https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

Spatial Typo-morphology of Residential House in Supporting to the Resilience of the Indigenous Settlement in the Sub-urban Area, Case: Enclave Settlement in the New Town of Gading Serpong

Mohammad Ischak[1], Bambang Setioko[2], Dedes Nurgandarum[3]

[1]Doctoral Candidate of Architecture and Urban, University of Diponegoro, Semarang, Indonesia mohischak@yahoo.com
[2]Professor, Department of Architecture, University ofDiponegoro, Semarang, Indonesia keliek2000l@yahoo.com
[3]Professor, Department of Architecture, University of Trisakti, Jakarta, Indonesia dedes@trisakti.ac.id

Abstract *— The growth of the city of Jakarta is marked among others by the development of new towns in the surrounding areas including Tangerang. The growth of this city establishes the character of a distinctive sub-urban area emphasizing on indigenous settlement that retains its rural character. The form of pressure in terms of land acquisition and land development by new town developers concerning vacant land and indigenous settlement areas resulted on the emergence of enclave settlement. To ensure that the enclave settlement is in line with the principles of sustainable development, the phenomenon needs to be explored by focusing on the inhabitants of enclave settlement. This study is based on the question of whether the indigenous settlements of the new town area can survive and be prevailed by using certain strategies. To be able to answer the question, descriptive analysis is exploited based on the grounded method through field observation on the social life of the inhabitants implementing through the spatial arrangement of residential house at the new town of Gading Serpong area. The results revealed that spatial typo-morphology of residential house in the indigenous settlement is basically a reflection of the strong values and social ties of the inhabitants as the uppermost hierarchy of the spatial socio-culture. Therefore, it is important to emphasize that spatial typo-morphology can become significant factor in supporting the resilience of enclave settlements in responding to the development of new towns.*

Keywords— New town ,Enclave settlement, Resilience, Typo-morphology.

I. INTRODUCTION

The emerging phenomenon as new town sub-urban areas is basically an indication of the expansion from urban into rural areas in the developing countries (Pozoukidou & Ntriankos, 2017). Although the development of new towns is aimed at reducing capital city's load through the decentralization of the population, the distribution of business opportunities, as well as the availability of residential infrastructure(Suyarto, 1993), the negative impact on the indigenous environment is remained real. The most prevalent impacts of the change, among others, are reduced agricultural land (Sahana, et.al., 2018; Parvaiz, et.al., 2017), changed in social society (Gebregziabher, et.al., 2014; Huang, et.al., 2017)and ecology (Haregeweyn, et.al., 2012, Dupras, et.al., 2016), and emerged in social and spatial segregation (Firman, 2004; Daskalova & Slaev, 2015; Winarso et al., 2015; Michelini & Pintos, 2016, de Jeude, M.L., et.al. 2016).

One of the problems arises from urban expansion is related to management and policy factors. These can be related to studies of new town development in developing countries such as those conducted in Beijing in China (Zhao, P.,2013), Ahmedabad (Damayanti, 2010) and Kathmandu (Chitrakar, et al., 2016) and Kolkata (Sahana, et.al.,2018) in India emphasizing on the development and progress of a new town which is heavily influenced by the development policy and the intervention of direct management from both local and central government (Noorloos& Steel, 2016). Whereas in Indonesia, new urban development is likely to be established by the developer without government interference, either in planning or designing, in terms of the acquisition of large number of vacant and uninhabited lands (Damayanti, 2010).

The land tenure and development in Tangerang covering such a vast and massive area is one of the city's megapolitan buffers. One that is currently under construction is the new town of Gading Serpong. Developers are building the new town equipped with a full range of urban service scales

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

(national and international) of residential buildings and supporting facilities, i.e., business, education, health, and entertainment. Land acquisition by the developers includes buying the pre-existing settlements. This can be executed based on the laws of the market without government interference, resulted on the scattered boundary land areas of developer. However, the indigenous settlement remains existed because some of its inhabitants refused to sell their land and houses (Ischak, et.al., 2018). In the development process of this new town ,the developers constructed a massive dividing wall between the new town and the surrounding villages entailed on the emergence of enclave settlement. This condition is as yet led to the lost space due to the absence of human life as the users (Trancik, 1990).

The change in environmental landscape performed by developers in the development of Gading Serpong new town is not only about the fragmentation of the indigenous settlement area, but also about the changes in almost all areas of the people living in the indigenous settlements, such as, occupation, kinship and neighborhood, building density, building designation, and building designs and functions (Ischak, et al., 2018).If based on the territorial review, the dawn of a new town can not be separated from the city's growth phenomenon which creates, as the impact it generates, a new area equipped with distinctive new character. This is due to the encounter of two territorial characters, namely the character of the city represented in the growth of Gading Serpong new town , which intersect with the rural character represented by the enclave settlement. This area is a mixture of village-city character which is known as peri-urban or semi-urban. In some cases, experts define sub-urban as a combination of peripheral regions as a combined process of population and economic growth with the expansion of urban space (Sauri, 2011; Ricci, 2016). On the other hand, the existence of settlement in the sub-urban area has a numerous opportunities to be organized. This can be carried out byusing ecological and sociological dimensions in the regional environmental spatial system (Soetomo, 2009). The proper and regional development must carry the concept of regionalism where the design of settlement as the design of social space is in an ecological space with the beauty of natural landscape and local character (Rapoport, 1977).

The conditions that reflect the gap between the phenomenon and the ideal demands raise the question of whether the enclave settlements within the new town area can be survivedtowards the pressure in the form of changes in the physical and non-physical environment in and around the settlement ?. The next question would be what factors can support the resilience of the enclave? To be able to answer the question, the discussion is directed to the community context. This is in line with the effort to respond to environmental problems, the relationships among inhabitants in one community will always be involved (Uzzell, et al., 2002). In terms of territorial border, the interaction among settlers occurs in a place and space that starts from the smallest unit in the family, to a wider territorial boundary (Piselli, 2007). Thus, the analysis in this study begins with the pattern of indigenous settlements' life manifested in the use of spaces in and around the houses. Therefore, it would be appropriate to do so by identifying the houses with typo-morphological studies.

Typology is concerned with how to classify all kinds of objects based on the similarity in the form of character, trend, size, and hierarchy (Frank and Schneekloth, 1994). While morphology is the study of form and shape (Carmona, 2003) in human settlement, and the process of how the formation and transformation of its forming entities covering city structure, land allotment, road patterns, buildings and open spaces which can be studied in terms of structural, functional, and visual forms (Zahn, 1999). Thus, typo-morphology is a combination of the study of typology and morphology, which is intended to describe the object group based on the similarity of the basic properties. This research is conducted by identifying the similarity in spatial character of the residential houses of the indigenous settlement. Spatial character in the form of the type of space setting will be obtained based on the repeating patterns in the community of enclave settlements.

In the context of expansion from urban into rural areas (sub-urban),the survival of the indigenous settlement can not be separated from the pressure of change due to the presence of new towns in the vicinity. Therefore, this study is in line with the review of resilience. The concept of resilience represents the ability of rural areas to adapt to the changing condition outside its territory in such a way as to maintain a satisfactory quality of life, as well as to adjust to the ecological, economic and social problems that accompany it (Heijman et al., 2007). In line with the opinion of Heijman, Kelly(2015)articulates that sustainability is a society's effort to survive and grow to a more resilient situation in the current environment of change, uncertainty and insecurity by involving economic, institutional, social, cultural, and natural domains. It emphasizes that the resilience of the settlements is closely related to the adaptation process of external pressures supported by the socio-cultural factors of the community (Thulstrup, 2015;Muntele&Banica, 2013; Thorn, et al., 2015). The process of adaptation involving

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

communities inhabiting one region is known as community resilience (Kelly, et al., 2015; Lier, 2015; Sagala, et.al., 2015). Muntele and Bănică (2013) more specifically associate community resilience with that of spatial relation in which resilience refers to the relationship between spatial variation of the smallest unitthothe macro unit.

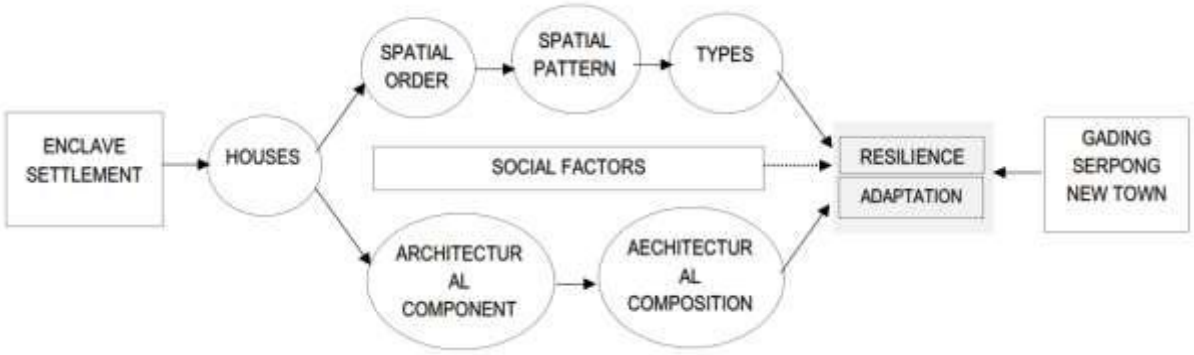

Fig.1: The order of research scheme by using typo-morphology approach

On the other hand, spatial socio-cultural concept represents the concept of social relations activities among people in order to fulfill their needs whose implications lie on spatial planning (arrangement on the length, width, and height) as a space where the activities are carried out (Wibawa, 2014). Thus, the concept of resilience of the indigenous settlement can be traced from how the inhabitants adapt to the spatial arrangement in the house as the smallest unit of analysis. It is essentially a reflection of the social values of the community in the research area as the hierarchy of the highest unit of analysis.

II. METHOD

Research Locus

The research was conducted in one of the enclave villages in Kampong Curug Sangereng, RW 06 Curug Sangereng Village, Kelapa Dua District, Tangerang Regency, Banten.

Method

The method of the study is descriptive-analysis, in which the data were directly conducted in terms of field observation and in-depth interviews from the selected informants. Physical and non-physical data in the form of phenomenon and activity of the inhabitants were thoroughly examined by using typo-morphology study as a collaboration between the study of typology and morphology. The study of typology is used to reveal the basic character of the physical formation of buildings and spaces in and around the settlement which is a manifestation of the social, cultural, and economic activities of the inhabitants. Eventually, the character can be formulated as a factor contributing to the resilience of the people inhabiting the enclave settlements. Whereas, the morphological approach using Zahn theory (1999) with special emphasis on the functional studies. This study, is therefore, based on the following scheme (figure 1).

III. RESULTS AND DISCUSSION

The analysis in this study is based on the theory that a settlement as a work of architecture basically reflects the life recognition of the society, which contains some communicated meanings (Rapoport, 1977).

Thus, residential houses inhabited by the community can be positioned as the media of communication of the inhabitants' everyday lives. The presence of the new town of Gading Serpong, developed by two major developers, PT Paramount Land and PT Summarecon which requires a large area by the acquisition of vacant land and pre-existing settlements. One of the impacts of territorial morphology is the emergence of enclave settlements. The term enclave or squashed in the settlement which is used as the research location describing the condition of the territory of a settlement located in the middle of a new town area (figure 2).

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

Fig.2: The schema of enclave settlements phenomenon in the new town area
Source: Google earth modification (2018)

In terms of territorial area, the presence of planned settlements in the form of new towns has a direct physical impact on the research sites, namely the separation of neighborhood unit(*RukunTetangga*) areas within a community unit (*RukunWarga*) as can be experienced from the research location (figure 3).

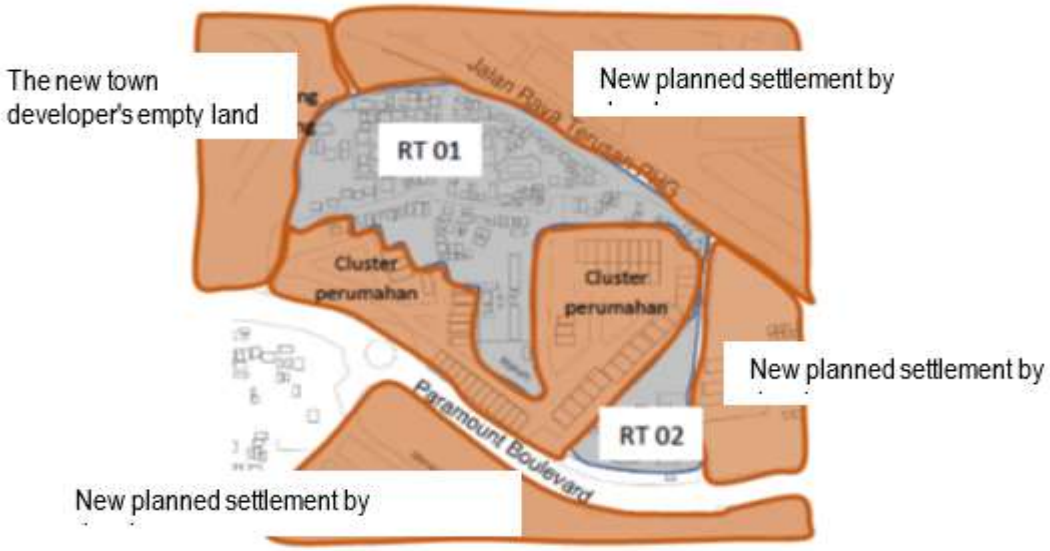

Fig.3*: RW 06 area which is separated because of land tenure of the new town developers*
Source*: Field data (2018)*

Changes in around and within the physical environment of the indigenous settlement represent the existence of pressure and external disturbance embodied in the form of planned settlements in the newtown area from the early 1990s to the present day. This pressure resulted on other non-physical changes, such as the change of dominant occupation of

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

indigenous settlements from previously plants gardening and raising animalsinto the informal workers.

Facing the pressure of landscape changes, although it directly affects the daily aspects of social life such as work, and the increasingly closed areas, it does not have a big effect on the physical formation of the residential houses. In addition, the inhabitants of enclave settlements ensure the potential of internal strength as social asset, such as, bonds of kinship and neighboring ties as the character of rural society that is remained apparent. The form of attachment can be observed from the spatial component of the house that represents the character: houses are built without front fence, there is no separating wall between one house to another, the terrace is functioned as living room and as a lounge.

When viewed from a socio-cultural background, the inhabitants of the enclave settlement remain homogeneous. Ethnically, indigenous communities as inhabitants of enclave settlements are mostly Sundanese who occupy semi-urban areas as farmers (Research Team of Tangerang City, 2015). If viewed from the origin of the occupants, there is no migrant occupant from outside of the region. Thus, the conditions of socio-cultural ties of the community is due to the kinship factors and inhabitants who are hereditary inhabited the village. Although there is a significant change in the livelihoods due to the loss of agricultural land, the remaining territorial character continues to form in terms of plantation and livestock areas which are cultivated by the communities. The cultural background becomes one of the factors that are influential on the lives of socio-cultural character in the society, especially in terms of intimacy of family and neighbors. The character of rural society is reflected through homogeneity in terms of language, culture, social system, and intimacy of family and neighbor (Wijayanti, 2014).One of the intimacy of neighbors and the family ties that exist in the community, is being manifested into the space setting around the residential houses, in the form of the existence of space or place as a gathering activities or in the local language is called a habit of *ngariung* (gathering).

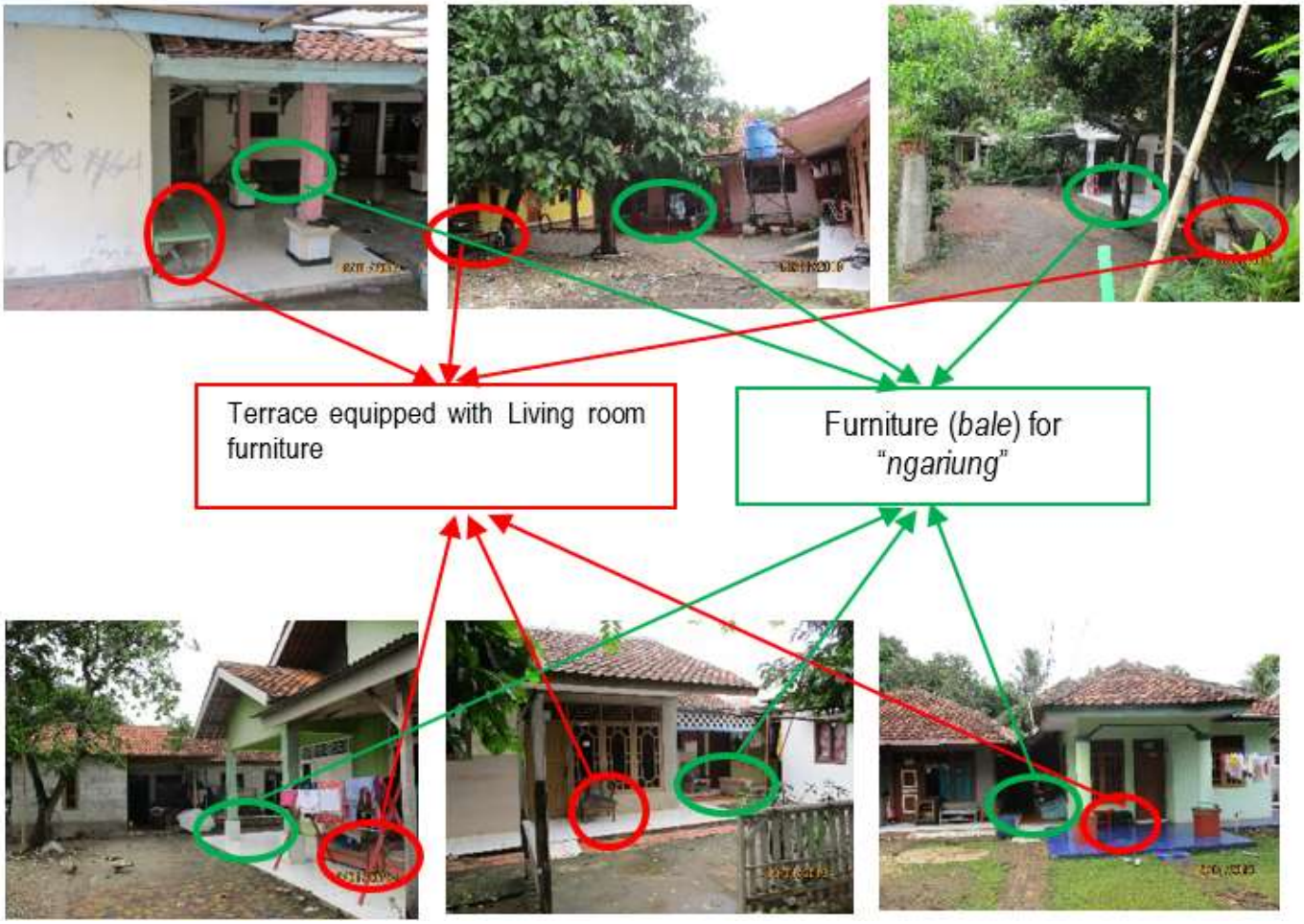

Fig.4: The character of space arrangement on the residential houses
Source: Field data (2018)

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

In the context of spatial arrangement, the community members unconsciously design their houses based on the social conditions especially in the provision of public space around the dwelling. The room plays a big role in daily activities as a medium of interaction among members of the community due to the close social relations between inhabitants. From the observation and field data analysis, the emergence of the characteristics of the type of space that almost always appears in every residential house is an open terrace space that also functioned as a living room, and "virtual" space that functioned as an informal gathering place (figure 4).

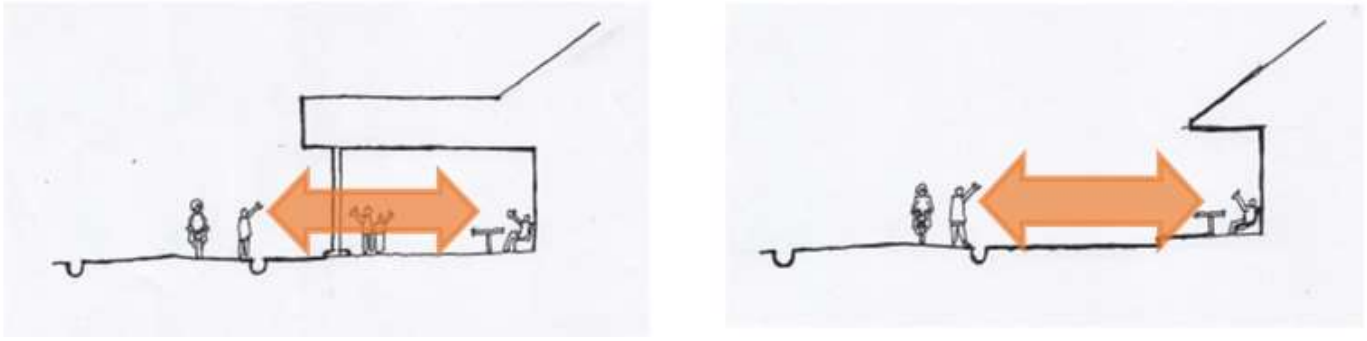

Fig.5: The character of spatial arrangement of the residential houses which allows the interaction at any time

Setting the space is possibly performed by the inhabitants due to the intimate relationship among the occupants so that the direct interaction allows to be happened at any time without a barrier (figure 5).

This condition leads to the formation of residential spatial typology in the formation of spatial houses with the composition of the living space as a private zone, and the living room, terrace, yard, and gathering space as the public zones. There are two types of variations caused by a house with a front yard (figure 6a) and a house without a front yard (figure 6b).

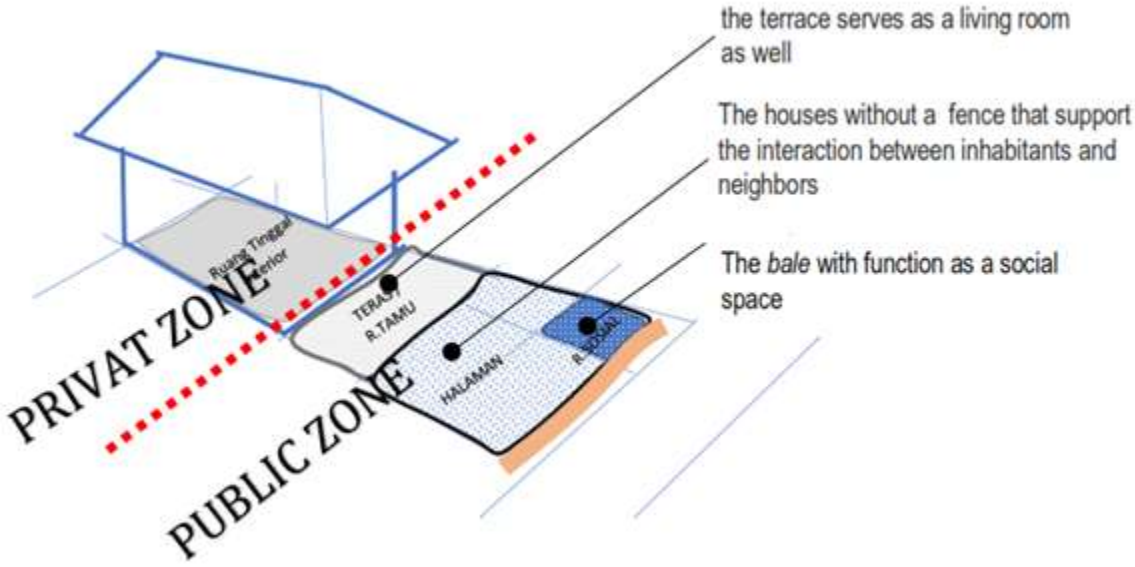

Fig.6(a) : Type 1 space setting at residential houses with a yard

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

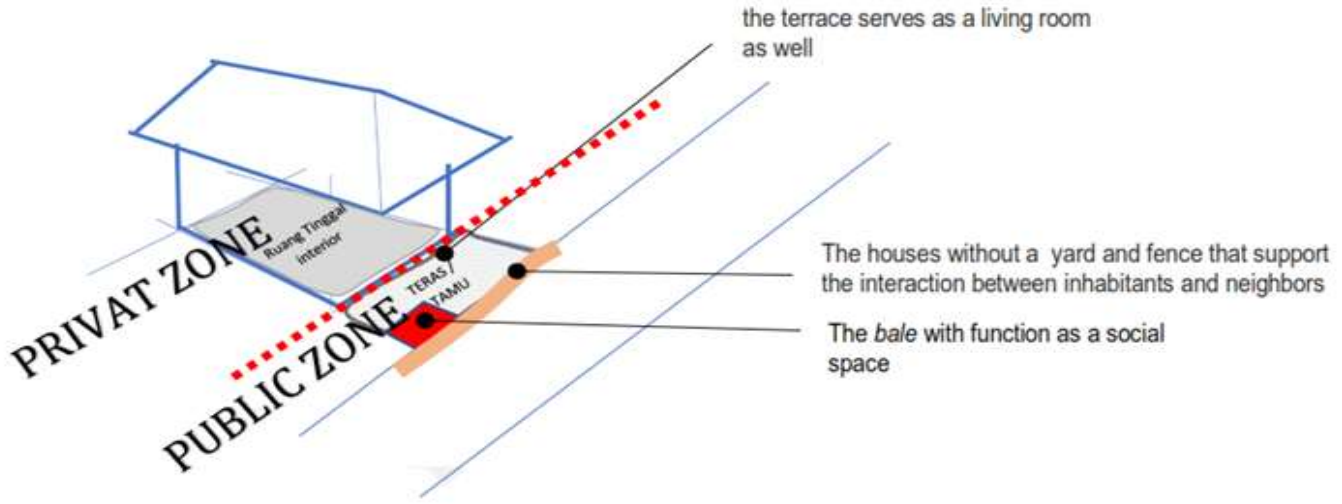

Fig.6(b): Type 2 space setting at residential houses without yard

On the macro spatial scale, the pattern of social life that has an emotional connection among the inhabitants of the enclave settlement gives rise to the territorial communal space which is an accumulation of typology of spatial arrangement in each residential unit. Referring to the theory of Habraken (1998) which states that the presence of territorial limits measured from the interests of individual and public private life is closely related to the basic spatial theory that divides the nature of space with the category of private - semi-private (semi-public) - public. The relationship among the inhabitants is very close because of the similarities of background and bondof familial relationships which demonstrates a large public space in every residential house. If every public space in every residence is accumulated, it basically reflects the creation of a wider territory. Quoting from Altman (1975), the established territory can be classified as a community territory (Figure 7).

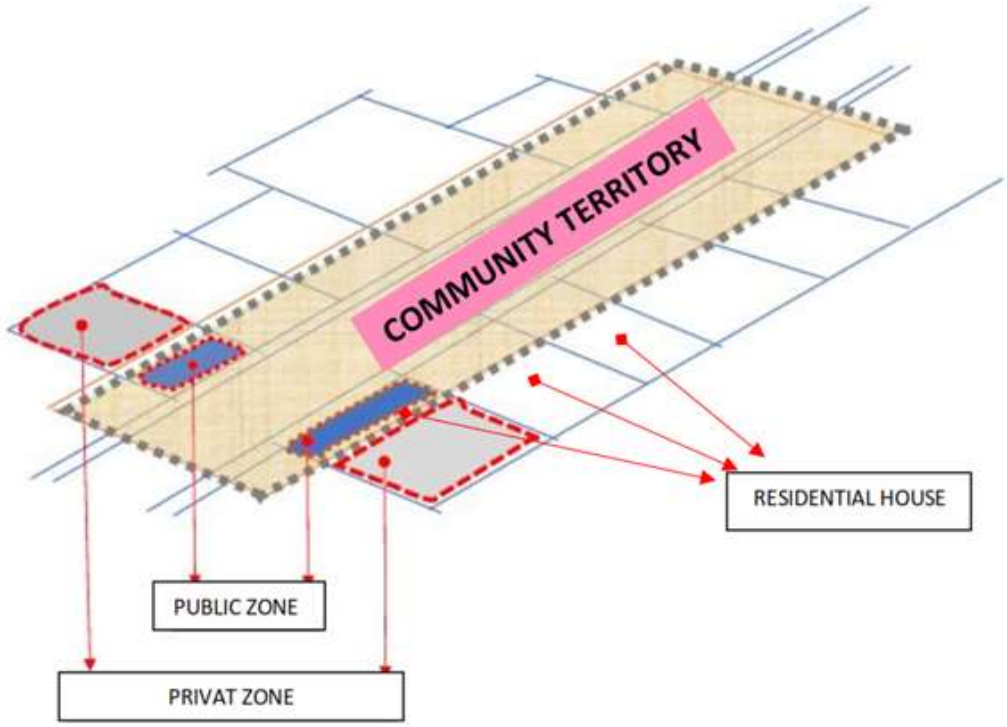

Fig.7: Scheme of communal territory as the accumulation of public space on spatial setting at a resdential houses

https://dx.doi.org/10.22161/ijreh.2.3.5 *ISSN: 2456-8678*

With the occurrence of community territory as depicted in Figure 7, the social bonding among inhabitants will always grow through daily activities. This is to support the appearance of social comfort atmosphere felt by the community as the resident of enclave settlement although physically there are many limitations on the inhabited area. In the wider context, these conditions are basically supported the values of sustainable development in the form of social and ecological development, which have impacted and directed to the role of human dimension and to the involvement of all social and economic strata (Soetomo, 2009). The phenomenon and meaning of spatial in the form of community territory is a reflection of the resilience to live in the enclave settlement.

IV. CONCLUSION

Changes on environmental landscape in and around the enclave settlements resulting from the construction of planned settlements in the form of new towns, in itself provides a direct impact on the living order of the inhabitants. Although the physical existence of enclave settlements is surrounded by many limitations caused by the developer, the community can survive based on the social bonds (family and neighboring ties) as a reflection of the character of rural society. Efforts to respond is reflected in the spatial arrangement as social character, both in the residential sphere and the neighborhood area. The condition produces a hierarchical functional typology, i.e., micro in the form of residential spatial type, and macro in the form of communal territory. The spatial constellation is a reflection of the strong social cohesion both in the individual and in the community. This becomes one achievable factor that contributes to the resilience of the community inthe enclave settlements.

REFERENCES

[1] Altman I. (1975). *The Environment and Social Behavior.* Monterey, CA :Wadsworth.

[2] Carmona, M., Health, T., Oc,T., &Tiesdel,S..(2003). *Public places, urban spaces: the dimensions of urban design,* Architectural Press, Oxford; Boston.

[3] Chitrakar, M.R. Baker, C. D. &Guaralda M.(2016). Urban growth and development of contemporary neighbourhood public space in Kathmandu Valley, Nepal, *Habitat International*, 53 (1), 30-38.

[4] Dadi, D., Azadi, H., Senbeta, F., Abebe, K., Stellmacher, T., Taheri, F. (2016). Urban sprawl and its impacts on land use change in Central Ethiopia, *Urban Forestry & Urban Greening*, 16 (1), 132–141.

[5] Damayanti, R. (2010).PertumbuhanFisik Kota Karena PengaruhIndustrialisasi, studikasuskota Ahmedabad – India, *Seminar Nasional RisetArsitektur dan Perencanaan (SERAP) 1 :Humanisme, Arsitektur*, dan Perencanaan, Jurusan Teknik Arsitektur dan PerencanaanUniversitas Gadjah Mada, Yogyakarta.

[6] Daskalova, D., Slaev, A.D. (2015). Diversity in the suburbs: Socio-spatial segregation and mix in post-socialist Sofia, *Habitat International* Vol 50, 42-50.

[7] de Jeude, M.L., Schütte, O., Quesada, F., (2016), The vicious circle of social segregation and spatial fragmentation in Costa Rica's greater metropolitan area, *Habitat International*.54. 65 – 73.

[8] Dupras, J., Marull, J., Parcerisas, L., Coll, F., Gonzalez, A., Girard, M., Tello,E. (2016).The impacts of urban sprawl on ecological connectivity in the Montreal Metropolitan Region, *Environmental Science & Policy* 58, 61–73.

[9] Firman, T. (2004). New town development in Jakarta Metropolitan Region: a perspective of spatial segregation, *Habitat International*, vol. 28 : 349–368.

[10] Frank, K.A., & L. H. Schneekloth, L.H., Eds. (1999).*Ordering space: types in architecture and design* (pp. 289-311). New York, Van Nostrand Reinhold.

[11] Gebregziabher, Z., Yiadom,K.S., Asfaw,M. (2014). The Impact of Urban Sprawl on the Livelihood of Fringe Farmers in Mekelle, Ethiopia**,** *Research on Humanities and Social Sciences*, Vol.4, No.16.

[12] Habraken N.J. (1998). *The Structure of the Ordinary: Form and Control in the Built Environment.* MIT Press.

[13] Haregeweyn, N., Fikadu, G., Tsunekawa, A., Tsubo , M., Meshesha, D.T. (2012). The dynamics of urban expansion and its impacts on land use / land cover change and small-scale farmers living near the urban fringe : A case study of Bahir Dar, Ethiopia, *Landscape and Urban Planning* 106, 149–157

[14] Heijman, W., Hagelaar, G. and Heide, M.v.d. (2007). Rural resilience as a new development concept, EAAE seminar Serbian Association of Agricultural Economists, Novi Sad, Serbia.

[15] Huang, X., He,Y., Yang,X. (2017). Assessment of livelihood vulnerability of land-lost farmers in urban fringes: A case study of Xi'an, China, *Habitat International* 59, 1 – 9

[16] Ischak, M., Setioko,B., Gandarum, D.N. (2018). Design integration of new town development among different developers and with surrounding areas in respect of sustainable development concept, *IOP Conferences Series: Earth and Environmental Science*. vol. 106.

[17] Kelly, C., Ferrara, A., Wilson, G.A., Ripullone, F.,Nolè, A., Harmer, N., Salvati, L., (2015). Community resilience and land degradation in forest and shrubland socio-ecological systems: Evidence from Gorgoglione, Basilicata, Italy. *Land Use Policy* 46, 11–20.

[18] Lier, D.J. (2015). Community resistance to megaprojects: The case of the N2 Gateway project in Joe Slovo informal settlement, Cape Town.*Habitat International* 45, 169 - 176

[19] Michelini, J.J., & Pintos, P. (2016). Metropolitan expansion and new socio-spatial segregation scenarios in contemporary Argentina. The case of Nordelta-Las Tunas (Buenos Aires), *Habitat International*, vol. 54 : 40-49

[20] Muntele, I.,Bănică, A. (2013). Romanian Functional Urban Areas: Between Polarization and Spatial Resilience. proceeding, *4th Global Forum on Urban Resilience & Adaptation*, Bonn, Germany 31 May – 2 June.

[21] Noorloos, F.V. Steel, G. (2016). Lifestyle migration and socio-spatial segregation in the urban (izing) landscapes of Cuenca (Ecuador) and Guanacaste (Costa Rica). *Habitat International*. 54. : 50 - 57

[22] Parvaiz A. Bhat, Mifta ul Shafiq, Abaas A. Mir.(2017). Urban sprawl and its impact on landuse/land cover dynamics of Dehradun City, India, *International Journal of Sustainable Built Environment.* vol. 6, 513–521.

[23] Piselli, F. (2007). Communities, Places, and Social Networks, *American Behavioral Scientist*. vol 50:867.

[24] Pozoukidou, G., Ntriankos, I. (2017). Measuring and assessing urban sprawl: A proposed indicator system for the city of Thessaloniki, Greece, Remote Sensing Applications: *Society and Environment*. vol 8. 30–40.

[25] Rapoport A. (1977). *Human Aspects of Urban Form Towards a Man—Environment Approach to Urban Form and Design* , First Edition, Pergamon Press.

[26] Research Team of Tangerang City. (2015).Laporan Sistem Sosial Profil Sosial Budaya Masyarakat di Kota Tangerang *Program Studi Perencanaan Wilayah dan Kota*, InstitutTeknologi Indonesia.

[27] Ricci L. (2016). Reinterpreting Sub-Saharan Cities through the Concept of Adaptive Capacity, An Analysis of Autonomous Adaptation in Response to Environmental Changes in Peri-Urban Areas, *SpringerBriefs in Environment, Security, Development and Peace* Volume 26.

[28] Sagala, S., Anwar,H., Lubis, W., Yamin, D. (2015). Strengthening Community Resilience from SpatialPlan Perspective, Working Paper Series, No. 9 September 2015, *Resilience Development Initiative* , Bandung, Indonesia.

[29] Sahana, M., Hong, H., Sajjad,H. (2018). Analyzing urban spatial patterns and trend of urban growth using urban sprawl matrix: A study on Kolkata urban agglomeration, India, *Science of the Total Environment* 628–629, 1557–1566 .

[30] Sauri, D., Serra, P., Modugno, S., Seifolddini, F., Pourahmad,A. (2011), Urban sprawl pattern and land-use change detection in Yazd, Iran, *Habitat International*. 35 : 521- 528.

[31] Soetomo, S., (2009).Urbanisasi dan Morfologi, Proses PerkembanganPeradaban&WadahRuangnya: MenujuRuangKehidupan yang Manusiawi, GrahaIlmu , Yogyakarta.

[32] Sreeja, K.G., Madhusoodhanan, C.G., Eldho, T.I. (2017), Processes of peri-urban resource – livelihood transitions: Glimpses from the periphery of greater Mumbai city, India, *Land Use Policy* 69, 49–55.

[33] Sujarto, D. (1993). Perkembangan Kota Baru, *jurnalTelaahPlanologi* ITB, 9 September, Bandung.

[34] Tang, S., Hao,P., Huang, H. (2016). Land conversion and urban settlement intentions of the rural population in China: A case study of suburban Nanjing, *Habitat International* 51, 149 - 158

[35] Thorn, J., Thornton, T.F., Helfgott, A. (2015). Autonomous adaptation to global environmental change in peri-urban settlements: Evidence of a growing culture of innovation and revitalisation In Mathare Valley Slums, Nairobi, *Global Environmental Change* 31, 121–131.

[36] Thulstrup, W.A. (2015). Livelihood Resilience and Adaptive Capacity: Tracing Changes in Household Access to Capital in Central Vietnam', *World Development* Vol. 74, 352–362.

[37] Trancik, R. (1986).*Finding Lost Space, Theories of Urban Design*, Van Nostrand Reinhold Company, New York.

[38] Uzzell, D., et.al. (2002). Place Identification, Social Cohesion, and Environmental Sustainability, *Environment and Behaviour*, 34 : 26.

[39] Wibawa, D.N.G., (2014), *Perancangan Permukiman Kota dan Kontrol Sosio Spasial*, Penerbit Universitas Trisakti, Jakarta.

[40] Wijayanti, T.A. (2014).Masyarakat Desa Kota. Universitas Negeri Yogyakarta. *www.themegallery.com*

[41] Winarso, H., Hudalah, D., Firman, T. (2015). Peri-urban transformation in the Jakarta metropolitan area, *Habitat International* 49, 221 – 229.

[42] Zahnd, M. (1999).*Perancangan Kota SecaraTerpadu, TeoriPerancangan Kota dan Penerapannya*, penerbitKanisius, Yogyakarta.

[43] Zhao, P. (2013). Too complex to be managed? New trends in peri-urbanisation and its planning in Beijing. *Cities* 30. 1. 68 - 76