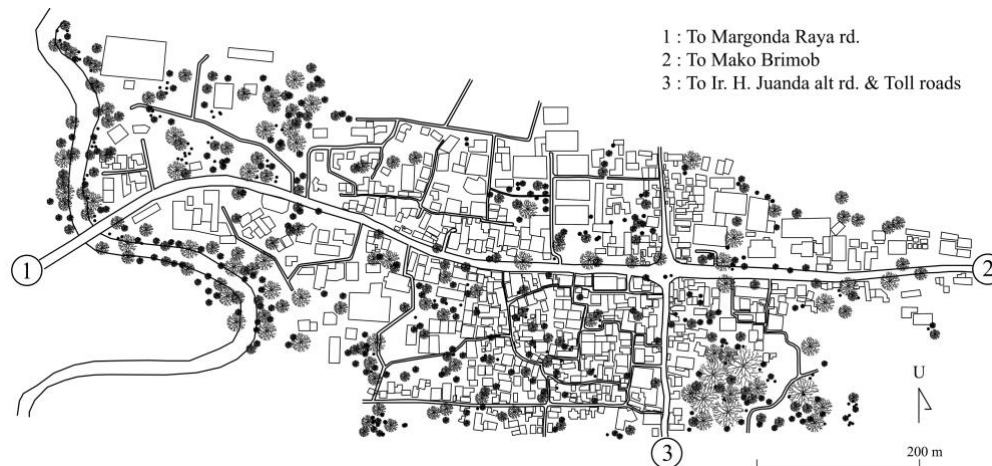


Figure 1. The site: Kelapa Dua, Depok: Kombes. Pol. M. Jasin Road

Changes of form and function in the area through the adding of arterial roads and adding/changing functions of buildings are the specific types of transformation that will be discussed here. In terms of form, interventions by various stakeholders have been instrumental in the way in which Kelapa Dua has changed from being a rural area (settlements, farms etc.) into one of the most prominent access routes connecting Depok to its surroundings. The development of Akses UI Road and Universitas Gunadarma from 1991 to 1994 are identified here as the main local agents of transformation, as a consequence of which the functions of the surrounding area have significantly changed. Recently, linear commercial areas have been built along the road, and settlements and farms have simultaneously been changed into densely-packed houses for rent, meeting the needs of the surrounding area. Thus, transformation of both form and function are influencing the area.

Previously, the area was of low density and consisted of only one neighbourhood association or rukun tetangga (RT) in one village. Recently, the area has become more populous, and it is now divided into three villages with 170 RTs in each. In addition, formal property development and functional transformations have evidently triggered other circumstances which can be identified as aspects of informality in form in the area.

In this situation, the word ‘informality’ describes unofficial development¹. Hawkers have spread around the Universitas Gunadarma campus, specifically within the range of rented houses and the campuses, and this growth is an example of what is referred to as informality in the following discussion. Despite their constituting a blockage at certain times of day, these hawkers provide amenities for the inhabitants of the area. Surrounded by three campuses of Universitas Gunadarma, hawkers have become among the most affordable food suppliers for students. By their nature, the small, flexible premises of hawkers can be located in the most profitable locations at almost any time.

Transformation and informality are the core of this discussion because of their strong attachment to this particular context. Informality emerges when an area becomes more established and integrated, with the change to more complex land use and cadastral building development. The aim of this research is to investigate the relationship between the two, as well as the development of each. Based on the explanation above, the research questions are:

1. How and in what way do transformation and informality occur?
2. Does transformation trigger the emergence of informality or vice versa? How do such processes occur?

Our research found that informality presents as substitutions for aspects which are unaccommodated and unanticipated by formal actors during the process of transformation. This discussion will be limited to the relationship of transformation and informality to the presence of Universitas Gunadarma, because it is evident that Universitas Gunadarma is a significant contributor in this the context. It brings a large number of people to the area (especially students) and also a number of activities which affect functional, formal and property development in its surroundings. The discussion will lead to conclusions in terms of limitations, theories and compatible evidence for field surveys.

2. Transformation and Informality in Urban Design

As a basis from which to understand the observed phenomenon, we carried out a theoretical review in relation to transformation, informality and urban design. Initially, it is necessary to understand the terms ‘urban’ and ‘city’. According to Dovey (2016)², the word city is derived from the Latin word *ciuis*, meaning ‘citizen’, while ‘urban’ is derived from the Latin word *urbanus*, meaning ‘courteous’. Being urban means respecting others, even when numbers of people have their own differing needs. The word ‘city’, in the sense of being ‘urban’, corresponds to the terms ‘civic’, ‘civil’ and ‘civilized’ – we have to be civilized to become civil – and this has a similar significance to the word ‘courteous’. Based on these definitions, urban design contains the meaning of designing for courtesy between people within the city environment.

2.1. Transformation

Transformation, as stated previously, can be seen in this context as the change in appearance in terms of function, form and property. Transformation is something inevitable in terms of the city, in that the development of a city denotes an area with concentrated numbers of residents that accommodates the growth and development of urban socio-cultural and economic activities³. The term ‘growth and development’ refers to non-static conditions in which both increase and reduction are possible. In addition, the government issues urban design guidelines as a set of legal instruments for application within a certain period of time.

Many things affect the transformation of a city. One of the most influential factors is the nature of the government of the city itself. As the governmental structure is transformed, transformation of city image often comes with it². A definition of transformation is that it is about adding, subtracting or rearranging constituents – and this is similar to how governments operate within their cities; for example, a government can build numerous arterial roads and rearrange land use of certain areas to change the image of the city. It is very possible, however, that the direction of growth and development of a city can function in totally different ways from those planned. Finally, urban design offers a set of possibilities that can reduce uncertainty by controlling and regulating the city through monitored conditions².

2.2. Informality

Informality serves to provide what formal sectors (local government, state, etc.) have not or will not provide². It develops in the most convenient locations for consumers, for example by cutting down travel time and reducing travel costs⁴. Lack of predictions and planning create these types of circumstances. Dovey (2016) also states that informality (especially hawkers) presents a functional mix that is not provided for in certain zones of activity. This indicates that functional mix is a crucial issue in the development of a city’s public space.

According to Darmawan (2005)⁵, public space is space that accommodates public needs and interests, used by the public from all parts of the local area. Due to their wide variety, provided facilities, in terms of function and others aspects, should be sufficiently diverse to accommodate the varied needs and preferences of the population. In relation to this, Dovey formulates the concept of ‘urban density, mix and access’ (DMA), inspired by previous theories of urbanization. In this concept,

he defines density as meaning the shortening of distance between humans and their destinations, mix as the actualizing of synergy between functions in a certain area, and access as concerning the connection between locations. The DMA concept does not define the results obtained, but acts as a set of structures for understanding what might occur.

In looking at the topic of hawkers, it is necessary to have a general understanding of the informal sector. 'Informal' in this context signifies something unofficial or illegal, as referred in the introduction. However, the informal sector cannot necessarily be labelled as 'illegal'; it is more appropriate to describe it as being composed of practices beyond government control². According to a report by the Asian Development Bank in 2008, the informal sector of the economy contributed approximately 25% of gross national product in 26 Asian countries and employed around 60% of the population of cities⁴. This significance as the provider of commodities or services not provided by the government leads to a prominent focus on the informal sector being important for the decision maker, either in eliminating it or integrating it into the city².

As such, informality is inseparable from formal political and institutional processes⁶. According to Bromley and Yatmo (in Dovey, 2016)², there are a number of types of street vendors: fixed kiosks (items are stored in situ overnight), applied fixed elements on walls and fences (using tables or tarpaulins as bases, covers and temporary roofs), vehicles (carts or bicycles), and apparatus held/carried by the hawkers themselves. These characteristics can be defined as fixed, semi-fixed and mobile. This categorization reflects informality as temporary urbanism, as these businesses can easily be reduced and resized⁷. These characteristics also make it possible for them to exploit the most profitable opportunities as they arise, by, for example, operating during lunch times and being located at the gates of public and other locations.

Like other citizens, these hawkers or street vendors also have the right to be involved in activities within the city space. However, although spatial occupation by them for certain periods of time excludes the right of other people to access specific spaces, at the same time the hawkers also accommodate the needs of citizens for affordable and convenient food and other requirements. Life in cities always constitutes a 'special form' of human existence⁸, and hawkers interact with surrounding actors as well as creating drawbacks. This matter is noteworthy when it comes to solving the problems of informality within city spaces.

3. Method

This research was carried out through a field survey and several mappings. In addition, the theoretical review detailed in the previous section was performed and in-depth interviews were carried out with a number of inhabitants, neighbourhood chiefs, students of Universitas Gunadarma, hawkers, shop owners along the arterial road and close to rented houses, and local government staff. This combination approach was chosen to enable a comprehensive picture of the whole study site to be drawn. On the other hand, this research was confined in terms of its limited observation time and also in carrying out interviews with local actors only, so the observational point of view tends to be on the local context. The findings will later be observed in light of a theoretical review to examine how the theory applies in context.

4. Case Study: Transformation and Informality in Kelapa Dua, Depok

Kelapa Dua comprises the area of Kombes. Pol M. Jasin Road, which is an arterial road constructed in 1991, and Campus E of the Universitas Gunadarma development. Initially, this area was owned by several landlords, the most important being H. Sobri and H. Sa'in as the largest landowners in the area. These names are still the most well-known among the native and migrant people of the area because not all of their land has been sold and some is still being leased to local residents. Even though both of these owners have now died, their land is still being managed by their descendants.

In 1978, this area consisted of one village, Desa Tugu, and only one RT or neighbourhood (currently there are 170 RTs in each village). The area is now divided into three villages, namely Tugu, Pasir Gunung Selatan, and Mekarsari. This division was created when the Depok area changed

from being an administrative city into a municipal city in 1999. Along with the development of Kombes. Pol M. Jasin Road and Campus E of Universitas Gunadarma, the function of the roadside land changed from being residential and vacant land into commercial areas. The surrounding residential areas were also changed into rented houses and small restaurants. Those developments led to the surrounding area being transformed into campus-supporting facilities, such as rented houses, food providers and digital printing.

Along with other migrants to the area, Universitas Gunadarma also bought its land from the existing landlords. The development of Universitas Gunadarma Kelapa Dua campus (Universitas Gunadarma also built other campuses in Margonda–Depok and Salemba–Jakarta) did not cease with the construction of Campus E: in 2000 and 2010 the university built two additional campuses – Campuses G and H – located alongside Campus E. The full list of Universitas Gunadarma campuses as at 2018 is as follows:

- Campus A located in Jl. Kenari III No. 33, Central Jakarta, with 12 rooms.
- Campus B located in Jl. Salemba Bluntas, Central Jakarta, and Campus C located in Jl. Salemba Raya No. 53, Central Jakarta, with a total of 19 rooms.
- Campus D located in Jl. Margonda Raya 100, Depok, with 18 rooms.
- Campus E located in Kombes. Pol. M. Jasin Road, along with Campuses G and H. Campus E has 55 rooms and Campus G has 39 rooms while Campus H consists of laboratories.
- Campus J located in Jl. KH. Noer Ali, Kalimalang, Bekasi, with 24 rooms.
- Additional campuses are currently under construction.

Most of rooms for educational activity in Universitas Gunadarma are located in the campuses in Kelapa Dua. There are a total of 94 rooms in Campuses E and G and laboratories in Campus H that can be used by other students from different campuses. This situation has led the function of the surrounding area to be subject to even wider transformation, as change has moved out from the initially transformed area around Campus E to Campuses G and H. Previously this area consisted of infrequent settlements and fields and farms, but has now become more densely populated and with the presence of more immigrants. In the following investigation, it is identified that most of the immigrants have built rental houses for college students as private investments. An area that was once inhabited by a family of seven people can now provide 20 rooms or more in rental houses. Later, Universitas Gunadarma also provided accommodation for their cleaning service staff. This current condition stands in sharp contrast to circumstances in the area before the arterial road and campuses developed. Figure 2 shows the development of the area over recent decades.

- *1978*: There was only a single street crossing the whole area (Nusantara Road to RTM (Rumah Tahanan Militer or Military Prison), which connected military sections. The land was mostly owned by landlords and the boundaries were unclear (based on certain trees and stones). Most was used for rubber and rambutan cultivation and as hamlet gardens. The area consisted of only 1 RT.
- *1990*: Landlords sold to investors. Most of properties became monthly rental houses. Most of the inhabitants came from rural areas to work in manufacturing around Jl. Raya Bogor (Luki, Meiwa, etc.). Universitas Indonesia was established in 1987. A west–east lane (now Kombes. Pol. M. Jasin Road) was recognized as the main street of the kampung. (The word kampung refers to non-formally-planned settlements inhabited by the urban underclass, typically with a poor state of infrastructure, services provision and environmental conditions⁹. This is not the situation in this area now.)
- *1996*: Universitas Gunadarma had bought H.Sa'in's land in 1991 for Rp 100,000/m². There were five buildings constructed by 1994, together with the west-east road called Akses UI and the flyover. These were established alongside the development of Universitas Gunadarma. The boundary of the land was determined by the buyer and depended on how much land they needed and where they needed it. The RT was divided by road development.

- *1999*: Universitas Gunadarma bought H.Sobri's land for Campus G. Many investors came along to buy the surrounding land, supporting the needs of many students with rental houses. Clearance of land certification was issued since Depok became a municipal city at that time. Many new certificates for legalization were created. More immigrants arrived and lived around the area.
- *2000*: Campus G expanded. More investors arrived to buy the surrounding land, supporting the needs of the many students at the university with rental houses and other commercial enterprises (mini restaurants, cafes, digital printing, etc.).
- *2010*: Campus H was established. More investors arrived to buy surrounding land, some of it just put themselves on land-rent (e.g. : McDonald).
- *2018*: Most of the land owned by the previous landlords has been sold. Universitas Gunadarma has bought more land to expand its area, but has yet to carry out this expansion. Land prices have increased by up to 30–50 times compared with the price in 1991. The university is also buying land near the Military Prison for another campus and a private road to connect the area with Jl. Margonda Raya.

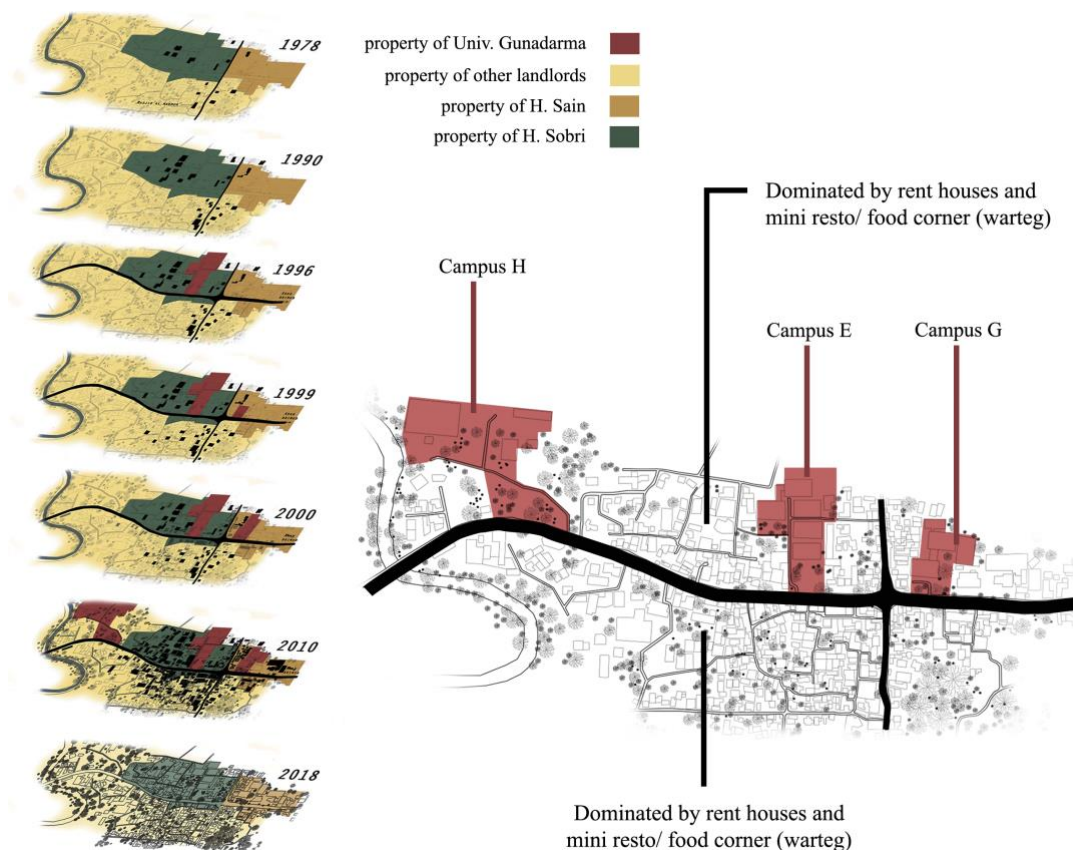


Figure 2. The site's transformation over three decades

This transformation has both advantages and drawbacks for related actors such as the government, investors, natives, migrants and even road users. The advantage of this transformation lies in how the arterial road has played an important role in the development of the city and in improving connectivity between Depok and its surroundings. This road is also used as a defence access that connects Mobile Brigade Command Headquarter (Markas Komando Brimob) and Brigip (other Mobile Brigade host) in the eastern and northern part of the area with other locations. In addition, the establishment of advanced educational facilities also plays an important role in the intellectual progress of society. This

advantage certainly reflects the sustainability and independency of a city, in accordance with Dovey's (2016)² theory about the relationship between transformation of political power and the image of the city. Unfortunately, as well as these considerable advantages there are also several drawbacks which reflect the lack of anticipation and planning of regional development. These drawbacks closely relate to the increasing student numbers in Universitas Gunadarma, Kelapa Dua, as the institution that occupies an extensive area of the specified context.

Universitas Gunadarma has at least eight campuses, three of them located in the observed area of Kelapa Dua. According to data from 2013, Universitas Gunadarma accommodated educational facilities for 21,185 students, of which around 11,900 studied in the campuses in Kelapa Dua. Campuses E and G are active educational units for several subjects and faculties, while Campus H consists of laboratories, so the number of students in Campus H is not included in calculation, due to their flexible schedules. We do not have recent total numbers of students in Universitas Gunadarma, but certainly the university will expand Campuses E and G (the land required has already been bought) and increase the student registration capacity.

However, this considerably growing number has not been well anticipated. For us, the most significant issue is that these campuses do not provide their students with canteens. The only available canteen is for staff and lecturers, despite the class schedule running daily from 7.30 a.m. until 6 p.m. (the campus is closed on Sunday). In the specified context, the campuses and residential area and low-price food vendors or mini restaurants (warteg) are 50–300 metres apart, or about 5 minutes at walking speed of 3.2–4 km per hour. In addition, the university's learning systems can require students to travel between several campus for their classes and this is quite problematic, especially when the student's food options are less affordable inside the campus itself. The time needed to go from their campuses to the closest food vendors, along with the time needed for queueing as well as the cooking and serving of food, is significant. This situation creates conflicts between students' personal capabilities and their schedules. The absence of a functional mix establishes an informal sector to fill this vacuum.

During active learning periods, hawkers occupy several areas around the campuses, particularly in front of the campus gates. The presence of informal food vendors or hawkers cuts the distance and time needed for students to buy food. This corresponds to Dovey's theory relating to informality and how it provides the unprovided (in this case, Universitas Gunadarma is the formal sector but is also a 'no canteen' area).

In this research, we also found that the hawkers are not only used by the student but also by public transportation drivers who use the arterial road. The location of hawkers on the roadside causes many students to cross over the road during lunch time and the late afternoon when lectures end. As we observed, very frequent pedestrian road crossing occurs between 12 noon and 2 p.m. (lunch break) and 4 p.m. and 6 p.m. (the end of students' campus schedules). This happens on five out of seven weekdays during active learning periods, and consequently, the arterial road is congested during these times. In addition, as the public transportation drivers also use the hawkers' facilities in 'drive-through' style, this also creates traffic blockages, even if each stop is only for a short time (the hawkers tend to serve drivers first to minimise such blockages).

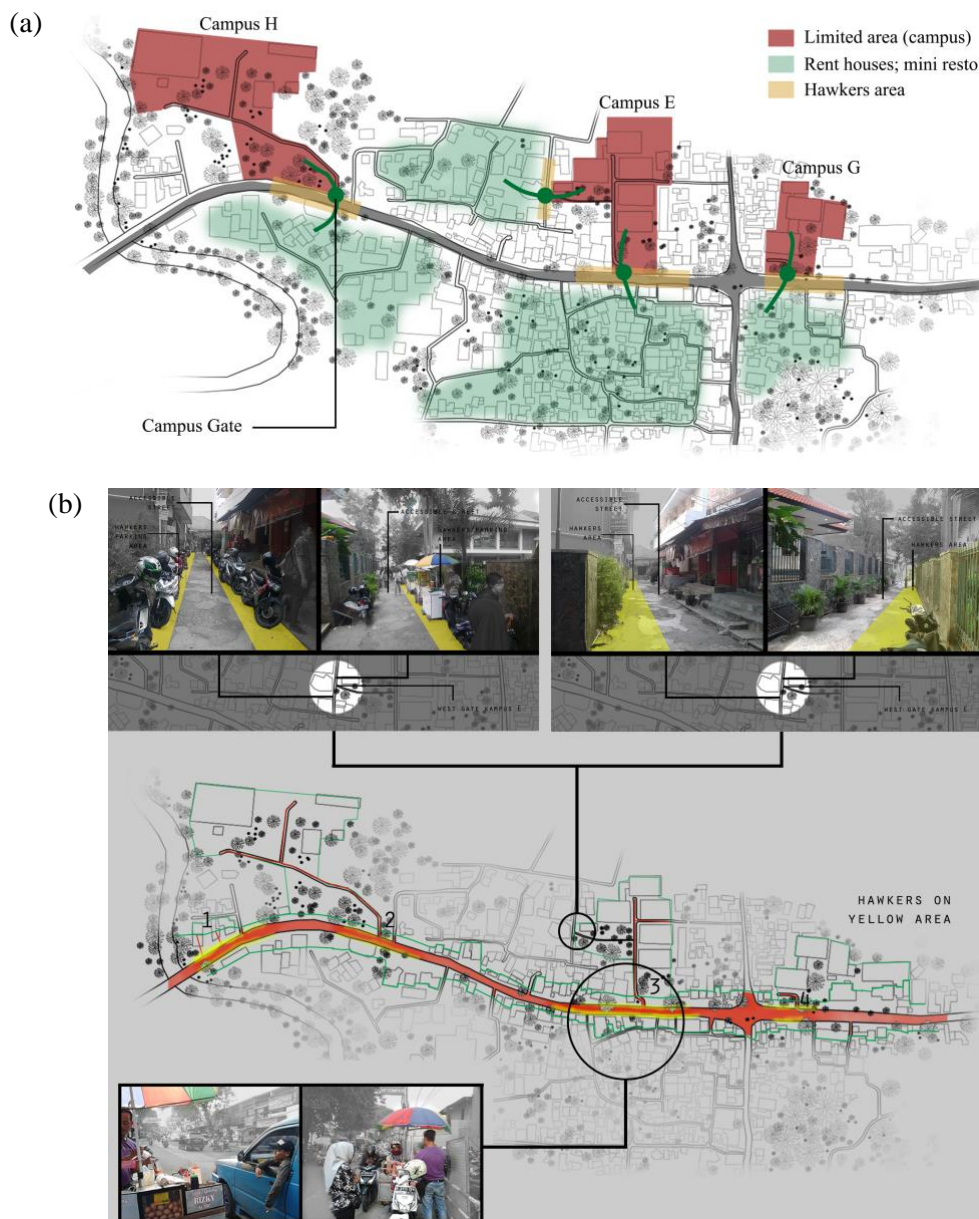


Figure 3. (a) Schematic diagram of hawkers' positions between campuses and rental houses;
(b) Hawkers' area

Generally, Depok could be claimed to not have adequate basic planning as yet. We can see this from the absence of urban design guidelines (Rencana Detail Tata Ruang, or RDTR) as formal regulations to develop the city, which is now inhabited by more than 1.5 million people. At the time of this research, the RDTR is still in the evaluation process within several levels of the governmental structure. Transformation and the emergence of informality in Kelapa Dua is evidence of lack of comprehensive planning and adequate intervention from the Depok city government to solve the problems of city spaces.

Next, we will discuss transformation and informality in the research context, observed from two aspects. As well as the transformation as reviewed in the previous section, informality also has its own advantages and drawbacks. The primary advantage of informality in this context is its ability to

accommodate the needs of students and other relevant actors at acceptable cost, distance and time. The main drawback lies in how the hawkers occupy public spaces, for example, pedestrian areas, arterial roadsides and streets, clogging road access at certain times.

4.1. Transformation vs informality

Looking back to the essence of transformation, the alterations produced by the long process of city planning ideally follows the wider meaning of the term ‘urban’ (constituting courtesy among citizens). Can the transformation that occurs in the study context be classified as being ‘courteous’?

The formal sector (in this case Universitas Gunadarma Kelapa Dua), located as it is on the sides of the city’s arterial road, occupies an appropriate area in relation to ‘affordability’ for the various actors connected with an educational institution. This is one simple example of courtesy in a liveable city. However, the concept of courtesy in the name of respecting and caring for others does not stop there. Continuity of learning processes that consume peoples’ minds and energy also becomes an issue we have to respect and care about. Therefore, the absence of functional mix in the formal sector is a case of ‘courteous deficiency’. In light of this deficiency, the concept of courtesy emerges from the informal sector. The hawkers around the campuses take part in catering for the affordability of students who are attached to formal classes and who tend to have low or even no income.

On the other hand, the amenity of informality in accommodating students’ needs also eliminates other interests, namely the interests of road/street/pedestrian users. During certain times of day, the hawkers occupy road/street/pedestrian areas and use the accessible areas of the street for trading while these should in fact be used for legal access. This phenomenon increases density in the specified area and produces cleanliness and congestion problems (in relation to unfixed waste systems and poor hygiene culture). This matter indicates that hawkers are not a precise answer for accommodating students’ needs. Furthermore, it must be asked whether if the university provided canteens for its students the informality would be removed? The answer to this is still unclear, and to review it we discuss the phenomenon in relation to the concept of urban density, mix and access (DMA)².

The problems discussed above arise from the carelessness of the ‘mix’ within transformation. As a result, informal movement emerges to fill the vacancies which occur. Informality provides synergy between functions (M), cuts distances between actors and destinations (D), and provides connections between the two (A). Its presence is evidently consistent with the concept of urban DMA, but emerging in unofficial form. The occupied location is one of the most strategic area connecting the campus to other destinations outside. Students can take advantage of this area when they move to other campus or other destinations. Informality becomes the most strategic option for related actors by cutting travel time, distance and travel costs, as Chalana and Rish (2016)⁴ have stated previously. Finally, the presence of informality might not necessarily be eliminated from the daily living of Universitas Gunadarma Kelapa Dua’s students and other related actors.

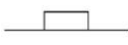



In consequence, can it be said that transformation triggers the emergence of informality or vice versa? How does it happen? In the specified context, transformation can trigger informality as the answer to problems formed by disconnections between functions in the area. This can happen because informality emerges as the provider for aspects of living not provided by the formal sector². Otherwise, in relation to Dovey’s theory, informality can cause transformation in the form of intervention by political power. The tolerance level for ‘messiness’ within certain political structures predisposes how far informality can survive or grow. (‘Messiness’ denotes urban conditions and processes that do not follow institutionalized or culturally prescribed notions of order⁶).

Transformation by re-planning or eliminating problems can be a way of building a regime’s image. Simultaneously, transformation can also occur when informality is at a disturbing level for various stakeholders. On the other hand, informality is also an agent of transformation, as it injects a new functional, formal and property composition into an area. Therefore, informality also has an effect on transformation.

5. Conclusion

Transformation is inevitable in city spaces. Over time, the alterations of various living elements can grow and develop to almost infinite forms and extents. Therefore, it is necessary to anticipate the direction of growth and development of various aspects of urban change. This research has found that many things have changed in Kelapa Dua, considered as a rapid transformation due to the time span of only 30 years since development began in 1978. In the Table 1, we present conclusions relating to some transformation aspects during this time.

Table 1. Transformational aspects in Kelapa Dua - Depok

Variable of Transformation	Then	Now
Ownership	- Landlords	- Landlords - Private - Investors
Function	- Farm; garden - Rural settlements	- Commercial area - Educational institution - Rent houses - Cluster housing
Density	1 RT in 1 village (Desa Tugu)	3 village (Kelurahan Tugu, Pasir Gunung Selatan and Mekarsari); approx. 170 RT in each village.
Form	 Settlement	 Settlement  Commercial area; Rent houses  Educational institution
Actor	- Local residents - Immigrants; factory workers	- Students (<i>i</i>) - Staff of educational institution (<i>i</i>) - Commercial area workers (<i>i</i>) - Local residents - Immigrants = (<i>i</i>)
Access	Kampong street : North - South lane Kampong street : West – East lane	Collector road : Nusantara rd. – RTM st. Arterial road : Kombes. Pol. M. Jasin rd.

Accordingly, the present condition of the context is more diverse than previously. The numbers of actor and interests have increased in the same areas. The state of inadequate planning within the local government generates questions about how these interests and preferences can be met. The mix of various activities is evidently not sufficient to provide for actors' needs in the specified context. This situation has caused the emergence of the informal sector during Kelapa Dua's rapid growth, and is a crucial factor for wider regional growth.

Formal and functional transformation of the area without planning has created a lack of functional synergy in recent times. Hence, informality has emerged as a substitute for needs unaccommodated

and unanticipated by the formal sector. Informality, in fact, also becomes the agent of ‘courtesy’ that pays attention to the needs of various related actors. It provides synergy between function and cutting down distance between actor and destination by considering the nature of the connection between the two. This circumstance increases the efficiency of actors’ activities by trimming travel time, distance and cost.

However, the amenities provided by the informal sector are not entirely profitable. Its existence often excludes public interests so that messiness emerges at disturbing levels. Accordingly, anticipation in planning for better growth and development of various aspects within the city is highly necessary.

Transformation without growth and development planning will trigger informality, and informality that becomes the main provider for various actors can then generate other problems (such as cleanliness problems, territorial conflicts and congestion). The presence of informality injects new functional, formal and property composition into the area, and eventually forms other kinds of transformation.

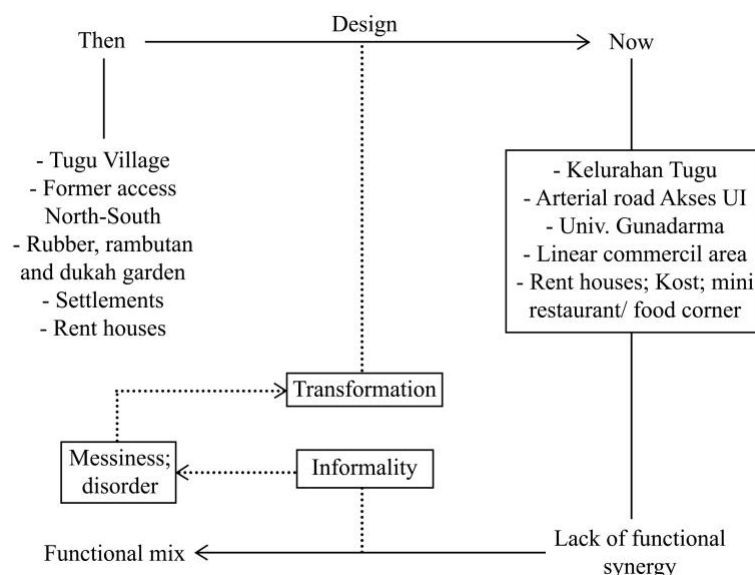


Figure 4. Relationships between transformation and informality within the study context

We hope that this study can be continued by the study of the continuity of informal sectors in Kelapa Dua, Depok. This matter is considered necessary in understanding the variation of informal systems that control trading activity and the interests around it.

6. Appendices

- (A.1) Agus. (2018). Hawkers in Kelapa Dua, Depok. (H. F. Wasnadi, interviewer)..
- (A.2) Herniwati. (2018). Perencanaan dan Pembangunan Kota Depok. (H. Fijriah, interviewer).
- (A.3) Kusumastuti, P. (2018). Daily life of a Universitas Gunadarma's student. (H. F. Wasnadi, interviewer).
- (A.4) Mugianto. (2018). Daily life and land development in Kelapa Dua, Depok. (H. F. Wasnadi, interviewer).
- (A.5) Taufik & Anto. (2018). Daily activity in Universitas Gunadarma, Kelapa Dua. (H. F. Wasnadi, interviewer)
- (A.6) Tiwari, R. (2018). Connecting places, connecting people. New York: Routledge.

7. References

- [1] Kementerian Pendidikan dan Kebudayaan. (2018). Kamus Besar Bahasa Indonesia (KBBI). Retrieved from <http://www.kbbi.web.id>
- [2] Dovey, K. (2016). *Urban design thinking: A conceptual toolkit*. New York: Bloomsbury Academic.
- [3] Kementrian Agraria dan Tata Ruang/Badan Pertanahan Nasional. (2018). Peraturan & Perundangan. Diambil kembali dari Kementrian Agraria dan Tata Ruang/Badan Pertanahan Nasional: Retrieved from <http://www.bpn.go.id>
- [4] Chalana, M., & Rish, S. (2016). Making sense of the order in the disorder in Delhi's Kathputti 154 colony. *Messy Urbanism*, 154–174.
- [5] Darmawan, E. (2005). Ruang Publik dan Kualitas Ruang Kota. Seminar Nasional PESAT (hal. A35-A43). Jakarta: Universitas Gunadarma
- [6] Hou, J., & Chalana, M. (2016). Untangling the “messy” Asian City. In M. Chalana & J. Hou, *Messy Urbanism: Understanding the “Other” Cities of Asia* (pp. 1–21). Hong Kong: Hong Kong University Press.
- [7] Hou, J. (2016). Everyday urban flux: Temporary urbanism in East Asia as insurgent planning. In M. Chalana & J. Hou, *Messy urbanism: Understanding the “other” cities of Asia* (pp. 193–214). Hong Kong: Hong Kong University Press.
- [8] Karp, D. A., Stone, G. P., Yoels, W. C., & Dempsey, N. P. (2015). *Being urban: A sociology of city life*. Santa Barbara, California: ABC-CLIO.
- [9] Tunas, D. (2008). *The spatial economy in the urban informal settlement*. Bandung: International Forum on Urbanism.

Acknowledgements

This research is supported by the Higher Education Primary Research (PDUPR) Ministry of Technology Research and Higher Education of the Republic of Indonesia, 2018, Contract Number 405/UN2.R3.1/HKP05.00/2018.

This article is presented at the International Conference on Smart City Innovation 2018 that supported by the United States Agency for International Development (US-AID) through the Sustainable Higher Education Research Alliance (SHERA) Program for Universitas Indonesia's Scientific Modeling, Application, Research and Training for City-centered Innovation and Technology (SMART CITY) Project, Grant #AID-497-A-1600004, Sub Grant #IIE-00000078-UI-1.