Transformation of socio-cultural aspect of gated housing’s residence in Medan City, Indonesia.

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Abstract. Gated Community Housing develops rapidly in Medan City and other big cities in Indonesia. These housing types initially reserved for middle to high-income residents. Transformation can describe as changes from one condition to another condition that can happen continuously in time. Change is affected by internal and external factors. Internal factors include culture, perspective, and social system while external factors include science progress and other cultural influence. This research is a descriptive study which tries to describe the phenomenon that is currently ongoing. Gated housing chosen are Perumahan Taman Setia Budi Indah, Perumahan Bumi Asri dan Perumahan Graha Helvetia. Characteristics of gated housing’s residents transform by the regional or national socio-economic transformation. The structure and function of human social life are not uniform; meaning in every social life setting each of the structure and function are different. The characteristic of a community will transform in continuity.

1. Introduction
Housing region in the urban area was generally developed based on the society social attributes. These conditions mainly appeared in cities in developing countries with rapid growth. Housing segregation is visible as a product of income or ethnic discrepancies as a trait of community concentration in a city. [1] For example, middle to lower income residents will reside in a poorly regulated settlement whereas middle to higher income residents will likely reside in a well-regulated settlement.

Gated Community housing develops rapidly in Medan city and other big cities in Indonesia. These housing types initially reserved for middle to high-income residents. However, gated community for middle to lower income residents developed as well. These dynamics affect the development and utilization of city space structure. It will also create complex social problems.

Transformation can describe as changes from one condition to another condition that can happen continuously in time. Urban changes consist of socio cultural, economic and political changes. Gated community housing will directly create problems for city developers and governments which function as the city administrator [2]. However, private developers will likely help government fulfill the housing needs in the urban area. Transformation process can proceed with planning or without planning by allowing acceptable deviations. Change process will occur gradually and continuously.
The start and the end of the transformation depend on the background of the change. Alexander, 1980 in [3]. Transformation is affected by internal and external factors. Internal factors include culture, perspective, and social system while external factors include science progress and other cultural influence. In public space context, the shift of controlling institution will, directly and indirectly, affect transformation.

The goal of this research is to determine the transformation characteristics of gated community housing residence from 1980 to 2000 in Medan city.

2. Method
This research is a descriptive study that tries to describe currently ongoing phenomenon. Descriptive research focuses on actual problems as is at the time the research conducted. Through detailed research, researchers try to explain the problems and phenomenon that has become the center of attention without giving it special treatments.

The data on housing growth has become unique because it can pick up combinations of demographical trends (population growth, migrations, family formations, housing trends in cities, urbanizations) and indicates the location and concentration of human influence to the neighborhood around them. With the research goal in mind, selection of formal housing in Medan city as research target is needed. Formal housing chosen are Perumahan Taman Setia Budi Indah, Perumahan Bumi Asri dan Perumahan Graha Helvetia.

Collections of secondary and primary data were simultaneously conducted to acquire housing data. House digital map obtained from developers are redrawn in Autocad formats to get a scaling dimension and morphology of the housing area. Coincidently, field observations are conducted to synchronize data to the digital maps and the actual space composition. Questionnaires were spread randomly to represents components of housing clusters in each housing area. The analysis methods are:

1. Resident types and characteristics transformation
   The goal is to acquire the symptoms of the residents’ characteristics change. These symptoms will be used to describe the social structure in gated community housing.

2. Lifestyle and behavior transformation
   The goal is to acquire symptoms of residents’ lifestyle and behavior change. These symptoms will be used to describe the social dynamics in gated community housing.

Research framework is represented by Figure.1 below.
3. Results and Discussions
Community life depends on the type of community located, and since humans are social creatures, as suggested by [4], social interactions are needed in it. Some characteristics of a community are: 1) Consists of many humans, 2) occupies a particular geographical area 3) recognize work division with various dependent functions, 4) has a culture and social system that regulate joint activities and 5) able to comply collectively into precise manner. As such, a city consists of various communities. A group of the population living in a housing area is called a community.

The condition of Indonesian society from 1970 until 2011 has undergone a transition from low-income economies into middle-income economies [5]. This economic situation has affected the population’s social structure. Population grouping in a housing community based on the neighborhood values and choices. House pattern in urban areas in Indonesia tends to be heterogeneous with classification in community’s social, economic structure Suparlan, 1996 in [6].

Urbanization condition was flat from 1970 to 1980 though this situation has developed satellite cities around Jakarta and other cities such as Surabaya, Bandung, and Medan. Middle social class communities represent districts with middle income. In the 1980s, four big cities in Indonesia began to develop in accordance to other prominent cities in Southeast Asia. Industrialization developed slowly in Jakarta, Surabaya, Bandung, and Medan. This condition observed from the development of real estate housing for the middle class population such as gated community, shopping center, mall and department store, which becomes a new lifestyle for middle-class communities. [7]

3.1. Residents’ profile
For almost the last three decades, family profiles became the focus of research to observe sociodemographic process. Observing changes in the sociodemographic process became necessary because family patterns were the basis of urban transformations. Observed trend changes include new wedding pattern, life improvement expectancy and new pattern in family relationships [8]. Further
understanding this dynamics can increase social, cultural and economic qualities of housing residents as the city simultaneously transformed by families’ consumption and mobility pattern.

**Table 1.** Analysis on Residents’ Profile Transformation

| Residents’ Profile | Perumahan Taman Setia Budi Indah | Perumahan Bumi Asri Metropolitan | Perumahan Graha Metropolitan |
|--------------------|----------------------------------|----------------------------------|------------------------------|
| **Head of Family** |                                  |                                  |                              |
| **Age**            | 35% were 31-40 years old, 30% were 41-50 years old, dan 22% were 51-60 years old. The rest were below 30 years old and above 60 years old. Majorities of the head of family are in the productive age group. | 15% were 31-40 years old, 20% were 41-50 years old, 25% were 51-60 years old. The rest were below 30 years old and above 60 years old. Number of head of family in productive age group is comparable with the non productive age group. | 15% were 31-40 years old. 40% were 41-50 years old. 10% were 51-60 years old. The rest were below 30 years old and above 60 years old. Majorities of the head of family are in the productive age group. |
| **Gender**         | Head of Family are 97% Male.     | Head of Family are 78% Male.     | Head of Family are 92% Male.  |
| **Marital Status** | 88% married, 4% widower, 6% not married, 2% widow | 77% married, 1% widower, 10% not married, 12% widow | 88% married, 4% widower, 6% not married, 2% widow |
| **Number of family member** | 31% consists of 4 members, 26% with 5 members, 22% with 6 members, 13% with 3 members, 5% with more than 6 members, 3% with 2 members. | 80% consists of 4-6 members, 15% with 1-3 members, 5% with 7-10 members. | 65% consists of 4-6 members, 20% with 1-3 members, 15% with 7-10 members. |
| **Religion**       | 50% Moslem, 30% Buddhist, 15% Catholic and 5% Protestant. | 95% Moslem, 5% Catholic and Protestant. | 95.52% Buddhist, 4.48% Catholic. |
| **Ethnicity**      | 45% Aceh ethnicity, 15% Batak and Minang, 10% Melayu and Tionghoa, 5% Jawa | 40% Aceh ethnicity, 20% Minang and Batak, 15% Jawa, 5% Melayu. | 98% Tionghoa, ethnicity, the rest were Batak and Jawa. |

The general characteristic of gated community resident is middle to high-income group with both husband and wife in the family have jobs. This typology considers education and housing facilities necessary. Through ecological approach, [9] identifies six concept of community with families in mind which is: social community organization, social network, social potential, informal and voluntary assistance, sense of community and community satisfaction. Though there are differences between male and female head of the family, priorities of the head of household related to their neighborhood are security, housing quality, jobs for the male head of the household, recreation chance, park availability and celebration events.

The characteristic of the middle-income family, in particular, had transformed in the last three decades. Since the 1970s to 1980s, Indonesia conducted Keluarga Berencana program which was considered a success in changing the character of families in Indonesia. This program shifted the
perspective of families in Indonesia to have two offsprings as such the changes that directly impacted were changes in the size and the number of family members. This program also successfully develop the economy and elevate the position of women socio economically. [10]. The changes also happened in the number of children based on gender enrolled in school. There were more girls enrolled in school especially in urban areas. This situation created success for the Indonesian government to increase the chance of girls to enroll in school.

3.2 Social Fragmentation

Social fragmentation in urban areas affected social fragmentation in housing areas even though from income classification, gated community residence included into the middle of higher income population. This condition observed through research on the population economic discrepancy conducted by [11] which stated that there are problems in regions economic disparity in Indonesia. The income of communities outside Jawa Island was lower than population inside Jawa Island. The difference in economic growth was the result of differences in technological advances, populations, geographic, ethnic, and culture, which was diverse in Indonesia. The discrepancy can also observe from a population in urban areas and rural areas.

Jobs and income as an indicator of social fragmentation are affected by socio economic condition nationally or regionally. This situation will create structure and social system in the housing area. When the transformation from centralized government into decentralized government happened in Indonesia occurred social structure and social system in communities transformed as well. Social fragmentation change always occurred quantitatively or qualitatively. [12]. The qualitative transformation start to develop when quantitative change continuously occurred. The transformation in the last three decades began when centralized housing supplier mainly controlled by government gradually transformed into the decentralized system with housing supplier from the administration and a private company. Real estate market affects housing supplies in Indonesia.

| Social Fragmentation | Perumahan Taman Setia Budi Indah | Perumahan Bumi Asri | Perumahan Graha Metropolitan |
|----------------------|----------------------------------|---------------------|-------------------------------|
| Education            | 66% baccalaureate, 18% bachelors, the rest answered secondary school and common school. | 65% high school graduates, 35% bachelors and post graduates. | 55% high school graduates, 40% bachelors and 5% post graduates. |
| Occupation           | 42% entrepreneur, 31% private employees and 17% government employees. | 35% private employees, 25% housewives. | 55% private employees, 30% housewives. |
| Income               | 35% of residents does not disclose their income 30% of residents who discloses their income answered 2-million rupiahs per month, 25% answered 5-10 million rupiahs per month, 5% discloses their income of 1-2 million rupiahs and | 30% of residents has 2-5 million rupiahs income, 20% has income of 1-2 million rupiahs, 20% has income of 5-10 million rupiahs, 30% does not disclose their income. | 25% does not disclose their income. 30% has income of 2-5 million rupiahs, 15% has income of 5-10 millions, 10% has income of 1-2 million rupiahs, 10% has income of 10-15 million rupiahs, 5% has income of 15 to more than 20 million rupiahs. |
Another 5% discloses 10-15 million rupiahs.

### 3.3. Social Dynamics

Residents’ profile and social fragmentation which become characteristic of a housing area generate social dynamics. Social changes occurred are related to human’s physical and spiritual elements. The bigger shift in mindset and behavior affected by culture changes. When social structure changes then the function and role of mindset and behavior changed as well. [13]

Convenience, mindset, and behavior in everyday life become an indicator on social dynamics. Dissatisfaction towards residential and neighborhood will create decisions to stay or move into another residential area. Criteria of residential satisfaction become aspects considered in choosing housing location. [14] researched gated community housing to gather the criteria of residential satisfaction and discovered that environmental criteria (location, housing design, public facilities) and on environmental criteria (security, social interaction, ownership status) becomes the criteria of residential satisfaction for middle-income population group in Medan city.

#### Table 3. Social Dynamics Transformation Analysis

| Social Dynamics | Perumahan Taman Setia Budi Indah | Perumahan Bumi Asri Metropolitan | Perumahan Graha Metropolitan |
|-----------------|-----------------------------------|----------------------------------|-------------------------------|
| **House ownership status** | 74% residents own the property while 25% of residents lease their house. The rest of the properties are official property. | 75% residents own their properties. The rest 25% of the properties were owned by residents’ family. | 60% residents own their house and 40% of residents lease their house. From 40% of house leased, 5% used it as a residence, 30% used it as a residence and for trading while another 5% used it for trading only. |
| **Duration of settlement** | 58% have stayed for 1-5 years, 20% have stayed for 5-10 years, 11% have stayed for more than 10 years and another 11% have only stayed for less than one year. | 25% have stayed for 1-2 years, another 25% have stayed for more than 5 years, 15% have stayed for 2-3 years, and another 15% have stayed for 4-5 years. 10% have stayed for 3-4 years and another 10% have stayed only less than a year. | 35% have stayed for more than 5 years, 20% have stayed for less than a year and another 20% have stayed for 4-5 years. 10% have stayed for 1-2 years. |
| **Social identity** | This housing has heterogenous social identity | This housing has heterogenous social identity | This housing has homogenous social identity which can be observed by the resident which consists of almost 100% Tionghoa ethnicity |
| **Residents’ Sports** | Sports: 30% jogging, 15% | Sports: 40% jogging, | More than half of the |
behaviour pattern | gym, and 5% golf. 60% buys their everyday needs outside housing complex while the rest 35% chose to shop in the housing complex and 5% shops in shopping centre. 95% of residents chose mall as place for recreation. 50% worship and pray inside the housing complex. | 15% gym and the rest plays other sports such as tennis, basketball, volleyball. 60% chose to shop in housing complex, 30% chose to shop in housing complex and 10% shops in shopping centre. 80% chose mall as a place for recreation. 80% worship and pray inside the housing complex. | residents, which is 52.24% does not go for worship and pray. 65% goes for swimming in the housing complex while the rest does outdoor sports.

4. Conclusions
Characteristics of gated community housing residents transform by the regional or national socio economic transformation. In general, middle-income population group tends to settle in this type of housing because it is affordable economically and convenient access with personal vehicle even when the house located in the suburban area. [15] explained that in the 1990s housing complex with common resident characteristic was starting to emerge. This middle-class group chose to settle in the urban area because of the poor city transportation network and poor traffic condition.

The structure and function of human social life are not uniform; meaning in every social life setting each of the structure and function are different. The characteristic of a community will transform in continuity. Community transformation can observe through the indicators that affect it. [16] mentioned those indicators were: environment, economic, social and political. An example of that is everyday activities, natural disaster, economic condition transformation, and policies implementation impact. Community transformation can also happen because of the change in community member characteristic. Examples of personal transformation are sense of community, community pride, community competence, etc.

A new trend in population mobility started in the early 1990’s. Investments in the road network and transportation infrastructure was increasing inter region population movement. Consequently, a group of ethnic with different tradition and habit has developed into social interaction and rapid economic development [17]. This transformation also affects and changes the population lifestyle and behavior.

On going gated community transformation will affect the development of housing space structure in the urban area. This condition should be observed because with the discovery of this studies, predicting housing growth trend in the future will be possible.

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