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Learning from Shared Creative Experiences
Volume 1

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Proceedings

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PREFACE

The third biennial Arte-Polis International Conference between the 22-24 July 2010 brings together to Bandung, Indonesia, creative champions from different places around the world, to share and learn from each others creative experiences in making places.

Under the theme of Creative Collaboration and the Making of Place: Learning from Shared Creative Experiences, Arte-Polis 3 underlines the importance of sharing collaborative and creative experiences through international and local best practices, and their policy implications on place-making.

The Arte-Polis 3 International Conference critically examine these issues:
(1) what is the understanding of creative collaboration?
(2) how and to what extent does the creative economy influence the collaborative nature of place-making?
(3) what shared experiences on creative collaboration can be learned from the cultural and economic contexts of diverse places?
(4) how can creative activities can be managed, planned, designed and replicated to enhance the quality of places for their communities?
(5) what are the appropriate policies and collaborative strategies that encourage development of community-based creative economy and place-making?

Keynote and Featured Speakers provide a platform for discussion of the Conference theme to be elaborated in parallel sessions of the Conference Tracks:

- **Prof. Nezar ALSAYYAD, Ph.D.** Professor of Architecture, City Planning, Urban Design and Urban History, University of California, Berkeley and Director/President, International Association for the Study of Traditional Environments, USA.
- **Prof. Eku WAND** Braunschweig University of Art, GERMANY.
- **Prof. Togar SIMATUPANG, Ph.D.** Institute of Technology Bandung, INDONESIA.
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- **Astrid S. HARYATI, MLA.** City and County of San Francisco, USA.
- **Prof. Dr. Suhono Harso SUPANGKAT** Institute of Technology Bandung, INDONESIA.

In this publication, Parallel Session papers are compiled to provide an insight for reflection and sharing of the best practice experiences from over 15 countries. We trust that you willo find Arte-Polis 3 International Conference on Creative Collaboration and the Making of Place a rewarding and enriching learning experience worth sharing.

**The Editors**

**Arte-Polis 3 International Conference**
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Kampung as a Creative Density: Fluidity of Linier Traditional Markets in High Density Urban Kampungs

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ABSTRACT

A high population density is one the characteristics of kampungs, which are located in urban centers. This condition is accompanied by other spatial characteristics of kampungs, such as dynamic, flexible, organic, and multi function. Such spatial typology creates a light separation in the kampung space and triggers "spatial togetherness" where social cohesiveness is easier to be realized. This phenomenon happens in almost all cities in Indonesia. In addition, overpopulation in kampungs can trigger slumming of these kampungs. Theoretically, it is believed that high density is one of the requirements in creating a compact condition in kampung and urban settings. High density enables not only economically but also socio-psychologically the emergence of creative spaces. Those spaces are not only limited to private houses, but also the public space or public facilities of a kampung. With their local strategy, kampung communities collaboratively create a creative dialogue on space. This paper presents evidence that emerges from traditional markets, which are located in urban kampungs. The exploration of those markets is mainly correlated with socio-psychological creativity in overcoming limitations and space density. The research is performed by correlating traditional market attributes, which covers location, nature of supply, function, degree of informality, lay out, and organization. The results will be important lessons to know and adopt some models of high density, which are suitable for appropriate cases of urban kampung settlements. Another lesson is people's creativity and collaboration in accommodating their daily needs in high-density settlements is an interesting reference for designing density itself.

Keywords: urban kampung, high density, creativity, fluidity, traditional market
KAMPUNG: DENSITY AND CREATIVITY

Kampung as a representation of urban settlement condition in developing countries has several traditional characteristics such as organic, dense, and minimum open space. Traditionally, kampung which already showed itself as part of urban physical, socio-economic, and culture entity is also seen as the entry point for the implementation of high density city ideas, mainly from their environmental density potentials and mixed used of spaces (Roychany, 2008). Generally, high density, which is dominated by this horizontal life, may tend to exceed environmental capacity and triggers slums or environmental degradation. Still, Burgess and Jenks (2001) see this relatively high-density condition as a potential as well as a challenge. This condition steer an interesting attempt to examine the nature of kampungs in adopting, accelerating, and overcoming high density, particularly though creative life and collaboration inside communities.

Theoretically, efforts to manage population density and environment will directly correlate with land optimization, efficiency of urban infrastructure needs, conservation of sub-urban fertile land, and other positive effects. In compact city strategy, for instance, although each attributes has an essential role in creating sustainability, population densification is a productive attribute for its initial steps. Improving an area’s population density in accordance to its optimum value, for example the center or a mixed-use district of a city or a transit area, is seen as an appropriate effort to reach sustainability target. For a detailed example, high density of an area (city) will significantly cut the need of energy and enables pedestrian and bikers to take part in urban mobility (Newman and Kenworthy, 1999).

According to Altman (1975), variation of density indicators is closely related to social attitudes. Those density indicator variations cover number of city population, number of people in a certain census area, number of people who live in a settlement unit, number of building in an area, etc. Urban kampung as described in Figure 1, for example, can be categorized into a high-density area, both outside as well as inside density. Jain (1987) adds that every settlement has different density level, depend on the contribution of the existing elements. Some factors are closely related with density (Budiharjo, 1996), so it is possible to consider the density of a certain area to exceed its limit and may create negative impacts, while in other community it is not.

<table>
<thead>
<tr>
<th>Inside Density</th>
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<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Suburban Area</td>
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<tr>
<td>High</td>
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<tr>
<td>Rich Urban Area</td>
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Figure 1. Profile of outside and inside density based on areas (Altman, 1975)
According to Yusuf (1991), dense condition that often creates limited space may trigger human creativity to perform intervention as an effort to adapt to or overcome the condition. Altman (1975) also explains that on one side, density leads to a more flexible attitude in a community, which has “communal” cultural background, such as Asian community. Using limited space for several activities is also a commonly found alternative. In Japanese society, as described by Tsukamoto and Atelier Bow Wow (2003), high density and limited space often lead to creativity in a location which is often seen to be unbenevolent, but with optimum design (*pet architecture*).

Meanwhile, density, which has positive impacts, is often objectively seen from economic perspective. For example, density is a productivity capital where population density will increase working performance of an area (Ciccone and Hall, 2008). Glaser (2010), using the data of cities in Unites States, explains that 50% increase on population density improves productivity level up to 4%. There are 2 possible scenarios of the strong correlation between productivity and density. First, economic agglomeration that will occur in a high-density area. Second, a matter of choice, that productivity may occur in a geographically proper area, which may lead to density, or vice versa; skilled people prefer to live in high-density area. Technology intensification which recently flashes, and commonly seen as intensiveness, also embosses the spillover of innovation and investment. This statement is supported by the research result of Knudsen et al (2008), which reveals that density and creativity, both independently and collectively, affect the innovation emerged in a city. In this case, density is also considered to be a key component of knowledge spillover and innovation. This emphasize supports Jacob's statement (1969) that innovation is a process that emerges when there is a new job in the old job division. This innovation not only creates new job division, but also new products, process, and idea.

![Figure 2. Density and related emerged aspects in sustainability spectrum](image)

From the discussion above, creativity in density can be seen from two different perspectives; socio-psychological and economical point of view. Density in socio-psychological aspect sees one’s or a community’s effort to adapt himself or
themselves to the existing condition. Meanwhile, in economic perspective, density is considered as a capital to increase performance and product of an activity. It is clear that the phenomenon of urban kampung density will be significantly different from both of those perspectives. From the economic perspective, kampung density will not give optimum result such as the one in socio-psychological perspective. Referring to the track record and potential of kampung as an entity which may strengthen social bond, creativity in kampung density is full of socio, culture, and psychological, rather than economic values.

From the perspective of sustainable development, the higher the density (up to its maximum limit capacity), the more several beneficial concepts can be obtained (Elkin e al., 1991). As described in Figure 2, density has a strong correlation with the created condition. For instance, high density will lead to social cohesiveness or intimacy aspect. From this condition, suitability aspect will emerge and in turn leads to an increase on the performance of productivity aspect. Density or high density is also believed to give strong influence toward efficiency aspect, for example in infrastructure provision. In such condition, accessibility and affordability aspects will also automatically increase. Ideal density also improves proximity and, as a result, enables people to perform their activities intensively. Such condition can also create multiplicity with complete derivation. Those flexible and fluid characteristics of density will lead to an optimum environmental condition.

TRADITIONAL MARKET: RELEVANCY, METHOD AND DATA

This paper puts the strategic position of kampung in the efforts of gaining sustainable development through a creative density and collaboration. This is a part of a research to find a model of citizens’ strategy to anticipate living in a space with high-density habitation. Cases of traditional linier markets which emerge in several kampungs are interesting to be observed as a local creativity in overcoming space limitation and using the existing density potential. This study used the case of traditional markets that grow and develop in kampungs as the object of the study. Besides the kampung community’ strategy in anticipated the density and the limited space to live, the phenomenon of a traditional market in kampungs is very worthy to be studied. This phenomenon is also able to stretch the notion that a traditional market must always be on the edge of the main access roads and be wide open. This case is more suitable to be traced with the statement of Gallion and Eiser (1986) that traditional markets are the direct process of joint space needs have grown since a long time, especially for trade beginning with barter. The traditional markets in this kampung also illustrated some interesting phenomena such as the formalization of activities and space in the institutional level, as well as the dialogue strategy with limited space and high density at the technical level.

The explorative method through the case object is used in this study. Besides aiming to be explored as a local strategy, it is expected there is a lesson learned that could be achieved. First, the analysis began by linking the existing phenomena with population and the local area statistics. It can be seen the relationship between the density data and the productivity data, including some possible collaborations. The next is the relevance between density and market spatial characteristics of markets that can be viewed through a simple spatial
analysis, associated with the attribute condition as mentioned by Dawer and Watson (1990) in assessing a traditional market in urban areas. The five attributes are location and nature of supply, function, the level of formality, including measuring existing facilities and infrastructure, layout, and organization.

Figure 5. The site map of Ngampilan Ward (1) and Gedong Tengen Ward (2) and its "figure ground"

There are about 32 traditional markets with different levels in Yogyakarta City itself. Pasar Beringharjo is the oldest market established along with the founding of Yogyakarta City (1758). Initially pasar Beringharjo was an open space and just got a permanent building in 1925 (Utomo, 2006). Other markets in Yogyakarta also expanded similarly, starting with the selection of the trading place by traders in strategic open spaces. Informality of collaboration in community level as well as trader level, namely "gotong royong" have become one of important aspect for the existence of these traditional markets. Although, there are some markets located inside kampungs, the two longest markets with different characteristics are used as the observation objects. Both are Pasar Senen and Pasar Ngebuk. Pasar Senen is located in Kampung Pathuk and Kampung Sutodirjan, Kelurahan Ngampilan, Ngampilan Ward and Pasar Ngebuk is located in Kampung Kementiran Kidul, Kelurahan Pringgokusuman, Gedong Tengen Ward (sites illustrated in Figure 5). Generally, a traditional market is located in a square-shaped spot at the edge of roads, but both these markets are in linear shape and located in Kampung.

M. S. ROYCHANYAH
Figure 6. The population density and the percentage of dwelling area compared to the overall area width (Yogyakarta Statistical Bureau, 2007)

Viewing from the population structure in the two wards where the two markets are, both of them are located in the areas with the highest density in Yogyakarta City as can be seen in Figure 6. The population density in Ngampilan Ward is 2316 persons/km², while in Gedong Tengen Ward is 20778 persons/km². From the comparison data of the dwelling area to the overall area, it is found that both of these wards have a prevalence ratio for residential area, 75% and 70%. Nevertheless, Ngampilan Ward is also known as the region with specific medium to large home industries, namely the food industries (bakpia). It is recorded that there are 12 large and medium-class industries (Yogyakarta Statistical Bureau, 2007). In contrast, it is recorded that Gedong Tengen Ward only has one medium- and high-class industry. The small percentage of non-residential area could be interpreted as a small number of regional productivity.

As has been estimated in the previous section, the creativity in kampungs will be more viscous in the socio-psychological relation than its economic performance. It is evident that the density at Ngampilan Ward and Gedongtengen Ward is not followed by a better economic performance (Table 1). The low productivity and creativity can be proved by comparing the number of Family Welfare III and Family Welfare III Plus (mid-upper) and the number of families in the category of Pre-Welfare and Welfare 2 (mid-lower). Ideally, the higher rate of welfare at mid-upper level, then the society condition can be classified into the creative community (well educated). Family Welfare 3 is a family that has been able to meet basic needs, socio-psychological and family development, but can not give a regular contribution to society, such as material donations, and actively participate in community activities. The Family Welfare 3 Plus is a family that has been able to meet all basic needs, psychological and social development and has been able to contribute regularly and actively participate in community activities. It is obvious that the very high densities in these two wards are not followed by a good performance of its welfare achievement aspect. Contrary, this minimum social condition showed a good acceptability of collaborative used spaces inside kampungs.
Table 1. Welfare conditions in Yogyakarta City (tabulation, 2010)

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<thead>
<tr>
<th>Ward</th>
<th>Households</th>
<th>Mid-Lower Class</th>
<th>Mid-Upper Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mantrijeron</td>
<td>7,807</td>
<td>0.48</td>
<td>0.52</td>
</tr>
<tr>
<td>Kraton</td>
<td>4,960</td>
<td>0.55</td>
<td>0.45</td>
</tr>
<tr>
<td>Meryangsan</td>
<td>6,701</td>
<td>0.62</td>
<td>0.38</td>
</tr>
<tr>
<td>Umbulharjo</td>
<td>13,674</td>
<td>0.45</td>
<td>0.55</td>
</tr>
<tr>
<td>Ketagede</td>
<td>6,758</td>
<td>0.66</td>
<td>0.34</td>
</tr>
<tr>
<td>Gondokusuman</td>
<td>8,462</td>
<td>0.47</td>
<td>0.53</td>
</tr>
<tr>
<td>Damujiyan</td>
<td>4,473</td>
<td>0.63</td>
<td>0.37</td>
</tr>
<tr>
<td>Pakualaman</td>
<td>2,310</td>
<td>0.49</td>
<td>0.51</td>
</tr>
<tr>
<td>Gondomanan</td>
<td>3,577</td>
<td>0.48</td>
<td>0.52</td>
</tr>
<tr>
<td>Ngampilan</td>
<td>4,004</td>
<td>0.59</td>
<td>0.41</td>
</tr>
<tr>
<td>Wirobrajan</td>
<td>5,625</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td>Gedongtengen</td>
<td>4,570</td>
<td>0.72</td>
<td>0.28</td>
</tr>
<tr>
<td>Jetis</td>
<td>5,969</td>
<td>0.59</td>
<td>0.41</td>
</tr>
<tr>
<td>Tegalejo</td>
<td>7,719</td>
<td>0.62</td>
<td>0.38</td>
</tr>
</tbody>
</table>

LINIER TRADITIONAL MARKETS: FLUIDITY IN DENSITY

Pasar Senen (Figure 7) was established in 1961 after removed from its previous site, which is also inside kampung. Since it is moved on Monday, then the market is named Monday Market (Pasar Senen). So, there is no relation to the trading model on Mondays only. The site of this market is utilizing a wall around Ngampilan Dormitory Police and some traders hoarding the state land ("Wedi Kengser" in Javanese) of former waste disposal in the Dutch era in the north of the dormitory. This market is actually very close to the traditional market that grew later in its east which more dominated by large-scale trading. Meanwhile Pasar Nggebuk (Figure 8) was established in the early 1970s in the kampung road (Jalan Rukunan in Javanese), which divided Kampung Kemetiran Kidul. Since at the beginning a group of merchants conducted the selling activities near the fence into a street, and then this market is called Pasar Nggebuk. Both these markets clearly showed that the density inside the kampungs could still tolerate and collaborate the multi-function activities that grow following the activities dominated by residential areas. The residents are not interfered by the existence of this market. Even residents voluntarily handed over the privacy aspects that must be lost daily at the time of these markets doing activities.

Table 2. The Assessment of market conditions in the city based on the attributes developed by Dawer and Watson (1990)

<table>
<thead>
<tr>
<th>No.</th>
<th>Attribute</th>
<th>Pasar Senen</th>
<th>Pasar Nggebuk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location and Nature of Supply</td>
<td>The location is situated inside the high density kampung, linear surrounding the fence of Ngampilan Police Housing (neighborhood market class). The traders and goods are retail (retail rather than wholesale) come from the local kampungs, Bantul Regency and Sleman Regency.</td>
<td>The location is situated in a quite high-density kampung, diagonal linear dividing the kampung (neighborhood market class). The traders and goods are retail (retail rather than wholesale) come from the local kampungs, Bantul Regency and Sleman Regency.</td>
</tr>
<tr>
<td>2</td>
<td>Function</td>
<td>Mixed, limited to meet the daily needs. Because there is no good division, the traders are spread; for example, meat traders are not in an adjacent location. Wet and dry merchandise can also be adjacent.</td>
<td>Mixed, limited to meet the daily needs. Because there is no good division, the traders are spread; for example, meat traders are not in an adjacent location. Wet and dry merchandise can also be adjacent.</td>
</tr>
<tr>
<td>3</td>
<td>Degree of</td>
<td>Shelters are in the middle of the road.</td>
<td>Shelter / los are along the road.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Informality</th>
<th>Market. Some new non-permanent shelters appear on both ends of the market. Roads between shelters are no more than 2 meter. Shade is generally not permanent with a tarpaulin or plastic and roped between shelters. Some traders over flew selling outside the shelters and remain linear lengthwise. The infrastructure is used: mingled among traders-buyers and the general people who use the road. The market is open from 5 am until 12 noon.</th>
<th>Mingling amongst the permanent road to the east and non-permanent road in the west. Road between shelter is more or less 2.5 meter, but in the west part is used more for selling, in front of residents' houses. Shade is generally also not permanent with a tarpaulin or plastic and roped between shelters. The intensity of the residents or general people who pass the road is higher, because the market is truly used the kampong road. The market is open from 5 am until 12 noon.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>Linear sweep and then turned to form the letter &quot;L&quot;, from south to north and east to west. The market total length is 460 m. the main market width is 884 m2. There are entrances at both ends, although in the west part is more crowded because of motorcycles parking lots.</td>
<td>Linear extends diagonally to form the letter &quot;T&quot;, the north-south. The market total length is 230 m. the main market width is 650 m2. Both the entrances are slan-shaped (buk) (low gate to enter the kampong street), so it is called Pasar Ngebuk.</td>
</tr>
<tr>
<td>Organization</td>
<td>There is an independent trader organization, plus a security guarantee from the local residents. It is recorded that there are 440 official traders. Market Management is under Technical Service Unit of Serangan. There are trader clubs with social society nature.</td>
<td>There is a merchant organization led by local residents. Market Management is under UPT Serangan. The recorded official traders are 190 people. There are also trader clubs with social society nature.</td>
</tr>
</tbody>
</table>

From Table 2, it is obvious that both the traditional markets still have strong informal nature. From the 5 attributes used by Dewar and Watson (1990) in analyzing the existence of town market in developing countries, Pasar Senen and Pasar Ngebuk showed the consistency relationships among their attributes. This can be explained, for example, the market site in the crowded kampong will clearly have consequences on the type of goods of selling and buying. The condition in the kampong also made the flexibility shelter construction or way to trade is very fluid. Kampong facilities such as badminton courts, resident yards, and the aisles are also used as the overflow of this activity. The form and layout market that extended in length allowed for mixing trading that in other traditional markets may be avoided, such as the mix of dry and wet goods. The same goods with different disseminating confirmed that this market has close relations with customers and local residents' daily life. From such fluid physical setting leads to the traders organizing which is also fluid with family-based. Even the interaction with residents or customers is often carried out more intensive and long.

From Figure 8, in more detail, there are significant differences from the conditions of both markets. In Pasar Senen, because the used pivot point is narrower and there is no private society land that is easy to be accessed, the crowdedness is more pronounced. While in Pasar Ngebuk, because a wider line conditions, and on one side used as the market and on the other side is residents' houses with open yard, created a lower level of crowdedness. Nevertheless, in both market, traders and the inhabitants are also quite creative in using the remaining spaces. Public facilities such as post watchmen (pos ronda); badminton courts to a private facility
such as house’s fences to the wall of closed stalls are used as business spaces. The space utilization is not only limited to trading activities, but also for other socialization activities, a typical kampung community.

![Image of kampung layout](image)

Figure 7. Site of Pasar Senen that located inside Kampung Pathuk and Kampung Sutodirjan in Ngampilan Ward, formed as linier “L” shape (above) and site of Pasar Ngebuk that located inside Kampung Kemetiran Kidul, in Gedong Tengen Ward, formed as linier “I” shape (below).

The linear market inside the kampung truly creates a multi-function of informal social space. First, it is a communal space that could bring an economic space: to help community interact in terms of economic and helping community perform daily activities efficiently. The characteristics of their activities are also significant different compared with other traditional market that arranged formal by the governments. Second, it is a creative space, which is present due to physical and non-physical conditions of the community. This physical condition is closely related to limitations of space and so fluid high density forms a creative, linear space, which also allows the kampung inhabitants and the outside inhabitants doing activities inside the space which in formal terminology may not be unusual for buying and selling activities.

Third, since the limitation of space has been felt in everyday life of kampung communities, this situation has triggered a collaborative space through a basic social-inclusion from each stakeholder who uses the space. In the case of the linier market, the social inclusion does not only emerge from kampung communities, but also an inclusive spirit of the traders. These “internal” collaborations between communities, between traders, and among communities-traders in interpreting importance of high-density space become a significant potential for a livability of kampung. Several sustainability pre-conditions that initiated by a high density in the kampung can be seen as a local strategy for improving environmental conditions. Although from the economic aspect is not yet shown a significant

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creativity and productivity products, but high density (optimal density, not over-density) is quite meaningful socio-psychologically.

Figure 8. Sequences of Pasar Senin (above) and Pasar Ngembuk (below)

LESSON LEARNED

Kampungs have a very potential density condition when directed to the relevant ideas such as sustainability issues. Its entity as an integral part of urban space structure will have a significant role and become an integral part in efforts to bring cities in Indonesia to the concept of sustainable development. This high density and some settings in order to optimize the business and not exceeding its capacity, directly can arrange kampung environment to be better condition. The high density in the urban kampung (some tend to exceed the threshold-density or "over-density") besides showing the potential, it also gives clarity to the improvement actions that must be taken, primarily related to its development model. It becomes a challenge in the future of how the idea of raising the degree of density in an area within a specific development strategy, which is followed by activities concentration (mixed-use development), should be associated with the anticipation of the concept of carrying capacity of the area.

One of the interesting issues is how the density empirically can also be a key to increase living standards in some aspects of life. In the economic sphere, in the community whose welfare has been fulfilled, the density will be the key to increase productivity, creativity, as well as collaboration in innovation. This spillover will not only spread in knowledge increasing but also area investment. In socio-cultural sphere as well as psychology sphere, high density also triggered creativity and collaboration in solving the space limitation through integrated local strategies. The case of linear traditional markets in dense kampungs showed the multi-dimension of density transformation in a multi-function activity. The activity is not only economic activities as market representation, but also social activities that have a high level of fluidity. For kampung inhabitants, this linear space of traditional market is the mediating space that tried to be put in informally as a creativity form of spatial dialogue and a result of intangible collaboration among the stakeholders. The result is a market that flows based on human, activities, space attractions, and spirit of informality.
For informal daily urban life, the needed space is a “social space” which has several multi-dimensional interactions. Informal space in these kampungs where represented by linier markets is a formless and a fluid space that streams based on droughts of community-flow. Of course, it is totally different with special, strategic, and isolative (traditional) markets that have utilitarian and mechanistic planning terminologies. Facts of many examples in Japan, China and other countries convinced that the market which grows linearly between the limited urban spaces does not only encourage characteristic and spirit of place (and culture), but it is also the strength of economic activities of the society.

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