



## International Journal of Current Research and Academic Review

ISSN: 2347-3215 Volume 2 Number 12 (December-2014) pp. 21-30

[www.ijcrar.com](http://www.ijcrar.com)



### Exploring the travel route types of tourists based on a small island survey

Hsueh, Ya-Hui \*Wang, Shu-Mei Chang, Wan-Tzu Chen, Shao-Ching  
Chuang, Huey-Wen Yan, Yong-Yu and Chen, Yi-An

Department of Regional and Social Development, National Taichung University of  
Education, Taichung City 40306, Taiwan

\*Corresponding author

#### KEYWORDS

Destination,  
Travel route type,  
Accommodation,  
Point to point,  
Radiating hub,  
Timebudget

#### A B S T R A C T

This research aimed to clarify the travel route types of tourists according to 325 valid questionnaires contents, focused on the arrangements of travel nodes and accommodation(s) in itineraries stayed at Kinmen Islands. This research explored the travel route types on a small island and the influence of time budget based on clarifying spatial arrangement types of travel nodes by stop-over accommodations as bench-mark points. Knowledge of the actual travel route types of tourists can be used to define the boundaries of destination zone, as well as the competitive relationships among travel nodes for tourism plan.

### Introduction

Travel route composes of several spatial elements, such as linkages, community and nodes. Among them, nodes on functional dimension may include of stop-over nodes (accommodations and cuisine facilities) and travel nodes (tourist spots). From the dimension of relative relationship of the whole nodes in each travel route, different tourists display different type of travel routes according to the consequential relationship among nodes connection. Node(s) is the important spatial element in travel route, especially when discussing about tourist spots as a further relative concept of travel nodes. So, exploring the spatial formation of travel route type usually

focuses on the arrangement type based on the elements of origin, stop overs and tourist spots.

The classification of travel route types based on different indexes have discussed by several researchers. Flognfeldt (1992), Lue (1993), Oppermann (1995), Stewart & Vogt (1997), Hwang & Fesenmaier (2003) and McKercher & Lau (2008) identified travel routes to different types based on original place and destination places. However, Lew & McKercher (2006) concluded that if based on stop over points of accommodations in local scales, P1 type, P2 type and P3 type of three broad types would be defined in

tourists' travel route types (Table 1). P1 type-point to point type means that the travel route starting journey and return trip all trace the same route from the points of destinations back to the point of accommodation, and P2 type-circular type indicates starting journey and return trip trace different routes circularly back to the point of accommodation, while P3 type-complex type is a type combined with P1 type and P2 type. Generally, easier transportation options, time budgets increased, all-centric behavior and well destination knowledge will result in travel routes that are more reflective of types P2 and P3 (Lew & McKercher, 2006:417).

The viewpoint of analyzing travel route types of tourists based on accommodation location, proposed by Lew & McKercher (2006), could be applied on the exploring travel route types of tourists visited to Kinmen Islands. The tourists from Taiwan Main Island usually spent several nights in Kinmen Islands for travel, thus every tourist has a stopover point of accommodation as basement for travel. In contrast to the viewpoint, proposed by such as Flognfeldt (1992), Lue (1993), Oppermann (1995) and Stewart & Vogt (1997), which analyze travel route types of tourists based on original place of home, is unsuitable to clarify the diversity of travel route types of Kinmen Islands tourists, since all tourists may set out from their homes and finally return back home after visiting Kinmen Island, and the travel route type of each tourist will all be defined to circle route type, making this research with less meaningful results.

Kinmen Islands, located on the narrow Taiwan Strait between the Mainland China and Taiwan, is a small archipelago composed by several islands including of Great Kinmen, Little Kinmen and some

islets. Geographically, it is very near to Xiamen City of Mainland China no more than 2 kilometers. Great Kinmen administrative area is divided into Kincheng Township, Kinhu Township, Kinsha Township, Kinnig Village, and Liehyu Village. Kinmen Islands, originally a military reserve, as the growth of trade and tourism development between Mainland China and Taiwan, are transforming to be with the function of gateway.

Kinmen Islands, recognized as a national park in 1995, is a popular destination zone with several tourist spots, well known for its folk culture heritage such as Wind Lion God, Wind Chicken God, battlefield culture heritages, such as war monuments, war museums, artillery tunnels, century home architectures, and Kinmen cuisine (Table 2). Kinmen Islands is also famous for the Kaoliang liquor, a spirit ranging between 38 and 63 percent alcohol highly appreciated by Taiwanese. There are many tourist spots for travelers to visit the Kinmen Islands (Figure 1), and a couple of souvenir stores in popular destinations sell Kinmen local specialties to keep memory for travel experiences. This research conducted to explore the travelers' route types displayed on Kinmen Islands, clarified the reason why the travelers have different travel route types, and finally compared the actual travelers' route types and the planned ones by Kinmen Government.

## **Materials and Methods**

### **Data collection**

Kinmen Islands, containing several tourist spots, is viewed as a destination zone in this research, and a single tourist spot is served as a destination. Surrounded by the sea and covered by no high mountains as its natural defense except for Taiwu Mountain with an

elevation of more than 200 meters, Kinmen Islands is strongly affected by northeast monsoon in winter due to the topographic wind field effect of Taiwan Strait. In addition, the temperature of Kinmen islands is generally lower than that of Taiwan in winter. With these two influencing elements of strong wind and low temperature in winter than Taiwan, the number of tourists to Kinmen Islands resulted in dramatically decrease in winter than in summer. Furthermore, the fog in spring is likely to influence the normal flight schedule, thus the appropriate time to travel in Kinmen Islands is in summer and autumn, and the peak season and off season can be distinguished obviously during a year for travel.

This research conducted the questionnaires to 350 independent tourists who visited Kinmen Islands at famous tour spots, which are famous and more frequently visited by tourists, e.g. settlements of Shui-tou full of many traditional Fujian architecture buildings, famous Battle Museums, Juguang Tower, and 325 valid ones are collected. Because of the obvious variations of tourist numbers from the peak season to the off season in Kinmen Islands, the researchers conducted the questionnaires in different periods, in the off season of February, 2010 and the peak season of July, 2010, for the purpose of exploring whether the travel route types of tourists are different or not in the two peak and off seasons. This research used itinerary mapping way to collect all travel routes of the tourist samples by recording travel nodes and accommodation(s) in each itinerary individually.

### **Data analysis**

The content of questionnaire in this research includes two parts of tourists' demographic

and economic characteristics and tourists' travel routes. The first part investigates tourist's gender, age, residence, occupation, marital status and education in order to realize the tourist attributes, while the second part aims to explore the frequency of visit to Kinmen, the duration of the travel, the characteristics of the travel spots and the itinerary of tourist in order to define the type of travel route and to analyze the relevance between staying length and travel route type.

In order to clarify the reasons why the differences between the actual travel route types of tourists and the those planned by Transportation and Tourism Bureau of Kinmen County, this research randomly chose 30 tourists to have an in-depth interview in 2013. The first part of the interview content is about tourist's preference of accommodation place, while the second part is about tourist's personality trait and tourist's knowledge of how to influence his decision when in choosing travel destinations to visit.

## **Result and Discussion**

### **Exploring the Travel Route Types of Tourists Visited to Kinmen Islands**

According to the questionnaire survey, the original places of Kinmen Islands tourists all are from Taiwan Main Island, but which mostly concentrated on Taipei city and Taipei County, subtotal for 28%, and Taichung city and Taichung County subtotal for 26%. The staying length of Kinmen Islands for travel all were more than two days. The popular Kinmen Islands tourists' accommodation places based on questionnaire survey are listed successively as follows: in hotels in Jincheng Town accounting for 39%, in Jinning Town and Jinsha Town both accounting for 8%, in characteristic guest houses in Jinhu Town

accounting for 30% and in Jincheng Town accounting for 19%. From above it can be realized that the numbers of tourists staying in hotels of business areas and that in guest houses are in similar proportion. Tourists preferring to stay in hotels of business areas are influenced by the conveniences of shopping or transportation factors, while those preferring to stay in guest houses are attracted by the traditional Fujian architecture buildings.

Table 3 shows that the travel route types of tourists visited to Kinmen Islands can be defined to three broad types—P1, P2 and P3, belonging to six sub-broad types: single point-to-point, touring point-to-point, circular loop, stem and petal, random exploratory and radiating hub, among which radiating hub accounts for the largest proportion of 62% and touring point-to-point accounts for 19%, while random exploratory, single point-to-point, circular loop and stem petal account for 8%, 4%, 4% and 2% respectively.

### **The Relevance between Staying Durations and Travel Route Types**

Table 4 shows that the travel route types of tourists visited to Kinmen Islands for two days are mostly defined to touring point to point type (10%) and radiating hub type (6%), meanwhile the radiating hub for three days (39%) and over three days (17%) are obviously accounting in a large proportions. According to the in-depth interviews, the tourists for two days tour usually confined to time budget so displayed touring point to point travel route type (P1c type), focusing on their favorite tour spots, such as the example illustrated on Figure 2. On the contrary, the tourists for over two days has enough time to explore and stretch to further distant spots relatively, so they demonstrate radiating hub travel route type (P3b type),

hoping to visit more tour spots as possible as they can. Briefly, the more time budget of tourists stayed for over two days, the more frequency for tourists displayed radiating hub travel route type. The tourists, staying less than two days and limited by time budget often demonstrated touring point-to-point travel route type. The more familiar with environment the tourists encounter, the more delicate and complicate travel route type are displayed, such as P3b radiating hub type.

### **Comparing Travel Route Types between Planned by Government and Reality of Tourists**

In order to promote and market the local tourism, Kinmen County Government is trying to brand a lot of tour spots with cultural heritage as drawing attractions. The travel route types planned by the Government for two day tour and over two days all belongs to radiating hub types (P3b type) (Figure 3, Figure 4). Compared with the actual travel route types displayed by the tourists and the planned by government, it reveals that the travel route types of tourists staying for a relatively longer period of time is similar to that planned by government, both are radiating hub types. While the tourists stayed for a relatively shorter period, they planned their travel route type according to their own needs, displaying touring point to point travel route type. Based on this research survey, the shorter time the tourists stayed, the more frequency the tourists displayed P1c type-touring point to point. The reason why for this situation is the more longer staying duration the more similar with the tourist environment, thus tourists can plan more diversified and complicated travel route types, such as radiating hub travel route types. In travel route types, two days tour planned by Kinmen Government mostly was not

adopted by tourists, but for over two days tour was well followed. Travel route type planned for three days by Kinmen Government can be defined as radiating hub type, which is more complicated than touring point to point one. Pearce (1988) and Fennell (1996) indicated that time budget play a role on the level of adopting travel route types, namely when staying duration changed, travel route types may be displayed in different type for tourists. According to the in-depth interview, the reasons due to this situation are tourists' difficulty to access the travel information and limited time budget. The tourists for two days tour expressed that they planned their trips before setting out and they hoped to acquaint themselves with destinations within the shortest time, hence touring point to point types became the choices of visiting favorite spots for efficiency.

The reason for what leads to the consistence between the travel route type planned by Kinmen Government and the tourists' actual ones for three days tour is the increased accessibility because of familiar with Kinmen Islands, able to visit across the central part from the east to the west, and then taking three various circular loops. Prideaux (2000) also suggested that accessibility is an important influencing factor on the choices about which tourist spots to visit. In addition, three-days-tour tourists could travel by themselves easily due to without language barriers with local residents of Kinmen Islands to get travel information, thus leading to the high frequency of practicing radiating hub types on their itineraries.

## **Conclusions**

This research explores a number of different itineraries associated with using travel node (tourist spot) as a vital element of travel

route type, considering accommodation as a useful tool on exploring the arrangement of travel nodes in itinerary. This research aims to address the importance role of time budget in travel route type, by examining and highlighting the role of accommodation in the itinerary relating to the staying durations for two days tours and over two days tours. Analysis of the travel nodes is an important and complex topic in tourism, yet its powerful role in clarifying travel route types of different tourists has not been explored in details by researchers. This research using itinerary mapping to define travel route type in terms of how to connect accommodation and travel nodes, and the relationship between the actual travel route types of tourists and the planned ones by government.

It is essential to clarify the reasons why decisions about which destinations to visit are made in terms of time budget, and this also reveals plan implications for extending staying duration or increasing awareness of tourism images. Particularly, given the context for planning destination zone and promoting alternative tourism, the significance of travel route types in the planning and management of tourism development is crucial to be considered. A accommodation acts not only as a benchmark point to an itinerary, but also a location where plays a role of gateway to get information, interpretations, thus influencing traveler's stay duration and choices of tourist spots. Knowledge of the actual travel route types of tourists can be used to define the boundaries of destination zone, as well as the competitive relationships among travel nodes. This information also can be used to plan other new destinations and facilities within a destination zone, furthermore make cluster effect of travel nodes to promote tourism in local scale.



**Table.1** Three Types of Travel Routes Based on Stop Over Point of Accommodation

Broad Type	Sub-broad Type
P1 Point-to-Point Type	P1a 〈Single Point-to Point〉 ,P1b 〈Repetitive Point-to Point〉 P1c 〈Touring Point-to Point〉
P2 Circular Type	P2a 〈Circular Loop〉 ,P2b 〈Stem and Petal〉
P3 Complex Type	P3a 〈Random Exploratory〉 ,P3b 〈Radiating Hub〉

**Table 2.** The Tourist Spots of Kinmen Islands

<i>Kinnig Township</i>	<i>Liehyu Village</i>	<i>Kincheng Township</i>
1.Zhong-shan Memorial Forest	8.Siwei Tunnel	13.Shui-tou Village
2.Chiung-lin Village	9.Circular Tank Road	14.Kinmen Wine Factory
3.Ku-ning-tou Battle Museum	10.Wind Chicken	15.Wentai Pagoda <sup>+</sup>
4.Shui-Wei Pagoda	11.Huchingtou Battle Museum	16.Kukang Lake
5.Bei-shan western style building	12.Ling-Shui Lake	17.Zhai-shan Tunnel
6.Zhenwei Residence		18.Zhu-shan Village
7.Ci Lake		19.Oucuo Village
<i>Kinhu Township</i>		20.Chu Kuang Tower
22.Taiwu Mountain		21.Koxinga Shrine
23.Kinmen Ceramic Factory		<i>Kinsha township</i>
24.Tai Lake		30.Shanhou folk culture village
25.Chiang Kai Shek Memorial Forest		31.Rong Lake
26.August 23 <sup>rd</sup> Artillery Battle Museum	32.Mashan Broadcasting and Observation Post	
27.Banyan Garden		
28.Brook Side bathing Beach		
29.August 23 Memorial		

Source: Kinmen tourist guidebook (2010).

**Table.3** The Travel Route Types of Tourists Visited to Kinmen Islands

Travel Route Type	Samples	Percent
Single point to point	13	4%
Touring point to point	63	19%
Circular loop	14	4%
Stem petal	6	2%
Random exploratory	27	8%
Radiating hub	202	62%
Total	325	100%

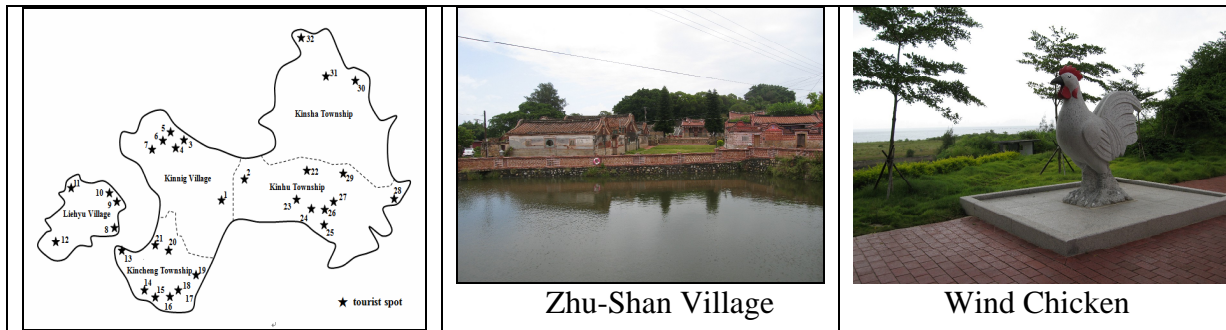
Source: Questionnaire survey (2010) .

**Table.4** Staying Durations and Travel Route Types of Tourists Visited to Kinmen Islands

Staying Duration Travel Route Type	For Two Days		For Three Days		Over Three Days	
	Samples	Percent	Samples	Percent	Samples	Percent
Single point to point	0	0%	8	2%	5	2%
Touring point to point	32	10%	16	5%	15	5%
Circular loop	2	1%	10	3%	2	1%
Stem petal	1	0%	5	2%	0	0%
Random exploratory	0	0%	18	6%	9	2%
Radiating hub	20	6%	127	39%	55	17%
Total	55	17%	184	57%	86	26%

Source: Questionnaire survey ( 2010 ) .

**Figure.1** The tourist spots of Kinmen Islands



**Figure.2** An Example of P1c travel route type for two days tour

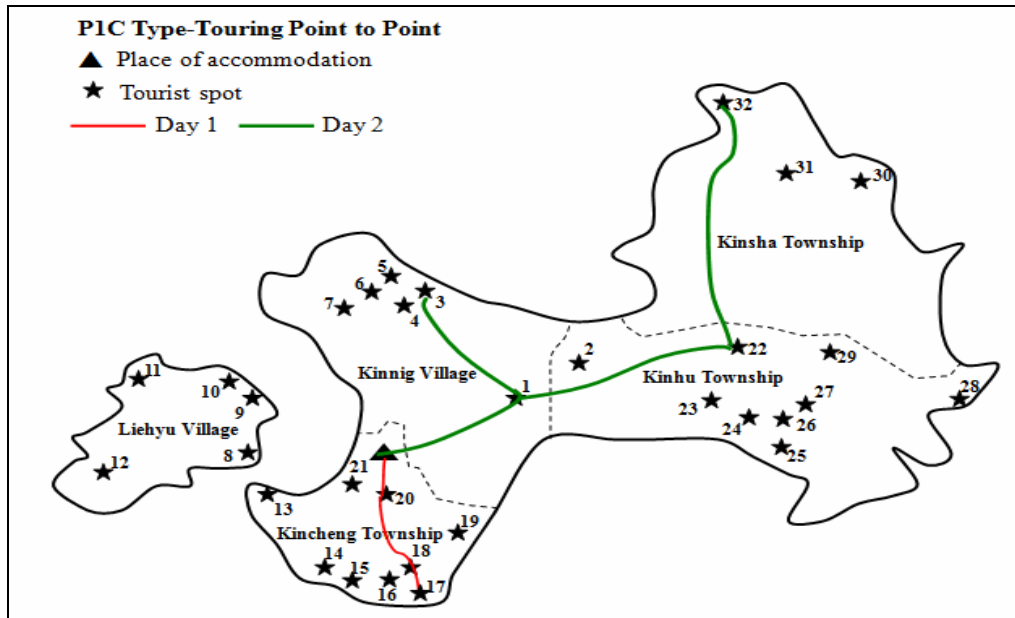


Figure.3 P3b radiating hub type planned by Kinmen Government (2011) (two days tour)

〈1〉 Two Days Tour

Day 1

1.Zhong-shan-lin Visitor Center--->2.Chiung-lin Village--->3.Ku-ning-tou Battle Museum -  
 --> 4.Shui-Wei Pagoda --->5.Bei-shan western style building--->6.Zhenwei Residence ---  
 >7.Ci Lake---> hotel in Kinchong Township business area

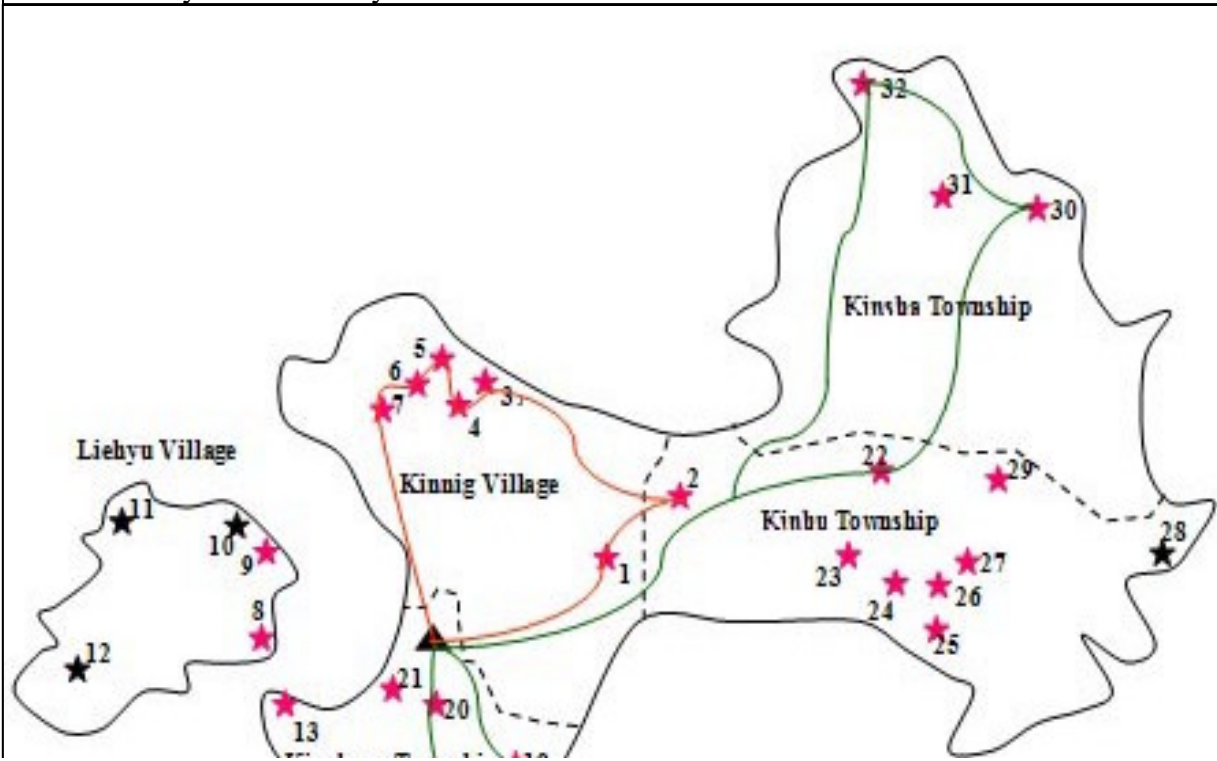
Day 2

22.Taiwu Mountain for hiking--->30.Shanhou folk culture village--->32.Mashan  
 Broadcasting and Observation Post--->lunch--->17.Zhai-shan Tunnel--->18.Zhu-shan  
 Village--->19.Oucuo Village--->hotel in Kinchong Township business area.

▲ Place of accommodation

★ Tourist spot

— Day 1 — Day 2





**Figure.4** P3b radiating hub type planned by Kinmen Government (2011) (three days tour)

〈2〉 Three Days Tour

Day 1

1.Zhong-shan-lin Visitor Center--->2.Chiung-lin Village--->3.Ku-ning-tou Battle Museum ---> 4.Shui-Wei Pagoda --->5.Bei-shan western style building--->6.Zhenwei Residence --->7.Ci Lake---> hotel in Kincheng Township business area

Day 2

8.Siwei Tunnel--->9.Circular Tank Road--->10.Wind Chicken--->11.Huchingtou Battle Museum--->12.Ling-Shui Lake--->13.Shui-tou Village--->lunch--->15.Wentai Pagoda --->16.Kukang Lake--->17.Zhai-shan Tunnel---> 18.Zhu-shan Village--->19.Oucuo Village--->20.Chu Kuang Tower --->hotel in Kincheng Township business area

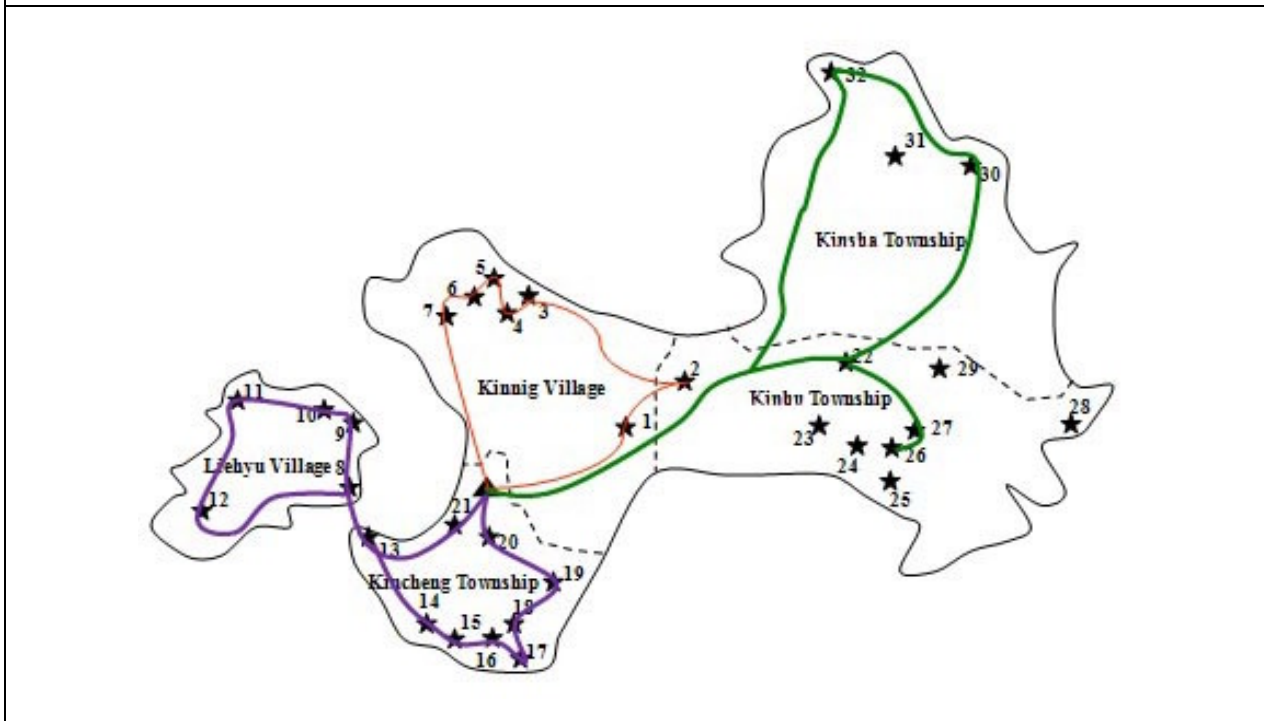
Day 3

22.Taiwu Mountain for hiking--->30.Shanhou folk culture village--->32.Mashan Broadcasting and Observation Post--->lunch--->27.Banyan Garden--->26.August 23<sup>rd</sup> Artillery Battle Museum--->hotel in Kincheng Township business area.

▲ Place of accommodation

★ Tourist spot

— Day 1 — Day 2 — Day 3



## References

- Dredge, D. & Moore, S. (1991) Planning for the Integration of Tourism and Town Planning. *Journal of Tourism Studies* 3:8-21.
- Dredge, D. (1999) Destination Place Planning and Design. *Annals of Tourism Research* 26 (4) : 772-791.
- Flogenfeldt, T. (1999) Traveler Geographic Origin and Market Segmentation:The Multi Trips Destination Case. *Journal of Travel and Tourism Marketing* 8:111-118.
- Fukuyama, F. (1992) *The End of History and the Last Man*. New York: Free Press.
- Getz, D. (1992) Tourism Planning and Destination Life Cycle. *Annals of Tourism Research* 19: 752 -770.
- Gunn, C. A. (2002) *Tourism Planning-Basics, Concepts, Cases*. Routledge: Taylor & Francis.
- Hwang, Y. H. & Fesenmaier, D. R. (2003) Multidestination Pleasure Travel Patterns: Empirical Evidence from the American Travel Survey. *Journal of Travel Research* 42:166-171.
- Lew, A. & McKercher, B. (2006) Model Tourist Movements-A Local Destination Analysis. *Annals of Tourism Research* 33(2):403-423.
- Lue, C., Crompton, J. & Fesenmaier, D. (1993) Conceptualization of Multidestination Pleasure Trips. *Annals of Tourism Research* 20:289-301.
- McKercher, B.& Lau, G. (2008) Movement Patterns of Tourists within a Destination. *Tourism Geographies* 10(3):355-374.
- Mings, R., & McHugh, K. (1992) The Spatial Configuration of Travel to Yellowstone National Park. *Journal of Travel Research* 30:38-46.
- Opperman, M. (1995) A Model of Travel Itineraries. *Journal of Travel Research* 33:57-61.
- Pearce, D. (1988) Tourist Time-budgets. *Annals of Tourism Research* 15:106-121.
- Prideaux, B. (2000). The Role of the Transport System in Destination Development. *Tourism Management* 21:53-63.
- Stewart, S. & Vogt, C. (1999) A Case-based Approach to Understanding Vacation Planning. *Leisure Sciences* 21:79-95.
- Fennell, D. (1996) A Tourist Space-time Budget in the Shetland Islands. *Annals of Tourism Research* 23:811-829.