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8th AMER International Conference on Quality of Life
Mahkota Hotel Melaka, Malacca, Malaysia, 18-19 Mar 2020

E-B Environment - Behaviour Proceedings Journal

e-IPH e-International Publishing House Ltd., United Kingdom

Integrating the Typographic Landscape in Creating Interactive Spaces for a Holistic Learning Environment

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Abstract
This paper aims to identify the importance of the ideas on integrating Typographic Landscape in a campus environment. In creating interactive spaces that can create a holistic learning environment, an artistic approach has been developed. The design proposed is an installation of functional three-dimensional gigantic letters that will become a bench for students' informal outdoor activities as part of sustainable initiatives that will beneficial to students in order to give adequate space for a learning environment. A quantitative method using questionnaires survey has been distributed to 160 students. The results of this study will provide a better understanding of the relationships between students' preference and landscape features and aim to enhance the quality of life in a campus environment.

Keywords: Typographic landscape; learning environment; campus environment; interactive space

1.0 Introduction
 Learning environment issues have become an important topic globally that has student's concentration and led to increased attention concerning the quality of campus open spaces that fulfil the students' needs. Students currently, have the right to an inspiring, stimulating, innovative and energizing physical learning environment. Landscape environment plays a vital space that captures the human experience campus. Previous studies prove that the campus environment should design to present students with unplanned opportunities for interaction, encourage a sense of community among the student body, and prepare students for citizenship within society. While artistic design seeks to enhance human understanding through aesthetic values that can increase people's perception. Hence, the effort to integrate landscapes and art is one of the significant factors to unify the relationship between people and campus environments. According to Cubukcu & Niyazoğlu Işıtan (2011), interactive landscape, comfortable seating areas and community gathering areas could invite students to spend more time in the campus environments. The campus environment that is not conducive and attractive will emotionally affect the students. Students will lose the spirit of being in the campus area for a long time because it is

more comfortable to be in the dormitory, or outside the campus area. In his study on students' behaviour, Abu-Ghazzeh (1999) stated that outdoor areas on campuses should not be treated as unused spaces between buildings, special attention should be given to planning development.

Faculty of Art & Design (FSSR 2) is surrounded by green spaces (Fig. 1). These green spaces can be utilized for student use on campus. Moreover, the lack of outdoor facilities for students to relax, meet friends, socialize and engage in informal activities has long been an issue in this faculty. Ignoring this issue will lead to students' discomfort to do activities outside of which may contribute to the waste of electrical energy as they forced to use academic spaces for informal purposes. Therefore, this study explored the campus environment and proposed the featured idea to look at how students' perceptions and responses towards integrating the typographic landscape on the campus.

Fig. 1 FSSR 2 is surrounded with open spaces
Sources: UiTM Perak Website

Typography is an art form that is part of graphic design. Stockl (2005) claimed that graphic design relies primarily on typography. Typography can be applied anywhere. Not only can it be seen on printed material for reading, but also on signage, clothing, products, street signs and as a place's identity. Huerta (1994; 2005) claims that we can see the text on the wall, on the street, we are all texting on a computer, cell phone and while watching television (Huerta 1994; 2005). It is all around us. Kaplan, et al., (1989) in his researches, frequently highlights students' emotional and mental health that influenced by the aesthetic quality of green space. This statement supported by Lougee, et al., (1988) who concludes that humans who are connected to nature are happier and more satisfied with their lives. It turns out that most research recognizes towards a healthy physical environment is associated with many aspects of quality of life. Other arguments mention about the aesthetic quality landscape design that can create campus identity, foster alumni sentimentalism and create a sense of unity within the community. Reaffirming this view, Griffith, (1994) argues that to create a campus that is attractive and to facilitate the quality of life should be the aim of a campus with an emphasis on aesthetic quality design.

2.0 Literature Review

2.1 Typography and landscape

Typography has been everywhere around us for a long time – be it functional typographic signage on street signs, furniture, lifelong layers of hand-painted lettering on shop windows, or the quickly written daily menu on a sandwich board. They give a picture of our environment, not only visual but also reflect cultural heritage. Big-scaled typographic elements are no longer only a readable text, but they are forms with indents-outdents (ascenders-descenders, arms-legs, crossbars etc.), extensions (decoration characteristics, serifs, barbs, beaks, finials, etc.), negative spaces (counters, bowls) (Kane, 2002). And these forms have been designed in different angles, perspectives and scales. These detailed structural features and arranging proportions helps students to internalize typographically.

Today, many contemporary landscape designers have created new ideas by creating a landscape design that integrates green surroundings with abstract images or sculptures. Fig. 2 shows some use different ways to refine the landscape by exploring the letters to capture the essence of a place. Sense of belonging to a place indicated by the name of the place associated with the local culture. (Burke, 2014). Typographic signage within public spaces represents a significant role in a county's visual culture by presenting language letterforms used to communicate a specific message to the public. (Spiekermann, Ginger, 1993). Thus, letters are not linguistically but pictorially use for communication. Abu Ghazzeh (1999) mentioned that student's favourite outdoor spaces depending on the combination of setting, surroundings, landscape, individual experiences and other space contexts. Students look for unique outdoor spaces in line

with appropriate activities that are different from academic routines. It is important to educate students that landscapes need to be beautiful as well as useful (Shelly, 2014).

Fig. 2 Students received basic information about scenery, photography, art and typography.
The sculpture located on the Museumplein in Amsterdam.
(Sources: https:www.iamsterdam.com/en/about-amsterdam/overview/i-amsterdam-letters)

2.2 The needs of Interactive Spaces in Campus Landscape

Students' interactive spaces in institutions are very important nowadays to gather and interact. Ghani et al. (2018) point out that our sense of purpose has a significant impact on the experience of our place, and how and why people use and interact with their space is a result of the uniqueness and sense of meaningful places. In students' life, they cannot escape from interacting with one another. This is where the process of exchanging ideas, perceptions and experiences through healthy debate, discussion and group work take place. It is a useful social interaction where students share new knowledge in an adequate place. To create a positive learning environment, adequate space is needed. Open spaces on campus can have a powerful impact on the interaction among students especially the aesthetic values of a landscape that are due to a range of landscape attributes. It benefits the learning process as they involve all landscape components such as a gazebo, garden table, pergola, flower pot, bench, signage and other plants (Salina, 2015). This is a positive point because besides providing knowledge, it contributes to a healthier life. Previous studies have shown how green space affects student and environmental integration. Maheran et al., (2017) support this statement by saying that outdoor activities positively impact all learning levels as they are influenced by experience and quality of the environment. A supportive and safe environment provides opportunities for students to cope with academic as well as non-academic factors that impact their learning. Harold (2009) points out that one of the aspects that nurture students' learning is defined as a holistic learning environment.

3.0 Methodology

3.1 Case Study

Fig. 3, (a) shows the current view of the selected area. In this research, a study has been conducted by the researcher on the use of typographic landscape on campus landscapes. The proposal for large-scale letters sculpture with the word FSSR serves as a seat for students to perform outdoor activities with friends. Dober (2000) stated that safe, convenient, functional, exhilarating experiences of a campus user who easily move around were the desired qualities for a good landscape order. As typography is part of the graphic design, so researchers have integrated typography and landscapes to see whether students see them as an important element or not, especially the study areas selected in this research area are an art-based faculty.

Virtual reality using 3-D modelling software is a promising method for landscape preference studies (Jie Zhao, 2013). To capture the real visual of Typographic Landscape, the researcher has generated a 3D visual for the alphabets of FSSR using 3D Studio Max Software (a professional 3D computer graphics program for making 3D animations, models, games and images) combined with Adobe Photoshop CC Software (a photo-editing and designing software that is mainly used for correcting image imperfections and for adding effects to photos). The 3D visual shows an installation of gigantic letters in the faculty open spaces, which serves as a seat. This huge proper seating area has been designed using the Arial Regular fonts with the alphabets of FSSR representing Fakulti Seni Lukis & Seni Reka (Fig.3. (b)). The purpose of this 3-D visual is for the use of the respondent's understanding and guidance in answering the questionnaire survey form given. The respondent's experience in 3-D visual could promote a better understanding of a place while offering interaction within elements in the environment provided (Ghani et al., 2018).

(a) (b)

Fig. 3 (a) Current view of the selected area; (b) Proposed design of Typographic landscape
(Source: Author)

3.1 Survey Questionnaires

A 160 questionnaires survey has been distributed among the students of the Faculty of Art and Design (FSSR 2), in order to gather the findings. All students were involved except for the second-semester diploma students as there was no intake during the study being held. A convenient sampling has been used because the respondents were the students who studying in the area selected and their answers are needed to identify the problem. The questionnaires were distributed to respondents during the class. Participation The researcher has requested permission from the class lecturers to distribute the questionnaires survey. Some were distributed among respondents when their presence was on campus to facilitate inquiries. A short brief of information about the research was given before respondents could answer questions to make sure they were clear with the questions provided. Following this, a statistical analysis (SPSS) was carried out to evaluate the data. software. All the data from the survey were then organised into a data file, which contains the data of all respondents. The frequencies of all the variables from the data are shown in section 4. The cross-tabulation between variables was used to look at any relationships between variables.

4.0 Findings

4.1 Demographic

Table 1 shows the data analysis of the respondents' demographic details used in this study. From 160 students who participate in completing the questionnaires, 116 were aged between 18-20 and 43 were the age of 21-23. As described in table 1, 64 were male, and 96 were female respectively and they were in a programmed of Diploma in Graphic and Digital Media (AD111) 89 respondents, Diploma in Photography and Creative Imaging (AD117) 29 respondents and Bachelor Degree if Graphic and Digital Media (AD241) 42 respondents. Among 160 respondents, 118 were the diploma respondents, and 42 were degree respondents

Table 1 Demographic details of respondents

Demographic Profile	Category	Respondent (N=160) Frequency (%)
Age		
	18-20	116 (75.2)
	21-23	43 (26.0)
	Others	1 (0.6)
Gender		
	Male	64 (40)
	Female	96 (60)
Programmed		
	AD111	89 (55.6)
	AD117	29 (18)
	AD241	42 (26.2)

Semester			
	Diploma		
	-	Part1	42 (26.25)
	-	Part 3	24 (15.0)
	-	Part 4	26 (16.25)
	-	Part 5	26 (16.25)
	Degree		
	-	Part 5	22 (13.75)
	-	Part 6	20 (12.5)
Mode			
	Diploma		118 (73.8)
	Degree		42 (26.3)

4.2 Basic Understanding of Topic

In this study, the respondents need to understand the purpose of this research in order to get reliable feedback and responds for valid findings. Lack of understanding of the topic being studied can result in the opinions being given out. The results obtained from the survey showed that 46 (28.75%) of the respondents understood the definition of Typographic Landscape and 84 (52.50%) of the respondents understood it. This means that most respondents know what Typographic Landscape is. 78 (48.75%) respondents understood sustainability. Other than 49 (30.63%) respondents were unsure about it. Concerning the existence of open spaces in the faculty, it was found that 94 (58.75%) respondents were aware of their existence and agreed that the areas were clean 87 (54.38%). The majority agreed that the phenomenon of electric waste in the faculty occurred with 85 (53.13%) respondents agreeing. The effects of poor use of electricity have led to an increase in waste of energy. A total of 73 (45.63%) respondents strongly agreed that it was important to create an outdoor space in the faculty are aimed at preventing students from using too much of the faculty's internal space to cause excessive electricity use.

The results of the data analysis proved that there is a problem of lacking space for students to engage in beneficial activities outside of class. A total of 67 (42.14%) strongly agreed with the same number of respondents choosing to agree. This means that the students in this faculty need a specific space so that they can socialize and integrate well with nature while also solving the problem of wasting electricity. 94 (58.75%) respondents have strongly agreed that typography is an important element. This means that most respondents understood the role of typography in everyday life. The researcher ensures that the integration of space elements (benches and trees) when combined with the elements of art can capture the curiosity of students and provoke their desire to touch, interact, examine, and experience by their own will. All these elements are integrated harmoniously with natural elements and textures.

Table 2 Basic knowledge on Topic

	Basic Knowledge on Topic	Indicator				
		Strongly Agree	**Agree**	**Mixed Feeling**	**Disagree**	**Strongly Disagree**
a	Understand the meaning of TL	46 (28.75%)	84 (52.50%)	29 (18.13%)	1 (0.63%)	0
b	Understand the meaning of sustainability	30 (18.75%)	78 (48.75%)	49 (30.63%)	2 (1.25%)	1 (0.63%)
c	Aware of faculty open spaces	53 (33.13%)	94 (58.75%)	13 (8.13%)	0	0
d	Aware of faculty cleanliness and tidiness	55 (34.38%)	87 (54.38%)	18 (11.25%)	0	0
e	Aware of the misuse of electricity in faculty	46 (28.75%)	85 (53.13%)	25 (15.63%)	4 (2.50%)	0
f	Realized the importance of outdoor space	73 (45.63%)	71 (44.38%)	15 (9.38%)	0	1 (0.63%)
g	Agree of the lacking spaces in faculty	67 (42.14%)	67 (42.14%)	21 (13.21%)	3 (1.89%)	1 (0.63%)
h	Agree that typography is an important element	94 (58.75%)	56 (35.0%)	9 (5.63%)	0	1 (0.63%)

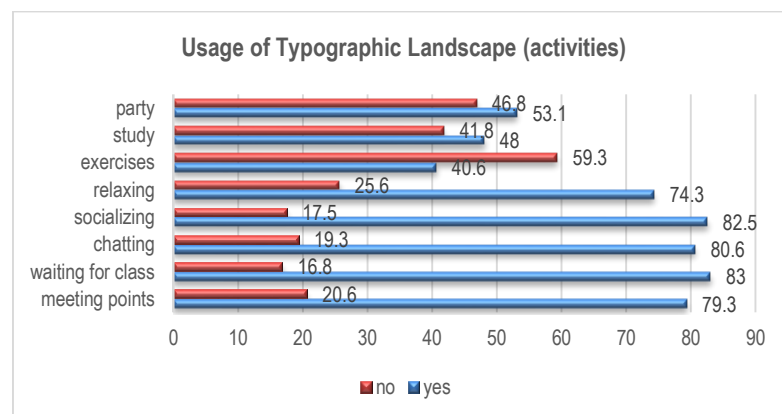### 4.3 Usage of Typographic landscape (Activities)

Fig. 4 Purpose in Choosing Selected Area

In order to gain a good result on how students used the spaces, the questionnaires asked students what are the activities that they will do on the space proposed. By far, Fig. 4 shows the highest percentage is 'waiting for class' (83%). Followed by 'socializing' (82.5%) and 'chatting' (80.6%). It seems that some students declined that this area suitable for doing 'exercises' (59.3%). Same goes to 'party' (46.8%).

4.4   The importance of integrating typography and landscape
Fig. 5 shows the results of the importance of the idea of the typographic landscape. Among the 9 variables, 106 respondents strongly agreed that this idea might be built up the image identity of the faculty. Followed by 'function well' (77) and 'spread the knowledge about typography'. The least frequency is 'lessen the use of energy in faculty' (32). 85 respondents agree on the 'affect pattern of students' activities, while 'engage with nature very well' become the next higher frequency.49 respondents have no ideas on 'lessen the use of energy in faculty'.
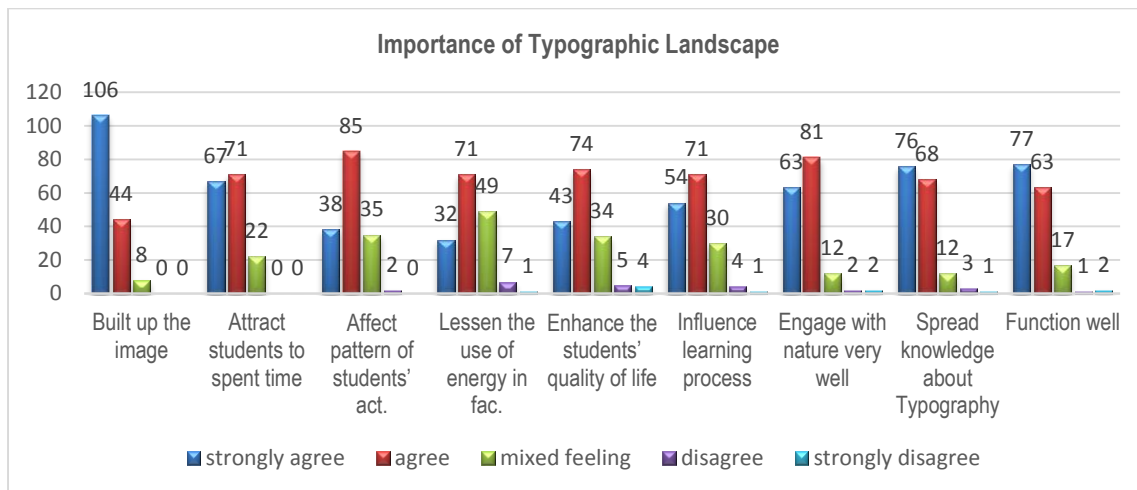

Fig. 5 Importance of Typographic landscape

5.0 Discussion
There were no analyses on demographic or personal characteristic related to see the importance of integrating Typographic landscape. The data showed (Table 1) was intended to give a clear view of the capacity and details of students in the faculty. Within the findings, it shows that most of the students understand with the issue rise up by the researcher. They realized the issue of lacking spaces for outdoor activities on campus and the importance of typography. As they were mostly students from the Graphic and Digital Media department, they have a better knowledge of typography. But, although they understand what typography is all about, some were lack understand the meaning of Typographic Landscape, including the meaning of sustainability. Other than that, most students agree on the importance of outdoor spaces.

It was found that students' expectation of this idea might solve the problem of space. Through the data, it is shown that most of them need space for waiting for the next class. Class transitioning happened all the times in faculty. Speake et al. (2013), stated that social functions of campus are described by students as 'simply for socializing', but more specifically as 'meeting points', waiting for classes' and 'chatting with friends. Students need an outdoor space for informal activities. As they have spent much time in an academic space attending classes routinely, an outdoor space certainly needed for socializing n chatting. Within these activities, students might share new ideas, experiences, and other information that happened on that day.

Students attraction on spaces depends on physical attributes. Payne (2009), points out that many creative and innovative ideas occur in outdoor environments, away from formal classes and discussions. Typographic landscape tends to be the aesthetic element to attract students to spent time on the area. A designed landscape must address the functional and physical requirements of the people it serves, but also engage everyone within the society. "The place, therefore, unites a group of human beings, it is something which gives them a common identity and hence a basis for a fellowship or society (Christian,1985). Results on Figure 4 proved that the integration of Typographic landscape in campus open spaces contributes to the image identity of the faculty. The gigantic letters of FSSR that represent the graphic design elements and become the landmark of the faculty. It also will function very well because students will have a place to sit and run their daily activities. "Where there are benches, people will go," (Buch et al.,2011). Indirectly, students will get to know about typography very well as they learnt that typography is just not a printed matter but can be utilized (as a bench).

6.0 Conclusion and Recommendation
This research reveals that students understand the importance of having adequate space for quality of life. As the university is a place to gain knowledge and experience, it is crucial to provide sufficient interactive space for the holistic learning environment. Typographic landscape tends to be an aesthetic value in the campus environment to play pertinent roles in influencing students to spend their quality

times. The area presents full of messages, of elements that can turn out to be very attractive if we observe them from new, interdisciplinary, suggestive or creative standpoints. Results have proved that students in the Faculty of Art and Design (FSSR 2) building need an interactive space. It identified the importance of integrating Typographic landscape that unified the relationship between people and interactive campus environments. This information may help other campus universities to find new ideas to promote the identity of their campus and solve the problem of lacking spaces for students' communal space. Furthermore, by living in an environmentally conscious community, students can learn to balance their daily lives with the comfort of their surroundings. This is in line with the words of Sir Winston Churchill (1943) that is the principle and belief to this day, "We shape our buildings, and then they shape us". Further research can be conducted on other campuses to identify students' perceptions and preferences from diverse programmes towards the benefits of the typographic landscape in creating holistic campus environment.

Acknowledgement

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