

# Architecture, space and power in historical multi-ethnic city Gresik

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**Abstract.** The study of historical-morphology cities is conducted to discover the socio-cultural characteristics which influence the formation and development of spatial patterns and architecture. Gresik as the historical multi-ethnic city on the north coast of East Java, is known as a major trading port, the center spread of the Islamic religion, and the government city in the colonial era. This research has been made to know the morphological phenomenon of the historical city, by using a qualitative method. The result has shown: 1) the urban structure with the segregation of settlements based on ethnicity indicates the authority power to control its territory, 2) the building form which is dominated by colonial architecture shows the authority power to control the physical changes, 3) the courtyard-house concept which is widely applied in Kampung Arab indicates about the ethnic power to arrange the environment, and 4) the use of landhuis type and luxury mansions in Kampong Kemasan represents the power of successful people as government officials and entrepreneur. The spatial patterns and architecture of the historical multi-ethnic city - Gresik were influenced by the power aspects in the form of efforts to dominate each other and self-defense in the personal and communal levels.

## 1 Introduction

Until the 1960s era, the learning of architectural theories in many topics related to originality, harmonious composition, and associated with the happened phenomena. In the 1970s era, Alexander Tzonis and Manfredo Tafuri introduced a theoretical framework which linked between architecture and the socio-economic-political contexts. Furthermore, Foucault, which is known as poststructuralist paradigm, explained how the expert knowledge affected the power of social working, and thus how the certain architectural configurations can play a role of disciplining people's minds and bodies. Based on Foucault's studies, many scholars conducted various studies about the diversity of architectural and social interaction patterns [1].

Currently, the development of a new theory of architecture studies is conducted to find more holistic relation using a variety of new paradigms including postcolonial. Postcolonial was originated from the emergence of movements against the colonialism paradigm, and the goal was toward the colonialism impacts in knowledge included the culture which influences individuals to dominate others. The concern could encourage increasingly chaotic world order. Postcolonialism is also oriented toward the realization of a new world relationship in the future. Postcolonial perspectives espouse a transformative agenda of

architecture and urbanism that enables and empowers multiplicity in the processes of material production, the practices of their inhabitation, and the structures of representation. The attempt to break free of colonial hierarchies includes investigating the colonial dimensions of concepts like modernism, postmodernism, tradition, heritage, and sustainability. The interrogation of different demands for an investigation into the origins of the conceptual frameworks and spatial categories defines the discipline. Therein lies our future – and our hope – for a more just and equitable world which demands the globalizing knowledge production in architecture and planning [2].

The Development of Architecture and cities in Indonesia have been considering the historical development of coastal cities, especially in the north coast of Java. The cities in the north coast of Java are the trajectory of world trading and the spread of Islam. Gresik as one of the cities in the northern coastal region of East Java has a port and a major trading area, so that is where the influx of migrant ethnics of Chinese, Arabic and Dutch [3]. In general, the coastal cities evolved through the phenomenon of ethnic settlements as an important part of the formation of neighbourhood, city, and architecture. The city formed the heterogeneous multi-ethnic settlement with the close layout each other, and the power of space and architecture will affect the patterns of formation and development. In the northern

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residential buildings (landhuis). Indies architecture is a style of architecture which blended between European architecture and local architecture to adapt the climate in Indonesia (tropical climates). The building characteristics of architectural Indies, including landhuis are: the high slope of roof to enlarge the volume of space under the roof, the high ceilings, vents in the top of doors and windows (fanlight or bovenlicht) perforated (ventilation block or krawangan); the front and back porches, located slightly to inside (the influence of Javanese house), and the attachment of natural stone plates in outside the bottom of buildings [15].

In the era of colonialism, the development of urban space and building structure governed by the laws of strict colonial rule. This shows the power of the colonial government in controlling the physical development of the region is very strong. There are two ages have great influence on morphological development of cities in Java, namely: 1) after 'Java Oorlog' / Java War in 1825-1830, followed by the system Cultivation (*Cultuurstelsel*), and 2) after the implementation of the Law of sugar 'in 1870 and the Law of Decentralization in 1905 [16].

As a political form of multi-ethnic and multi-culture, the colonial government developed the 'area of governance' (political domain) and 'trading area' (economical domain) [3]. Many wealthy people as a result of trade in coastal cities appointed rulers in the region. Furthermore, the environmental authorities have adopted a building officials and environmental conditions. The use of this building typology benefit from the government as a form of hegemony, and for society as a form of socio-economic success [17]

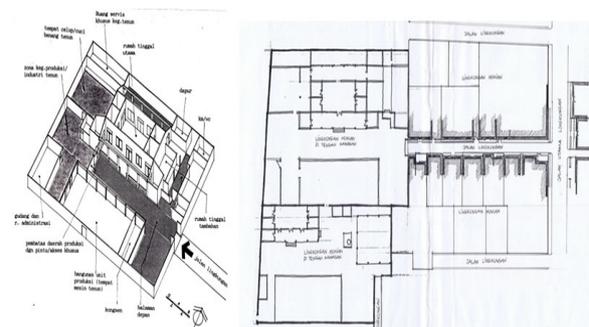
The characteristics of space and architecture in the area are dominated by the physical form of colonial architecture building which shows the dominance by the Dutch colonial government as an extremely strong power determinant. The building characteristics of official houses of landhuis types which are located in the Dutch settlement indicate an attempt to give the domination of spatial and architectural environment in the Old City of Gresik.

### 3.1.2 Courtyard in Kampung Arab Gresik

The existence of Kampung Arab Gresik that has been from the 1600s era, the patterns of residential and region were formed and developed in the colonial trading era, and survived until nowadays, influencing and forming the specific cultural community in Gresik today. Kampung Arab Gresik area is closed by the ethnic settlements and forms a Ethnic enclave pattern. The existence of ethnic enclave in this region is a picture of multiculturalism and diversity which can be used to maintain an ethnic culture, such as cultural activity and language [18].

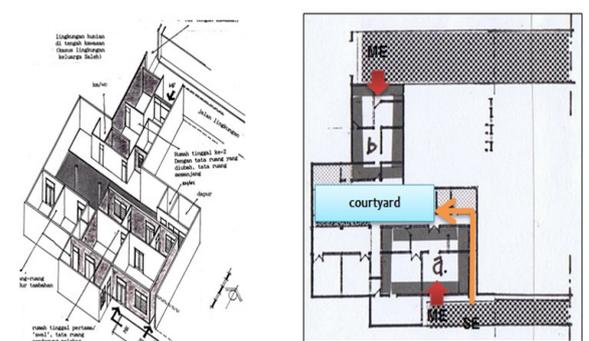
Residential unit area in the center of Kampung Arab region, in general, is residential houses with a large area. The shape pattern of residential areas is a Cul de sac, with one access for entry and exit as shown in Figure 4. Generally, the dwelling has a front yard that serves as a

receiving area after the main gate. The typology of courtyard building forms is located behind the main house. Furthermore, there are differences that separate the guest access to male and female guests. The access of male guests (public) is towards the main building, and the access of female guests (private) moves toward the courtyard space. The front yard can serve the private activity when the main gate is closed as shown in Figure 4.



**Fig. 4.** Courtyard housing in the center area of Kampung Arab (Source: D. Ariestadi, 1999).

While the dwelling units in the road edge, both of the environment and the main street are a smaller residential area. In general, residential building has a boundary with the road environment, the main street of the area, or other dwellings. This building only serves as a dwelling house without the additional function of business activity. Courtyard space is located in the back or side, with separate access (entrance side). Thus, there are always two accesses namely the main access and the additional access which is marked by a door covered by a curtain or 'kerai'. Side entrance is located in the building edge, or, due to the limited of wide building, it can be located in the different street as shown in Figure 5.



**Fig. 5.** Courtyard housing in the edge area of Kampung Arab (Source: D. Ariestadi, 1999).

Characteristics of courtyard houses in the Arab-Islamic architectural typology aim to meet the needs of protection level of the occupant privacy, particularly women in interaction with outsiders and male visitors, how to serve guests, attitude and responsibility towards the neighbours, and simplicity in life [19-21]. The typology of courtyard houses is related with the religious culture aspects, especially regarding to the privacy and

separation activities, and visual access between men and women [22]. In traditional Islamic or Arab culture, it is important to separate men and women to protect the house against outsiders. The houses were designed to create a separate physical space between men and women, as well as to prevent the visual contact.

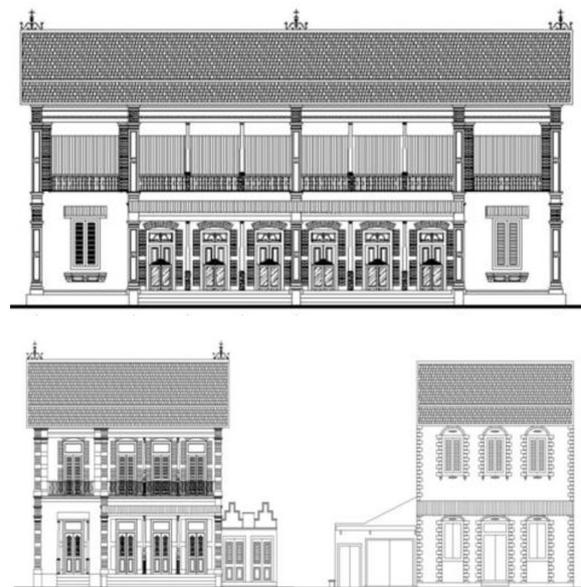
Courtyard house typologies in 'Kampung Arab' Gresik formed through a process of cultural adaptation by occupants in different settings. Courtyard house concept used in accordance with the demands of the inhabitants of the territory of gender space, privacy, and comfort. Environmental spatial patterns are formed in urban enclave settlements with the concept courtyard can arrange access system that supports the principle of the separation area of gender and privacy, as well as very efficient to control environmental thermal comfort. Nevertheless, the presence of the use of courtyard house concept which stands out in the residential neighborhood in Arab ethnic indicated the efforts to realize the domination power of strong ethnic in their own environment.

### 3.1.3 *Luxury mansions in Kampung Kemasan Gresik*

Kampung Kemasan is one of the alleys located in the old town area of Gresik. Historically, this village is called 'Kemasan' for its inhabitants work mostly gold handicraft makers. Currently, the craft of making gold was no longer found in this alley. Homeowner in this village are successful entrepreneurs, thus they built the unique and interesting house.

In general, residential buildings in Kampung Kemasan Gresik are composed of two building masses, which function the main building as the main activity for homeowners and the additional building as birds' nest. Two masses of the building are separated by a courtyard. In addition, there is also a building wing which is functioned as a service area [12]. The main building is a dwelling house typology mansion consists of 24 buildings. Identification of the typology of the building style is Dutch Colonial building with neo-classical style with influences of Chinese architecture and Arabic. Characterize the influence of Chinese vernacular house in the form of two storey building. The upper floor is made without partitions and used for storage and livelihood activities. Characterize the influence of Arab culture is spatial indicate an attempt to distinguish the activities of women and men, through the use of bamboo curtain covering the activities inside.

The most interesting element of buildings is the number of doors and windows which are more than a residential home in general. In front of the house, there is a form of stealth window, the window shaped ornaments which include the ventilation holes on it, but in reality the window deadlocked. The window was only made to decorate and beautify the building. In addition, the unique characteristics of residential buildings are also seen in the many ornaments in the buildings. The typology of residential buildings in Kampung Kemasan Gresik is shown in Figure 6 [23].



**Fig. 6.** Typology of residential buildings in Kampung Kemasan (Source: PU Ciptakarya Kabupaten Gresik, 2013).

The buildings and ornaments in residential houses in Kampung Kemasan were influenced by Chinese, Arab and European cultures. The Chinese influence is seen in the use of ornament to the wrought iron beams, which serves as the locking of doors and windows. The ornaments are generally found in Chinese style house. The Chinese influence is also shown in the dominance of use the red colour in the building. The red colour represents fire and blood which symbolize prosperity and luck, but red also is a symbol of virtue, truth and sincerity. The influence of Arabic culture is seen in: (a) the existence of patterned brick ornamentation in the pillars or columns and walls both exterior and interior building, with a triangular arrangement or pyramid, in which the composition of multiples-three, identical with the mosque roof; (2) the use of ornaments with the crenellation or Merlons motif is often found in the religious building ornaments; and (3) The use of the natural shape is the stylized-plant elements (flowers, leaves and branches). Floral motifs have been a medium of decorative expression due to the religious understanding of Islam that prohibits painting or creating the soulless creature sculptures, especially those can move or walk. The European cultural influences are seen in the peak of the roof ornaments, gable and gabletoppen [13].

Building on the corridor Kampung Kemasan tend to have a colonial style and another in part Chinese-style architecture [12,23]. Dutch architectural style of the building is established earlier, because at the time there was no other building models that describe greatness and luxury. In the postcolonial perspective, the embodiment of the symbols indicate desire to showcase identity and the ability to live / to struggle of a group of sub-altern. The dynamics of the understanding and use of the building typology of luxury in Kampung Kemasan Old City Gresik is influenced by: 1) political power, in this case all the artifacts colonialism as a symbol of power,

2) attempts to show identity as minority groups were successful, and 3) efforts resilience to retains its identity [2].

The characteristics of the luxury building houses of a successful entrepreneur in Kampong Kemas indicate an attempt to give the domination of spatial and architectural environment in the Old City of Gresik. The used ornaments were manifested with clear, very attractive, dominating, and even those are extremely interesting in its environment. The ornaments have also the symbols and meanings of success, prosperity, and positive values including virtue, truth and sincerity. Thereby, the existence of homeowner as a successful entrepreneur will gain prominence in the community.

### 3.2 Space and power in historical multi-ethnic city Gresik

Establishment of space and architecture in the multi-ethnic city of Gresik historically strongly influenced the dynamics of politics and power. Spatial and environmental building is based on a strong Islamic culture show the role of Islamic government as the initial formation of the town of Gresik. Spatial heterogeneous multi-ethnic describe government policy is the kingdom until the colonial government set Gresik city as a port city and growing as a center of commerce and government in the eastern region of the island of Java. While the physical dominance of colonial building with architectural influences show the strength of colonial government that controlled the region in the long term.

An overview of the formation of space and architecture shows that studies about architecture and multi-ethnic city is mostly conducted to find the concept of formation and use of spaces, because of the presence of complex interaction of diverse aspects including social, culture, and politic. This is in accordance with the theory of 'Production of Space' that emphasize social interaction as an important aspect in the formation of space [24], and the theory of 'Power of Place' which states that the use of space in the area of multi-ethnic influenced by aspects of domination and control of user groups space [25].

Postcolonial paradigm will be disclosed through the perspective of the opposing party (sub-altern). The dominance of power political forces that shape the space and architecture is balanced by the power-ethnic society as a user who wants to be able to control the social and cultural needs including space and architecture. The dynamics of space adjustment and colonial architecture with ethnic Chinese and Arabic influences shaping acculturation specific space and architecture, as seen through landhuis colonial building typologies in the entire area of the old town, courtyard houses pattern in Kampung Arab and luxury mansion in Kampung Kemas. In the government that controls the political pressure, the adjustment of space and architecture in an effort to preserve the identity, privacy, and existence itself.

Space and built environment are instruments that reinforce hierarchies and the negotiation of relations of

differences and adjustments. Postcolonial can show more unique ways and particles of forms and histories on the scope of global interconnection; henceforth considered to be universal, as well as the European modernism, which actually is a fact on the scope of provinces and particles [26]. Postcolonial thinking can contribute to the interpretation of architecture and city as a cultural artefact and as a symbolic landscape formed from the layers of meaning and identity. Postcolonial perspective can describe the political influence in architecture and urban governance [27].

## 4 Conclusion

The cities in Indonesia which developed in the colonial era greatly were influenced by the dominance of colonial government about the formation and development of the city physical character. The specific condition of environment and residential patterns in the old town of Gresik is the existence of multi-ethnic enclave settlement. The characteristics of space and architecture in the area were dominated by the physical form of colonial architecture building which showed the dominance of Dutch colonial government as an extremely strong power determinant. Nevertheless, the presence of the use of the courtyard-house concept which was applied in the ethnic Arab settlement indicates the efforts to realize the power of strong ethnic domination in their own environment. The characteristics of the house-officials of landhuis types which is located in the Dutch settlement, or a luxury mansion building of successful entrepreneur houses in Kampong Kemas also indicates an attempt to give the domination of spatial and architectural environment in the Old City of Gresik. There is an attempt to establish the mutual power of space and architecture that will always occur in the establishment and development of space and the environment, while on the other hand, attempt to maintain the domination of power will always happen.

## References

1. H. Heynen, G. *The book of Architectural Theory*. SAGE Publications Ltd. (2012)
2. J. Hosagrahar. *The book of Architectural Theory*. SAGE Publications Ltd. (2012)
3. R. Damayanti, Handinoto. *Dimensi Teknik Arsitektur*. **33**, No. 1 July (2005)
4. M. S. Barliana, [http://file.upi.edu/Direktori/FPTK/JUR.\\_PEND.\\_TEKNIK\\_ARSITEKTUR/196302041031\\_MOKHAMAD\\_SYAOM\\_BARLIANA/Articles\\_Makalah\\_Ilmiah/ArsitekturKekuasaan.pdf](http://file.upi.edu/Direktori/FPTK/JUR._PEND._TEKNIK_ARSITEKTUR/196302041031_MOKHAMAD_SYAOM_BARLIANA/Articles_Makalah_Ilmiah/ArsitekturKekuasaan.pdf). Accessed, 10 October 2015
5. L. Groat, D. Wang. *Architectural Research Methods*. John Wiley & Sons, Inc. (2002)
6. G. E. Guba, S. Y. Lincoln. *Naturalistic Inquiry*. Beverly Hills: Sage Publications Inc. (1985)
7. A. Salama, *METU JFA*. **1**, 23: 1 (2006)

8. J. W. Cresswell. *Qualitative Inquiry & Research Design, Choosing Among Five Approaches*. SAGE Publications Ltd. (2007)
9. A.A.S.I. Widyastuty. *Jurnal Teknik WAKTU*. Vol. **09**, No. 02 (2011)
10. Sudaryono. *Laporan Jurnalistik Kompas*. 2008
11. B. Fauzy, Antariksa, P. Salura, *DIMENSI*. Vol. **38**, No. 2 (2011)
12. C. Riski, Antariksa, Surjono. *Arsitektur e-Journal*. **2** Nomor 2 (2009)
13. Y. Sumalyo. *Gadjah Mada University Press*. (1993)
14. Handinoto. *Perkembangan Kota dan Arsitektur Kolonial Belanda di Surabaya 1870-1940*. Penerbit Andi. (1996)
15. J. Soekiman. *Komunitas Bambu*. (2014)
16. Handinoto, *Dimensi Teknik Arsitektur*. Vol. **32**, No. 1. (2004)
17. D. Ariestadi. *Jurnal Teknologi dan Kejuruan*. FT UM. (1999)
18. S. Mazumdar, *EDRA* **36**-2005. (2010)
19. A. Shorbagy. *IJCEE-IJENS*. **10** No: 04. (2010)
20. F. A. Mustafa, A. S. Hassan. *American J. of Engineering and Applied Sciences*, **3** (2010)
21. A.Z. Karimi, B. Hosseini. *Proceedings: Archi-Cultural Translations through the Silk Road 2nd International Conference*, Mukogawa Women's Univ., Nishinomiya, Japan, July 14-16. (2012)
22. N. Qomariyyah, Antariksa, E. Y. Titisari. *Arsitektur e-Journal*. **2**, Nomor 2, Juli (2009) 79-89
23. PU Ciptakarya Kabupaten Gresik. Laporan Akhir Detail Pelaksanaan Tindak Konservasi Kawasan Jl. H.O.S. Cokroaminoto- Jl. Nyi Ageng Arem-Arem. (2013)
24. H. Lefebvre. *Book of Rethinking Architecture: A Reader in Cultural Theory*. Routledge (1997)
25. D. Hayden. *The MIT Pres*, (1995)
26. E. Akcan. *SAGE Publications Ltd*. (2014)
27. A. Kusno. *Behind the Postcolonial Architecture, urban space and political cultures in Indonesia*. Routledge. (2000)

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