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From rigidity to ephemerality: Architecture as a socio-spatial assemblage of heterogeneous components

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Abstract

This study discusses the idea of ephemeral architecture as an alternative approach to overcoming the rigidity issue of the built environment. Ephemeral architecture is an architectural space that appears and disappears in a short period of time. The ephemerality of such a space indicates that there are components that are not permanently available in the built environment. The question then arises as to what these components are, in what way they are present or available, and how they relate to each other to temporarily form a certain architectural space in the built environment. Using assemblage as the theoretical approach, the study investigates these questions through the case of trader space in the courtyard of the Sunda Kelapa mosque in Jakarta. The research makes three main findings regarding: (1) the heterogeneity of entities that act as architectural components, including everyday items such as clothes, socks and plastic rugs; (2) the process of spatial assemblage in which these entities relate and interact; and (3) social assemblage as the non-physical structure that frames this spatial process.



Keywords

Assemblage, Ephemeral, Rigidity, Everyday items.

1. Introduction

There is growing awareness of the importance of time in architecture, specifically related to the rigidity of the built environment in responding to the "unprecedented population growth, urbanization, social and technological change" (Lifschutz, 2017, p.8). Therefore, instead of a being a rigid and timeless object, it seems necessary to see the built environment as a "mutable subjects much affected by [the] everyday uses and intentional intervention" of its users (Frank, 2016. p.8).

Various approaches have been developed to overcome this rigidity issue. However, they tend to focus on the physical structure of the built environment, either by making the elements moveable/changeable, or by making it suitable for reuse after a structure has been dismantled. Some of these efforts originated many years ago. For instance, in 1961, Cedric Price proposed a design called the fun palace, based on an idea about time and uncertainty. Price argued that a built environment should be "enabled rather than determined human activities" (Lifschutz, 2017, p.8). In Japan, "major corporations are pursuing research and development to create systems for moveable partitions, bathrooms, and kitchens to underpin flexible homes" (Lifschutz, 2017, p.12). The approach of Price and the Japanese corporations can be categorized as an example of 'architecture as a system, which can respond to the changing demands of users (Murray & Brand, 2017). Another approach considers "what happens to architecture when its time is up"; how its elements can be dismantled, and then reused by a community (Armborst, D'Orca, & Theodore, 2016, p.110).

The idea of ephemeral architecture offers an alternative approach in response to this rigidity issue by extending the range of components that form the architectural space. Ephemerality indicates the importance of components which are not part of the physical structure of the built environment; non-static components that are only present or available within a particular time-frame. The question subsequently arises as to what these components are. In addition, in what way they are

present or available in the built environment, and what the process is that temporarily assembles these components into a particular form of architectural space.

This study investigates these questions through the case of trader spaces that appear and disappear in the Sunda Kelapa mosque courtyard, in central Jakarta, Indonesia. This kind of occurrence, a cluster of trader space inside or near a mosque area, is a common phenomenon in societies that are dominated by Muslims, such as that of Jakarta. However, there is a disjunctive relationship (Tschumi, 1994) between the trader space and the mosque courtyard, because the courtyard does not have any specific features to accommodate the trader space. However, the cluster of trader spaces still appears in the courtyard, albeit only for a short period. In other words, this case demonstrates the capability of the built environment to accommodate different, or even incompatible, everyday uses.

Using an approach based on assemblage theory (DeLanda, 2006; Deleuze & Guattari, 1980/1987), this study aims to explain the ephemerality of trader space as a process of socio-spatial assemblage. Specifically, it investigates the entities that are involved as components of the space, the process of relation-interaction between these entities, and the layer of non-physical structure that frames this process. Understanding this socio-spatial assemblage process, and the wide range of entities involved as resources in this process, can contribute to developing an alternative design approach that can reduce the rigidity of the built environment.

2. Theoretical discussion2.1. Ephemeral architecture: Event, materiality and compatibility

The basic idea of ephemeral architecture is architecture that appears and disappears in a short period of time. The term 'ephemeral' is derived from the Greek *epi* (on) and *hemerai* (a day), which means 'lasting only a day' (Partridge, 1966). To date, there have been two points of view in the discourse on ephemeral architecture: first, the architecture that is related to special events;

and second, that which is seen through the fleeting materiality of its components.

From the first point of view, ephemeral architecture is an architectural space that appears along with special or planned event, and then disappears when the event ends. A special event is an event held or created to achieve specific objectives or to satisfy specific needs (Getz, 2007; Matthews, 2008). These objectives vary, from simple entertainment, urban rituals or festivals (Macy & Bonnemaison, 2008; Monin, 2003); to cultural and state celebrations (Vinsentini, 2008); pilgrimage/religious rituals (Mehrotra & Vera, 2014); and expressions of ideas or political propaganda (Delbeke, 2008). The components that form the architectural space, for instance stages, backdrops, lighting etc., are specifically created to support these objectives.

From the second point of view, the ephemerality of architecture is seen through the fleeting characteristics of its components. The focus of related discussion explores the possibility of an architecture formed by non-visual and immaterial elements, such as sound, smell or even electromagnetic waves (Haque, 2004; Karandinou 2013; Pallasmaa, 2014). This exploration aims to increase the utilization of all the human senses, instead of just the senses of vision, in the experience of architecture.

Both points of view suggest the involvement of 'other' components that affect the ephemerality of an architectural space. In other words, the idea of ephemeral architecture extends the range of components involved in the formation of architecture. However, neither point of view discusses the importance of these other components in relation to the contextuality of ephemeral architecture; the relationship between the ephemerality of the architectural space and the specific circumstances of the built environment, in which ephemerality indicates the importance of components that are not part of its physical structure. This contextual frame is important with regard to the effort to increase the flexibility of the built environment, making it able to respond to changes in everyday use.

Within this contextual frame, this study aims to investigate these 'other' components involved in the formation of certain architectural space, and how their availability affects the ephemerality of such space. The following section discusses assemblage theory as an approach to identifying and analyzing the entities that act as the components of architectural space, the peculiar characteristics of the relationship between them, and the phases of the process in which the components relate and interact.

2.2. Architecture as spatial assemblage

Assemblage is an idea about a 'whole' formed by heterogenous components (Anderson, Kearnes, McFarlane, and Swanton, 2012; DeLanda, 2006; Harris, 2016; Müller, 2015). The idea of assemblage could be considered as a noun (object) or as a verb (process) (Anderson et al., 2012; Dovey & Woods, 2014; McFarlane, 2011). As a noun, assemblage is an entity that emerges through a 'relation of exteriority' between its components. This relation means that various entities which act as the assemblage components do not merge into one seamless unity or organism. Instead, they "may be detached from it and then plugged into a different assemblage in which its interactions are different" (DeLanda, 2006. p.10). In this study, this idea is used to analyze architecture as a spatial assemblage that temporarily emerges through the relation between heterogeneous components, rather than as a single seamless entity with permanent characteristics.

As a verb, the relation that forms the assemblage is not seen as a static state. Instead, it is a dynamic process with specific phases. It is important to note that the assemblage theory does not specifically mention the phases of the assemblage process. However, we argue that there are two concepts in the theory that can be considered as phases: territorialization and deterritorialization. Territorialization is the phase in which diverse components are temporarily related or connected to each other to define the boundary and identity of the assemblage, while de-

territorialization is the phase in which the relation-interaction between components destabilizes the boundary and identity of an assemblage, and at some point completely dismantles it (DeLanda, 2006; Deleuze & Guattari, 2004; Kennedy, Bruce, McCann & Zapasnik, 2013; Muller, 2015).

This process of 'appearing and disappearing' through territorialization-deterritorialization is the link that connects the idea of the assemblage process with the idea of ephemerality in architecture. Therefore, this study uses the idea to analyze the ephemerality of architectural space as a process of appearing and disappearing, involving heterogeneous components and through a particular series of phases. However, we do not use territorialization-deterritorialization as rigid conceptual categories, to which any findings should be confined. Instead, we use both concepts as starting points or guidance to analyze and understand the overall appearing-disappearing process of trader space in the Sunda Kelapa mosque courtyard. Besides territorialization-deterritorialization, other concepts from assemblage theory that we use as guidance in the analysis process are capacities and properties. The role of these concepts will be further discussed in the following section.

3. Research methods3.1. Data collection

This study is a qualitative and employed both field observations and interviews to collect the data. The data from the observations were used to develop semi-structured questions for the interviews (Cohen & Crabtree, 2006), which were held with different parties involved, both directly and indirectly, with the research case phenomenon. This combination of multiple methods and sources of information aims to achieve a "more valid, reliable and diverse construction of realities" (Golafshani, 2003, p.604).

The field observation consisted of two stages. The first stage aimed to obtain an overall picture of the presence of clusters of trader space inside the Sunda Kelapa mosque courtyard. The main information obtained from this stage was: 1) the configuration of the physical structure of the courtyard; 2) the overall time-frame of the market/bazaar events; 3) the overall variety of entities (particularly goods) involved in the formation of the trader space; and 4) the configuration of the spatial position of the traders' space in the courtyard. These data then were used as the basis for conducting the second stage of the field observation.

In the second stage, more specific observations were made to identify all the entities involved as components of the trader space, and how the relations and interaction between them made the trader space appear or disappear in the courtyard. This stage involved three trader spaces (figure 1), which were selected based on their level of complexity, specifically regarding the quantity and variety of the components that formed the space. The first trader sold men's clothes, representing a low-complexity space. The second trader sold socks, employing a medium-complexity space, while the third trader sold men's accessories (for example, wallets and belts) in a high-complexity space.

In both stages, the data were recorded using photographs. In the second stage, the photos were taken sequentially in the same position to fully capture the whole appearing-disappearing process of the selected trader space (figure 2). For each selected trader, this photo-taking process was conducted several times, so that the data from each process could be compared to check the consistency of the information. If there were photos from a certain part of the process that were missing, incomplete or seemed to be inadequate (for example, because the image of the process was blocked by a mosque visitor), individual data could complement each other.



Figure 1. From left to right: men's clothes trader, socks trader, accessories trader.

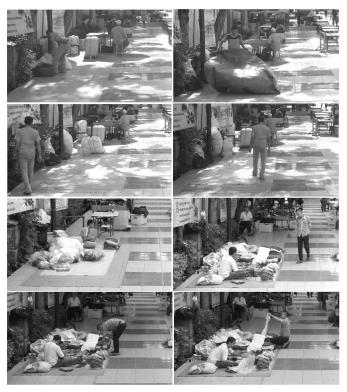


Figure 2. Example of data from sequential photos.

The main aims of the interviews were to gather information that could not be obtained from the field observations. For example, from the observations, we can see that every trader will occupy a specific position inside the courtyard as a base to form their space. However, we are unable to ascertain the reasoning behind this action merely through field observation. How is a certain trader able to occupy that specific spatial position? Are there any specific rules or regulations? This kind of information needed to be collected through the interviews. TThe interview is semi-structured, with primary pieces of information collected using an 'interview-guide', while still open to new ways of seeing and understanding issues relevant to the topic (Cohen & Crabtree, 2006).

The interviews were conducted with various different parties. First, they were held with administrative staff of the official mosque management institution (called *Pengelola Masjid Agung Sunda Kelapa* or PMASK). One of the most important pieces of information from these interviews was the existence of a *paguyuban pedagang* (trader community). The second party was the leader of the traders'

community. The third party was the traders. The final party was the porters, who support the traders in managing the additional resources used in the formation of trader space.

The interviews took place on-site(the Sunda Kelapa mosque courtyard), specifically in the time-frame of the bazaar events, namely on Fridays, from approximately 07:00 to 15:30. This decision was based on consideration of the importance of the sites to the research questions and the data possibly generated from the interviews (Edwards & Holland, 2013). For instance, it was easier for the traders to provide information about specific entities (for example, physical features of the built environment, tools and goods) involved in the formation process of the trader space while the event was taking place. The only interviews not conducted on site were those with the administrative staff, which took place in the mosque administrative office.

3.2. Analysis

The study used coding as the method to analyze the data. Several concepts from assemblage theory were used as the theoretical lens in the coding process. However, this methodological approach did not intend to deliberately confine the categorization in the coding process to the various theoretical concepts (based on assemblage theory). These theoretical concepts were intended as guidance or a starting point of view to sharpen the focus when analyzing the data. Instead of being restricted to a pre-established theoretical concept, this method opens up the possibility for adjustment when developing a new framework of conceptual categories to explain the research findings.

The paper discusses the results of the analysis in three sections: (1) social assemblage as the framework of the spatial process; (2) trader space as a spatial assemblage; and (3) the phases in the appearing-disappearing process of trader space. Each section contains several conceptual categories as a base to develop understanding from the findings. Three concepts from assemblage theory underlie the analysis in the first and second sections, namely

(1) heterogenous components; (2) capacities; and (3) properties (Anderson et al., 2012; DeLanda, 2006; Harris, 2016).

The concept of heterogenous components suggests analysis of the wide range of entities that are possibly involved as components of the assemblage, while the concept of capacities and properties is necessary to analyze the relationship and interaction between these components (McFarlane, 2011). Capacities are related to the capabilities of certain entities that emerge when they form a relationship and interaction with others (DeLanda, 2006). Property can be seen as a peculiarity (for example shape, quality or social position) or characteristic that is possessed by a certain entity (Partridge, 1966), which can affect its capacities (DeLanda, 2006).

The third section aims to explain the ephemerality of trader space as a spatial assemblage process with specific phases. Territorialization and deterritorialization are concepts that represent a phase in the assemblage process. The concept of territorialization suggests analysis of the phase in which the relation-interaction between entities temporarily defines and stabilizes the boundaries and identity of the architectural space (DeLanda, 2006; Kennedy et al., 2013; Müller, 2015). On the other hand, the concept of deterritorialization suggests analysis of the phase in which the relation-interaction between entities destabilizes the identity and blurs (and then disassembles) the boundaries of the space (DeLanda, 2006; Kennedy et al., 2013; Muller, 2015).

4. Brief description of the research case

The case examined in this study is trader spaces at a weekly event called *pasar* (market or bazaar) that take places inside a mosque called Sunda Kelapa in central Jakarta, Indonesia. It occurs every Friday, along with the routine religious gathering called *Shalat Jumat* (Friday prayer). Most of the traders that participate in the event sell commodities such as clothes, shoes, accessories (belts, wallets, small sling bags) and electronics.

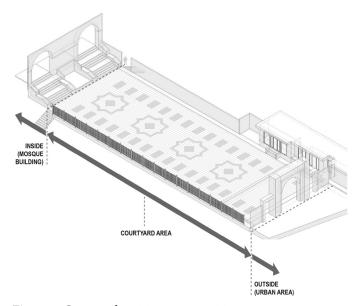


Figure 3. Courtyard position as a transition area.

This trader space occupies the courtyard of the mosque. In terms of physical features, the courtyard does not have any specific feature to support or accommodate the presence of this space; for example, no dedicated kiosks or stalls for the traders. The courtyard has no specific element or area to properly display (and store) the goods. Hence, each trader needs to bring additional objects and utilize them as resources to form their own space during the bazaar.

However, albeit physically simple, the courtyard is a transition area that is passed through by many mosque visitors (when they arrive and leave the mosque area) (Figure 3). This fact plays



Figure 4. Difference between empty (top image) and peak time (bottom image) of the courtyard.

a crucial role during the peak times of the bazaar, which occur directly after the Friday prayers end (around 12:30 – 13:30), when there is a large stream of visitors, most of whom have just finished their Friday rituals, who walk through the courtyard and observe the goods sold by the traders.

Figure 4 show the different condition of the courtyard when it is empty and during the peak time of the bazaar. Even though this time only exists for approximately 45 minutes to an hour, preparations to assemble each trader's space starts early in the morning (at around 06:00 - 10:30). After the peak time has ended, the traders need to disassemble their spaces, which happens around 13:30 - 14:30.

5. Results and discussion

5.1. Social assemblage: Framework of the spatial process

The findings reveal the existence social-assemblage in the of form paguyuban pedagang (trader community), as a layer of non-physical structure that frames the spatial assemblage process of the trader space. The component of this social assemblage is human actors with particular social positions. In this case there are three social positions, namely permanent trader (PT), additional trader (AT) and porter (Pr). A PT is a member of the trader community, while an AT is not a member of the community, but is still occasionally involved in the bazaar. A Pr plays a supporting role that helps the traders in the spatial assemblage process.

Social position is a non-physical property of the actors that affects three capacities that play a crucial role in the spatial assemblage process (Figure 5), namely: 1) the right to occupy a particular spatial position inside the courtyard; 2) the right to bring and use objects as (additional) resources that are required to form the trader space; and 3) the capability to utilize the resources and develop a set of relation-interactions to form the trader space.

Each actor is only able to actualize these capacities in a specific time-frame, which is during the bazaar that takes place along with the Friday prayer ritual in the mosque. For example, regarding the first capacity, PTs have the right to 'own' a particular spatial position, which they can use to form a trader space inside the courtyard. However, they can only occupy this position during the bazaar on Fridays. They cannot randomly come (for instance in a Monday morning) and then occupy a certain position to form a trader space inside the courtyard.

The first capacity is crucial because it allows certain actors to occupy a spatial position that acts as a base to form the trader space. Actors need to follow two 'goods-based' rules to acquire a social position as a PT who owns a specific

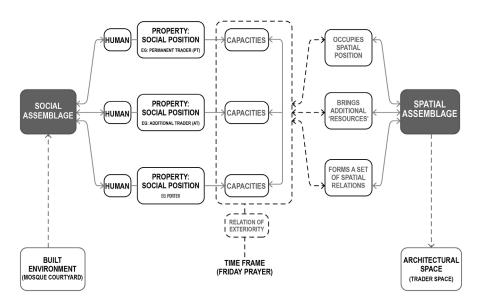


Figure 5. Relation between social and spatial assemblage.

spatial position in the courtyard. First, the trader community has a regulation regarding a limit on the number of similar goods that can be sold. 'Common goods', such as clothes, are limited to five traders, while 'rare goods', such as traditional medicine, are limited to three traders. Second, traders with similar goods are strongly suggested not to form their space in adjacent positions. There is usually a gap of around two or three traders between traders of similar goods.

ATs do not own a specific spatial position in the courtyard, so they need to search for an 'empty position' every time they want to form their space. There are two types of empty position in the courtyard. First, one that is not owned by any PT. Second, the position is empty because the PT who owns it is absent. When the AT finds an empty position, they cannot directly occupy it, but need to ask for permission from the PTs in the area surrounding the empty position.

The first capacity is closely related to the other two. When traders are able to occupy a position inside the courtyard, then they are also allowed to bring (and utilize) various objects as resources to form a certain set of relations-interactions that are required to form the trader space.

5.2. Spatial assemblage: The importance of everyday items and the idea of the spatial role

This study argues that the ephemerality of architectural space is affected by the heterogeneity of its components. The findings show that there is wide range of entities that are involved as components that form the trader space, including everyday items such as clothes, socks, plastic rugs and umbrellas. The availability of these everyday items plays an important role in the ephemerality of the trader space. This importance is based on two factors. First, the traders have limited time to actualize their capacities, specifically those that allowed them to bring and utilize these everyday items in the courtyard. Second, the traders can easily move or mobilize these items to another location, even though the variety and number of these can increase the

difficulty of this process.

However, the importance of these everyday items does not reside in the items themselves; instead, it should be seen through their *spatial role* when they form a relation-interaction with other entities. Based on the concept of capacities from assemblage theory, this study develops the idea of the spatial role to fully explain the relation-interaction between the components of spatial assemblage. This role can be divided into three parts: the role itself, the function of the role, and the actual realization of the role.

The idea was developed to demonstrates the variety of entities that act as components of architectural space. Different entities can act as components with the same spatial role, even though the realization of the role is different (which also affects the qualities provided by the entities). For example, in trader space, there is a component with a spatial role as a 'boundary'. The function of a 'boundary' in trader space is to mark out the courtyard area that can be used by traders, especially to display their goods. In Case 1 (men's clothes trader), the entity that acts as a 'boundary' is a plastic rug, which actualizes the role by directly covering the surface of the courtyard floor. In Case 2 (sock trader), beside a plastic rug, the entity which also does this is an umbrella, which actualizes the role by forming a shaded area that indirectly covers the courtyard floor. The plastic rug and umbrella therefore play the same spatial role (as a boundary), even though the properties of each lead to different actualizations of the role. The spatial role is also specifically related to the components involved in the (de) territorialization phase, which is when the architectural space appears and disappears (the phase will be explained in the following section). In other phases, the role of each assemblage component

Table 1. List of abbreviation for the sub-phases (each sub-phase will be explained in the following section).

SR	Supplying Resources	Dol	Disappearance of Identity	
OaP	Occupying a Position	Dis-B	Disassembling Boundaries	
Def-B	Defining Boundaries	PW	Position Withdrawal	
Eol	Emergence of Identity	RW	Resources Withdrawal	

will be explained with the concept of capacities and properties.

5.3. Spatial assemblage: The appearing and disappearing process with specific phases

This section explains how trader space appears and disappears in the courtyard through a spatial assemblage process with three phases: preparation, (de)territorialization, and withdrawal. Each phase is divided into several sub-

phases to further specify their significance in the appearing-disappearing process of trader space. Tables 2 show information about the overall phases (and sub-phases) of the spatial assemblage for each selected case, along with the entities that are involved, and the time-frame of the process.

In the time-frame bar, there is a specific block labeled 'FPB' (Friday Prayer Break). This is the time when the main part of the Friday Prayer ritual takes

Table 2. Overall phases of the spatial assemblage process.

PHASE	PREPARATION		(DE)TERRITORIALIZATION				WITHDRAWAL		
ENTITY	SR	OaP	Def-B	Eol	Dol	Dis-B	PW	RW	
Trader									
Visitor									
Parcel/Package									
*sack									
*plastic rug									
*clothes									
Courtyard Floor									
TIME-FRAME	07:30 - 09:30		09:30 - 13:30		13:30	13:30 – 14:15		14:15 – 14:30	
				FPB					
			SOCI	(S TRADER					
PHASE		RATION	<u> </u>	(DE)TERRITORI		<u> </u>		DRAWAL	
ENTITY Porter	SR	OaP	Def-B	Eol	Dol	Dis-B	PW	RW	
Trader									
Visitor									
Wood Sheet				_					
Umbrella	-								
Parcel/Package									
*sack									
*plastic rug									
*clothes									
Courtyard Floor									
TIME EDAME	06:30	- 10:00	1	0:00 - 13:30	13:30	- 14:30	14:30	– 14:45	
TIME-FRAME				FPB					
-			ACCESS	ORIES TRADE	R				
	DDEDA	RATION		(DE)TERRITORI			WITHI	DRAWAL	
PHASE	PREPA			107 27		Di- D	PW	RW	
		Oab	Def-B		Dol		1	KVV	
ENTITY	SR	OaP	Def-B	Eol	Dol	Dis-B			
		OaP	Def-B	Eol	Dol	DIS-B			
ENTITY Porter		OaP	Def-B	Eoi	Dol	DIS-B			
ENTITY Porter Trader		OaP	Def-B	Eol	Dol	DIS-B			
ENTITY Porter Trader Visitor		OaP	Def-B	Eol	Dol	DIS-B			
ENTITY Porter Trader Visitor Table		OaP	Def-B	Eol	Dol	DIS-B			
ENTITY Porter Trader Visitor Table *frame		OaP	Def-B	Eol	Dol	DIS-B			
ENTITY Porter Trader Visitor Table		OaP	Def-B	Eol	Dol	DIS-B			
Porter Trader Visitor Table *frame *wood sheet Tent *frame *cloth-shade		OaP	Def-B	Eol	Dol	DIS-B			
Parcel/Package		OaP	Def-B	Eol	Dol	DIS-B			
Parter Parter		OaP	Def-B	Eol	Dol	DIS-B			
Porter Trader Visitor Table "frame "wood sheet Tent "frame "cloth-shade Parcel/Package "plastic box "wallet		OaP	Def-B	EOI	Dol	DIS-B			
Porter Trader Visitor Table "frame "wood sheet Tent "frame "cloth-shade Parcel/Package "plastic box "wallet "belt		OaP	Def-B	EOI	Dol	DIS-B			
Porter Trader Visitor Table "frame "wood sheet Tent "frame "cloth-shade Parcel/Package "plastic box "wallet	SR								
Porter Trader Visitor Table "frame "wood sheet Tent "frame "cloth-shade Parcel/Package "plastic box "wallet "belt	SR	OaP - 10:00		0:00 – 13:30 FPB		— 14:45	14:45	3 – 15:10	

place. In this specific time-frame, none of the bazaar activities is allowed to be performed in the courtyard. This stipulation perfectly demonstrates the importance of rules as a part of social assemblage in limiting the formation of architectural space in a built environment. Even though all the resources are available and ready to use, they are useless if the actors are unable to utilize them.

In each phase, there are entities with significant and insignificant roles. Significant means that the entities play an important role in forming the required relation-interaction related to the peculiarity of each phase in the spatial assemblage process. Insignificant means that the entities are merely present and involved in the process, but have yet to make any meaningful contribution to it.

For example, in the men's clothes' trader space, the entities with a significant role in the 'defining boundary' sub-phase are 'trader', 'plastic rug' and 'courtyard'. The relation between these entities defines the boundaries that specify the trader space area. Meanwhile, the role of 'clothes' in this sub-phase is insignificant, because they are merely involved as a resource (which will have a significant role in the next sub-phase).

The following sections will further discuss the role and importance of each phase and sub-phase in the appearing-disappearing process of trader space in the mosque courtyard.

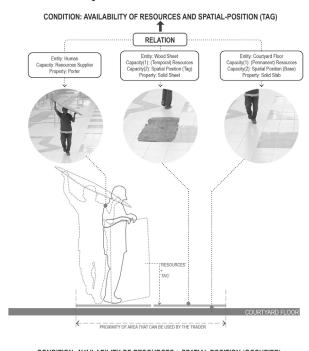
5.3.1. Preparation: Setting-up process

The aim of the preparation phase is to set up two basic requirements that are crucial to executing the following phase ((de)territorialization), namely (1) the availability of resources, and (2) the availability of spatial position. This phase is then divided into two subphases, *supplying resources* and *occupying a position*.

The aim of the 'supplying resources' sub-phase is to condition the availability of a certain set of entities as (additional) resources to form the trader space. This sub-phase can be performed by the traders themselves, or with help of a porter. If the traders

execute this sub-phase by themselves, then they also simultaneously occupy a specific spatial position. If they utilize the support of a porter, then the resources that are placed by the porter in a specific location will act as tags or placeholders that prevent other traders from occupying the position (figure 6-top image).

'Occupying a position' is the subphase in which the trader occupies a particular spatial position as a base to form the trader space inside the court-



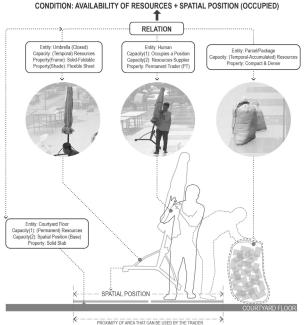


Figure 6. Supplying resources (top image) and occupying a position (bottom image) sub-phases of socks trader.

yard. This sub-phase, as previously stated, can be performed simultaneously with the process of supplying resources. However, if in the previous sub-phase trader utilizes the support of a porter to tag or put a placeholder down for his/her spatial-position, then that trader will occupy the tagged-position in this sub-phase (figure 6-bottom image).

5.3.2. (De)Territorialization: The appearing-disappearing process

(De)territorialization is the phase in which the trader space appears through the process of territorialization, and then disappears through the

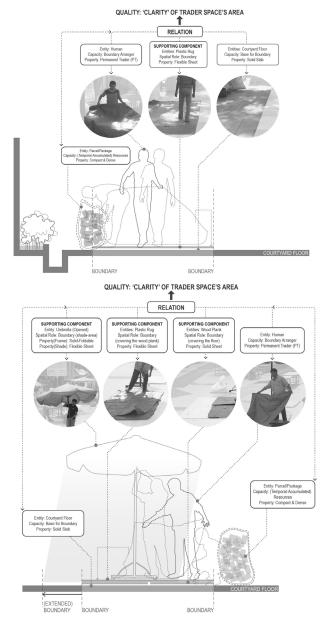


Figure 7. Defining boundaries sub-phase of men's clothes trader (top image) and socks trader (bottom image).

process of deterritorialization. This phase is divided into four sub-phases: defining boundaries, the emergence of identity, the disappearance of identity, and disassembling boundaries.

The 'defining boundaries' sub-phase aims to form a relation between supporting components, which differentiate the area of trader space from the others. The supporting component is one that defines the quality of the space (figure 7). For instance, a component with a spatial role as a 'boundary' provides quality in the form of 'clarity' regarding the area of the trader space. Different entities can act as supporting components with the same spatial role, albeit with different levels of quality (depending on the properties of the entities). Beside components with spatial roles as 'boundaries', there are also components with other spatial roles such as 'place to display' or 'sitting place, but all play a role in 'defining' the trader space and differentiating it from its surroundings.

'Emergence of identity' is a subphase in which the identity of space (as a trader space) emerges through relation-interaction between the main components of the space. The main component is one whose presence, and relation-interaction with other main components, plays a crucial role in the emergence of the identity of certain architectural space. This space can temporarily appear, even in an incompatible built environment, if the relation-interaction between the main components can be formed in the environment. For instance, trader space can appear in the courtyard through the relation-interaction between 'seller', 'goods', and '(potential) buyer' (figure 8). However, unlike supporting components, these main components require specific entities that cannot be easily replaced. For example, all traders has specific entities that they can use as goods to sell. These entities cannot be easily replaced by others because they are tied to the social and spatial position of the trader.

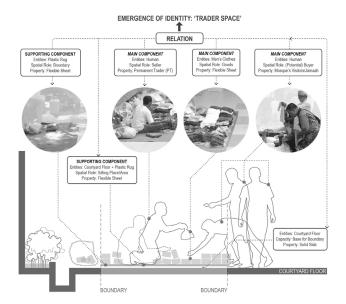
'Disappearance of identity' is a subphase in which the identity of the space disappears because there is a change in the relation-interaction between the *main components*. For example, when the peak time of the bazaar is over, the traders need to disassemble their space. This disassembling process starts by dismantling the arrangement of the goods and then storing them in a certain place or parcel/package. In other words, there is a change in the relation-interaction that involves particular entities changing from 'being displayed' (as goods) to 'being stored' (as resources in a parcel/package). Traders disassemble their space by dismantling the relation between the goods and the place of display, and then gathering and storing the goods in a certain package.

The process that takes place in the 'disassembling boundaries' sub-phase is similar to the 'disappearance of identity' sub-phase, in the sense that there is a change that leads to a relation-interaction that accumulates a group of items/entities into the form of package. This relation between entities in the form of a package makes them easier for the actors to move or mobilize from the courtyard.

5.3.3. Withdrawal: Cleaning-up process

The withdrawal phase is the opposite of the preparation phase. The main aim of this phase is to 'clean up' the built environment and return it to its default condition. Therefore, this phase strengthens the argument about the temporal availability of resources that are required to form the architectural space. The withdrawal phase is divided into two sub-phases, *positional withdrawal* and *resources withdrawal*.

'Positional withdrawal' is the subphase in which the traders, who initiate the formation of trader space in the courtyard, leave their spatial position. Some traders perform the positional and resources withdrawal simultaneously, which means that they take all the resources with them when they leave their position. Other traders, who utilize the support of a porter in the preparation phase, only take some of the resources and leave the rest in the built environment. 'Resources withdrawal', on the other hand, is the sub-phase in which the porters move/ mobilize the remaining resources to another location (inside the mosque



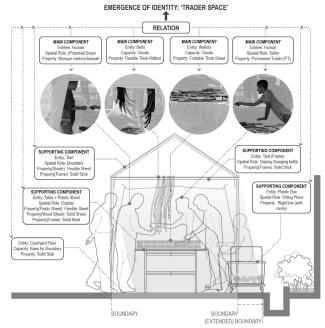


Figure 8. Emergence of identity sub-phase of men's clothes trader (top image) and accessories trader (bottom image).

area), to return the built environment completely to its default condition.

6. Conclusion and recommendation

This study has addressed the heterogeneity of entities involved as components of architectural space, and how they affect the ephemerality of the space. An architectural space becomes ephemeral when some of the entities that act as its components are only, and should be, available/present in a particular time-frame. This means it is necessary to extend the recognition of the components that form an architectural space beyond the permanent physical

structure of the built environment. This recognition indeed suggests a limitation of this physical structure, but it also provides an idea about the variety and wider range of entities that could act as architectural components.

The findings of the study reveal the importance of everyday items, such as clothes, plastic carpets and umbrellas, in the formation of architectural space. This argument does not try to negate or eliminate the importance of permanent physical structures in the built environment. Instead, both types of entity (the physical structure of the built environment and everyday items) are resources that are required to form certain architectural space. The difference is that physical structure is permanently available, while everyday items are only available temporarily, and there is process that involves a certain group of actors that needs to be performed to condition the availability of these items. However, the importance of these entities cannot be seen through their being separate individual entities. Instead, it needs to be seen through their spatial role as architectural components, whether as a main component (which determines the identity of the space) or supporting component (which determines the quality of the space).

A combination of the ideas of resources, main components and supporting components can be used to develop an alternative approach to overcoming the rigidity issue of the built environment. This issue is primarily related to the inability or limitation of the built environment to respond to change in everyday uses. This limitation is related to the fact that the features or elements of the built environment are only part of the resources that are required to form the architectural space. It is therefore necessary to fully recognize this limitation and open it up to an alternative approach, one that suggests that architects act more as 'resources managers' than as 'form makers'.

As a resources manager, an architect can explore the resources that need to be permanently available, and those that are only available in a specific condition (in which their availability depends on other parties). This explo-

ration should be based on the contextual situation of the design, specifically related to: (1) the variety of everyday uses or activities (that require a certain set of main components); and (2) the level of spatial quality to support these activities (which is affected by the supporting components). This approach opens the possibility to simplify the physical structure of the built environment, without reducing the complexity of architectural space. The physical structure of the built environment can be simpler because the availability of other resources has been 'distributed' to other parties.

However, the availability of these resources is useless if the actors are unable to utilize them through a process of spatial assemblage. The findings reveal the importance of social assemblage as non-physical structure that frames this spatial assemblage process. Therefore, social assemblage plays a crucial role in the ephemerality of an architectural space, because it frames the actualization of actors' capacities that are required to perform the spatial assemblage process, but only in a specific time-frame. This social assemblage adds a non-physical layer that can affect the flexibility/rigidity of the built environment without changing its physical features. This finding therefore suggests the necessity for architects to become involved in the formulation of rules and regulations (as the elements of this social assemblage). Similar to the previous argument about the recognition of the importance of everyday items, this involvement opens up wider options in the design approach of architects, rather than a mere focus on the physical structure of the built environment.

This research is limited to the context of a certain event in a particular type of public area, specifically a market/bazaar event in the courtyard of Sunda Kelapa mosque. Investigation in different cases is needed to further explore and develop the conceptual arguments that have been made in this study. Research in different contexts with a more diverse set of activities is required to develop a framework to understand the ephemerality of architectural space in everyday life. Such

knowledge will be valuable to further develop an alternative design approach to overcoming the rigidity issue of the built environment.

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