APPLYING THE IMAGES CITY VALUE TO IMPROVE THE IDENTITY OF WUALAI'S LOWLAND COMMUNITY IN THAILAND

Umpiga Shummadtayar [1], Kazunori Hokao [2] and Pawinee Iamtrakul [3]

ABSTRACT: Each of developing communities is interested in basic improvement and sustainable development plan as especially for 'lowland environmental', 'community identity' and 'social value'. This paper clear to recognize and create value that impress people in community and visitor in which the space syntax theory that the urban area can be represented as a matrix of connected spaces. There were explained to the physical problems; the historical part and perception of a city image and improving the image of community identity, environment and social value. Particularly, the resident perception on damage of the city could be forming of image and creating social networks with life satisfaction or community living. Based on physical environment and network functional related to develop the design guideline, suitable model and policy framework. To concludes by reach to a greater understanding of city image and discovers how to quantify its importance for each particular case study in term of 'identity', 'structure' and 'meaning'. Moreover, this information can support decision-makers to policies plan by prioritizing certain aspects depending on the sense of place by sample groups. These suitable model, though to the methodological proposal idea can be extrapolated to other cities, as a process for measuring city identity image.

Keywords: City image, space syntax, lowland environmental, community identity, sustainable development

INTRODUCTION

Recently, the world as Thailand has experienced a dramatic growth of its urban population for over 50 years ago. United Nation (2008) reported, the rate of the urban population growth is more than that of the rural population. More importantly, the speed and scale of this growth have usually been concentrated in developing countries which are characterized by larger metropolitan areas and a great number of megacities. Inevitably, prolific population growth leads to a rapid expansion of urban growth, causing changes in land use and land cover in many metropolitan areas around the world. Significant, uncontrollable changes can intensify a large number of environmental, social and physical problems; especially in many developing countries have deployed various products, themes, and re-sources to compete for a share of tourism and other external capital.

The control of urban sprawl is one of the key issues challenging planners in many countries. Urban sprawl is the rapid and expansive growth of a metropolitan area. It is driven by the (often uncontrolled) development of suburbs at the edge of the city – primarily of low density

– and generally leads to loss of natural landscapes and to enhanced energy consumption (EEA 2006). During the last decades, researchers, planners and other stakeholders have discussed ways of opposing the sprawl in order to minimize consumption of open land and energy. A compact city structure has been considered the obvious way to fulfill these goals, this growth within existing boundaries, and high density and mixed-use (Frey 1999).

Therefore, environment quality is one of the basic conditions for quality of life, as well as the main support for the activities of economy, culture and society. The improvement of residential environment quality has become one of the main targets of city policy and urban planning. Different methods of approaching the study of residential environments have resulted from the efforts of different disciplines, such as architecture, economics, environmental, geography, psychology and sociology, applying concepts and developing topics related to their own perspectives (Aragones et al. 2002). Moore (1997) has proposed four levels of theoretical construction for organizing and integrating studies of residential environment: the conceptual orientations, frameworks, models and theories. In practice, studies of residential

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[1] Ph.D. student, Graduate School of Science and Engineering, Saga University, Saga 840-8502, JAPAN, email: n.umpiga@gmail.com
[2] Professor, Graduate School of Science and Engineering, Saga University, Saga 840-8502, JAPAN, email: hokao@cc.saga-u.ac.jp
[3] Assistant Professor, organization, Architecture and Planning, Thammasat University, THAILAND, email: apawinee@hotmail.com
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environments have adopted eclectic conceptual and methodological approaches.

From the above discussion, it seems prudent to assume that the built environment carries important meanings from one generation to the next, and serves as a one repository of cultural meanings based on a sense of place. Because of The term sense of place has been defined and used in many different ways by many different people (Alexander 1977). Then writing over 40 years ago, Lynch (1960) developed many of the ideas and themes upon which behavioral and environmental psychologists have subsequently expanded. The very first page of his celebrated book, *The Image of the City*, establishes why a community's perceptions of its urban surroundings are important: "Every citizen has had long associations with some part of his city, and his image is soaked in memories and meanings".

This paper investigates and introduces how to imageablity can provide a valuable of community identity and lowland theme for city destinations. Although several authors have examined the relationship between physical environment and image of city, the vast majority of this work focuses on the use of reimaging, rather than resultant effects. To examine the cultural identity role of community can play within sustainable urban development approach of social, economic value and environmental (Fig. 1).

Fig. 1 Concept of sustainable development. Source IUCN (2006)

There are not only study without the image of city but also understanding and applying the social character in this area as well. Social character analysis takes as its starting point the premise that relations create social life primarily and most importantly and the patterns formed by these network relations. Social networks are formally defined as a set of nodes (or network members) that are tied by one or more types of relations (Wasserman et. al. 1994).

Moreover, the intention is to evaluate the value of initiatives by identifying and actually affect of city destinations. Furthermore, applying this analysis will be constructed of social network and summary image of city are represented and linkage between the mental map and axial map to basic improvement and sustainable development plan for the community identity, social value and environmental resources.

LITERATURE REVIEWS

A city planning process requires collecting all possible information and exploiting it adequately. All planning should rest on solid research foundations that include both qualitative and quantitative data and information referring, in this case, to the city on which the actions are to be implemented. However, the communities recently are different from the past. So that studying a city's image is not only important from the viewpoint of an adequate strategic planning, but it can also be considered an antecedent of satisfaction level. In short, there are apply the findings of new approach of community identity prevention, it could be concluded that a city image should bear a close relationship level of perception and satisfaction into more specific land use;

Image of the city

In 1960, Lynch wrote "the image of the city", which transformed the way design professionals and social scientists dealt with the urban form and design. The evaluative image of the city follows the work of Lynch and further explores the role of human evaluations of cityscape. This book describes how to assess, plan, and design the appearance of the cities to please inhabitants. It presents a series of studies on evaluative images, discusses methodologies, findings, and applications to design and planning at various stages (Jack 1997). He is significant not only for aiding practical tasks such as way-finding, but also that it is central to the emotional and physical well-being of the inhabitant population, personally as well as socially. He continues by equating the legible environment with an "imageable" one. Imageability, according to him, is that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. Moreover, Lynch points out that these three provided results of the map of photographed elements having the fewest number of elements.

- Identity: "distinction from other things"
- Structure: "spatial or pattern relation"
- Meaning: "practical or emotional relation"

Our argument is treated to his five elements (the node, path, district, edge and landmark) in a resolutely empirical sense; he seems to have identified them as being the best elements available for characterizing how inhabitants map their cities, without making a case for how they come together to give a systematic mapping of cities. His intentions are arrive at a sense of dependable accuracy in his studies, and to be able to generalize his method so that an appropriate city image can be constructed by a procedure that is both standardized and accurate and can only be realized if the inhabitants' cognitive map of the city is not merely the collection of features in terms of the five elements, but a systematic structure constituted by them.
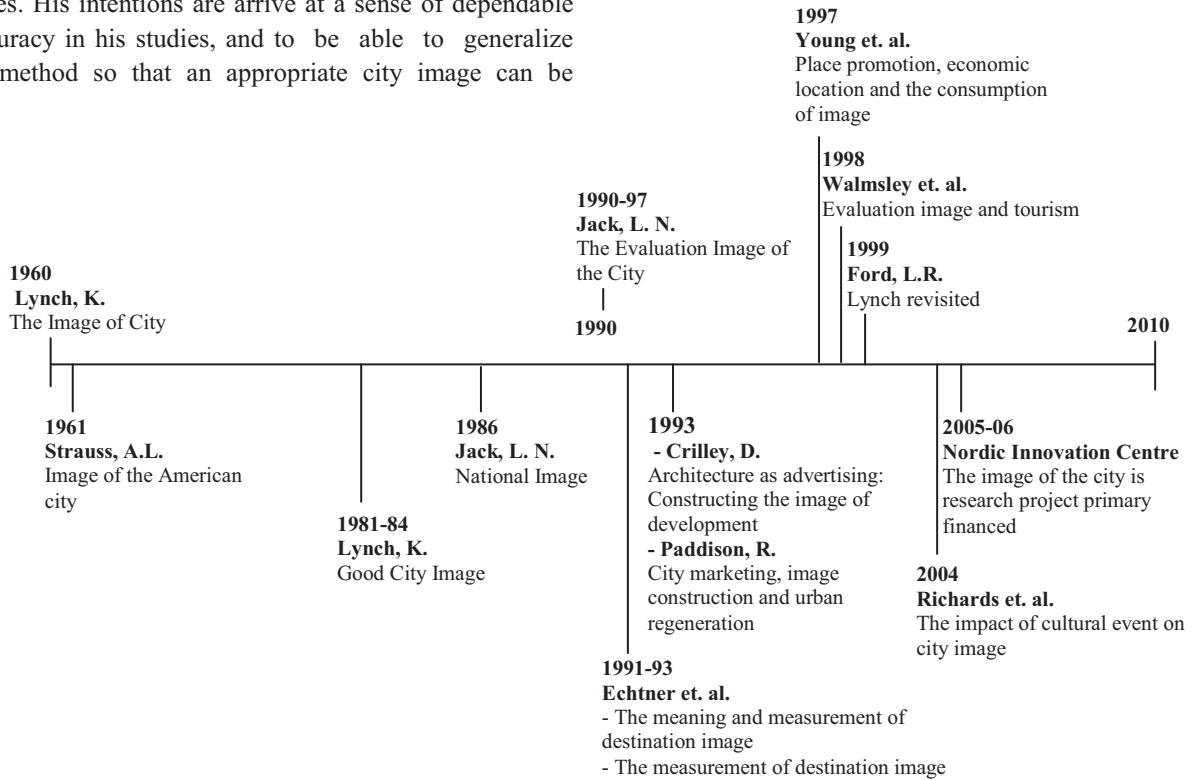
1960
Lynch, K.
The Image of City

1961
Strauss, A.L.
Image of the American city

1981-84
Lynch, K.
Good City Image

1986
Jack, L. N.
National Image

1990-97
Jack, L. N.
The Evaluation Image of the City

1990

1993
- **Crilley, D.**
Architecture as advertising: Constructing the image of development
- **Paddison, R.**
City marketing, image construction and urban regeneration

1991-93
Echtner et. al.
- The meaning and measurement of destination image
- The measurement of destination image

1997
Young et. al.
Place promotion, economic location and the consumption of image

1998
Walmsley et. al.
Evaluation image and tourism

1999
Ford, L.R.
Lynch revisited

2010

2005-06
Nordic Innovation Centre
The image of the city is research project primary financed

2004
Richards et. al.
The impact of cultural event on city image

Fig. 2 the Image of city: historical timeline

Many researcher provided the ''imageability'' of initiatives that also allow to penetrate destination images. However, some researchers have the capacity to become imageability elements of the urban environment; several commentators indicate (Fig. 2).

That may lead to their being selected, and that space syntax offers a way to characterize those. Interestingly, Lynch himself provides us a way into this. Lynch's study was intended to develop a general method for mapping the city in terms of its most significant or imageability elements. In order to test the efficacy of his method, he sought to compare three different maps of the city with one that trained observers had prepared. The map elements are compiled by putting together sketch maps that subjects constructed in response to particular queries, and constructed through verbal interviews.

Upon this problems found that the reviewing of imaginary cities study is a very important part from residential living. There seems to be a fundamental and, perhaps, irreconcilable difference between visual qualities of the city, and a method that tries to elicit the inhabitants' mental maps of their city, the other focusing on abstract spatial descriptions and a method which seeks to reveal their underlying structure or structures in relationship to observable behavior. Our purpose is to examine to what extent the two approaches can be mutually reconciled.

Due to the growing competition between cities and increasing globalization many cities around the world constantly ''re-package'' themselves and their resources in an attempt to present an attractive image. This is done in order to successfully compete for international status that could assist in attracting tourists, conferences, sporting events, entrepreneurs, investors, industries, company headquarters and global capital (Paddison 1993; Young et. al. 1997).

Space syntax model

Space syntax model has been proposed a new computational language which described the spatial patterns of modern cities (Hillier et. al. 1984; Hillier 1996). The notion of syntax derived from linguistics and referred to

relationships between different spaces or interactions or between space and society. The earliest approach of space syntax is represented based on the axial line-based of an urban structure. Axial map construction methodologies are used to represent directions of uninterrupted movement and visibility of axial line (Fig. 3).

In this study, we were following the procedure outlined by Hillier et. al. (1984). Firstly, we made a convex map, which is composed of convex spaces, from the original settlement. Convex space is defined as a space with no line drawn between any two points in the space goes outside the space. An axial map can be made from the convex map. The fewest number of long axial lines have been drawn along the convex spaces which represent all public routes through which people can see and move.
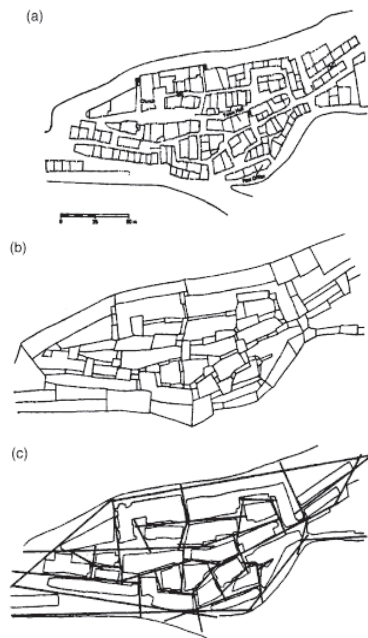
Fig. 3 (a) A small town of G. (b) Convex map of G. (c) Axial map of G. Source Hillier et. al. (1984)

Almost of space syntax researchers have also sought to capture the quality of an environment as being comprehendible and easily navigable, which they recognize as its 'intelligibility'. The definition of an intelligible environment is given in the book Space is the Machine (Hillier 1996) where it said that the property of 'intelligibility' means the degree to which what can see from the spaces that make up the system is a good guide to what cannot see, that is the integration of each space into the system as a whole. An intelligible system is one in which well connected spaces also tend to be well-integrated spaces. An unintelligible system is one where well-connected spaces are not well integrated,

so that what can see of their connections misleads us about the status of that space in the system as a whole. The definition of intelligibility concerns the relationship between local visual cues and the global properties of a space system.

Moreover, space syntax method has typically defined urban configurations in their totality whereas Lynch's study demonstrates that inhabitants mental maps of the city image are selected and depended as much upon certain features of the city being excluded as much as upon the features of the city that are used to characterize it. Particularly the prevent of cultural identity of community value. It represents on historical, valuable, and prides to their community are being lost which is the main point of currently problems in developing country. So that the perception of imaginary cities study are important to improve the identity of community value.

STUDY AREA

Chiang Mai, as shown in Fig.4, is considered a province that has been significant development in various fields such as tourism or economy of the city's rapid growth. Based on the change detection analysis from the existing land cover data, the urban area of Chiang Mai increased from 15 km^2 in 1952 to 339 km^2 in 2000, with a tendency to increase over time. The significant changes can be found from agriculture to urban land. Some development has been properly but something was oblivious such as history, identity, culture, environmental and social of the traditional Chiang Mai. However, the city would not only be developed as well as movement of physiological and economically that can compete with other country but also considered the affect of community development in the future especially for physical characteristic.

In case study area (Wualai community as shown in Fig. 4) covers the famous cultural of silver manufactures of the old city in Chiang Mai, Thailand. At present this location near by the center of growth that the comprehensive plan set for commercial and density residential area. As a result of several people came to area that determine the effects of urbanization. Moreover, mitigating adverse effects after development has occurred can be expensive, administratively difficult and community requirement.

Although, this area are supported the identity presented via "Walking Street activities of Wualai" by government which will be providing a cultural tourism of silver manufacture. On the other hand, inside community is defaulted to care for well-being and infrastructure service (walking street activity is the main

pattern). That can be seen the number of occupations household or shops selling silver inside community. There are from 1999 to 2004 the silver selling are shown in 22 households and decrease to 16 household in current year 2006 (Wualai 2006). In addition to three categorized the problems of case study survey (2010) as follow Lynch (1960);

● Structures, lowland environment and physical located, are not visible and difficult to remember and

accessible for visitor and quality of life such as flooding, low efficiency of economic value, and low accessibility.

● Identity is not clarity of the junction, no any tools or human activities can convey this form of identity, and unique symbols (identity) as throw to;

● Meaning that the historical significance of being forgotten as a result of the identities value, perceptions of the old community, and the living conditions of people and other.
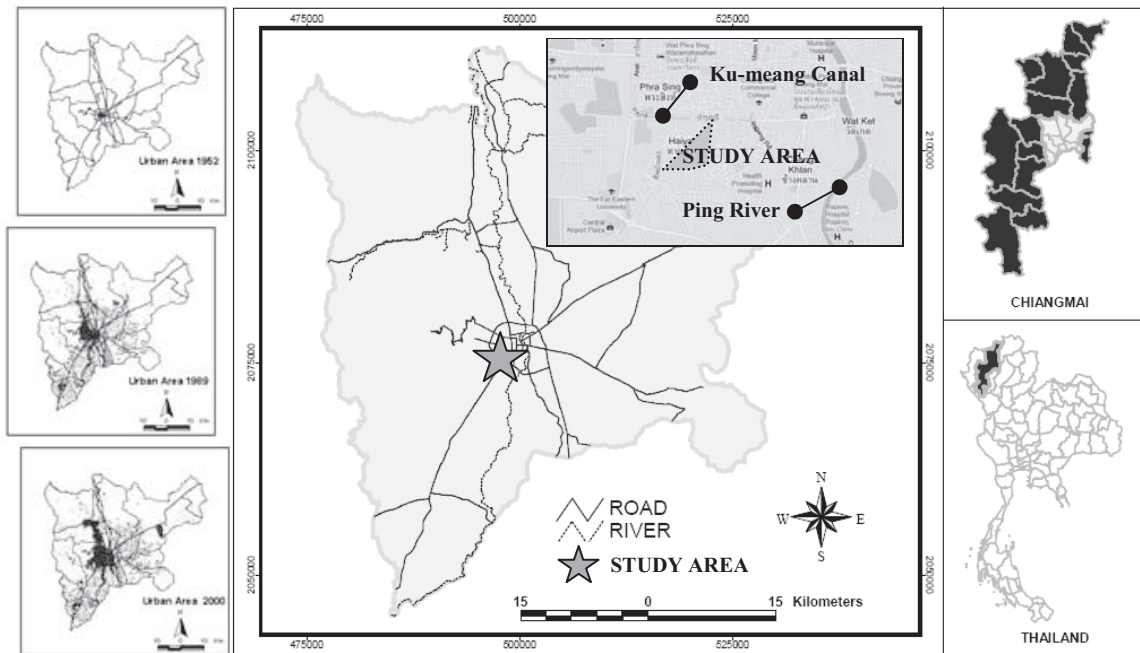

Fig. 4 Chiang Mai (2,415 km^2) and Wualai's study area of urban growth between 1952, 1989 and 2000. Source S. Sangawongse et. al. (2007)

In sum, this paper focus on the image studies are interested to residents' perception on damage of Lynch's five city image (the node, path, district, edge and landmark) that may have implications for forming of community image and creating network of community development will be considered as well as creation and good perception on those memories into three points focus on identity, structure, and meaning of community and also the suitable planning of community.

METHODOLOGY

This approach focused the development of a rigorous representation and analysis of spatial structures which used in society, from domestic interior spaces to large-scale urban systems. The basic concept of Space Syntax is based on spatial cognition and spatial behavior. There is defined to perception and cognition of the relation between the human and the surrounding environment as an intervening psychological process of human behavior.

The main factor of spatial cognition and cognitive representation is sight (Gibson 1966).

The framework in Fig 5, there seems to be a fundamental and, perhaps, irreconcilable difference between these two approaches — one focused on visual qualities of the city, and a method that tries to elicit the inhabitants' mental maps of their city, the other focusing on abstract spatial descriptions and a method which seeks to reveal their underlying structure or structures in relationship to observable behavior. Our purpose is to examine to what extent the two approaches can be mutually reconciled.

This study sites were selected to in-depth interviews and questionnaire of 50 households and 50 visitor persons. Sites were selected on the basis that city image should contain the Lynch's cognitive mappings of cities in terms of *five elements—nodes, edges, districts, landmarks, and edges—* and a syntactic mapping (space syntax model) of the city.

First of all, this study is started to conservation and prevention the community identity from urban sprawl

crisis though to the result of sustainable community identity created by sense of community. That Kevin Lynch's classic text *The Image of the City*, published in 1960 by The M.I.T. Press, introduces urban designers and planners to a new way of thinking about the urban form of a city. A methodology in this image study, a mental map has traditionally been used in order to explore spatial cognition. As stated earlier in this article, the term mental map has several identity, structure and meaning. In this article, it is used when referring to a map of certain the study area in addition to study the level of perception on imageability patterns and perception of community (100 persons) and visitors (100 persons) satisfaction.

Furthermore, in terms of how to space syntax model, the axial map can be derived for the analysis of an urban structure by MapInfo GIS program. These parameters include *the depth, connectivity, integration.* The Connectivity of an axial line measures the number of lines that directly intersect that given axial line. It also denotes the number of immediate neighborhoods of an axial line. The control value of an axial line is given by the sum of the inverse connectivity values of the

immediate neighborhoods of this axial line. Literately the control value shows the degree to which each axial line "controls" its immediate neighborhoods.

There are reviewing the space syntax model for study the social network of Wualai community; the perception and cognition of the relation between the human and the surrounding environment. A social network is a set of socially relevant nodes connected by one or more relations. The nodes units are connected by the relations whose patterns they study. These units are most commonly persons or organizations, but in principle any units that can be connected to other units can be studied as nodes. Network theories based on the frequently treat of network ties as: social support (Wellman et. al 1990), identities of workplace (Podolny et. al. 1997) and norms (Coleman 1988).

Finally, this study uses analyzing the relationship between cognitive mapping and syntactic mapping of the community. The information presented in this paper will not only provide a general idea about the design guideline model for sustainable community but also offer some solutions for future studies for other cities in the region and throughout the country as a whole.
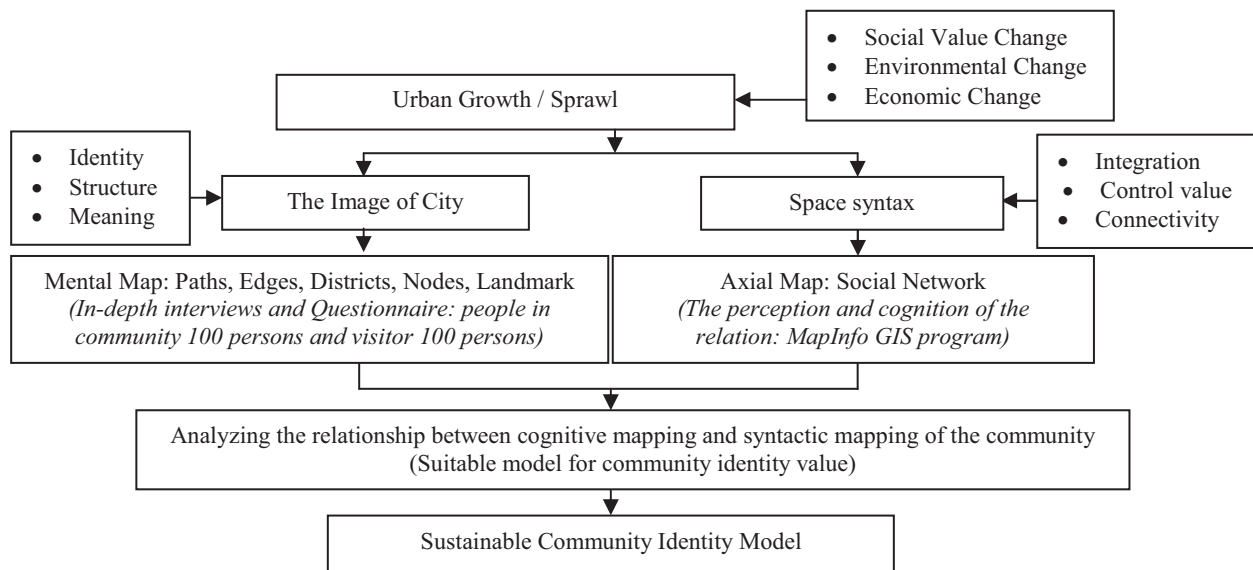

Fig. 5 Framework of study

RESULTS

This preliminary study and interview by questionnaire are aware of the study area into three system of conceptual network; "Public Identity", "Public Structure", and "Public Meaning"; of the city by Lynch (1960) and transfer to "public image". Based on the analysis of spatial configuration begins by representing layout of the case study area as a mental map. These integration maps allow the systematic quantification of aspects of the spatial

structure of the area and to explain which components of diversified community understanding. In addition, there are two groups of sample classification such as people who live in community (community group) and visitors group. As a result, this study can be manage and design guidelines for properly development.

In-depth interview, questionnaire and observation found that the relationship between the perception and aware of physical element of community by sample groups (community group and visitor group). And then

the results are linkage within five elements of image city by Lynch (1960), which is the main component of the imaginary city or the structure of conceptual network system. There is applying of the mental map concentrates on the physical features imageabilty of sample groups (paths, edges, districts, nodes and landmark).

The classification found the imageability perception levels on image elements of sample groups (community and visitors). They choose the 4 mode levels for categorized their perception and satisfaction of image of study sites. The differences are summarized in table 1 found that community level was interesting in +4 and +3 levels. On the other hand, visitors' level was interesting in +4 and +3 levels on the famous node (Muen-sarn temple) the main paths (Wualai road) that the way was districts of silver commercial zone, landmarks located and used trough to outside and inside of center of Chiang Mai. +2 and +1 level was following in other path; east edges, residential district, and small landmark (see Table 1).

This study found the five image elements of Wualais' community in Table 1 and in-depth interviews that is a good imageability of community and visitors group as shown in Fig. 6 following as;

Table 1 Imageability perception levels on image elements of sample groups in this study area

Image Elements of Community	Level of imageability perception (%)			
	+1	+2	+3	+4
1) Paths				
- Wualai rd.				●◆
- Wualai alley	●		◆	
- Nantraram rd.	●		◆	
2) Edges				
- Wualai rd.(west)			●	◆
- Nantraram rd. (east)	●		◆	
3) Districts				
- Commercial zone			●	◆
- Residential zone	●		◆	
4) Nodes				
- Muen-sarn temple			●	◆
5) Landmarks				
- Wualais' monument			●	◆
- Wualais' gateway	●			◆

Source Survey on March 28-31 2009

◆——◆ Community imageability perception level (50 persons)

●- - -● Visitors imageability perception level (50 persons)

**Mode level: +1 = Level of perception on 1-25%
                +2 = Level of perception on 26-50%
                +3 = Level of perception on 51-75%
                +4 = Level of perception on 76-100%

Wualai Road (Path)

In the past, the Wualai road is implying to historical background and silver manufacture cultural. Besides street pattern were easily located and access to community areas. Moreover, the route has been organized to walking street activities, commercial district area, and street event. The other community that around of Wualai road is supported the silver manufacture cultural and identity such as Nantraram community and Srisupan community. From using the said new tool and activities, it is found that most tourists had perception conforming to needs of the community in presenting identity in form of folk wisdom.
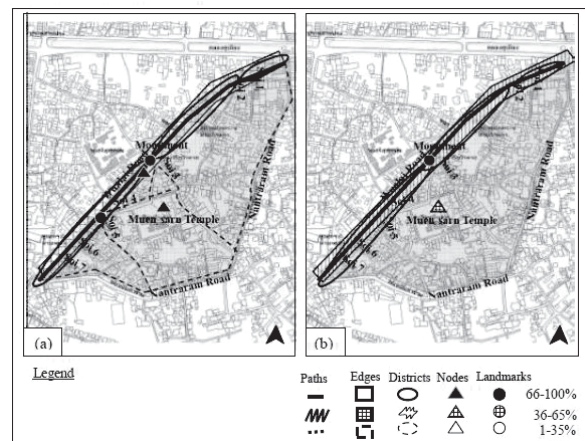

Fig. 6 A mental map concentrates the perception intend of: (a) imageability of people who live in Wualai (community group) and (b) imageability of visitors

Silver Manufacture District (District)

Silver Manufacture District is a part of memory identity of community. But now, they are decreasing shop and product from household due to they have not descendant and difficult to interested job for the new generation groups. So, the visitor will come to the walking street activities on Saturday (Wualai road). And after that the visitor choose to stay and travel outside community more visit than inside community living or learning of sliver manufacture at temple.

Muen-sarn Temple (Node)

This temple is the center of the community since the past to the present, whether as a museum of historical background center and the Japanese military cemetery in World War 2, religion event, learning center for silver manufacture, and culture center of community. Nowadays, they created the new silver building for teaching and correcting silver manufacture product to new generation. Muen-sarn temple is not only node place of religious and participation space of community

but also sliver manufacture learning center for interested people. In addition to represents and collects the history and cultural identity of community as well. This can be seen from the names of temple that is set to the full name of community called "Muen-sarn Wualai community". Wualai monument (Local Landmark)

The local landmark can be located and remember of identity community. There have been influenced by the culture and history of the community memory. The monument is interested for mention and belief of community historical. The period was early the cows' way of traditional transportation that is transfer to other community (website Wualai.com 2007). Therefore the community was created the monument of cow pattern, cow in Thai language called Wua, namely "Wualai monument". After that the monument is clearly identity of community and also contributed to the perception of other groups who will come and refer to the location of community like as local landmarks symbol.

Traditional Life Style and Cultural Identity (Fig. 7)

Wualai community has been living that a simple as well as the career of a silver manufacture occupation. Though to identity of community called "Wualai community". However, this area is being growth and developed to commercial zone. Thus, there were effected of the new decentralization and new approach of master plan. As a result of identity community was decreasing and specifying to tourism over time.

Fig. 7 Wualai's Identity community that are silver manufacture occupation

On the other hand, people and tourists who stayed and came to community want to seem identity of Wualai like as the past time. For example, Walking Street has particular identity, contributing to activate community's economy and maintaining cultural identity not to be lost, in order to be the sustainable walking street (Noochjarin 2009).

Lowland characteristic

Upon geography of Chiang Mai, it was located on the coast of the river Ping and surrounded by hilly terrain. So, the study area was sensitive to flood hazards in rainy season. Moreover, the urban sprawl problem for capital city as development is uncontrolled, this approach can higher the average land use density while at the same

time higher average commuting travel times and increasing the air pollution that is effect to global warming crisis and climate change.

Moreover, the frequency, type and size of flooding experienced over a period of time. The lowland effected in the economic value of sliver manufacture of commercial district households and higher density of community was difficult to accessing for visitor. Lastly, the cultural and identity of community are decreased and changed from the past. The public image of this study that the practical and the emotional value to the observer. Moreover, there are preserves the cultural identity, structure and meaning of community memory such as sense of place / sense of being in the cultural studies, geography and psychology that has been defined and used in many different ways.

However, it is not evident and supports the community structure (public image). The public images of structure can be able to recognize and organize urban elements into a coherent pattern. "In the process of way-finding, the strategic link is the environmental image, the generalized mental picture of the exterior physical world that is held by an individual. This image is the product both of immediate sensation and of the memory of past experience, and it is used to interpret information and to guide action" that these mental maps are usually an easily identifiable physical object in the urban planning.

ANALYSIS AND DISCUSSION

This space syntax application analysis applied the relationship between cognition spaces and network which can describe in each aspect below.

This study shown that integration values in the axial map of area provide a robust forecast of the cultural, as well as potential, rates of movement along each line. A syntactic analysis of spatial configuration can be compared to an application space syntax, it can be classified the patterns of networks in this site in 3 patterns by using graph that represent as shown in table 2;

Depth Graph

Depth is representing to distance in the network, depth value can be represented in term of accessibility, and the line with high depth value is respect to difficult accessibility. After analyzed the level of depth in syntax, this study was found that the low depth level is located in the major road activities of network, which refer to the ease of access. The value of depth at network graph is low depth in general which controversy to the inside community, it should be prepared or provided mass evacuation facility for evacuate and reduce travel time.
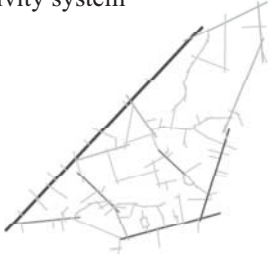
Connectivity System

The space syntax analysis is applied in theme of connectivity, after analyze by using UCL Depth graph, this study was found that the level of connectivity of the network in study area is located on nodes and landmarks of study area and the major road activities of network which had shown in dark tone.

Integration of Network

The mean distance between an axis line and all other axes of the system in this network, the integration graph which was found the high level of integration in this network. The result of analyze was shown that the level of integration was located on the activities center of network (Wualai Road) which tend to the inside of the study area.

Table 2 Spatial structure of area study by space syntax model; axial map of (unrestricted radius); darker lines indicate higher integration with three factors.

(a) Depth graph

Level of depth	Value
Lowest	400 - 550
Low	551 - 700
Moderate	701 - 850
High	851 - 1000
Highest	1001 - 1150

Min	Max	Count	Mean	Std.Deviation
463.00	1,015.00	120	685.80	126.16

(b) Connectivity system

Level of depth	Value
Lowest	1 - 3
Low	4 - 6
Moderate	7 - 8
High	9 - 11
Highest	12 - 14

Min	Max	Count	Mean	Std.Deviation
1.00	14.00	120.00	2.25	1.87

(c) Integration of network

Level of depth	Value
Lowest	0.5 - 0.75
Low	0.76 - 1.00
Moderate	1.01 - 1.25
High	1.26 - 1.50
Highest	1.51 - 1.75

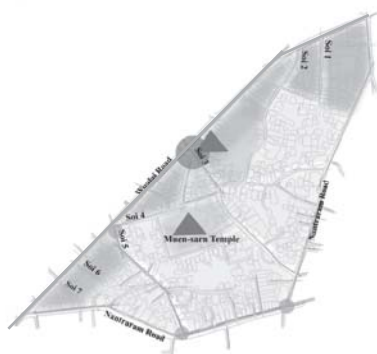| Min	Max	Count	Mean	Std.Deviation
0.58	1.52	120.00	0.97	0.20

Fig. 8 The relationship between a mental map and axial map.

Finally, the urban systems of conceptual environment are needed to counter the always looming fear of disorientation (Fig. 8). It is the framework for communication and conceptual organization, and heightens the depth and intensity of everyday human experience. The city itself is thus a powerful symbol of a complex society. Moreover, an environmental image of study has three components by identity, structure, and meaning factors. It was importance that these urban elements were not hermetically designed into precise and final detail but present an open-ended order. Urban inhabitants should be able to actively form their own stories and create the new activities.

CONCLUSION

This paper attempted to assess three environmental of initiatives value for future community by analyzing the image effects of five elements of conceptual system by Lynch. A mixture of quantitative and qualitative methods has been used to assess whether and how the images of potential structure have been affected by ''imageability'' specific of initiatives. There are consists of components in terms of identity, structure and meaning. Those are also matched into two sample groups and then there is one way in which this need is accommodated in space syntax model. However, this particular case study found that the imageiability values of sample groups are different from in terms of area meaning. The community group is specifying the residential values of living, in contrast to the visitors group are specifying the economic value of tourism. Such a core, for instance, properly developments follow by conservation system. The knowledge and constant value of community traditional (silver manufacture) are continued to the new generation.

Moreover, Hillier (1996) has argued that spatial configuration may face constrains on spatial experience since it appears to encourage or impede aspects of human activity through spatial cognition and subsequent behavior. Including to the approach of space syntax researchers and Kuipers et al. (2003) approach must by necessity, diverge, where the skeleton is viewed as a phenomenon that emerges over time from the cumulative experience of image environment. To utilize results from model specifically, Lynch's (1960) seemed to suggest that such 'skeletons' may not be merely a matter of identifying the elements with greatest syntactical values, but may have structural features of their own.

Therefore, this overall analysis found the approaches of development area are not only benefiting of the regulations and easy to remember but also improve the household living, upper individual-based approaches and place-based approaches, and conservation of traditional cultural community. In instance of created the cultural memory, successful proxemics, environmental diversity, and economic gain. This study explores more specific physical design method based on detailed analysis of land use pattern, level of pedestrian walking street movement, which may have upper the memory of community imageability. So that the public imaginary space are found that the main of problems and can be lead to appropriate ways to solve the suitable solution include the model in Fig 9. More specific model of this paper is to focus on the relationship between 'environmental prevention', 'social network' and 'economic development'.
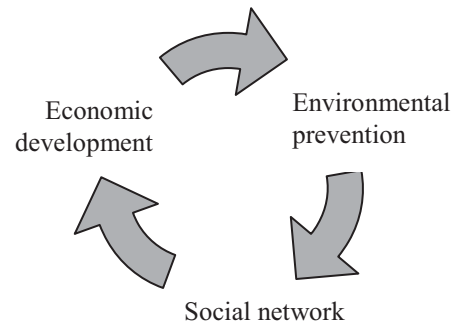

Fig. 9 Sustainable community identity model

In this respect, the model can be improved to policy framework and developing guideline for study site with flooding, climatic and other risks for examining the processes of social and economic change. In addition to, the historical and identity community should be outline to the policy plan especially for low imagibility perception points (+2 and +1 level) in mental map and low line (low and lowest level) in axial map. Finally, the social network approach would be more interested in human activities such as land use plan, environmental prevention and transfer the knowledge of silver manufacture to next generation and visitor.

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