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Perception of street vendors as 'out of place' urban elements at day time and night time

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ABSTRACT

This study attempts to understand the public evaluation towards elements that exist within the temporal dynamics of the cities. In particular the study explores the extent to which street vendors in Jakarta are evaluated as 'out of place' elements at day time and night time. The findings suggest that the users' evaluation of street vendors as 'out of place' change from day time to night time. The change of users' evaluation also varies across different urban places. In particular the study suggests that the presence of street vendors seems to be less unacceptable (out of place) at night time. Such knowledge regarding the dynamic of 'out of place' evaluation becomes important in making the decision about temporary urban elements in the city.

1. Introduction

Urban environments are inhabited by people who live their everyday life, walk about and experience the environments. The image of an urban environment cannot be separated from the way people perceive the environments. The image is highly dependent on the readings of a city's environment by its residents. The "evaluative image of the city" (Nasar, 1998) is created by the residents of a city, who 'read' the existing elements in the city and perceive the environments either positively or negatively. Studying the residents' evaluation of the city may reveal the extent to which they like or dislike the city where they live.

In a study of residents' evaluation of different cities, Nasar (1998) attempted to explore the urban areas that are liked and disliked by the residents. This study revealed that the likeability of an urban environment is related to the presence of certain urban elements. While people tend to like certain elements, there are some elements that tend to be perceived as 'out of place'. The presence of such elements as signscapes and vehicles is often considered as obtrusive to the appearance of a city (Nasar, 1988; Nasar & Hong, 1999).

The existence of 'out of place' elements may be observed in various situation. Some urban elements might be considered as 'out of place' in certain cultural contexts, such as street vendors in many third world cities which tend to be rejected and banished from the cities. The presence of street vendors in the cities is often considered as a nuisance, a source of disorder and an "eyesore", especially from the point of view of the urban elite (Bromley, 2000, p. 11; Cross, 1998, p. 18). Therefore, the policy tends to eliminate their presence from urban environment in order to create better image of the city.

Certain elements in urban environments might be considered as 'out of place' elements for certain reasons. The term 'out of place' is used by Douglas (1966) who explained "dirt as a matter out of place" (p. 44). It refers to a situation where an object or a person breaks certain orders that exist in human environment. However, Douglas (1966) emphasised that 'out of place' is a relative idea, and thus determining a certain object as 'out of place' involves not only the identification of the internal condition of the object but also its relationship with the context where it exists. Douglas' ideas of 'out of place' have offered a theoretical basis in understanding how certain elements tend to be rejected in our urban environments (Yatmo, 2008). Such ideas also instigate further attempts to understand how 'out of place' elements are perceived in everyday practice.

The terms 'out of place' and 'in place' are also used by Cresswell (1996) in relation to the sense of the "proper", whether "something or someone *belongs* in one place and not in another" (p. 1). The concept of 'belongingness' has also been the subject of Social Identity Theory (Dixon & Durrheim, 2000), in which the idea of belongingness is related to place-identity, as "a psychological structure that arises out of individuals' attempts to regulate their environments" (p. 29). That something or someone belongs or not in a place is also much related to the individuals' transactions with place over time. Such process of belongingness to a place enables people to identify the 'discrepancy',

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or what is 'right' and 'wrong' in a setting. This becomes an important argument since "it relates place-identity with how people appropriate and transform everyday environments" (Dixon & Durrheim, 2000, p. 37). Leach (2003) also explained the problem of 'belonging' in physical space, and he believed that it is much derived by the performance. "For if identity is performed, then the space in which that performativity takes place can be seen as a stage. After a certain number of performances, that stage will no longer seem neutral" (Leach, 2003, p. 79). Hence the process of identity formation has taken place over time.

Studies concerning the evaluation of urban scene or urban elements indicate that public perception of 'out of place' elements are related to many aspects. Some areas might be liked or disliked in relation to the characteristics or condition of the elements found in those areas. Studies indicate that naturalness, good maintenance and good organisation become some factors to like an area (Nasar, 1998). The perceived quality of a neighbourhood is related to the upkeep of the area, both at micro and macro levels, including the upkeep of the streets, the presence of abandoned area and trash, the condition of buildings and the signs of vandalisms (Bonaiuto, Aiello, Perugini, Bonnes, & Ercolani, 1999). These suggest that the orderliness and the maintenance condition become important factors for likeability. Thus disorderly and poorly maintained elements that exist in an urban scene tend to be disliked and considered as 'out of place'.

Another issue in judging an element as 'out of place' is related to the extent to which the element fits with or is compatible with its context. This is particularly crucial in cases where an element is added to the existing scene. People possess capabilities to assess that certain objects do not fit into an environment (Sorte, 1973). However, there might be various reasons behind the judgement of fittingness and appropriateness. A study by Wohlwill (1978) explored the judgement of fittingness regarding the addition of man-made structures in natural settings, and found that the role of physical characteristics of elements in determining its fittingness to a context.

The studies above indicate that there are certain factors that may lie behind the judgement of certain urban elements as 'out of place'. The knowledge on the way people perceive 'out of place' elements becomes important, especially because the presence of 'out of place' elements is inevitable in most urban environments. Venturi (1977) called such elements as "honky-tonk elements", and he stated that

> The main justification for honky-tonk elements in architectural order is their very existence. They are what we have. Architects can bemoan or try to ignore them or even try to abolish them, but they will not go away. Or they will not go away for along time, because architects do not have the power to replace them (nor do they know what to replace them with)…banality and mess will still be the context of our new architecture… (p. 42)

An important issue with the assessment of 'out of place' elements is the fact that most of these elements are the elements that are 'added' to urban scene. Moreover, the existence of such elements should also be considered within the dynamic context of time. Some urban elements possess the characteristics as temporary, flexible and moveable elements. Such elements may exist at one time and disappear at another time. Street vendor is an example of such phenomenon, as they may exist on the cities at different times of the day. The presence of such dynamic and flexible elements raises a question on how people perceive such temporary elements through time. Would it be possible that an element that is considered as 'out of place' at one time may be perceived differently at another time?

Nasar (1989) believed that an aesthetic evaluation may change from day to night, although studies concerning the evening experience of urban space are still limited. A study by Parkes and Thrift (1980) found that people perceive different images of an urban area from day to night. There is also a difference in the preference rating of certain urban areas at day time and night time, in which some areas might be favoured at night time, and others are favoured at day time (Hanyu, 1997, 2000).

The present study attempts to expand the knowledge of change of urban experience at different times of the day, by looking into the residents' evaluation of certain elements. This is an important issue in urban planning and design which need to consider the temporal dimension (Worpole, 1998). It becomes important to become aware of the effects of the existence of temporary elements in urban places.

In particular this study assess the extent to which street vendors are evaluated as 'out of place' elements at day time and night time. Issues concerning street vendors and their existence in urban environment have been so far studied mainly from the economic and political fields (Bromley, 2000; Cross, 1998). There exists little empirical evidence on the visual impacts of their existence in urban places. Furthermore, there were no studies looking into their dynamic appearance in the cities at day time and night time. The objective of the study is to explore whether there are any differences in users' evaluation of street vendors as 'out of place' elements at day time and night time.

2. Methods

The study reported here is a part of a larger research which assessed the users' evaluation of street vendors as 'out of place' elements and the relationship with the evaluation of the scene as the contexts where the street vendors exist. The study employed a method commonly applied to preference research, which is basically through eliciting responses from the respondents towards stimulus materials presented to them. This paper only focuses on the analysis of how the evaluation of street vendors as 'out of place' elements changes from day time to night time. In addition, it also explores the relationship between the evaluation of street vendors as 'out of place' elements and the perceived likability and perceived safety of the urban places where the street vendors exist.

2.1. Participants

The participants in this study were recruited among the students from the Faculty of Engineering at the University of Indonesia who volunteered to take part. All the participants were those who have become the users of street vendors in their everyday life. Therefore their opinion could be taken as the point of view of users, although not necessarily representative of all users with different socio-economic and educational background. In total there were 158 students involved, consisting of 88 males and 70 females. The average age of the respondents was 21.2.

2.2. Stimulus materials

During data collection sessions, the participants were presented with a series of photographs illustrating the variety of urban places in Jakarta that contain street vendors, as shown in Fig. 1. All photographs were taken in commercial locations; however, only street vendors that occupy the areas in front of the main building were taken. Therefore the photographs represent a similarity not only in land use contexts but also in spatial relationship between the main buildings and the street vendors.

There were pairs of day time and night time slides of eight urban scenes which created the total of 16 photographs. The photographs were chosen from a pool of photographs of urban places containing street vendors, which were then ranked by nine independent

judges based on the perceived amount of street vendors in each scene. The ranks provided by those judges were used as the basis to select eight pair of photographs to represent a range of street vendors.

The eight pairs of photographs consist of: one pair of photographs with no street vendors at day time and with street vendors at night time (scene E); two pairs of photographs with decreasing rank in number of street vendors from day time to night time (scenes B and G); three pairs of photographs with slightly increasing rank in number of street vendors from day time to night time (scenes D, F and H); two pairs of photographs with largely increasing rank in number of street vendors from day time to night

Fig. 1. Stimulus materials.

Fig. 1. (*continued*).

time (scenes C and I). In addition, there was a test slide put at the beginning of the set, which was used as the exercise for the respondents. In total there were 17 slides presented to the respondents.

The slides were presented randomly so that the same scenes at different times were not presented subsequently. All the photographs were presented to the participants on a white screen using a data projector during the data collection session that was

conducted in a darkened classroom. Each photograph was presented for 3 min, during which period the participants were asked to provide their response in a questionnaire.

2.3. Questionnaire

The questionnaire consisted of 15 items of 7-point semantic differential scales, in which the respondents were presented with pairs of adjectives to respond to the stimulus materials. Included in this questionnaire are four rating scale to measure the respondents' evaluation of street vendors as 'out of place' elements. There were also two pairs of adjectives to measure the respondents' liking (*dislike-like*) and safety (*dangerous-safe*) of the urban scene. Other nine pairs of adjectives were used for the purpose of other analysis in the context of larger research.

The rating scale items to measure the respondents' evaluation of street vendors as 'out of place' elements were developed based on the discussion of 'out of place' (Cresswell, 1996; Douglas, 1966) that suggests that the judgement of an object as 'out of place' involves the process of identifying the object and its relationship with the context. Identifying the object is necessary to understand *the internal condition of the object* in order to determine whether it is considered as 'out of place'. The evaluation of 'out of place' object also needs to consider *the relationship of the object to its surrounding* (Cresswell, 1996; Douglas, 1966). It involves understanding the context where the object exists. For the purpose of this study, these two aspects of 'out of place' were further developed into four variables. The *internal condition* of street vendors was measured through variables *disorderliness* and *poor maintenance*, while the *relationship of street vendors to its surrounding* was measured through variables *inappropriateness* and *misfit*.

Disorderliness refers to the condition of irregular or improper arrangement of the objects. In this research this variable referred to the arrangement of the street vendors, to assess the extent to which street vendors were perceived as disorderly. It was implemented in the adjective pair *orderly–disorderly*.

Poor maintenance refers to the lack of act in maintaining or keeping the objects in proper condition. In this research this variable was used to determine the evaluation of street vendors as slum and dirty elements. It was implemented in the adjective pair *well maintained–badly maintained*.

Inappropriateness refers to the incorrect existence of objects in a particular place or context. In this research this variable addressed the issue of legality of street vendors, and the extent to which they were perceived as being in the wrong place. For example, the presence of street vendors in the street might be considered wrong when they disrupt the flow of vehicles as the designated function of the street. This variable was implemented in the adjective pair *appropriate–inappropriate*.

Misfit refers to the presence additional objects that do not adjust well to its surrounding. This variable was used in this research to assess how the presence of street vendors was perceived to be ruining the existing context. It addressed to what extent the street vendors destroyed the visual forms of the city. This variable was implemented in the adjective pair *fit–misfit*.

In this study, each of 158 respondents rated the presence of street vendors in 15 scenes in 7-point semantic differential scales for four variables of 'out of place': *disorderliness*, *poor maintenance*, *inappropriateness* and *misfit*. The rating data was subjected to reliability test using Cronbach's alpha coefficient. The reliability test was conducted to ensure that the rating scale has internal consistency – that the four variables hanged together and represented the respondents' evaluation of street vendors as 'out of place'. Table 1 presents the means of the respondents' rating in these four variables, while Table 2 presents the Cronbach alpha coefficient of the scale as well as the alpha if each item is deleted.

Table 1
Means of 'out of place' variables.

Variables		*N*	Means	SD
Internal condition of street vendors	Disorderliness	2363	4.57	1.89
	Poor maintenance	2363	4.59	1.66
Relationship of street vendors to surrounding	Inappropriateness	2363	5.23	1.61
	Misfit	2363	4.50	1.72
Overall		2363	19.39	5.76

The result in Table 2 shows that the Cronbach alpha coefficient for this rating scale is 0.86, which indicates the reliability of the scale. All the values of 'alpha if item deleted' for each item were lower than the final alpha. This indicates that the rating scale had internal consistency as the rating scale to measure the degree of 'out of place'. For further analysis, the respondents' evaluation of street vendors as 'out of place' was represented by the sum of the four variables above, which is labelled as '*out of place' score*.

To measure respondents' liking towards the scene, they were asked: "How much do you like this scene?" The respondents gave their rating on a 7-point scale, from 1 (dislike) to 7 (like). Meanwhile, the respondents' perceived safety were measured from the responses to the question: "What is your opinion about the safety in this scene?" The respondents gave their rating on a 7-point scale, from 1 (dangerous) to 7 (safe).

2.4. Statistical analysis

The study examined how the users' evaluation of street vendors in the same location changes from day time to night time. Paired-sample *T*-test was used to compare the 'out of place' scores of the matching pairs of day time and night time scenes. The analysis would explore whether in the same location, the score of 'out of place' at day time would differ significantly from the score of 'out of place' at night time. In addition, the comparison was also made for each of four variables that made up the 'out of place' score. The aim was to explore whether there were any changes from day time to night time in the scores of these variables.

The analysis included all rating data from 158 respondents, excluding pairs of data from location E where there were no street vendors at day time. In total, there were 1098 matching pairs of data analysed. Statistical testing was done for overall data from all scenes as well as separately for each pair of scenes.

In statistical testing with such a large number of samples, it often occurs that even a very small difference can become statistically significant. Then it became important to calculate the 'effect size' or 'strength of association' (Pallant, 2001). Effect size statistics provided the indication of the magnitude of the difference between day time and night time scores of the matched scenes. The effect size statistic used in this analysis was eta squared, which has the value ranged from 0 to 1. The eta squared value of 0.01 indicates

Table 2
Cronbach's alpha coefficient for 'out of place' rating scale.

Variables		alpha if item deleted
Internal condition of street vendors	Disorderliness	0.81
	Poor maintenance	0.82
Relationship of street vendors to surrounding	Inappropriateness	0.83
	Misfit	0.81
alpha: **0.86**		

small effect, 0.06 indicates moderate effect and 0.14 indicates large effect (Cohen, 1988).

The relationship between 'out of place' scores and other two variables, liking and perceived safety, were examined using Pearson correlation coefficient. In correlation analysis with the large number of samples, it is also very likely that the tests would show highly significant results. Therefore, to determine the strength of relationship, the following guidelines are used (Cohen, 1988): $r = 0.10–0.29$ indicates small correlation; $r = 0.30–0.49$ indicates medium correlation; $r = 0.50–1.00$ indicates large correlation.

3. Findings

3.1. Change of 'out of place' evaluation from day time to night time

Fig. 2 illustrates the overall means of 'out of place' score from day time and night time scenes. It shows that day time scenes had higher means of 'out of place' score than night time scenes. Paired-sample *T*-test result in Table 3 indicates that the decrease in overall means of 'out of place' scores from day time to night time was highly significant. The eta squared statistic indicates a moderate effect size, which means a moderate difference between the means of day time and night time scenes. The result clearly indicates that the users' evaluation of street vendors as 'out of place' in the same location changed from day time to night time.

Fig. 2 also shows that the mean scores at both day time and night time were higher than the neutral scores of 16. This suggests that at both times the street vendors were considered as 'out of place' elements. However, their presence was perceived as less 'out of place' at night time than at day time.

3.2. Change of four 'out of place' variables from day time to night time

Further analysis was conducted to explore the changes that occurred in each 'out of place' variables. Fig. 3 illustrates the means of the four variables which made up the 'out of place' score for all day time scenes and night time scenes. It shows clearly that all the means of the four variables decreased from day time to night time. The results of paired-sample *T*-test in Table 4 indicate that the changes were highly significant for all four variables. The values of eta squared statistics for those variables also indicated a moderate difference between means of day time and night time scenes. This result clearly suggests that the street vendors at night time were perceived by the respondents as less disorderly, less poorly maintained, less inappropriate and less misfit to the surroundings, compared to the street vendors at day time.

Table 3
Change of 'out of place' scores from day time to night time.

	N	Day time scores		Night time scores		*T*	Significant (2-tailed)	Eta squared
		Means	SD	Means	SD			
'Out of place'	1099	21.10	4.93	18.89	5.55	12.52	$p < 0.001$***	0.13[a]

***Highly significant.
[a] Moderate effect size.

Fig. 3 also illustrates that day time mean scores of 'inappropriateness' and 'misfit' were higher than day time mean scores of 'disorderliness' and 'poor maintenance' variables. This indicates that the variables which refer to the internal condition of the street vendors had lower means than the variables which refer to the relationship of street vendors to the surroundings. The similar situation also occurred for night time scenes.

Fig. 3 also shows that although the means of 'inappropriateness' and 'misfit' variables decreased significantly from day time to night time, these means were higher than the neutral score of 4, indicating the perception of street vendors at night time as 'inappropriate' and misfit'. Meanwhile, in 'disorderliness' and 'poor maintenance' variables, the means decreased in such a way that they approached the neutral values at night time. This suggests that the respondents perceive the street vendors at night time as relatively neutral, neither 'orderly' nor 'disorderly', with neutral condition of maintenance. However, they still perceived the presence of street vendors as inappropriate and misfit to their surroundings at night time, although less inappropriate and less misfit if compared to day time.

The findings above indicate that the users evaluate street vendors differently at day time and night time in the same location. In particular, at night time the street vendors tend to be perceived as less disorderly and less poorly maintained.

3.3. Change of 'out of place' evaluation in each location

To explore the pattern of change in the users' evaluation in various situations, further analysis was conducted to compare the day time and night time scores of 'out of place' for each pair of scenes. The results are illustrated in Fig. 4. It shows that the means of 'out of place' in all locations decreased from day time to night time, except in scene B where the mean increased. The results of

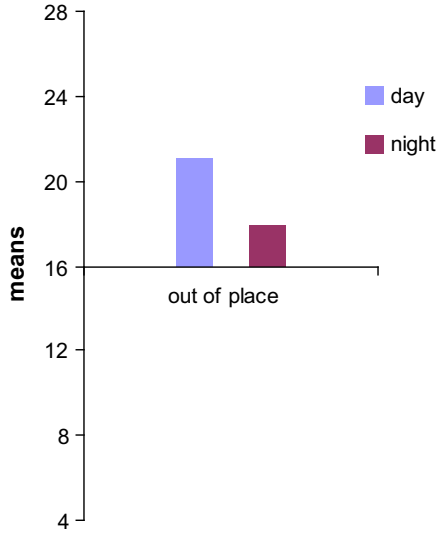

Fig. 2. Means of 'out of place' score of day time and night time scenes.

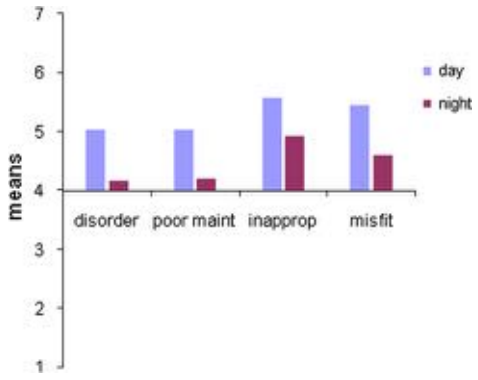

Fig. 3. Means of four 'out of place' variables.

Table 4
Change of four 'out of place' variables from day time to night time.

Indicator	*N*	Day time scores		Night time scores		*T*	Significant (2-tailed)	Eta squared
		Means	SD	Means	SD			
Disorderliness	1104	5.03	1.73	4.47	1.83	8.89	$p < 0.001^{***}$	0.07[a]
Poor maintenance	1105	5.04	1.49	4.45	1.62	10.63	$p < 0.001^{***}$	0.09[a]
Inappropriateness	1105	5.57	1.43	5.12	1.60	8.74	$p < 0.001^{***}$	0.09[a]
Misfit	1103	5.44	1.51	4.84	1.70	11.15	$p < 0.001^{***}$	0.10[a]

***Highly significant.
[a] Moderate effect size.

paired-samples *T*-test in Table 5 indicate that the changes of 'out of place' score were significant in scene G and highly significant in all other scenes. Eta squared statistics indicate large effects for scenes B, C, D and I, and moderate effects for scenes F, G and H. The results suggest that, with exception to scene B, the presence of street vendors in each location at night time was perceived as less 'out of place' compared to their presence at day time in the same place.

However, Fig. 4 also suggests that the patterns of change in each scene were not exactly similar. In scene C, the 'out of place' score decreased towards the values below neutral, while in scenes I and F the scores changed approaching the neutral values. This suggests the possibility that in these situations the street vendors at night time were no longer perceived as 'out of place'. Meanwhile in D, G and H, the night time scores were still above the neutral values. This indicates that the respondents perceive the street vendors in these scenes as 'out of place' at both times.

Scene B shows different pattern, in which the 'out of place' score was significantly increased from day time to night time. This indicates that the street vendors in scene B is significantly perceived as less 'out of place' at day time. This different pattern might be related to the presence of trees dominating this scene, which does not exist in other scenes. The presence of tree might contribute positively to the scene as a whole (Kuo, Bacaicoa, & Sullivan, 1998), and this might affect the respondents' evaluation of how the street vendors adjust to the scene as a whole.

An attention should be given to the pattern of change in scene E, although there was no statistical testing conducted for scene E, which does not contain any street vendors at day time. However, Fig. 4 illustrates that in scene E-night the values of 'out of place' score is far below the neutral score of 6. None of the other night time scenes reach the 'out of place' score as low as in scene E-night.

The findings above show that the change of users' evaluation towards the presence of street vendors from day time to night time varies across different situations, although all scenes used in this study represent commercial areas. This finding suggests that the evaluation of street vendors as 'out of place' should consider the different contexts where they exist.

3.4. Perception of 'out of place', liking and perceived safety

In this analysis, the 'out of place' scores were correlated with the 'liking' and 'safety' scores which represented the respondents' general preference of the scene and their evaluation of the general safety of the scene. Fig. 5 illustrates the scatterplot for the means score of 'out of place' and 'liking'. In this graph, each point represents the mean score for each scene. The scatterplot suggests the linear relationship between these two variables. It also suggests that night time scenes tend to have lower means of 'out of place' score and higher means of liking score than day time scenes.

Table 6 presents the Pearson correlation coefficient between 'out of place' score and 'liking' score for overall data. The results indicate that in overall there was a strong negative correlation between the respondents' evaluation of street vendors as 'out of place' and their liking of the scene in general. This result is highly significant ($r = -0.58$, $p < 0.001$). This suggests that the more respondents evaluated the street vendors as less 'out of place', the more likely they would like the scene. The separate analysis for day time and night time data also shows that the correlation coefficient for night time data ($r = -0.61$) was higher than day time data ($r = -0.47$). This indicates that the relationship between the evaluation of street vendors as 'out of place' and the respondents' liking was stronger at night time than at day time.

Fig. 6 shows the relationship between the means of 'out of place' score and the means of general safety for each day time and night time scenes. The results indicate linear negative relationship for night time data but more inconclusive relationship for day time data. Table 7 presents the Pearson correlation coefficient between 'out of place' and 'safety' scores for overall data. The results indicate negative correlation between 'out of place' and 'safety' with medium strength of relationship, and this result was highly significant ($r = -0.37$, $p < 0.001$). This correlation suggests that the more street vendors were evaluated as 'out of place', the less safe the scene was perceived by the respondents. However, the strength of this relationship was not large. The separate analysis for day time and night time scenes indicate that the strength of relationship was smaller at day time ($r = -0.29$) than at night time ($r = -0.48$). The result suggests that the association between the evaluation of 'out of place' and general safety of the scene was more predictable at night time than at day time.

4. Discussion

The analysis above has shown that the users' evaluation of street vendors as 'out of place' change from day time to night time. The change of users' evaluation also varies across different urban places, although the study is limited to commercial areas where street vendors most commonly exist. This finding confirms that the perception of street vendors as 'out of place' is not absolute (Cresswell, 1996; Douglas, 1966). It illustrates the important role of context (Herzog, Kaplan, & Kaplan, 1976; Kaplan, 1985) in evaluating the presence of street vendors in urban places. In particular the study emphasises the important role of time contexts in the evaluation of 'out of place' elements. This finding suggests that the generalisation of judgement that the street vendors are 'out of place' in any locations at any time may not be entirely correct.

This finding was obtained from the respondents' point of view as the everyday users of street vendors. The samples were taken from university students, thus limited to certain groups of population and not necessarily representatives of all urban residents with different socio-economic and educational background. Nevertheless, the findings indicate some contrary to the urban elite's point of view regarding the need to reject street vendors from the cities. The policies from the government tend to be deterministic in terms of the street vendors' use of certain urban areas. When the street vendors occupy the location not designated for trading, such as streets and sidewalks, they are judged as wrong.

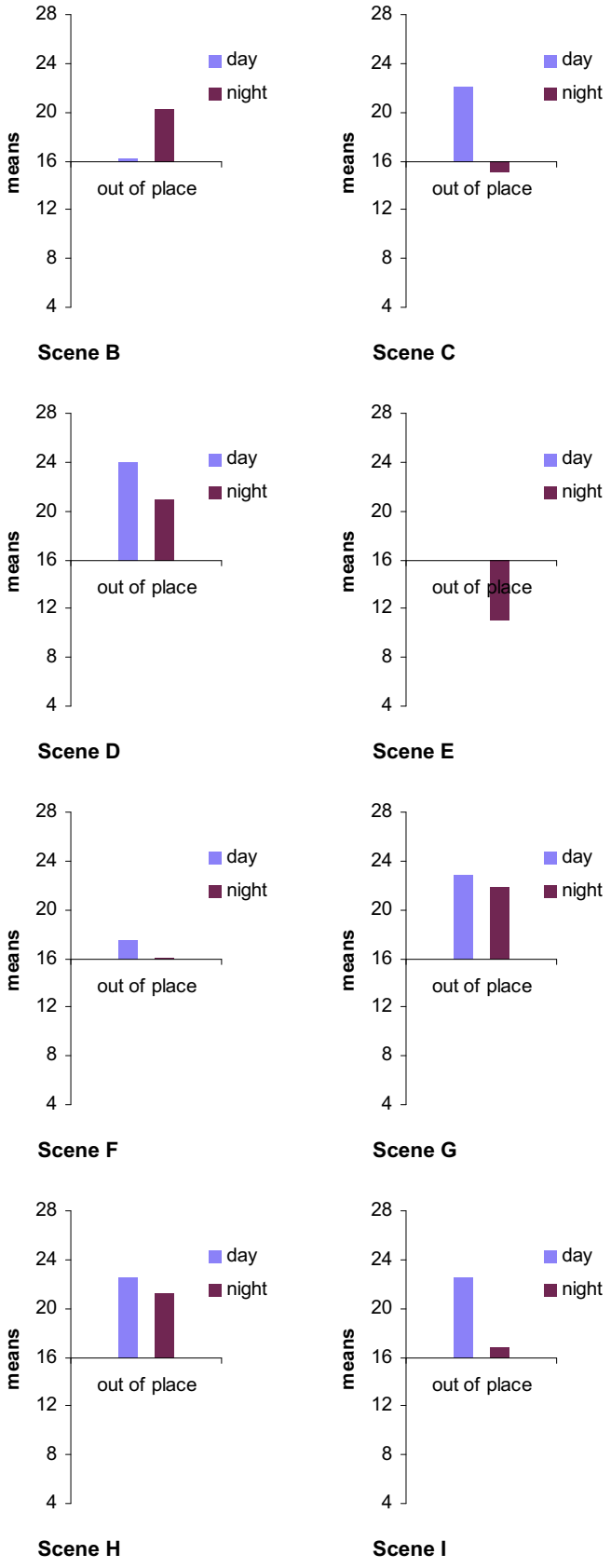

Fig. 4. Means of 'out of place' scores in each location.

Table 5
Change of 'out of place' score in each location.

Scene	*N*	Day time scores		Night time scores		*T*	Significant (2-tailed)	Eta squared
		Means	SD	Means	SD			
B	156	16.23	4.45	20.26	4.75	−10.41	$p < 0.001$***	0.41[a]
C	157	22.08	3.64	15.08	5.20	15.19	$p < 0.001$***	0.60[a]
D	158	23.96	3.82	20.91	5.28	7.70	$p < 0.001$***	0.27[a]
E	158	–	–	11.01	4.31	–	–	–
F	157	17.54	5.31	16.09	5.22	3.94	$p < 0.001$***	0.09[b]
G	158	22.79	3.83	21.82	3.64	3.20	$p < 0.01$**	0.06[b]
H	156	22.55	3.87	21.24	4.48	3.88	$p < 0.001$***	0.09[b]
I	157	22.50	3.60	16.77	5.70	12.73	$p < 0.001$***	0.51[a]

**Significant; ***highly significant.
[a] Large effect size.
[b] Moderate effect size.

In fact, the data from this study shows that the users' attitudes towards street vendors vary. In some situations where the street vendors occupy the streets or sidewalks, their presence may still be appreciated by the users. It seems that the users' evaluation of street vendors as 'out of place' is related to their perception of the place-identity and how the place 'performs' (Leach, 2003), and this seems to be unrelated to the spatial zoning determined by the urban elites.

This study indicates that the street vendors tend to be perceived less 'out of place' at night time. It is parallel to the study by Parkes and Thrift (1980), who found the shift of perception in certain commercial areas towards positive image. This finding suggests the potential of street vendors to give positive contribution in the temporal dynamics of urban life. In many locations, the street vendors are present at night time, replacing the day time activities. The role of street vendors in this *displacement* in the use of urban places (Lynch, 1978) should be responded positively.

Furthermore, the study has shown the relationship between the respondents' perception of street vendors as 'out of place' and their liking of the scene. When the respondents evaluate the street vendors as less 'out of place', they tend to like the scene. In the night time situation where the street vendors are perceived as less 'out of place', it is more likely that the scene will be perceived positively. This finding suggests the positive contribution of the presence of street vendors at night time.

Findings related to perceived safety become particularly important in discussing the presence of street vendors in urban scenes. Their presence is often associated with the image of danger and crime in urban places. However, the above analysis indicates

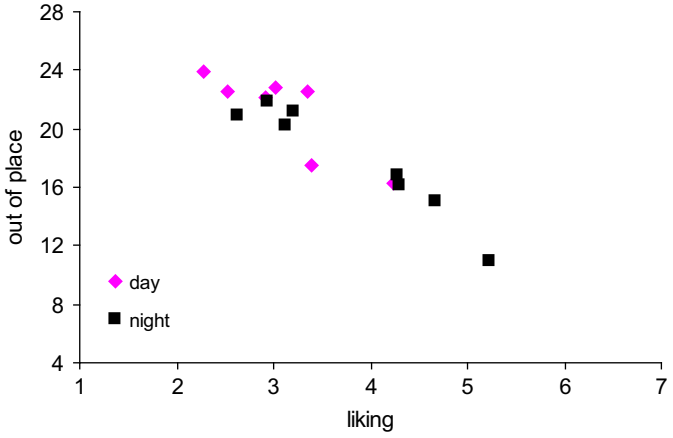

Fig. 5. Scatterplot of 'out of place' and 'liking' means score.

Table 6
Correlation between 'out of place' and 'liking' scores.

	N	r	Strength of relationship
Overall data	2362	−0.58***	Large
Day time data	1102	−0.47***	Medium
Night time data	1260	−0.61***	Large

***Highly significant.

Table 7
Correlation between 'out of place' and 'safety' scores.

	N	r	Strength of relationship
Overall data	2362	−0.37***	Medium
Day time data	1102	−0.29***	Small
Night time data	1260	−0.48***	Medium

***Highly significant.

only small relationship between the perception of street vendors as 'out of place' and the feeling of safety perceived by the respondents in the scenes at day time. Therefore the claim that street vendors create the safety problem may be questioned. Their presence might be only one among many other factors related to the urban safety at day time.

Meanwhile, the finding above suggests that the relationship between the presence of street vendors and safety is stronger at night time than at day time. This becomes an important finding, since the problem of safety is often associated with night time experience (Hanyu, 1997; Nasar & Jones, 1997). Street vendors are often present at night time occupying the spaces that are not in use at night time, replacing the day time activities. Some also occupy the abandoned spaces or empty lots around the city, making the spaces become more alive with the presence of lighting and signs of human activities (for example in scenes E-night and I-night). Previous research has suggested that the areas with lighting and human activities might enhance the feeling of safety (Boyce & Gutkowski, 1995; Nasar & Jones, 1997; Painter & Farrington, 2001; Ramsay & Newton, 1991). The findings of this study clearly suggest the possibility of street vendors to contribute positively to urban safety.

The findings of this study confirm the need to integrate temporal dimension in urban planning (Worpole, 1998). It highlights some significant changes in the way the users perceive urban scenes. This may contribute to the existing knowledge in the study of preference at different times of the day. Nasar (1989) has pointed out the lack of research concerning the evening experience of the places, and this present study offers some evidence that can help to fill this knowledge gap. In particular this study suggests the importance of street vendors as urban elements that have potential to make a positive contribution to the evening urban experience. In practice, the presence of street vendors at night time in Jakarta has not been incorporated seriously in urban planning. The findings of this study may direct the policy of legalising their presence at night time particularly in the locations that are underutilised at night, such as parking lots, waste lands and certain streets. This attempt may even increase the publics' perception of safety in such places.

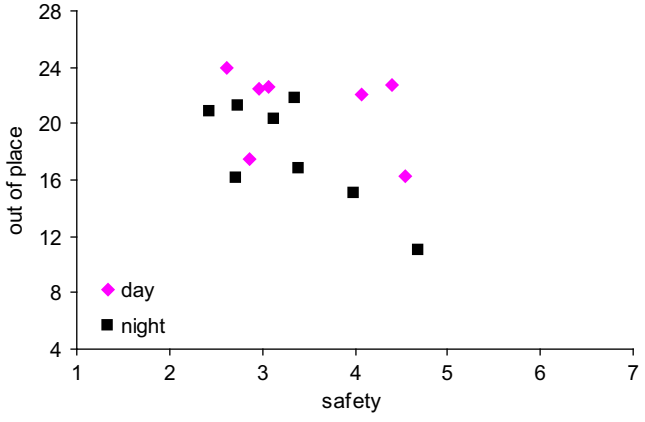

Fig. 6. Scatterplot of 'out of place' and 'safety' means score.

The knowledge regarding the dynamic of 'out of place' evaluation becomes important in making the decision about urban elements in the city. It seems that to accommodate the dynamic nature of 'out of place' elements, there is a need for the plans that are 'accommodating' rather than those that are 'fixed'. In particular for the case of street vendors, providing spaces for street vendors does not necessarily mean providing the fixed zoning for their trading activity. In fact this is impossible as there will never be enough spaces for all existing street vendors. This study indicates some possibilities to accommodate various alternatives to the presence of the street vendors, including the planning for day-night layering of the spaces.

Temporary elements can enhance the identity of urban places. In particular locations, street vendors can have the potential to change the image of places that are perceived negatively to become less negative. This can be achieved by understanding the characteristics of street vendors that have a positive contribution to the general preference of the scenes. The publics' general preference of the urban scene is strongly related to the orderliness and maintenance of street vendors, as well as the fitness and appropriateness of the street vendors in their surroundings. It becomes necessary to pay attention to the characteristics of street vendors that may enhance the visual image of the city.

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