MINING CULTURAL LANDSCAPE AS POTENTIAL HERITAGE TO MALAYSIA? INSIGHT LENS: THE PERSPECTIVE OF KINTA VALLEY RESIDENTS

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Received: 19 January 2021
Accepted: 17 February 2021

ABSTRACT

The cultural construction through landscape condense with values that further links to sense of place – genius loci and identity. Identity on the other hand is essential to ‘sense of place’ and creates meaning for people who experience the everyday landscape. Having regard to place, identity and heritage, this paper focusses upon the resident’s perspective in perceiving the merit embedded within the ruin image of the Kinta Valley. Maintaining the qualitative inquiry, the findings of this investigation will enrich the cultural heritage of the place having regard to integrity and authenticity that further defined and characterized Kinta Valley’s regional post-industrial mining landscape today.

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Keywords: Post-industrial mining landscape; Cultural Landscape and Heritage; Landscape and Identity; Kinta Valley.
INTRODUCTION

It is interesting to note that the establishment of Kinta Valley is mainly due to the importance of the tin mining industry, an industry that steered modern development of Peninsular Malaysia from the 1880s. Being the most productive tin district towards the end of the 19th century, tin production from the Kinta Valley has surpassed Taiping in 1889, thus evidencing Kinta being the key player for tin production venue in Malaya (Khoo & Lubis, 2005). According to Ahmad (2018), the massive industrialization due to tin extraction from this Valley has prolonged for more than 110 years, hence this industrialization has drastically transformed the regional Valley landscape as evidenced by today's generation. The decline of tin production from the 1980s was due to the collapse of the international tin market which has left a huge impact on tin production from the Kinta Valley, thus manifesting a remarkable industrial image established within the envelope of the old Valley district boundary. Hence, evidence of the abandoned former mining land could be easily observed today especially around the 16 former tin mining towns established in Kinta Valley, the old towns that emerged from the end of the 19th century as a result from the massive tin extraction industry. The ruined outlook of this industrial mining landscape due to mullock tailings, mining ponds, dredge ponds, novel ecosystem and some abandoned and deserted old tin mining towns and settlements (example: Papan, Pusing, Lahat, Kampar and Gopeng) were further marked as important industrial ‘scars’ that amplified the demise of the industry.

Regardless of this ruined image within the industrial fabric that until today continues to be a part of the Kinta Valley landscape, historically, it is an undeniable fact that tin has significantly contributed to lucrative annual revenues of the Perak State for more than 100 years, boosting the state's economy and further paved modernization in Kinta especially in Ipoh from the 1920s. Realizing its importance, two significant questions were drawn; does this ruin landscape and its metaphoric scar represent the identity of the Valley? Can this ruin landscape be acknowledged as important and be further established as an invaluable heritage to the community? Since landscape is where past and present meet (Taylor, 2009), hence this paper has sought to understand the residents' perspectives towards their daily landscape and how they perceived these ruin industrial image as an identity to place.
Through a constructive paradigm of landscape, the way of seeing offers a vast array of interpretations that connect human activities with their surroundings. Therefore the symbolic creation of cultural spaces through ways of seeing is manifest in the social and cultural constructs of landscapes (Ahmad, 2018). Accordingly, this cultural construct is rich with cultural tapestries that include complex layers of landscapes and establish important cultural processes that demonstrate human interventions, ideologies and power, values and tensions in the landscape. Rose (1995, p. 88) further claims that ‘meaning given to a place maybe so strong that they become a central part of the identity of the people experiencing them’. Since cultural landscape possess both tangible and intangible expressions and values, hence these cultural values, as included in the Australia’s Burra Charter (2013), involve aesthetic, historic, social, scientific, and spiritual qualities.

LITERATURE REVIEW

Landscape and Memory

Given significance that all landscapes are cultural constructs (Taylor, 2009), the interlink between landscapes and memories are inseparable since landscapes frame human ideologies, hardship and experiences that montage human cultures that construct them. The interconnection between landscape and memory as according to Tolia-Kelly (2013) portrays a complex relationship due to strata of memories embodying the landscapes. Embedded with rich cultural tapestry, cultural landscape exhibit ‘the repository of collective memory’ (Mitchell, Rössler, & Tricaud, 2009, p. 22) other than individual memory that can be interpreted and understand through way of seeing. From this notion, landscapes are imbued with human sentiments and ‘emotional landscape memories’ (Tolia-Kelly, 2013, p. 327) that are able to awaken nostalgia and melancholy of the community who had experienced the landscape. Perhaps the connotation highlighted by Tolia-Kelly (2013) by ‘emotional landscape memories’ is what Tuan (1979) is expressing through his writings in Landscape of Fear that place an emphasis on human consciousness in landscape. Memory that is integral in landscape emerges as intangible heritage, giving merit to wider cultural landscape meanings and interpretations, and further establish connections to identity and sense of place in landscape. Identity, as asserted by Lynch (1960), enhances place significance thus making it recognisable and distinctive in the eye of its
Malaysian Journal of Sustainable Environment

Landscape and Its Connection to Place Identity

Ahmad (2018) accentuates that meaning in places or landscape may refer to physical components and activities that fashioned the landscape through human intentions, they collectively form an image that characterises identity of cultural landscapes. Some of these examples are depicted in World Heritage cultural landscape sites, emphasizing human activities that have given rise to various significant cultural landscape categories with outstanding universal values (OUV). Upon this recognition, from year 2000, a different type of cultural landscape- Blaenavon Industrial Landscape, United Kingdom being nominated as the first industrial mining landscape to be inscribed on the World Heritage (WH) cultural landscape list. Regardless of its ruin in character, this cultural landscape is able to possess an OUV that portray its authentic yet integrity landscape, picturing the iron and coal mining industrialization that occurred between the late 18th and early 19th centuries (ICOMOS, 2000). With this WH recognition, therefore the idea depicted through the image of ruin landscape has transverse to another level of heritage recognition worldwide. Interestingly, Relph (2007) has concluded that:

There is a strong connection between the two [spirit of place and sense of place] – thus somewhere with a powerful spirit of place will help to engender a strong sense of place and a community with a strong sense of place is more likely to effect changes that will create a remarkable spirit of place (Relph, 2007, p. n.p.).

Therefore significant cultural landscapes intersect with spirit of place or genius loci that are able to be felt by a community who are attached to a landscape. Distinctive identity, as emphasised by Relph (2007), is the main factor that evokes spirit of place and offers a deep connection to ‘senses’ that eventually formulate quality places and landscapes. With this discussion, it is apparent that identity is essential to sense of place (Egoz, 2013; Rose, 1995; Taylor, 2017), and further connections to landscape integrity and authenticity empower a spirit of place to be manifested in meaning embedded in cultural landscapes.
Therefore, recognizing the past industrial revolution by human, this cultural processes have considerably shaped the physical landscape of many places and further attracted a sense of industrial romanticism (Storm 2014) that awakens past memories towards this landscape type. However, through an examination of the Peninsular Malaysia cultural landscape, it is found that at present there is indeed a gap of knowledge related to the recognition of its industrial mining landscapes. This might be due to the ‘typical’ translation of aesthetic as embodying both natural landscapes and agricultural landscapes as currently embedded in the Malaysia National Landscape Policy (National Landscape Department 2011). Interestingly, this study offers another insight of perceiving the cultural landscape and its heritage values that are found within the Kinta Valley industrial landscape from the perspective of its residents.

**METHODOLOGY**

This study offers another perspective that acknowledges the residents’ perceptions towards their everyday landscape that surround their workplaces and residences today. Inspired by Jackson (1984) and Shuib (2008) who highlight that people’s perceptions give meaning to place and value towards the industrial ruinous character in the Kinta Valley landscape, the quantitative method employed in this research has enabled the resident values to the Valley landscape to be articulated and comprehended. This research was undertaken in accordance with a Deakin University Human Research Ethics Committee approved application dated 26 June 2014 and coded 2014-075. Maintaining qualitative strand analysis to generate results, therefore the findings of the quantitative design protocol will be interpreted to test or generalize the initial qualitative results to further enhance the significance of the studied phenomena (see Figure 1 illustration).

![Figure 1. Creswell and Plano Clark prototype of the Exploratory Sequential Design which Author Adapted for Her Research.](image)

Source: Reproduce illustration from Creswell and Plano Clark (2011)
In the questionnaire survey conducted, 60 respondents participated in this quantitative survey, covering 3 major precincts in the Kinta Valley. Since this study is an additional triangulation method and designed to eliminate bias from the initial qualitative findings, therefore the sample number of the respondents is subject to Deakin University Human Research Ethics Committee approval (2014-075). To emphasize, since this quantitative survey is a ‘follow-up phase’ (Creswell & Plano Clark, 2011) and presents a different dimension of ‘way of seeing’ the landscape from the eyes of the Valley’s community (Taylor, 2017; Wylie, 2007), therefore this quantitative survey is sufficient to resemble the collective view points of the Kinta Valley residents that further enriched the findings of the study.

Through exploratory sequential design, key propositions established in this questionnaire enabled an assessment of the landscape by the residents. The selection of the respondents varied in terms of background, including the local authority staff, government departments, private sector offices, schools, and the village development and security committee (JKKK- Jawatankuasa Kemajuan dan Keselamatan Kampung) relevant to Kinta Valley. Given this sampling scope and approach, this quantitative survey was able to elicit a variety of perspectives of respondents, thus comprehensively aiding in the evaluation and documentation of the study findings.

Four sections were established in this questionnaire. With various cultural backgrounds of these respondents, and their difficulties in articulating and visualizing the landscape, images together with descriptions were included by the researcher in the questionnaire to trigger residents’ interest and understanding in the questionnaire execution.

RESULTS AND DISCUSSIONS

In discussing the results of this questionnaire survey, the frequency data based upon resident preferences and perceptions towards the Kinta Valley post-industrial mining landscape will be the key data highlighted for the study findings. In the initial stage as well as to encourage engagement, general questions in Part I basically sought information about respondents’ backgrounds. Some 57% of the respondents were female and 43% were male covering 3 precincts in Kinta Valley. These respondents varied in ethnic
race with the majority being Malay (76%), followed by Chinese (17%) and Indians (5%). Variations occurred in age ranges; the majority of respondents were between 30-39 years (40% of the sample population), followed by 27% population between 50-59 years, 18% between 40-49 years, and 15% between 20-29 years old.

**The Uniqueness of Kinta Valley through the Eyes of the Residents**

Given the 5 structured answers that sought to obtain respondents' interpretations to Question 15, respondents were asked about their perceptions towards the characteristics and values of Kinta Valley based upon their personal experiences and knowledge. It is very important to establish this platform so to build an initial understanding about respondents' sensitivity and awareness that may influence their perceptions towards their environment. Provided with multiple choice answers, the respondents were allowed to express selected preferences from their perspective. Having regard to: (i) natural environment; (ii) sociocultural; (iii) built heritage (intangible) (iv) post-industrial mining landscape of past mining legacy; and (v) intangible heritage; surprisingly, a majority of the respondents (39 out of 60 participants being equivalent to 27% of respondents) acknowledged that the post-industrial mining landscape is one of the most important attributes that distinguishes the Valley's uniqueness, and gives rise to its significant character. Apart from having the vast majority of the sample respondent population that have resided in Kinta Valley for more than 20 years, these residents were very aware that Kinta Valley contained a large expanse of former mining land and that such was rare in Malaysia. Furthermore, some 25% of the respondents' answers concluded that the Valley’s natural environment was another important attribute. This percentage was greater than those who concluded that the built heritage (tangible items) (35 out of 60 participants; equivalent to 24% of respondent’s) concluded that the extant built heritage characterized the Valley's image today. Regardless of being the two bottom preferences, sociocultural attributes together with intangible heritage attributes were also selected by the respondents. In conclusion, the 3 main attributes-- the former mining landscape, natural environment and built heritage-- were recognized by the residents as being the key characteristics that best described the Kinta Valley's image today (see Figure 2).
Residents’ Preferences of Landscapes

Drawing upon residents’ familiarity with the Kinta Valley landscape, the residents were asked whether they had any special places that they preferred or regularly visited. Some 58% respondents responded to this question. Familiarity with the Valley landscape can cause attachment and a sense of cosiness to the residents. Of the participants who responded to this Question 16, they were thereupon asked to further state their special landscape selections. Among all places, the Clearwater Century Golf Resort and the Gunung Lang Recreational Park received the highest attention, being the special landscapes selected by residents probably due to their scenic qualities and landscape settings. Other than these two places, the T.T.5 bucket tin dredge in Tanjung Tualang, the former tin mining landscape around the Batu Gajah areas (including areas surrounding the Batu Gajah Keretapi Tanah Melayu Berhad- KTMB), the Kinta Nature Park that stretches from Batu Gajah to Kampar as well as the Banjaran Hot Spring Retreat in Tambun all were identified as special landscapes to the respondents.
Astonishment with the Scenic Quality of the Kinta Valley Former Mining Landscape

With these thoughts in mind, the respondents were further asked to give reasons and define the characteristics of their special landscape selection. With structured answers, all respondents were allowed to select more than one reason so to enable them to better justify the ‘quality’ of their special landscape preferences. As observed in Figure 4, of 12 aspects, aesthetic views emerged as the highest (20%) in respondents' answers as being the most important quality that influenced respondents' preferences towards their special landscape. This aspect clearly stimulated respondents' appreciation towards the present Kinta Valley post-industrial mining landscape, as reflected in their majority selection of their special landscape (as indicated in section 4.2 above). Obviously, the post-industrial mining landscape, and its extant fabric (including the novel ecosystem, tailings, mining ponds,
etc.), fascinated respondents to acknowledge beauty in the former tin mining places together with scenic views manifest in the industrial aesthetic quality arising from tin mining industrialization.

![Figure 4. Aspects that Attracted Respondents to their Special Landscape](source: Author)

In the respondent’s selection, other than aesthetic views, recreation (18%); natural environment (16%); historic (13%); and culture (7%) were the top five important aspects that influenced residents' preferences towards their special landscape selection. This response was notwithstanding rural aspects, accessibility, quiet environments, growing up and familiarity together with amenities and people being what one would assume to be the essential aspects that could influence respondents' preferences toward their special landscape selection. Thus, Question 19 sought to counter check findings in Question 15 and to encapsulate respondents' perceptions to significant aspects that bestow the Valley’s distinct character. While the special landscape question sought to trigger and understand respondents' interests and values, this questioning also sought to enhance the residents' awareness towards the industrial landscape fabric that is still intact in Kinta Valley today. Hence, the results demonstrated a correlation in findings as previously established in Section 4.1, with 36% of the respondents concluding that it was the overall significant character that best described the Kinta Valley landscape today (see Figure 5).
Recognizing the Post-Industrial Mining Landscape as the Key Identity of the Kinta Valley

Following respondents’ awareness towards the present Valley landscape, aided by photographic images, the respondents were further asked to offer opinions about whether the present Kinta Valley can be described as possessing a post-industrial mining landscape identity. Guided by photographic images attached in the questionnaire sheet, significant images of important mining features that are currently extant in the Kinta Valley were illustrated. These features include: the T.T.5 tin dredge in Tanjung Tualang; old Kinta Valley towns and their fabric; examples of Tronoh and Kampar old towns; the Malim Nawar permanent electric power station; active tin mining activity in Kota Baharu; an example of an old miner’s settlement (composing of miner’s village, cemeteries and various old religious places including a Muslim mosque, a Chinese temple, a Sikh temple, an Indian temple, a Christian church and some limestone hill temples); the canalisation of the Kinta River; and images depicting ‘before and after’ scenarios emphasizing the development of mining dams and pipelines in Gopeng (hydraulic mining) together with the massive old tin mining surface activities that significantly crafted today’s post-mining landscape scene (see Figure 6-8). Notably out of 60 participants, 98% of them agreed that the present Kinta Valley post-industrial mining landscape, together with its mining features, comprised the identity of the Valley.
Figure 6. Extant Mining Fabric and its Associated Features in Kinta Valley
Source: Photograph by Author in 2013
Mining Cultural Landscape as Potential Heritage

Figure 7. Extant Mining Fabric and its Associated Features in Kinta Valley
Source: Photograph by Author in 2013

Photo 9: Old Religious Places Established in Kinta Valley.
Source: Photograph by author in 2013; image of temple in Gurung Cherok reproduced from Google image.

Photo 10: The canalization of the Kinta River involving 61 km from Ipoh to Kuala Chenderiang
Source: Google Earth 2014; Image on the right-photograph by author in 2013.
Historic Scene versus Present Landscape

Photo 11: Mining Pipeline in Gopeng, installed in year 1908 by the Gopeng Tin Mining Co.Ltd. 
Source: Reproduced from Palmer and Joll 2011 (left image); Image on the right-photograph by author in 2013.

Photo 12: Ulu Geroh dam, built in early 1900s as main water source for tin mining production in Gopeng.
Source: Old image courtesy image by Tan Sri Hew Sec Tong (Left image); 
Image on the right-photograph by author in 2013.

Photo 13: Historical views highlighting past massive tin mining activities that resulted to significant visual impact that able to manifest by today generation.
Source: Reproduced old images from Khoo and Lubis 2015; Current landscape images from the Google image

Figure 8. Extant Mining Fabric and its Associated Features in Kinta Valley
Source: Author
Perceived Landscape Values

Due to the reason that the main proposition embodied in this quantitative survey is based upon qualitative findings, these respondents were asked to elucidate their judgements about landscape values informed by colour photographic images that were attached together in the questionnaire sheet. In the questionnaire, 6 key values were highlighted including: historic, scientific, social, aesthetic, spiritual, and educational values. To guide the respondent’s understanding, each value was accompanied with an example to briefly explain its meaning. Through this quantitative survey, interestingly, historical, social, aesthetic, and educational values attracted obtained 100% scores each demonstrating that these 4 values were considered the most outstanding and relevant heritage values that best described the present Kinta Valley landscape through the eyes of the residents (see Figure 9). Surprisingly, aesthetic value was included amongst the important values attracting a 100% score (agreed) with 45% of the respondents strongly agreeing that the present condition of the Kinta Valley landscape is reflective of the Malaysian industrial revolution embodied in its current physical fabric (highlighted in the photographic images). This finding supports results established in sections 4.2 and 4.3, highlighting that the aesthetic quality of the former mining landscape was being recognised as a key attribute of the cultural heritage of the Kinta Valley's character today.

Furthermore, it was also compelling to discover that the respondents perceived that historical values were identified by 73% of the respondents strongly concluding that this value is embodied in the present condition of the Kinta Valley landscape. Supporting to these respondents' judgement, 53% of the respondents strongly agreed that an educational value was present in the current Kinta Valley landscape. As also noted, social value was another important value highlighted by the respondents (with 47% of the participants strongly agreeing) that social values were evident in the Kinta Valley landscape today. On the other hand 2% of the respondents disagreed about the landscape’s scientific value, while 7% of the respondents disagreed about the merits of the spiritual value. However the majority percentage of the respondents agreed with these two values, that consistently acknowledged 6 important values that distinguish the present physical landscape of the Kinta Valley.
Acknowledging the Kinta Valley Post-Industrial Mining Landscape as an Invaluable Heritage to the Perak State

Upon establishing residents' recognition to the landscape, the respondents were further invited to explain on whether the Kinta Valley post-industrial mining landscape could be described as an invaluable heritage to the Perak State. Notably 98% of the sample population have concluded that the present Kinta Valley post-industrial mining landscape comprised heritage to the Perak State (see Figure 10). Particularly, the photographic images attached to the questionnaire sheet (as illustrated in Figure 6-8) also provided a good aid in assisting respondents in forming a judgement on this heritage.

Hence, with this recognition, the respondents were encouraged to articulate the level of heritage significance that best described the Kinta Valley at the present time. Using a paragraph written by Jones (1925, pp. 167-169), this text was expected to enhance respondents' knowledge and assist them in making a personal judgement about the level of significance that best described Kinta Valley at the present time. This text was:
Perak, for a long period of years, has remained the chief tin-producing state in British Malaya, and in 1924 it produced 65.8% of the total output of the country, or over 20% of the world’s total output. Kinta district, in the centre of the State, is the chief producing centre, and it is estimated that from this district, which is only about 36 miles long and 25 miles wide at its widest part, about 50% of British Malaya’s output is derived. The extraordinary richness of this small area will be realised from the fact that it produces as much as Siam [Thailand], China, and Nigeria put together; that it produces over three times as much as the whole of Nigeria, and about three-fourths the total production of Bolivia; and that it (Kinta Valley) produces over 15% of the world’s total production (Jones, 1925, pp. 167-169).

Given these points, the majority of the respondents acknowledged that the present Kinta Valley post-industrial mining landscape possessed 3 levels of significance: (i) 97% of the respondents agreed that the Kinta Valley held a local/district level of heritage significance; (ii) 95% of the respondents agreed that the Kinta Valley held a Perak State level of heritage significance; and (iii) 82% of the respondents agreed that Kinta Valley demonstrated a national level of heritage significance (see Figure 10). In essence the Jones' (1925) text enabled an understanding of the national level of heritage significance to be constructed in their minds to inform respondents' judgements. Therefore, the major findings of this section has enabled a respondent-informed judgement about Kinta Valley heritage and its level of significance from a resident’s perspective to be notably established.
CONCLUSION

According to the perception of the residents who settled and work within the Valley post-industrial mining landscape today, the landscape of Kinta Valley has an undeniable and distinct characteristic as well as unique in narrating an important phase and process in Peninsular Malaysia’s history and culture of the massive industrialization that impacted upon this land. Henceforth this industrial footprint, evidenced in the past tin mining legacy, results in a unique visual landscape of the Kinta Valley today. Manifest to this conclusion, a majority of the Valley’s residents acknowledged that the extant post-industrial mining landscape (physical landscape) contributes to the cultural and social uniqueness of this Valley. Other than the landscape, important fabric which include the natural environment, sociocultural, and built heritage (including the 1880s old townships, settlements and villages) were established as important tangible items that enveloped and characterised the present industrial image and narrative of this Valley. Notably, not just constructing the tangible material form and evidence, there are remarkable intangible values which include oral histories, beliefs, and customs further characterising the mental imagery, memories and rituals of and in this Valley landscape today. With regard to the abovementioned findings, further protection action should be taken to ensure that this heritage landscape receives the proper recognition and acknowledgement it rightly deserves as comparable to the residents' aspirations.

ACKNOWLEDGEMENT

The completion of this paper would not have been possible without the contribution and assistance of all related parties especially Professor David S. Jones. This study is a part of my previous PhD work at Deakin University, Australia. To SIMPORA XI 2020 and especially to Associate Professor Dr Mohd Sabrizaa Abd Rashid, thank you for giving me the opportunity to share thoughts and ideas on cultural landscape, and specifically the industrial mining landscape as part of the Malaysian cultural heritage. I personally hope that the idea shared in this paper will further, who settled and work within the Valley post-industrial mining landscape today, enrich heritage interpretation especially within the Malay Archipelago.
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Mining Cultural Landscape as Potential Heritage