The Darker the Spectrum, the Better Image? – Relationship between visitors-based dark tourism spectrum rating of Museum Fatahillah as a heritage site and its image as a tourist attraction

Teguh Amor Patria1*, Wendy Puisetya1, and Wendy Purnama Tarigan1

1Tourism Department, Faculty of Digital Communication and Hotel and Tourism, Bina Nusantara University, Jakarta, Indonesia

Abstract. This paper examines the relationship between the visitors-based dark tourism spectrum and the image of Museum Fatahillah as a tourist attraction in Jakarta. Stone's six dark tourism spectra were used to rate the level of darkness of the museum, which was transformed into Likert's six rating scale system ranging from The Lightest, Lighter, Light, Dark, Darker, and the Darkest. Subsequently, the rating result was examined to determine the museum's image. A total of 120 respondents participated in the survey, comprising actual visitors of Museum Fatahillah in June 2021. A simple linear regression was used to see the relationship between the two variables. Findings show there is a relationship between visitors-based dark tourism spectrum rating and the positive image of Museum Fatahillah as a tourist attraction. Specifically, the darker a heritage site is, the better image it is as a tourist attraction. Such a finding contributes to the knowledge of heritage tourism studies, specifically dark tourism, where little is known about the relationship between the two variables, particularly with its application in Indonesia.

1 Background

This study aims to apply Stone’s dark tourism spectrum to a historic-cum-historical museum, namely Museum Fatahillah in Jakarta, Indonesia. Stone’s dark tourism spectrum was developed to rate the level of “darkness” of a tourist site, attraction, and exhibition [1]. Stone’s definition of a “dark” place is a real place (rather than imaginary) where a dark event occurred in the past and currently attracts people to visit. Stone’s dark tourism spectrum comprises six levels of spectrum, from the Lightest, Lighter, Light, Dark, Darker, to the Darkest. The sites covered within the dark tourism context range from ‘sites associated with death and suffering’ through ‘sites of death and suffering’. This study sought an answer to visitors-based dark tourism spectrum rating on Museum Fatahillah, one of Jakarta’s well-known heritage buildings and tourist attractions.

Previous studies on dark tourism – particularly during the past 10 years – have been revolving around the development of and the concepts of dark tourism, as well as around tourists and host communities in the destinations where dark tourism grows. Because dark tourism is relatively a new type of tourism industry, it was only academically explored in the mid-1990s (e.g. Wight, 2006) [2]. Throughout its own journey as a specific, growing type of tourism, some scholars made an attempt to define dark tourism, such as “… visitation to places where tragedies or historically noteworthy death has occurred and that continue to impact our lives” [3]. Meanwhile, Stone defined dark tourism as “… the act of travel to sites associated with death, suffering and the seemingly macabre” [1]. Another definition was proposed by Seaton (1996) [4], who stated “… dark tourism is essentially a behavioural phenomenon, defined by tourists’ motives as opposed to a particular characteristic of a site or attraction”. The term dark tourism is used for all forms of tourism activities related to death, suffering, cruelty, tragedy, or crime, such as visits to former battlefields, cemeteries, museums, former residences of someone with stories or events that have happened in the past and many others [5].

In relation to what academics studied regarding dark tourism, Stone came up with a concept of dark tourism spectrum. Stone’s concept classifies the intensity of the darkness of a place with a dark past, ranging from the Lightest to the Darkest, as Lv, et al. [6] said, “Dark-light spectrum was used to express the depth of dark experience in dark tourism”. For example, the lightest class means that a place has the lightest level of incident, such as prisons where the lightest level of punishment occurred. On contrary, the darkest class means that a place has the heaviest level of incident, such as places where genocides or natural disasters that took innumerable lives occurred. In between these two spectrums, there are four levels of darkness.

This study poses a question about how Stone’s dark spectrum applies to Museum Fatahillah in Jakarta.

* Corresponding author: tpatria@binus.edu
Located in the Old Town of Jakarta, the building was built in 1620 as a townhall building for the Dutch East Indies trading company, also known as VOC, in the region now known as Indonesia. During its long standing, the building has witnessed a number of events, including dark ones such as the Batavian Chinese massacre in 1740 by the VOC. Aside from that, the building and its compound also were the sites where VOC’s prisoners were held, mainly in the dungeons, and where convicts were executed on the townhall square. After Indonesia proclaimed its independence in 1945, the building was turned into a historical museum of Jakarta and has had the same function until today. Today, Museum Fatahillah is one of Jakarta’s protected old buildings and prominent heritage sites in the area. It houses collections related to the history of Jakarta from prehistoric era to the present, as well as furniture from the Dutch colonial era in Indonesia. The Museum Fatahillah itself consists of several buildings that are open to visitors, such as two main wing buildings in the east and west, office spaces, court rooms, and a basement that was once used as a prison.

For some people, the building and the museum also have been associated with dark events. Based on the historical stories that have occurred on the site, supernatural stories have been developed and circulated among the communities who live in both the surrounding and wider areas. Such stories include screams, voices asking for help in dungeons, and many other stories. Even though many of the stories have dark connotations, they arouse curiosity for some tourists to visit museum, which eventually lead to the development of dark tourism activities at the museum [7]. With its reputations as both a tourist attraction and a historic or heritage building, the dark aspect of Museum Fatahillah has attracted even more visitors who seek a different experience with the dark aspect of the museum.

This study is expected to fill the gap in the application of dark tourism spectrum to a museum in Indonesia and its relationship with the building of the image of the museum. By far, many studies about dark tourism have been about exploration and development of dark tourism concepts and models (e.g. Stone & Sharpley [8], Lennon [9], Light [10]). In the progress, many studies were conducted in recent years overseas (e.g. Boateng, et al. [11], Wang & Luo [12], Sarkar, et al., [13]). In Indonesia, the themes of study that the authors found related to the topic included ‘motivation and potential for dark tourism in Indonesia’ [14], and ‘the process of destination branding in shaping the image of Indonesian museum tourist destinations’ [15]. Other studies examined how dark tourism concept applies in some parts of Indonesia (e.g. Munif, 2020 [14], Carruthers, et al. [16], Prodan [17]). Thus, until now, little is found regarding studies that discuss and examine the relationship between dark tourism and image of a tourist attraction, especially Museum Fatahillah in Jakarta. Therefore, the authors attempted to investigate the influence of the dark tourism spectrum on the image of Museum Fatahillah in Jakarta as a tourist attraction. Findings of this study also is expected to contribute to the knowledge about dark tourism and heritage tourism. Specific focus in this study emphasizes on examination of the relationship between Stone’s dark tourism spectrum and the image of Museum Fatahillah as a tourist attraction.

Another question that may be of interest in this study is if any visitors’ rating of dark tourism spectrum leads to a particular image of the museum. For example, does the ‘Lightest’ or ‘Darkest’ mean ‘worst’ or ‘best’ in visitors’ perception?

2 Conceptual Review

2.1 Dark Tourism

Dark tourism is an educational tour that makes various kinds of events related to destructions, deaths, and all forms of tragic life that have occurred in the past as a tourist attraction. In dark tourism, victims’ testimonies and the location of the incidents are authentic things that draw visitors’ attention. Visitors’ direct experience when seeing and coming to visit dark tourism sites will provide a strong emotional one for most of them, because it can be observed and felt to create a sense of empathy and life lessons in the future [18]. Seaton (1996) argues that dark tourism is a behavioral phenomenon based on the motivation of the tourists’ as the demand side rather than that of the tourist attractions as on the supply side. Meanwhile, Damanik (2012) [19] explains that dark tourism is a trip to sites that have tragedies, stories, or history about tragedies, heartbreaking, and tragic human deaths [20]. The dark tourism activities are carried out to solidify visitors’ memories of the events and victims. Thus, it can be concluded that dark tourism is a trip made by a tourist based on a motivation and a desire to visit historical places or sites where events or stories related to a dark past occurred. Dark tourism also aims to strengthen memories of the events that have happened, to prove stories that have been developed and circulated by the community at large, or just to provide an experience for visitors that is different from other travel trips.

However, the scholar who probably has studied most of the topic of dark tourism is Stone. He initiated with a typology of death and macabre related to tourist sites, attractions, and exhibitions [21]. Other scholars followed with conceptual perspectives on dark tourism, such as Raine who further studied dark tourism spectrum [22], Biran with his new perspectives on dark tourism [23], Heuermann with his authenticity perspectives [24], Ashworth with his view of shifting perspectives on dark tourism [25], Lennon with his concept of dark tourism [9], and Lacamenti with provocation and related subjective experiences along the dark tourism spectrum [26]. Thus, it can be said that this study is based on Stone’s original concept of dark tourism spectrum and its application.

The measurement and assessment of how dark a site is can be measured by the following indicators [1]:

- **Political Influence and Ideology**, which is used to assess a historic site based on whether it or the accompanying story is affected by political influences or ideology of a group of people or not
- **Education Orientation**, which is used to assess a tourist attraction based more on the educational or knowledge aspect of the museum.
aspect received by visitors than on the entertainment one
- History Centric, which is used to assess a tourist attraction based on its dark past or aspect
- Perceived Authentic Product Interpretation, which is used to assess a tourist attraction based on its collection of goods from the past that relates to a dark past and are still authentic
- Location Authenticity, which is used to assess a location of a tourist attraction based on its authenticity and unchanged
- Shorter Time Scale to The Event, which is used to assess the period between the historical event related to a tourist attraction and the present time
- Supplies are Provided with Purpose, which is used to assess all forms of historical relics, such as goods, stories, historical sites, places where tragedies occurred, and other aspects that are related to the tourist attraction and can meet visitors’ intention in visiting a museum
- Tourism Infrastructure, which is used to assess the availability of tourism infrastructures and facilities to meet visitors’ need.

These indicators became the basis for the development of statements under the dark tourism spectrum variable in the questionnaire.

2.2 Image of Tourist Attraction

The image of a tourist attraction is important because it plays a role in the decision-making process for potential tourists to visit the attraction [15]. The image of a tourist attraction is defined as a person's representation of knowledge or beliefs, feelings, and perceptions about the overall tourist attraction. The image of a tourist attraction plays two important roles in tourist behavior, including:

- To influence tourists’ decision-making process in choosing a destination or tourist attraction, and
- To decide tourists’ visit intention, as well as how they gain the experiences, tourist satisfaction, decision on revisit intention, and recommend a tourist attraction to the others.

Qu, et al in Masarioh [20] revealed that the image of a tourist attraction can be assessed based on:

- Cognitive Image, which consists of the quality of the experience gained by tourists. This image is generated through tourists’ interactions with tourist attractions in a tourist destination, as well as the environment and the cultural traditions contained in the tourist destination. Cognitive Image is divided into several parts, including attractions, accessibility, amenities, and ancillary service.
- Unique Image, which is the distinctive image of a tourist attraction. It comprises the natural environment, the attractiveness of an attraction, and local attractions that exist in the tourist attraction.
- Affective Image, which is an emotional image that reflects one’s feelings towards an object, whether the object is desired or liked. It consists of pleasant, arousing, relaxing, and interesting feelings when one is in a tourist attraction. In this context, it is what the tourists feel about a tourist attraction or destination that tourists that build certain images of the attraction or destination.

3 Method

This study examined the relationship between the dark spectrum level made by visitors of Museum Fatahillah and the image of the museum as a tourist attraction. The six dark spectrum levels developed by Stone was used as a base, which ranges from the Lightest, Lighter, Light, Dark, Darker, to the Darkest.

The study is based on two hypotheses, namely:

H0 : There is no relationship between dark tourism spectrum rating of Museum Fatahillah as a heritage site and its image as a tourist attraction
H1 : There is a relationship between dark tourism spectrum rating of Museum Fatahillah as a heritage site and its image as a tourist attraction

A simple research framework is presented below:

![Fig 1. The research framework.](image)

Thus, due to the goal of the study, which is to examine if there is a relationship between the aforementioned two variables, a simple regression method is deemed appropriate for use in this study.

3.1 Data collection technique

In developing the questionnaire, statements for each variable were developed and used based on the indicators of each variable that are generated by Stone [1]. A Likert system was used to scale each indicator of the two variables. Specially for variable X, the dark tourism spectrum level, the Likert scale range was adjusted to match the number of the dark spectrum levels. They range from 1 for the Lightest, 2 for Lighter, 3 for Light, 4 for Dark, 5 for Darker, and 6 for the Darkest. In other words, the larger scale for each indicator means the darker the tourist attraction is according to the respondents. As for Variable Y, image of a tourist destination, the scale ranges from 1 to 5, where respondents should indicate their attitude toward each indicator (1 for Highly Disagree, 2 for Disagree, 3 for Neutral, 4 for Agree, and 5 for Highly Agree). The following Table 1 shows the variables and indicators of dark tourism spectrum and image of tourist attraction:
Table 1. Variables and indicators of Dark Tourism Spectrum and Image of Tourist Attraction.

<table>
<thead>
<tr>
<th>Dark Spectrum</th>
<th>Political Influence and Ideology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Education Orientation</td>
</tr>
<tr>
<td></td>
<td>History Centric</td>
</tr>
<tr>
<td></td>
<td>Perceived Authentic Product</td>
</tr>
<tr>
<td></td>
<td>Interpretation</td>
</tr>
<tr>
<td></td>
<td>Location Authenticity</td>
</tr>
<tr>
<td></td>
<td>Shorter Time Scale to the Event</td>
</tr>
<tr>
<td></td>
<td>Supplies are Provided with Purpose</td>
</tr>
<tr>
<td></td>
<td>Tourism Infrastructure</td>
</tr>
<tr>
<td>Image of Tourist Attraction</td>
<td>Cognitive Image</td>
</tr>
<tr>
<td></td>
<td>Unique Image</td>
</tr>
<tr>
<td></td>
<td>Affective Image</td>
</tr>
</tbody>
</table>

3.3 Population and sampling

Due to the Covid-19 pandemic, there was no fixed data available regarding the number of visitors to Museum Fatahillah since early 2020 when lockdowns and restrictions were implemented by the Indonesian government. Thus, the authors based the study population on an indefinite number to determine the number of study sample due to the unknown number of visitors in the museum. Using the Lemeshow formula below, a number of 96 respondents were needed as respondents.

\[
x^2 = \frac{z^2 \cdot np(1-p)}{d^2}
\]

Description:
- \(n\) = Number of samples
- \(z\) = skor 95% = 1.96
- \(p\) = maximum estimate = 0.5
- \(d\) = alpha (0.10) or error sampling = 10%

The questionnaire distribution utilized Google Forms and was done between June 17 and 30, 2022.

3.4 Data processing technique

The data obtained were then analyzed using SPSS. Several procedural tests were done, including validity, reliability, classic assumption, simple linear regression analysis, correlation coefficient, determinant coefficient, F-test, and T-test.

4 Results and Discussion

4.1 Respondent characteristic

The number of actual respondents who participated in this study is 120. Based on the data collected, the profile of the 120 respondents in this study are as presented in the following Table 2:

Table 2. Respondents’ profile.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male (53.33%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female (46.67%)</td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 18 years old (10.83%)</td>
</tr>
</tbody>
</table>

Results of the Dark Tourism Spectrum levels are presented in the following Table 3. As aforementioned, the Likert scales were adjusted to the number of levels of Dark Tourism Spectrum, namely 1 for the Lightest, 2 Lighter, 3 Light, 4 Dark, 5 Darker, and 6 the Darkest. Summary of the results are presented in the following Table 3, generating scales between Darker and the Darkest:

Table 3. Dark tourism spectrum level.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Statement</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>St Dev</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political influence</td>
<td>Museum Fatahillah building received strong influences and ideology</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>5.125</td>
<td>0.59</td>
<td>Darker</td>
</tr>
<tr>
<td>and ideology</td>
<td>from the Dutch colonial government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education oriented</td>
<td>I think the dark history of Museum Fatahillah today is more educational</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>5.142</td>
<td>1</td>
<td>Darker</td>
</tr>
<tr>
<td></td>
<td>than entertaining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on history</td>
<td>I think Museum Fatahillah today has a role more as a protected heritage</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>4.983</td>
<td>0.9</td>
<td>Darker</td>
</tr>
<tr>
<td></td>
<td>building than</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I think Museum Fatahillah and its collection today are authentic (unchanged from its early foundation)

I think the location of Museum Fatahillah today is original (has not been relocated since its early foundation)

I think the dark past of Museum Fatahillah occurred not long ago

I think Museum Fatahillah and its collection are not specifically provided for tourism purpose

I think the infrastructure and facilities in the Museum Fatahillah support my visit as a tourist

I think Museum Fatahillah is easy to reach from where I live

I think there are supportin

Results of the tourist attraction image are as presented in the following Table 4:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Statement</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>St Dev</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive image</td>
<td>I think the collection in Museum Fatahillah has good quality</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>4.28</td>
<td>0.68</td>
<td>Highly Agree</td>
</tr>
<tr>
<td></td>
<td>I think Museum Fatahillah is easy to reach from where I live</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>3.73</td>
<td>1.21</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>I think there are supportin</td>
<td>120</td>
<td>1</td>
<td>6</td>
<td>4.13</td>
<td>0.66</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Table 4. Tourist attraction image.

4.2 Research instrument test

The data obtained were consequently processed using SPSS and generated output as follows:

4.2.1 Validity test

Result shows that r-values for X and Y variables were 0.267 and 0.367 respectively, and these r-values > r table for df value (120-2 = 118, with a significant level of 0.05), which is 0.1793. Thus, the research instrument was considered valid.

4.2.2 Reliability Test

Result shows that rii values for X and Y variables were 0.2948 and 0.2207 respectively, and these rii values > r table, which is 0.1823. Thus, both X and Y variables were considered reliable.
4.2.3 Classic Assumption Test

- Normality Test
  The normality test in this study was carried out using the Kolmogorov-Smirnov method, generating a value of 0.200* that is greater than 0.05. Thus, the data in this study can be considered as to be normally distributed.

- Linearity Test
  The linearity test value for this study is 0.309, which is greater than 0.05. Thus, the two variables in this study were considered to be linearly related.

- Multicollinearity Test
  The multicollinearity test was carried out with a tolerance value of 1 and a VIF value of 1.000. This means there were no symptoms of multicollinearity.

4.2.4 Hypothesis Test

- Simple Linear Regression
  The following Table 5 shows the results of simple regression coefficient:

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient s Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.13</td>
<td>1</td>
<td>1</td>
<td>.9</td>
<td>4.96</td>
<td>.00</td>
</tr>
<tr>
<td>x</td>
<td>.373</td>
<td>.555</td>
<td>.724</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  The results of simple linear regression in this study are:

  \[ Y = 10.131 + (0.373) X \]  

  This means that every time there is an increase of one unit in the X (Dark Tourism Spectrum), it means there is an increase in the value of 0.373 for the image of the Museum Fatahillah as a tourist attraction.

- T-test
  If the t-test is greater than t-table, then H0 is rejected and H1 is accepted. On the contrary, if the t-test is smaller than t-table, then H0 is accepted and H1 is rejected. Results show that t-test value is 7.244, with a t-table value (0.67657) < t-test (7.244) with a Sig value < 0.05. Thus, it can be concluded that H0 is rejected and H1 is accepted.

- Deviation from Linearity
  The deviation from linearity test was carried out using a tolerance value of 1 and a VIF value of 1.000. This means there were no symptoms of linearity.

- Coefficient of Determination (R-square)
  In this study, the coefficient of determination (R-square) test was also carried out to be able to see the effect of the X variable (dark tourism spectrum) on the Y variable (the image of the Fatahillah Museum as a tourist attraction).

  Based on the results of the tests that have been carried out, the spectrum of dark tourism has an effect of 30.8% on the image of the Fatahillah Museum and 69.2% is influenced by other variables.

4.3 Discussion

The hypothesis test showed that there is a relationship between dark tourism spectrum rating made by the respondents and the image of Museum Fatahillah as a tourist attraction. In other words, the generally Darker level of Museum Fatahillah in respondents’ perception relates to the generally well perceived Museum Fatahillah. This finding suggests and answers to the question whether the darker the spectrum is the better image the site is.

Based on respondents’ rating of eight indicators in Variable X, six of which were rated Darker, one Darkest, and one Dark, it can be suggested that the respondents perceive Museum Fatahillah as a dark site. Table 3. shows that the highest average value lies on the dimensions of the authentic location of Museum Fatahillah, which still occupies the same location and structure as they were initially founded in 1620. The authenticity of the location adds to the impression of how dark the atmosphere of Museum Fatahillah is due to its location right at the original location of the dark incidents. Meanwhile, the temporal gap between now and the dark event is the dimension with the lowest average value. The long gap between the present time and the actual events has reduced respondents’ emotional attachment to the events. In
summary, the spectrum of dark tourism for variable X is ‘Darker’.

As for the image of tourist attraction, the lowest average value lies in the Cognitive Image dimension, particularly regarding the collection contained in Museum Fatahillah, the accessibility to and from the museum, supporting facilities around the museum, such as hotels and restaurants, and the the programs held to attract visitors. The condition of the collection in the Fatahillah Museum is considered to be in an authentic and sound condition. Because Museum Fatahillah is one of the preferred tourist attractions in Jakarta, it is not surprising that various public transportations operate around the Fatahillah Museum, making it easier for visitors to access the museum. Furthermore, the areas surrounding the museum are abound with a variety of restaurants with varying prices and qualities.

As from the Cognitive Image dimension, a program is offered to a diverse range of visitors. One example is a free bus called Bus Jakarta Explore for visitors who want to ride the bus for free to a various travel routes, including one that stops enroute the old town of Jakarta and the museum.

On the Unique Image dimension, the highest average value lies on the uniqueness of Museum Fatahillah as a place. This also means that Museum Fatahillah is considered as a rare place that is different from other places in Jakarta in terms of its historical value.

Finally, on the Affective Image dimension, respondents consider Museum Fatahillah as a pleasant tourist attraction. This may be due to the dark history aspect behind the construction and the history of the museum building. The ‘pleasant’ aspect here actually should be referred more to the opportunity to learn about the museum, the museum building to the visitors.

Findings also show that with an increase in dark tourism activities, there will be an increase of 10.131 constant value in the image of Museum Fatahillah as a tourist attraction by 0.373. Furthermore, the generally darker level of spectrum from variable X influences positively the image of Museum Fatahillah as a tourist attraction. However, it is only 30.8% of the dark spectrum level that affects the positive image of Museum Fatahillah.

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