Transformation of Pottery Handicraft Industrial Center in Dolon Hamlet of Bayat Sub District, Klaten Regency, Central Java, Indonesia

Joan Hesti Gita Purwasih*  Mahendra Wijaya2  Drajat Tri Kartono2
Postgraduate of Sociology, Sebelas Maret University, Jl. Ir. Sutami Number 36A, Surakarta, Central Java, Indonesia

Abstract
Traditional handicraft industry should be the solution to poverty alleviation in rural area and cultural preservation media. However, such the assumption does not apply to traditional pottery industry center in Dolon Hamlet nearly to be extinct. The objective of research was to describe the process of transformation in traditional pottery handicraft industry in Dolon Hamlet through structural, cultural and agent changes. This study employed a qualitative approach with phenomenological method. The informants were selected using purposive sampling technique with family analysis. Technique of analyzing data used was an interactive model of analysis. The result of research showed that there were five moments in the transformation process of traditional pottery industry center in Dolon Hamlet. Those moments began with glory, regeneration failure, earthquake disaster and empowerment failure, crisis period dealing with 3-kg gas, and extinction threshold. As a result, old generation tended to maintain pottery handicraft industry with traditional product identity (morphostasis), despite a series of adaptation to organic industrial form. Meanwhile, most young generations moved to other working sector (morphogenesis).

Keywords: pottery, industrial transformation, traditional handicraft, Archer, morphogenetic

1. Introduction
The economic development through creative industry is believed as the short-and medium-term solution to economic problems. Such the effort is proved by Indonesian government through organizing Creative Economic Development of 2025. The government emphasizes that creative industrial development should be supported by resource power, industry, building, marketing, and strong infrastructure structure. For that reason, cooperation between government institution, business, intellectualist, and community should be built healthily and strongly (Kementerian Pariwisata dan Ekonomi Kreatif RI, 2014). However, small-and-medium scale industry (SMI) cluster of creative industry tends to deal with the change difficultly. One of the examples is the small-and-medium scale industry (SMI) cluster operating in traditional handicraft sector.

Traditional handicraft SMIs are distributed widely in rural area and contain local culture. For that reason, when developed well, traditional handicraft SMI should be able to support the rural community economy and to preserve local culture. One of traditional handicrafts produced in rural area is pottery handicraft.

Pottery handicraft center develops widely and produces many artistic products with high selling values, for example Kasongan, Yogyakarta, and Melikan pottery industry centers in Klaten Regency. However, the pottery industry center in Dolon Hamlet is different. This industry center insists to produce traditional earthenware for household purposes. The products such as wajan (wok), kwali (clay pot), keren (traditional stove made of clay), blengker, and kendil (pot for rice cooking). Those products are traditional cooking appliances for household. The main advantages of products produced pottery industry center in Dolon Hamlet are strong and fire resistant. These appliances can absorb heat for a sufficiently long time. In addition, according to local community, earthenware is the environment-friendly cooking appliance that is better for health.

Figure 1. Earthenware burning process
Source: research document (2016)

The figure above shows the type of products and earthenware handicraft burning process in Dolon Hamlet.
Hamlet. Around 1965, nearly all of Dolon Hamlet populations are earthenware craftspersons. However, such the condition decreases continuously. The data of research shows that there are only 52 craftspersons (family head) surviving until 2015 and in 2016, this figure decreases to 50 persons (family heads). Majority craftspersons surviving are elder generation. Meanwhile, the young generation still continuing this business can be found in not more than ten family head. The decreased number of craftspersons indicates the threat to the extinction of pottery handicraft industry center in Dolon Hamlet. For that reasons, the author attempted to conduct a sociological research to describe the social change behind the threat of traditional handicraft extinction.

2. THEORETICAL STUDY
This research adopts morphogenetic approach, as suggested by Margaret S. Archer, by means observing structural, cultural and agent changes over times. Archer keeps maintaining the difference between structure and culture. Structure, according to Archer (2013), is the relationship between social positions occupied by the actor as human being. Culture, according to Archer (2013), is the knowledge we can produce collectively. Meanwhile, agent is something we do individually.

Archer introduces morphogenetic approach in observing the social change in structural/cultural condition, social interaction, and both structural and cultural elaboration. Particularly, morphogenetic approach attempts to analyze social condition of cultural and structural elements affecting the quickness of both morphostasis and morphogenetic process. Morphogenesis is “processes which tend to elaborate or change a system’s given form, structure, or state”. Meanwhile, morphostatic is "processes which to preserve or maintain a system’s form, organization, or state” (Archer, 2013).

In the form of morphostasis, agent can maintain status quo, that is, maintaining stability and ideas of group. Two domains (structure and culture), establish interrelationship in the form of reinforcement. In addition, the agent can maintain stability within group/community. In the form of morphogenesis, the community always acts beyond structure and culture. Such the action can be either modification attempt or social condition maintaining attempt (Archer, 1995).

In morphogenetic approach, time element (T1) plays important parts: structural motivation and cultural motivation. Structural motivation comes from the interest constructed by social position. Meanwhile, cultural motivation comes from the value held on tightly by the community. As the time progresses, the agent will move in their structural condition (T2-T3) (Archer, 1995). In this process, agent will attempt to change or to maintain structure through interaction. This process occurs in cultural element, in which agent will attempt to change or to maintain culture through interaction. According to archer, this process then develops in structural elaboration and cultural elaboration (T4). In this stage, the change appears. This condition can be used as further action analysis. Structural and cultural affects each other simultaneously. It is this relationship that affects the agent to act. In addition, agent can also take an action to change structure and culture. Considering the description above, the author develops the following framework.

An analysis on industrial transformation process is obtained from industrial process observation from every moment consisting of glory (T1), regeneration failure, dealing with disaster and empowerment failure, crisis, and extinction threshold (T4). The data on industrial process specifically contains the activity of collecting basic material, production process, and marketing. Furthermore, the author identifies the cultural and structural elements affecting agent, and agent’s action in dealing with structural and cultural changes. Structural, cultural and agent identification prevails in every moment. All of structural, cultural, and agent changes over times are then analyzed and connected to be a unity in order to obtain explanation about the transformation the agent does.
3. Method
This research employed a qualitative approach with phenomenological type of research. Techniques of collecting data used were non-participatory observation and in-depth interview. In addition, to confirm the division of moment element in transformation process, the author employed documentation. The informants in this research were selected using purposive sampling, with family analysis unit.

Data validation in this research was carried out using source and method triangulations. Source triangulation was conducted through interviewing different source, between craftspersons, craftsperson’s children, chief of RT (neighborhood), broker, and chairperson of craftsperson association. Meanwhile, method triangulation was conducted using interview, observation, and documentation evidence. Data analysis in this study was carried out using an interactive model of analysis developed by Miles and Huberman. Interactive model of analysis consisted of data collection, data reduction, data display, and conclusion drawing.

4. Result and Discussion
4.1. Production Process of Pottery Handicraft in Dolon Hamlet
The production process in pottery handicraft center in Dolon Hamlet is still traditional. The equipments used are still simple, as indicated in the figure below.
Number 1) is called *tataup*, 2) *kerik*, 3) *watu*, 4) *kerik*, and 5) *prebot*. The basic material of clay is obtained from land lease with collective fund. The basic material of sand is obtained from the rivers in Wedi Sub District area, red soil for coloring purpose is obtained from the hill in Sunan Pandanaran grave area. Meanwhile, basic materials of dry leaves (*uwuh*), straw (*damen*) and fuel wood are largely obtained by means of purchasing them.

The traditional production methods are also maintained by the craftspersons. The pottery production process starts with mixing basic materials of clay and sand. Then, the mixed material is shaped to create the initial frame using *prebot*. The created frame then undertakes thinning, bottom part (*silit*), handle, or hole development corresponding to the type of products. After the shape has been completed, the craftsperson refines the pottery using river stone with smooth surface twice. Then, pottery is burned in the first stage. Burning is conducted traditionally by mounting the pottery and burning it using *damen* (straw)/*uwuh* (dry leaves) gradually. After the first burning, the pottery is colored using red soil. Finally, pottery is burnt again in the second burning stage. The pottery is remounted and burned using wood and *uwuh/damen*. One cycle in the production process can take two weeks. The finished pottery (earthenware) is sold by relying on the broker (intermediary trader) around the village.

4.2. Transformation Process of Pottery Handicraft Industry in Dolon Hamlet

Traditional handicraft will always be related to two main elements: local knowledge and industry. Learning from Archer’s thought, the author finds that the cultural concept dominant in traditional handicraft industry is local knowledge. Meanwhile, the structure built is the industry emphasizing on the form of home industry.

The result of research shows the change occurring in pottery handicraft industry can be identified in five moments. Those moments are identified based on community’s collective knowledge and effect resulting from structural and cultural interaction. Those moments are: glory, regeneration failure, dealing with disaster and empowerment failure, crisis, and extinction threshold.

4.2.1. Glory

This period describes the prior condition (T1) when structure and culture are still in the original condition. The community accepts and maintains the ancestors’ cultural heritage. Structural and cultural conditions run well (morphostasis). Around 1966s, most populations are craftspersons (elder generation). The form of family industrial unit in this period can be distinguished into mechanic and organic forms. In the family holding on organic form, there is high productivity characteristic, labor service is used, and father serves as seller to outside village. The family holding on organic form has medium/small productivity characteristics, uses nucleus family labor, and using broker (intermediary trader) surrounding the house for selling it.

4.2.2. Regeneration Failure

Regeneration failure is characterized with young generation not continuing the pottery handicraft in 1965/1970. In this period, the children of craftsperson begin to be acquainted with education and move to other job. The craftspersons inherits pottery handicraft loosely to their children. The children are expected to have better job and education. This condition indicates the shift of culture and local knowledge inheritance from one generation to the next. In its development, many offspring move to other sector, for example construction worker and go to Jakarta, to earn living. The structural change occurs (related to family industry activity), the number of labors largely constituting the family members decreases continuously. The form of mechanic industry leads to the organic one gradually. This condition is characterized with the development of soil collecting worker.

4.2.3. Moment of dealing with disaster and empowerment failure

This moment shows that there is an effect of other factors than structure and culture, namely earthquake. The earthquake disaster occurring for 57 seconds in 2006 in Bantul, Yogyakarta Province at 6.2 Richter scale has ever inhibited the industrial activity for several months. Furthermore, it is also affected by external factor, empowerment. Empowerment comes by creating new structure and introducing product innovation toward the modern one. However, the empowerment is failed because of the following factors.

a. Craftspersons have not been independent and have low participation
b. Craftspersons’ low motivation and appreciation to new product innovation
c. Basic material characteristic is different from the types of product taught.
d. The supervision does not continue in long term.
e. Low participation among young generation
f. New product marketing is not facilitated.

Considering those factors, it can be found that craftspersons cannot maintain new culture (product innovation) because the previous culture is considered as more well-established/valuable. For that reasons, the craftsperson reproduces traditional pottery, but the structure prevailing in all of family unit form leads to the organic form.

4.2.4. Crisis period

This moment describes crisis condition in dealing with the decreased number of consumers due to the
government’s policy concerning the conversion to 3kg gas in 2007. The pottery is less sold out in the market because many consumers in the village using fuel wood and pottery to cook switch to using gas stove and aluminum/iron cooking appliances. Meanwhile, the expense for such capitals as labor and basic material is more expensive. This condition encourages the effect of structure. The craftpersons rely on broker/intermediary trader to sell pottery, while broker/intermediary trader sells the pottery Difficulty in the market. Nevertheless, the community insists to produce pottery and to continue the pottery industry. Most of them can survive by relying on their children’s loan and help.

4.2.5. Extinction Threshold
The accumulative interaction between structure and culture from previous moment impacts on extinction threshold. Nevertheless, until today, few children of craftpersons still produce pottery. Regeneration failure gradually leads to the less number of young generations keeping producing pottery. Overall, the number of craftpersons decreases as the craftpersons grow old. It also impacts on the reduced role of family members in family pottery industry. The production process leads to a labor (organic) system. Meanwhile, the empowerment failure encourages the difficulty the community finds in moving toward the modern industry. The product with communal identity is still maintained, while it is difficult to be sold during the crisis period. Another threat comes from basic material supply. Natural factor related to natural resource availability and coverage encounters scarcity. The final result appearing is that the elder generation tends to maintain pottery handicraft industry with traditional product identity (morphostatic), despite a series of adaptation to organic industrial form. Meanwhile, most of the young generations move to other job sector (morphogenesis) (T4).

5. Conclusion and Recommendation
5.1. Conclusion
Pottery handicraft in Dolon Hamlet is the portrait of traditional handicraft industry in rural area containing local knowledge. This industry is generally in home industry form containing the family members as its basic workers. The fact shows that Pottery handicraft industry in Dolon Hamlet decreases and faces extinction threat. This condition occurs through transformation process in five moments: glory, regeneration failure, dealing with disaster, and empowerment failure, crisis, and extinction threshold.

At a glance, the change appearing generally is the one in morphogenesis form recalling that many populations having other job to earn living and the ever decreasing number of craftpersons over times. However, based on the result of structural, cultural, agent analysis, it can be concluded that every moment of pottery craftpersons in Dolon Hamlet tends to survive in dealing with any change (morphostasis), this condition only applies to the elder generations. Meanwhile, in young generation, the change occurring is morphogenesis. This condition can be observed from the decision to move to other job sector to earn living.

This condition clearly indicates that transformation in Dolon Hamlet community experiences two forms: morphostasis and morphogenesis. However, it is noteworthy that the sustainability of pottery handicraft industry in Dolon Hamlet tending to be morphostasis is not fully static. The craftpersons make a series of adaptations in dealing with the change in each moment. The adaptation occurs in structural area including production factor procurement, production process, and marketing. Meanwhile, the culture in the term of knowledge on how to process the soil into pottery and product design are still maintained. The cultural change occurring is that the value of inheritance from one generation to the next begins to fade. As the time progresses, pottery is considered as less valuable and made as side job in old age.

5.2. Recommendation
The implication of morphogenetic development is the importance to consider natural factor and surrounding environment (Place). For example, in dealing with earthquake and threat from the difficulty to find land lease to obtain clay basic material. Natural resource factor as the primary basic material of industry should be taken into account. The use of surrounding natural resource continuously potentially leads to scarcity. Thus, place becomes important to be studied recalling that social relationship and spatial concept will be interrelated. The discussion on social change will be more holistic when it is harmonized with spatial, temporal, structural and cultural elements.

Meanwhile, the implication and practical development for pottery handicraft industry in Dolon Hamlet is structural and cultural reengineering in the development of traditional handicraft industry. Government, community, and academician should design the strategy to save the industry sustainably. While the previous industry has been failed, further empowerment with structural and cultural analysis approach to society should be designed and applied.

REFERENCES
Biography Joan Hesti Gita Purwasih was born in South Sumatra, January 26th 1992. Joan is currently an employee Intan Pariwara Group as editor and writer. She holds Bachelor's degree in Educational Sociology and Anthropology, Sebelas Maret University (Indonesia). Joan is in his final stage of undertaking Master’s degree in program Postgraduate of Sociology, Sebelas Maret University (Indonesia).

Biography Mahendra Wijaya is currently an employee in Sebelas Maret University as lecturer. He holds Bachelor's degree in Sociology, Gadjah Mada University (Indonesia). He holds Master’s degree in Rural Sociology, Institut Pertanian Bogor (Indonesia). He holds Doctoral degree in Sociology, Gadjah Mada University (Indonesia).

Biography Drajat Tri Kartono is currently an employee in Sebelas Maret University as lecturer. He holds Bachelor's degree in Sociology, Airlangga University (Indonesia). He holds Master’s degree in Sociology, Indonesia University (Indonesia). He holds Doctoral degree in Sociology, Indonesia University (Indonesia).