

## FIELD OF CREATIVE CULTURE: A STUDY OF CREATIVE MOVEMENT AND INNOVATION OF TERRACOTTA CULTURE IN JATIWANGI, INDONESIA

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**Abstract.** Although the creative city concept has received much criticism, the creative movement still occurs to fight for a better city. The decline in the terracotta tile business in Jatiwangi, Majalengka Regency, West Java, Indonesia, has triggered a creative movement to revitalize their identity through the Terracotta City movement. By combining Mihaly Csikszentmihalyi's field of creativity and Pierre Bourdieu's cultural capital, this study is carried out to reveal the creative culture of terracotta tile entrepreneurs in Jatiwangi and its relation to the movement. It is found that entrepreneurs' creative culture is dominantly stimulated by economic capital, and then it is transformed into cultural capital. Innovations are only made, if the market share is clear since it bears economic risks. However, social capital has a role in transforming entrepreneurs' economic and cultural capital to accept innovation and product diversification. This study also reveals that entrepreneurs as adopters intend to initiate innovation and diversification of terracotta products. However, within the framework of innovation, it shows that creative culture plays a role in incorporating aspects of humanity into innovation activities by giving innovation efforts to represent human beings.

**Keywords:** creative city, creative culture, cultural capital, field of creativity, innovation, Jatiwangi.

### Introduction

In the last few decades, the creative city concept has been developed to feature a high creativity level and urban competitiveness instruments from the concentrated knowledge-based

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activities. The creative movement of its urban framework is happening due to economic globalisation and technological development. This movement is expected to have implications on physical and socio-economics' urban configuration. The creators may depict the idea of creativity of human and non-human in any forms, such as video or audio (Łapińska, 2020), materiality (Manta, 2018), ritual tradition (Nurwani et al., 2020), architectural building (Piskunova et al., 2018), network culture (Safina et al., 2020), and events (Seyfi & Güven, 2017). Some scholars have studied the adoption of the creative city within different perspectives, such as policy assessment (Arbolino & Rostirolla, 2010; Evans, 2009; Romeiro, 2017), knowledge-based activity (Valenzuela Blejer & Blanco Moya, 2010), social engagement (Borén & Young, 2017), social movement (Citroni, 2017; d'Ovidio & Rodríguez Morató, 2017; Ekomadyo et al., 2020; Novy & Colomb, 2013; Pratt, 2011), and sustainability (Melnikas, 2019; Steward & Kuska, 2010). In the context of urban development, the concept of a creative city (e.g., Miles, 2013; O'Connor & Shaw, 2014) and the emerging approach (e.g., Bierwiazzonek et al., 2020) have been introduced.

However, the notion of a creative city remains unclear as it conveys a multifaceted meaning. Arbolino and Rostirolla (2010) argue that the idea of a creative city should consist of projects and, mainly, policies focusing on long-term strategy. The extemporary creative city may also generate conflicts because of the related stakeholders' mislinkage (Valenzuela Blejer & Blanco Moya, 2010), as shown by the critics' social movement and demonstration of the present-day development and policy (Citroni, 2017; d'Ovidio et al., 2017; Ekomadyo et al., 2020). All key actors and related creators' communities should be involved in the development (Borén & Young, 2017) and consider the sustainability concept (Melnikas, 2019; Steward & Kuska, 2010). Thus, the public decision-makers should acknowledge the integrated endorsement process of creative cities toward comprehensive planning and policies.

Some critics reprimand Florida's (2014) concept of creative class lacking conceptual transparency, which causes a fragile and erratic foundation to implement creative city (Novy & Colomb, 2013). For instance, the creative city movement in Bandung, West Java (WJ), Indonesia, exhibits strong influences on similar actions in other cities (Fahmi et al., 2015; Kim, 2017). However, it receives substantial denunciation since it only advertises flashy development gimmicks (Resmadi, 2015) and avoids to provide adequate public facilities (Vltchek, 2016). Internationally, in Berlin, German and Hamburg, German, the creative city program promotes investment within the city, but other side, paradoxically, the unemployment rate has increased (Moretti, 2013; Ozimek, 2012). The demand to shift creative city movements seems necessary since it suits community movements' fight for justice in urban space production (Ekomadyo et al., 2018). For example, the creative discourse is addressed on the *Kampung Kreatif* movement in Bandung to sustain the importance of informal urban settlement – *kampung* – among economic capital constraints (Ekomadyo & Riyadi, 2020). The Change movement in Bogotá (Colombia), creative campaigns are implemented to provide ideal public infrastructure for better urban places (Parra-Agudelo et al., 2017). Some creative movements symbolise the foundation for urban change (Castells, 1983; Miller, 2006), including striving for the city's rights (Lefebvre, 2009; Purcell, 2014). Nonetheless, Florida's creative class concept as an economic growth influenced by the knowledge-based economy centred on a creative person is bogus. For ages, the relationship between knowledge and economics has been the foremost

concern of innovation colloquy (Schumpeter, 2017). If innovation is surmised as added values for the economic and social by specific knowledge (Yuliar, 2011), the creative discourse can complement humanity scopes for innovation (Ekomadyo et al., 2020).

This article offers the concept of “creative culture” to uncover how creativity can influence and enable social movement and how it relates with innovation. The idea of “creative culture” is derived from Csikszentmihalyi’s (2013) concept of “field of creativity” and Bourdieu’s (1986) concept of “cultural capital”. According to Csikszentmihalyi, creativity is defined as acts, ideas, or products that change an existing domain and transform them into distinct ones, that is composed by three elements: person (who brings novelty into the symbolic domain), domain (a culture that contains symbolic rules and field), and field (experts who act as gatekeepers to the domain and recognize and validate the innovation). Thus, “field of creativity” is understood as how the new and distinct acts, ideas, or products are emerged and accepted in social groups to get validation and legitimation. For broader meaning, according to Bourdieu (1993), field is understood as a “social space” or “social configuration” where person creates a relationship with each other to struggle their goals and interests by strategic actions to control over resources by circulating and transforming their capital forms (Swartz, 1997; Dovey, 2015). Bourdieu (1986) also divides the capital into three forms: an economic capital refers to material asset that convertible into money and institutionalized as property right; a social capital, refers to resource which inheres in social relations or networks of family, friends, clubs, school, community and society, and cultural capital refers to knowledge, skill, manners, and credentials acquired through education and upbringings (Bourdieu, 1986; Dovey, 2015).

Based on these theoretical platforms, this article defines creative culture as cultural capital (skill, knowledge, manners, credentials) which construct and are constructed by social groups that capable to generate or enable the new and distinct acts, ideas, or products. For research purposes, this definition implies the framework to uncover how creativities are positioned in social movement, and how cultural capital is circulated and transformed among economic and social capital to generate and enable creativities. By this definition, in the innovation framework, creativities are also discussed how cultural capital has impact by transforming it into economic and social capital.

This article is composed based on in-depth analysis to examine the creative culture in Jatiwangi, where the creative movement has emerged to endorse terracotta as their cultural identity, which is closely associated with the innovation of existing terracotta entrepreneurs. Jatiwangi is a small town renowned as a region with vast terracotta roof production since the 1930s; it seized its marketing glory back in the 1990s, but since then, it has weakened significantly. A loss of identity also mirrors the business decline: the Jatiwangi youngsters favour working in garment factories instead of the *jebor*, a local name for terracotta roof factories. Since 2005, a local creative community called Jatiwangi Art Factory (JAF), Indonesia, launched a campaign in pursuit of Jatiwangi’s identity revival by organising various terracotta-themed art events, massively involving the local communities, and drawing international concerns on how art movements might be a robust tool to strengthen beliefs in a regressing city. In 2019, JAF initiated the Terracotta City movement (TCM), which restored the innovation of terracotta products by constructing terracotta-themed public facilities. Moreover,

the existing entrepreneurs have their own cultural, social, and economic capital of ingenuity in terracotta production. This article elaborates on the relationship between Terracotta City discourse and the creative culture of terracotta entrepreneurs.

## **1. Method: the innovation framework**

This research was conducted by framework combining Csikszentmihalyi's field of creativity and Bourdieu's cultural capital to uncover the terracotta entrepreneurs creative culture. This study intended to trace how entrepreneurs' cultural capital (knowledge, skill, manner, and credential) was circulated and transformed with economic and social capital in order to stimulate and enable creativity, especially to respond to innovation opportunities as part of the TCM. To make more relevant to the research case, practical concerns of entrepreneurs were interpreted these forms of capital are interpreted into, such as interpreting economic capital in business goals, development, and market pressures; social capital in relations with workers, the neighbouring community, other entrepreneurs, and ties with JAF, and cultural capital in source of knowledge, family tradition, commitment to quality, and constructed values.

Data were obtained predominantly through in-depth structural interviews with selected terracotta entrepreneurs in Jatiwangi and surroundings. Several entrepreneurs were intentionally selected to represent business categories and locations proportionally. Eight informants were selected: one informant depicted the large-scale terracotta roof factories in Jatiwangi, and the rest were the medium-scale ones, spread in Jatiwangi District (JD) (three informants), Dawuan District, Indonesia (two informants), and Kasokandel District, Indonesia (one informant). These districts have most terracotta factories in Majalengka Regency (MR).

The questions are adjusted to uncover how cultural capital propagates with economic and social capital and how innovation and creativity exist simultaneously, generally succeeding the TCM. The interview was done in 2019, with approximately 1–2 hours per informant. The interview transcripts are tabulated based on a creative culture framework. Several direct quotes from informants, some in Sundanese as the local language, some in Indonesian, or mixed, are selected to show the research findings. Supporting secondary and primary data, such as a statistical report from institutions (*e.g.*, the local Industrial and Manpower Agency of Majalengka (IMAM), Indonesia), informal interviews, and focus group discussions, verified the findings and arguments. The secondary data was collected from the Government of Indonesia offices. Meanwhile, the primary data were obtained from the conversation with selected entrepreneurs, the creative community (JAF), and Majalengka Development Planning, Research, and Development Agency, Indonesia as the state representative.

## **2. Terracotta entrepreneurship in Jatiwangi, Indonesia: development and decline**

The roof tile production dominated the terracotta entrepreneurship in Jatiwangi. Its production was initiated by a group of workers in Burujul Kulon village, MR, WJ, Indonesia, while constructing a mosque roof, substituting palm fiber elements in 1905 with modest tools (Asyari, 2018). In 1930, the terracotta roof invention caught the Dutch Government's

attention, utilising it for offices and worker houses construction. It was one of the prolific economic commodities in the JD and its surroundings.

The terracotta roof-tile business boom peaked in the 1980s until the 1990s, making Jatiwangi as well-known biggest terracotta roof producers in Indonesia. This product was slated for mass-producing to be worth selling. In 1980, the production of the terracotta roof had transformed as the community’s main livelihood with its widespread terracotta roof entrepreneurship, including small, medium, and large scales. It was reported that 630 industries were located all around Jatiwangi (Asyari, 2018). Nevertheless, the dwindling number of entrepreneurs and enterprises has resulted in a significant 76% drop from the 2000s until recently. In 2012, the large-scale industries were ten units with 4 582 workers, while the medium-scale ones were 424 units with 15 104 workers. In terms of product diversity, large-scale or medium-scale industries in MR are substantially terracotta roof factories (88.48%). The data shows that the number of terracotta roof factories in Majalengka in 2010 was 341 units, and in 2011 it slightly increased to 384 units. However, from 2012 to 2018, it plummeted (Figure 1).

There were three contributory factors: the unavailability of raw materials, less productive workers, and market competition (Asyari, 2018; Vardhani, 2019). To begin with, the raw material of clay within the JD was no longer sufficient; regions rich in clay shifted further from the district. Based on the data (Siagian et al., 2019), most of the clay-sourcing locations in 1970–1980 were located in Sukaraja village, Lambung, Indonesia, before moving to Jatisura (Jatiwangi), Loji (North Maluku, Indonesia), and Jember (East Java (EJ), Indonesia) villages in 1980–1990. In 1990–2000, it was chiefly taken from Leuweunggede village, MR, WJ, Indonesia, and nowadays, the source relocates to Pilangsari village, Sragen Regency, Central Java, Indonesia, and Jatitujuh District, MR, WJ, Indonesia – notably distant from Jatiwangi. Besides, fewer younger workers were enthusiastic about working in terracotta roof factories; they preferred working in garment industries. Lastly, production limitations and market competition had occurred since climate conditions hindered the already inadequate manufacturing rate, and there were no fitting technologies to boost terracotta roof production.

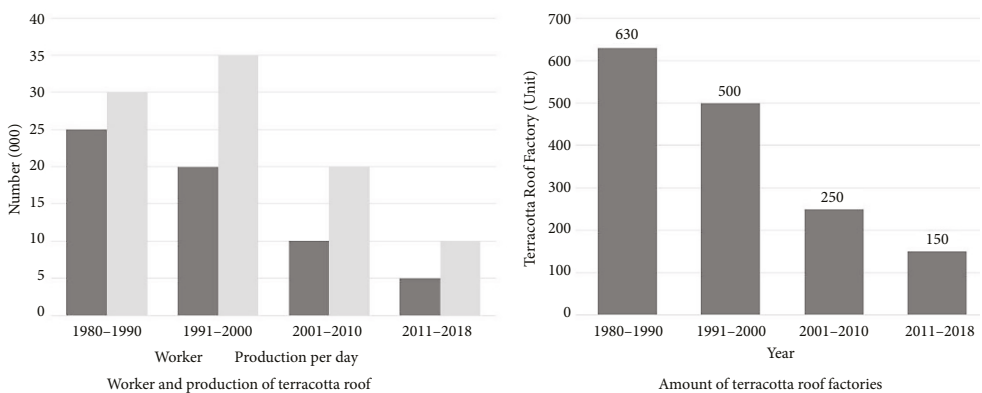


Figure 1. Worker, production, and amount of terracota roof factories in Jatiwangi, Indonesia (source: created by authors)

Table 1. The characteristics of terracotta roof factories in Majalengka Regency, Indonesia, 2019 (source: created by authors with the adaptation from the Industrial and Manpower Agency of Majalengka, Indonesia (2019))

District	Enterprise (unit)	Workers (person)	Investment (million rupiah)	Capacity (unit)	Production (million rupiah)	Profit per year (million rupiah)
Cigasong	7	437	1 250	2 796 800	5 244	1 748
Dawuan	58	1 352	6 708	8 652 800	16 224	5 408
Jatiwangi	67	2 282	9 814	14 604 800	27 384	9 128
Kasokandel	28	615	3 418	3 936 000	7 872	1 968
Ligung	7	412	530	2 636 800	5 274	1 318
Maja	1	10	15	64 000	128	32
Palasah	1	50	15	320 000	640	160
Sukahaji	1	18	50	288 000	540	180

On the other hand, several competitors produced roof tiles without clay, such as plastic, asbestos, metal, and ceramics, challenging the terracotta ones with a lower price. These burdens forced some factories out of business.

Although it has seen a massive slump, some entrepreneurs strive to maintain their terracotta roof businesses. Based on the IMAM (2019), the number of terracotta roof factories in 2019 is about 170 units – the highest is in Jatiwangi, Dawuan, and Kasokandel Districts, with 58 and 28 units respectively (Table 1). The amount of workers and investment also stands out in JD. It means that Jatiwangi can develop and preserve the terracotta products in the MR because terracotta roof factories still serve as a part of the society's livelihood.

The decline of roofing business, followed by the diminishing clay identity as social pride, has motivated the local creative community, renowned as JAF, to revitalise terracotta greatness through various art and cultural events. In 2019, together with the stakeholders, JAF initiated the TCM to reintroduce and expose the terracotta culture to the populace through public facilities and infrastructure provision, promoting the innovation of terracotta production in Jatiwangi and its surroundings. The Government of Majalengka responds to the notion through three kinds of programs: designating terracotta specific strategic area (TSSA), supporting product diversification for roof entrepreneurs, and building several terracotta-themed public infrastructure and facilities.

### 3. Creative movement and revitalization of terracotta culture

The creative movement to revitalise terracotta culture emerged from an art community in Jatiwangi (ACJ). This movement is based on the awareness that clay plays a vital role in the JD's presence, exemplified by the economic enterprises of processing clay into roof tiles. The decline in productivity and abundance of tile industries over the last 30 years, exacerbated with the growth of humongous non-tile industries in the JD, ignites the local community's

spirit to restore the Jatiwangi people's pride in clay – an invaluable material not to be taken for granted. As an active art community since 2005, ACJ provides a brand-new value to clay processing enlightenment in social and cultural aspects through music festivals, tile factory worker matches, musical instruments, food, accessories, *etc.*

ACJ's artistic and cultural pursuits to enrich the significance of clay in the JD are consistently fulfilled through routine and incidental activities. Monthly projects are facilitated through *Forum 27*, which is held every 27th day by inviting speakers ranging from government stakeholders, entrepreneurs, communities, and experts to exchange ideas related to processing and preserving the prestige of clay, as well as *Apamart* – a local products' market and clay-themed monthly festival. Annual activities are accomplished through the *Village Video Festival* as a venue for producing and screening videos related to the socio-economic life of the Jatiwangi community, the *Jebor Bodybuilding Competition*, A Moving House Day (*Hari Gotong Rumah*) as a way to commemorate the *Wakare* event in Wates Village, EJ, Indonesia, *Supernatural Agriculture* to celebrate the process of yielding crops from planting to harvesting rice, and the *Paraenergy* venture as a biennial campaign to explore renewable energy sources. Ultimately, the *Ceramic Music Festival* is a three-year event for clay musical-instrument performances attended by more than 11 000 participants.

The idea of a Terracotta City arose from the 5th Indonesia Contemporary Ceramic Biennale in 2019, organised by ACJ. The event was held in Jatiwangi, showcasing the theme "Terracotta City: Ceramics for the Real World". Multinational artists collaboratively conduct experiments and workshops alongside the Jatiwangi community in producing diversified terracotta products that suit as an alternative to clay products in Jatiwangi afterwards. The conceptualisation of a Terracotta City is an effort to convey the cultural arts movement into the public sector and boost expenditure in public infrastructure in expanding terracotta commodities. Besides, this notion values the admiration towards clay through a cultural approach and industrial products, including widespread acclamation.

The MR Government made several measures to begin utilising terracotta products in public infrastructure regarding this conception. In the spatial aspect, they identify the existing tile industry in Jatiwangi and its surroundings by classifying the type, availability, and distribution of clay raw materials, amidst other industries in Jatiwangi as consideration for zoning and determining the Jatiwangi TSSA in the district as stated in the Revision of Regional Regulation Number 11 of 2011 (JDIH BPK RI: Database Peraturan, 2011) concerning the spatial plan of MR. It is expected that the terracotta roof factory and the other derivative products can still thrive and be impactful to economic development in the regency and become the featured terracotta products.

In order to expand terracotta products, the production of terracotta concentrates on two varieties: mass and innovative products. Mass products include roof tile, wall brick, and floor tile. Meanwhile, the innovative product is assorted in compliance with the capacity and competency of terracotta creators and entrepreneurs. In the socio-economic and cultural aspects, efforts are made to increase the intensity of sustainable development for small and medium tile industries to diversify products through several activities (such as craft workshops, *Voice of Clay Command Post*, creative thematic villages, terracotta development studios), combined with budget allocations for the procurement of fitting production equipment technology.

The product diversification of terracotta is anticipated to restore terracotta roof entrepreneurship in the vicinity of Jatiwangi.

In the visual aspect, infrastructure and public facilities were built as terracotta-themed landmarks in Majalengka. These facilities include Majalengka town square, Tourist Information Center building, Government office fences, and various unique terracotta-themed public buildings stipulated under the Majalengka Regent's Circular Number 50 of 2020 regarding the implementation of terracotta development in MR. It is expected that these multiple terracotta-themed buildings can suffice as precedents on the application of terracotta product diversification.

The ideas or knowledge has innovation value if they are associated with economic and social added values. The TCM, accompanied by trials of realizing diversification of terracotta products through public infrastructure has an economic and social impact only if they can intrigue product diversification by existing entrepreneurs. They possess a particular creative culture that has been built through the course of business stages. The following section explains how the creative culture of entrepreneurs may impact numerous innovative activities triggered by the TCM.

#### **4. Field of creative culture in terracotta innovation**

In the previous chapter, the prominence of Jatiwangi terracotta tiles, a major decline in business and identity, and the occurrence of a creative movement to revitalise terracotta culture through art that conceived the TCM, prompting the government to try to make various policies to promote diversification of terracotta products were explained thoroughly. However, the desire to diversify products as the preliminaries towards innovation is not positively received by terracotta entrepreneurs as adopters. In order to examine the potential for adopting TCM by terracotta entrepreneurs in Jatiwangi, it is necessary to analyse their creative culture and its potential to invigorate innovation.

The entrepreneurs' creative culture is unveiled by identifying the field of their industry: economic, social, and cultural capital, and how innovation has been taking place, which was then summarised to how their creative culture is related to TCM. Economic capital is distinguished from business goals, developments, and pressures in market competition, while social capital is recognised from relations with workers, the neighbouring community, other entrepreneurs, and ties with ACJ. Finally, cultural capital is observed from the source of knowledge, family tradition, commitment to quality, and constructed values. Moreover, it is comprehended how these three capitals are diffused and transformed by each other in fostering innovation, and then discussing how to bond them to correlate to the TCM.

Business goals and developments are fundamental to economic capital because entrepreneurs start building and expanding businesses to acquire economic capital. Based on in-depth interviews, entrepreneurs preferred the terracotta tile business since they noticed a promising business opportunity attributable to exceptional Jatiwangi clay and a skilled workforce. Before commencing a tile business, one prominent businessman was a traditional food entrepreneur who decided to migrate and pursue the terracotta tile business to the extent of owning several factories. Business development starts small; for example, obtaining a lease



agreement, producing traditional equipment, developing intricate machinery, and building their factory. They consider that the peak of the terracotta tile business sprang in the 1990s, but now it is beginning to encounter a decline. There used to be a great demand for supply that was still limited back then – now that supplies have accrued, the demand plunges (quotes 1–2):

Quote 1: “At that time, there were still a few terracotta roof tile factories, but there was a lot of demand. It was marvellous to make a profit [...]. The marketing was still manageable [...]. The factories in Jatiwangi had possessed a potential due to the meaningful history in the beginning: first, the quality of clay; second, many skilled local human resources were capable of doing laborious work” (Informant 3);

Quote 2: “The factory owner used to own a traditional food stall. When he moved to Majalengka, he sold a traditional dessert (before switching to the terracotta roof tile business)” (Informant 1).

Economic capital is observed from the existing economic pressure as a direct result of market competition since it decreased the accumulation of economic capital from terracotta tile entrepreneurs. Previously, it has been discovered that the decline in the terracotta tile business around Jatiwangi is due to the unavailability of workforces who are more interested in being employed in the clothing industry and the presence of competitors’ products that are tougher, more durable, or easily manufactured than terracotta tiles. Terracotta entrepreneurs consider these factors to have triggered their financial loss.

Social capital is viewed from relations with workers, the neighbouring community, other entrepreneurs, and ties with ACJ. Since the roof tile factory was built collectively, the factory owner worked jointly with the employees, and their bond is equivalent to a father-son relationship. This conventional system has a tremendous impact on workers; during harvest, the factory ceases any activity, given that most workers are planting or reaping crops. Some entrepreneurs feel that this forged kinship is a favourable value that sets the tile factory apart from a garment factory (quote 3):

Quote 3: “We are together daily, chuckling and bantering while working [...]. It’s typical for us that the room is filled with laughter. Sometimes we joke a lot, so the ambience inside the tile factory feels warm [...]” (Informant 6).

Interactions with the community cater to the entrepreneurs’ social capital because there is a mutual relationship between the tile factory and the surrounding community. The neighbourhood labels the factory as a source of livelihood, either as employed workers or owners of food stalls nearby. These entrepreneurs become pivotal community figures, granted that they often offer donations during annual celebrations. Several business people were also appointed as village leaders (quote 4):

Quote 4: “The existence of roof tile factories in Jatiwangi means the community is supported in their essential needs [...]. The majority of people around here are farmers – they depend on the harvest season. When it is not time to harvest yet, they run the roof tile factory” (Informant 2).

Social capital is also established thanks to the relationships between entrepreneurs. There was a habit of assigning entrepreneurs’ children to other business people’s factories

for internships, but now this habit is gone. Some entrepreneurs founded informal associations to determine fair value for goods and labour wages. A cooperative was once formed to facilitate the procurement of additives and access to government policies (quotes 5–6):

Quote 5: “In the past, parents who worked there brought their son to introduce his work to the son indirectly” (Informant 7);

Quote 6: “There is an association of roof tile entrepreneurs. They set the minimum wage and sales regulations” (Informant 2).

The ties with ACJ are also part of the social capital for roof tile entrepreneurs. They acknowledge that ACJ has dramatically contributed to revitalising the roof tile heritage as the identity and pride for the Jatiwangi inhabitants. However, the exquisite connection with ACJ is still regarded just as promotion and has not yet produced a direct economic impact (quotes 7–8):

Quote 7: “This relationship between owners blossomed thanks to art community in Jatiwangi – now that all factories are linked. If there is a meeting, everyone is present. Art community in Jatiwangi has many ideas, and I am grateful for their campaign in sustaining terracotta roof tiles’ existence” (Informant 5);

Quote 8: “There is a Jatiwangi roof tile community that art community in Jatiwangi initiated. But in retrospect, it hasn’t been considerably beneficial to the economy” (Informant 7).

Meanwhile, cultural capital is studied from knowledge, family tradition, commitment to quality, and constructed values. Most of the roof tile entrepreneurs are self-taught; some of them only received elementary education. Nevertheless, entrepreneurs who can propel companies are naturally intelligent people. They love doing business and encourage learning from other manufacturers, and observing other people’s work (quote 9):

Quote 9: I just graduated from Elementary School, and I would get loose if I do not will to progress, thanks to God for giving me progress. In field I know the strong or weak clay from the wind, I consider it [...]. In factory (while I was a labour), I learn there, from experience [...] Learning from experience myself. The knowledge comes itself” (Informant 8).

Family traditions are also part of the cultural capital. All of the roof tile entrepreneurs who were informants had a family business background: some inherited from their grandfather, father, in-laws or started the business with relatives to later manage their own business. This practice also reinforces the survivability of the tile business from generation to generation, despite the increasing pressure of business competition.

Cultural capital is also found in strategies to maintain quality. For roof tile entrepreneurs, quality is more imperative than price because top-notch products function as a business’ identity. Some entrepreneurs develop ways to maintain quality through daily practices; others choose to focus on certain products (quote 10):

Quote 10: “Since there’s fierce competition, *PT Abadi* (factory name) is also making efforts to improve the products’ quality – it’s the number one priority that remarks our identity, for us Sundanese” (Informant 1).

The values originated from the roof tile business also recognise the cultural capital. Generally, entrepreneurs deem clay as a gift and source of livelihood for Jatiwangi. Although there is a drop in the supply of raw materials – suspected to be one factor that elicits the decline in the roof tile business, entrepreneurs are still certain that their stocks are sufficient. Likewise, values are gained from the obligation for hard work and determination as a roof tile entrepreneur. They believe that clay culture is their identity, as the pride of Jatiwangi as a roof tile producers (quote 11):

Quote 11: “Roof tiles are not merely a commodity. We trade them to prove that we do care about our culture and identity” (Informant 4).

From the economic, cultural, and social capital perspective of roof entrepreneurs, where do creativity and innovation flourish? Based on in-depth interviews, there are several conclusions in regards to entrepreneurs’ creativity and innovation. These are motivation and constraints to innovate and create new products, investment and market, simplistic existing innovation, and the importance of TCM for innovation.

Entrepreneurs comprehend both incentives and budget constraints when it comes to innovating. The driving purpose is the desire to create product configurations that are not dull. They also realise that innovation requires funds initially but can raise revenue in the end. One large company bought machines and studied samples of Italian terracotta products to invoke innovation in production. However, some medium-scale companies face a knowledge constraint: they cannot sustain innovation since their knowledge is still inadequate. To introduce innovation, entrepreneurs take note of the relationship between capital investment and market acceptance. Research for innovation is considered necessary, but it is only achieved if the market share already exists because financing such innovative products pertains to risk not being notably received in the market. However, if the prospects are promising, countless innovations, including product diversification, are going to be accomplished. Thus, most entrepreneurs can experiment with modest innovation through trial and error and stay focused on maintaining product quality (quote 12):

Quote 12: “There are several plans. I want to realise it, but I can’t think of a way to achieve it. Indeed it’s because my experience and resources are limited [...]. I’ve always stayed like this; nothing significant has changed. I need to evolve and gain new knowledge and information” (Informant 6).

As it turns out, the TCM sparks innovation efforts, but only on a handful of entrepreneurs. This effect is mainly because contemporary products from certain factories are used for buildings constructed to reciprocate the movement. One entrepreneur, a village leader, created a domestic company specialising in inventive terracotta products because there is a burden for community empowerment to restore Jatiwangi identity.

Several things can be found as creative culture in the roof tile entrepreneurs inquired. First, the terracotta culture in Jatiwangi is rather led by economic motives (eyeing business opportunities), which later develops because of social capital (egalitarian relationships shared with workers, understanding of traditional work rhythms, economic impact on the surrounding community, and community figures), that nurtures the cultural capital: the recognition of clay as Jatiwangi’s priceless asset. Second, since economic capital is more pronounced

than other capitals, various innovation efforts, including product diversification, are secured if there is a market share prior because investment for innovation requires funds and risks. Therefore, entrepreneurs choose to instigate innovation on a small scale and focus on maintaining product quality. Third, business pressures that have resulted in a decline in tile production have made entrepreneurs conscious of the cultural capital they possess: the importance of clay as an asset in Jatiwangi. Fourth, ACJ plays a vital role at this spot because through various arts and cultural events, they attract roof tile entrepreneurs to simultaneously revitalise clay culture as the identity of Jatiwangi and its surroundings. Fifth, the broad creative movements catalysed by ACJ have not yet directly impacted entrepreneurs economically and are still seen as promotional events. Sixth, the TCM can encourage innovation of terracotta products, but this is still restricted to only a few entrepreneurs whose products are adopted for public facilities and built infrastructure.

The next section discusses the connection between the TCM and the existing entrepreneurs' creative culture based on these findings. Initially, this movement cultivates optimism – how an art movement can trigger innovation. Conversely, within the framework of the capital field, there is a challenge to convert the present cultural capital into economic capital. On the contrary, entrepreneurs also have their cultural capital developed through accumulated economic capital. We uncover how the TCM is closely-knitted to current terracotta entrepreneurs' creative culture while exploring possible opportunities for mutual relationships.

## **Discussion**

Based on findings in the previous chapter, this chapter discusses the relationship between the TCM and the creative culture of existing terracotta entrepreneurs. It has been found that their creative culture is preferably driven by economic motives that innovation is realised if the market share already exists. The decline in the roof tile business brought awareness to clay as a symbolic pride of Jatiwangi, and ACJ played a pivotal role in revitalising the terracotta culture. The problem arises that the creative movement initiated by ACJ, has not yet been considered to have a noteworthy economic impact on the entrepreneurs. The opportunity to associate the TCM with innovation purposes by entrepreneurs and how this can contribute to the development of knowledge about creative culture and innovation are the issues addressed here.

First, the roof tile business decline has triggered the emergence of an art-based creative movement to revitalize the terracotta identity of Jatiwangi and its surroundings. This evidence shows that art plays a role in capturing attention to a problem because of its capacity to create an artistic and engaging narrative. If we apply Cross' (1982) way of knowing disciplines: science, humanities, and design, we can put art as part of humanities, which can initiate concerns for justice through artistic artefacts and events.<sup>1</sup>

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<sup>1</sup> Cross (1982) maps the ways of knowing into three disciplines: sciences, humanities, and design. In sciences, knowledge is obtained through observing natural phenomena to find out the truth. In humanities, knowledge is obtained by appreciating human experience, and is focused in justice. Meanwhile, designers obtains knowledge by making something in man-made world, and concerning for appropriateness. By positioning art in humanities discipline, various artworks can be seen how they represent humanity and justice. In TCM, various art event initiated by AJC represents the concern to revitalize terracotta culture as pride and identity for Jatiwangi societies and surroundings.

Second, within Rogers' (1983) framework of the diffusion of innovation, the TCM can be labelled as an initiation, and entrepreneurs' diversification of terracotta products by can be counted as an attempt for adoption. Rogers mentioned several steps on how adopters can accept innovation initiation: knowledge/awareness, persuasion, decision, implementation, and confirmation/continuation.<sup>2</sup> Here, ACJ as the initiator of innovation has succeeded in building knowledge, awareness, and persuasion to revitalize the terracotta culture, but has not been able to influence entrepreneurs' decision to implement and continue the product diversification. It is found, that entrepreneurs creative culture is mainly constructed by economic capital, so ACJ's initiation is just recognized as promotion only and has not yet give economic impact significantly.

Third, a study on creative culture reveals that entrepreneurs also prefer such innovation, which does not necessarily match what the Terracotta City initiators want. It turns out that entrepreneurs build a creative culture based on economic capital, only to be moulded into cultural capital after realizing of the true worth of clay. Meanwhile, the original initiation of Terracotta City derives from cultural capital, and efforts are being made to convert it into economic capital.

Fourth, social capital can be a medium in transforming economic capital into cultural capital and vice versa. Research findings show that the development of cultural capital, that is, the perception of clay as part of Jatiwangi's legacy, is partially influenced by their relationship with ACJ. Previous research on manual brewing-cafe communities in Bandung showed that cultural capital, such as knowledge, and the shared love of coffee, was later transformed into economic capital, indicated by profitable cafes, through various events in building social capital (Ekomadyo, 2019). The Terracotta City inventors can use this analogy to develop social capital with entrepreneurs to create various trials for terracotta innovation products that can finally become economic capital and convince entrepreneurs to build innovation. Fifth, theoretically, it is important to incorporate creative culture into the innovation discourse. Studying the TCM in Jatiwangi proves that creative movements exist in real life and can foster innovations in drawing public attention. Humanity concern, in this case, is that the revival of terracotta culture for a community's identity might be a source of innovation initiation. Expansively, creative culture can pave the way for various innovations which solid humanistic content.

## Conclusions

Despite countless criticisms of the creative city concept, several creative movements existed that struggle for a better city. The TCM in Jatiwangi shows how the creative movement administered human values through various arts and cultural events. Establishing creative culture within the innovation framework can sustain boldness through creative movements.

<sup>2</sup> Rogers' (1983) concept of the diffusion of innovation mainly explains how new ideas or product can be accepted and implemented through the adoption process to make added value for the existing ideas or products. Although providing an overview how innovation initiation can be implemented sustainly, Rogers' model has been criticized because it tends to see the diffusion as a linear process. In reality, adopters often have their own will that is different from what the initiator imagined. Actually, diffusion of innovation becomes iterative process and involve a lot of translations among actors.

Creative culture can contribute to artistic and human perspectives in the innovation discourse (Ekomadyo et al., 2020).

For knowledge development, the creative culture model developed from Csikszentmihalyi's creativity and Bourdieu's cultural capital can be applied to discuss how creative culture is built and contributes to innovation. Here, creative culture is put into an exercise to transform cultural capital into economic capital reciprocally. With this model, an innovation initiation, as a method of cultural capital's transformation, may continue to develop by utilizing social capital when it has not produced an economic impact. Creative culture carries innovative knowledge to generate novelty that provides an increased value economically, socially and culturally.

The limitations of this qualitative research are related to subjective responses from relevant informants. However, we select the resource persons with some criteria, such as experience and knowledge of the issue. The arguments are not intended to generalize the findings too broadly. It will be noted as initial findings that will be continued in further research. The initial discussions are prepared by interpolating findings with theory and information from the resource persons.

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