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Matthew James Lamont  
*Southern Cross University*

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# **Wheels of change: a model of whole tourism systems for independent bicycle tourism**

**Matthew Lamont**  
**PhD Candidate**

Author Affiliations:

Sustainable Tourism Cooperative Research Centre  
Australian Regional Tourism Research Centre  
School of Tourism & Hospitality Management, Southern Cross University

Author Contact Details:

School of Tourism & Hospitality Management  
Southern Cross University  
PO Box 157  
Lismore, NSW, Australia  
Telephone: +61 2 6626 9428  
Fax: +61 2 6620 3565  
Email: [m.lamont.10@scu.edu.au](mailto:m.lamont.10@scu.edu.au)

# **Wheels of Change: A Model of Whole Tourism Systems for Independent Bicycle Tourism**

## **Abstract**

Leiper's model of whole tourism systems is a useful concept for generic research into tourism. However, when applied to certain forms of tourism, the elements in the model, as well as tourist flows depicted in it may exhibit subtle variations. This paper addresses two geographic elements of whole tourism systems: transit routes and tourist destination regions, using independent bicycle tourism to highlight variations in the model when applied to this form of tourism. Existing literature and empirical evidence are drawn upon to suggest the presence of a geographic hierarchy of destinations for independent bicycle tourists, in addition to the identification of two distinct forms of transit routes used by independent bicycle tourists. An adapted model of whole tourism systems specific to independent bicycle tourism is proposed and implications for theory and practice are discussed, as are avenues for future research.

**Keywords:** Bicycle tourism, whole tourism systems, special interest tourism

## **Introduction**

Nature-based tourism and adventure tourism have grown strongly recently. Some adventure tourism operators have reportedly experienced annual growth levels of up to 20% (Millington, 2001), driven by trends such as a reduction in travel to mass tourism destinations, and the increasing significance of the baby boomer generation as consumers of tourism products (Patterson, 2002).

Bicycle tourism is a sub-segment of adventure tourism exhibiting signs of growth, and is attracting increasing scholarly interest. This segment encompasses a variety of niche markets, in which active or passive participation in cycling is an integral component of the tourism experience (Lumsdon, 1996; Ritchie, 1998). Bicycle tourism may take the form of organised events; travel to compete in or observe bicycle racing; or independent

cycling holidays. The focus of this paper is independent cycling holidays, of which an independent bicycle tourist may be defined as:

A person who is away from their home town or country for a period not less than 24 hours or one night, for the purpose of a vacation or holiday, and for whom using a bicycle as a mode of transport during this time away is an integral part of their holiday or vacation. This vacation is independently organised and may include the use of transport support services and any type of formal and/or informal accommodation (Adapted from Ritchie, 1998: 568-569).

No previous studies have considered the applicability of Leiper's (2004) model of whole tourism systems to specific forms of special interest tourism. It is unclear whether the embedded conceptual elements, or the tourist flows implied, are applicable when the model is applied to specific forms of tourism. This paper examines two geographic elements of the generic model: transit routes, and tourist destination regions, in light of independent bicycle tourism, and as such has three specific aims:

To highlight limitations of the generic model of whole tourism systems in articulating the tourist flows, and roles served by tourist destination regions and transit routes when applied to independent bicycle tourism;

To propose an adapted model of whole tourism systems specific to independent bicycle tourism; and

To discuss the theoretical and practical implications of the adapted model of whole tourism systems.

## **Literature Review**

### **General System Theory and Tourism**

A common means of conceptualising tourism is that of a system. Scholars began applying general system theory to tourism in the 1970s, resulting in a number of system

theories of tourism (Getz, 1986; Gunn, 1972; Mill & Morrison, 1985). System theory emerged during the 1930s as a successor to the 'mechanist' approach to understanding complex phenomena (Flood & Jackson, 1991; Leiper, 2004). The mechanist approach was eventually recognised as being problematic because it advocated analysis of elements in isolation. Systems thinking overcame this limitation by promoting the analysis of connectivity between elements (Hall, 2000). Systems theory distinguishes between *open* and *closed* systems. An open system interacts with the environment(s) in which it exists (Skyttner, 2001), of which tourism is an example. Actors such as hotels may experience fluctuations in demand due to environmental occurrences, a major terrorist attack for example (Leiper, 2004).

Leiper's (2004) model of whole tourism systems is a commonly cited conceptualisation of tourism underpinned by system theory. The model conceptualises tourism as an open system consisting of five interrelated elements: one human element (tourists), one industrial/organisational element (tourist industries), and three geographic elements (traveller-generating region, transit route, tourist destination region). These five elements are subject to influence by external environments (legal, economic, political environments). The scope of this paper examining the applicability of Leiper's model of whole tourism systems to independent bicycle tourism, is limited to the tourist destination region, and transit route elements.

### **Tourist Destination Regions**

A tourist destination region (TDR) is a geographic concept derived from that of a *tourist destination*, which must first be defined in order to understand the nature of a TDR. Leiper (2004: 128) defined a tourist destination as, "places where travellers choose to stay awhile for leisure experiences, related to one or more features or characteristics of the place – a perceived attraction of some sort". As such, tourist destinations are places in whole tourism systems where tourists remain temporarily static. Meanwhile, Leiper (2004: 128) postulated a TDR as a narrower geographic concept, whereby:

The boundary of a TDR can be regarded as the feasible day-tripping range around a tourist's accommodation, encompassing the area that tourists might typically visit on day

trips. Going further requires shifting to new accommodation, when tourists move to what is, in effect, another TDR. In theory, each hotel or other accommodation base where a tourist stays for a night is the centre of a TDR.

‘Destinations’ have been placed by some authors on a pedestal, to the belittlement of other elements in whole tourism systems. Cooper *et al.* (1993: 77) for example, described destinations as the “*raison d’être*” for tourism, while Ritchie and Crouch (2000: 1) described destinations as “the fundamental product in tourism”. Such thinking has, however, been called into question. Leiper (2000: 364) suggested that perception of destinations as the “heart of tourism” distorts clear thinking amongst researchers, resulting in flawed conclusions.

For tourism incorporating multiple destinations, of which independent bicycle tourism is often an example, conjecture exists regarding the role TDRs play in travellers’ decision-making as to where they visit. Weber (2001) noted that for tourists traversing the Asian Overland Route, the experience of traversing this transit route was of more importance than the final destination, Nepal. Meanwhile, Brotherton and Himmetoglu (1997) suggested that for ‘general’ travellers, characteristics of a destination such as its mix of attractions are the primary focus in their destination selection. However, for special interest tourists, the priority is being able to pursue the particular activity they have an interest in, as opposed to the actual destination they visit, which is said to be of secondary concern.

### **Transit Routes**

Transit routes are depicted as the conduit linking the traveller between their home (the traveller-generating region) and the TDR. When travellers reach the end of a transit route and arrive at their destination, they cease being travellers and become tourists. Leiper (2004: 122) described transit routes as the part of whole tourism systems where:

...the traveller has left home but has not yet reached a place he/she regards as a tourist destination for that trip. This is an intermediate zone where the principal *travel* activity of tourism occurs, as distinct from *visit* activity in destinations.

Two possible limitations may be noted from Leiper's definition of transit routes. First, this definition emphasises the connectivity provided by transit routes to and from the TGR, somewhat discounting tourists' use of transit routes within TDRs, particularly in multi-destination itineraries. Prideaux (2000: 55) noted a further limitation regarding transit routes as postulated in Leiper's (2004) model of whole tourism systems, in that the model does not consider "travel within the generating region required to move tourists from home to the point of departure".

A notable limitation is the downplaying of principal visiting activities occurring along transit routes. Leiper's definition suggests that transit routes are primarily associated with travel between home and destinations. For mobile forms of tourism however, tourists may derive the most pleasure from experiences incurred whilst traversing transit routes (Zillinger, 2007) such as the Asian Overland Route example cited earlier (Weber, 2001).

## **Methods**

In-depth interviews were conducted using email correspondence with thirteen experienced bicycle tourists. An interpretive approach to data collection and analysis was taken, in which textual data was gathered and used in theory generation (Creswell, 2003). This research was undertaken as part of a broader research programme. Therefore, informants for the present study were recruited from an earlier phase. Initially, a survey instrument was distributed via an Australian cycling periodical, which also invited respondents to contact the researcher if they wished to participate in a subsequent phase of the study.

'Purposive' sampling, whereby the researcher selects informants capable of providing the most pertinent information (Neuman, 2006) best describes the method used to select informants for this study. Purposive selection was evident in that 1) informants were subscribers to a dedicated cycling magazine, and therefore exhibited an interest and/or experience in independent bicycle touring; and 2) informants were screened

during initial contact to verify that they had undertaken an independent bicycle tour previously.

Asynchronous email interviews involve the administration of interview questions whereby respondents did not reply in real time. That is, responses are not instantaneous (Markham, 2004). Asynchronous email interviews were utilised because of the temporal and spatial flexibility required by the participants in order to participate in the research (Curasi, 2001). Many respondents were unable to participate in telephone interviews due to busy schedules. Asynchronous email interviewing provided a mutually convenient means of data collection (for the researcher) and participation (for the respondents), and was the primary rationale for their use in this study.

During November 2007 an email message was sent to the participants containing general instructions regarding the interview procedures; criteria for defining an independent bicycle tour; and an attached Microsoft Word file containing thirteen interview questions. Respondents were requested to type their responses using the attached file, and return them via reply email. Curasi (2001) noted that the capacity of asynchronous email interview methods to collect 'thick' data is inherently limited by the physical absence of the researcher, where they may 'probe' respondents for further detail. Curasi also stated that the detail provided is largely dependent upon the motivation and commitment of respondents to the issue(s) being investigated. As such, follow-up emails were undertaken in most cases to probe for further detail, and/or to clarify ambiguous responses (Minichiello, Aroni, Timewell, & Alexander, 1995). The respondents were avid and experienced bicycle tourists, and therefore provided very detailed responses in the majority of cases.

Raw data were analysed using a three-stage process of open, axial and selective coding (Neuman, 2006), in which a précis document of the researcher's interpretation of the responses as a whole was produced. A member checking procedure (Merriam, 1998)



was undertaken to validate the researcher's conclusions, which involved distributing the précis document to the participants for scrutiny and feedback.

## Findings & Discussion

Results from the thirteen interviews suggested that the definitions of TDRs and transit routes as prescribed by Leiper (2004) do not adequately articulate the tourist flows associated with independent bicycle tourism, nor do these concepts accurately reflect the nature of and roles played by TDRs and transit routes. In order to conceptualise independent bicycle tourism in light of whole tourism systems, inclusion of additional elements, and reconceptualisation of some existing elements was necessary.

### **It's not the Destination, It's the Journey!**

Independent bicycle tourists typically cycle from point-to-point each day during a tour, spending each night in a different location (Ritchie, 1998; Simonsen & Jorgenson, 1998), that is, they are often multi-destination tourists. Data collected in the present study suggests that destinations arrived at the end of each day's cycling are not perceived as the element which provides independent bicycle tourists with the most pleasure and satisfaction with their experience:

*...most often the destination is somewhere to go home from rather than the attraction. We led a ride from Alice to Canberra in 2001, we have rail trailed in 2 locations in Victoria, we toured the South Island of New Zealand, and I have toured Central NSW, as well as touring from Byron Bay to Wangaratta...On each occasion, the attributes of the destination had no real influence. It was simply a bike tour, and we would see and experience many things on each of them ('Peter', ACT).*

*[I consider] the weather, the 'attitude' of motorists & other people I may interact with (e.g. accommodation providers), the scenery/surrounds, the food, and the cycling itself, i.e.: the journey, rather than the destination ('Nancy', Victoria).*

'Destinations' for independent bicycle tourists are convenient, intermediary stopover points used mostly for physical recovery, refuelling the body, undertaking bicycle

maintenance or repairs, and replenishing supplies. Such a role is similar to “traveller destinations” described by Leiper (1990: 94), which serve as a point in transit. Sightseeing and other activities at intermediary destinations are generally of secondary importance for independent bicycle tourists. Similarly, Framke (2001: 15) noted that mobile tourists are not concerned with destinations as such. He observed that it is necessary for such tourists to make stops for sleeping, eating, making use of facilities, and labelled these stopover points as “nodes on the travelling line”.

### **Cycling Routes as Tourist Attractions**

As alluded to previously, destinations were not perceived by respondents as a primary source of satisfaction nor pleasure. Independent bicycle tourists’ primary concern in selecting a destination was a region’s capacity to support cycling. They are attracted to an area because of the presence and quality of cycling infrastructure (particularly roads, paths, and trails), endowed resources (appealing natural scenery), supporting industries, and accessibility.

Interestingly, destinations that are popular for the general tourist may prove to be inappropriate for independent bicycle tourists in the absence of suitable cycling routes, or because cycling routes are perceived as being unsafe. The following quote refers to the Great Ocean Road, a popular drive tourism route in Victoria, Australia. This respondent notes the resplendent scenery and quality roads, however, touring by bicycle along this route is constrained because of high traffic volumes, which may jeopardise safety:

*I may have driven through the area and thought it would be a good place to ride there, road conditions, distance between towns, availability of alternative transport if required, my ‘perception’ of it – i.e. there are a number of places that I would love to go riding – the Black Spur and Great Ocean Road (in Victoria), but I would not ride there, despite some factors being ideal e.g. great scenery, reasonable road surface etc. but I KNOW that both roads are narrow, attract lots of tourists (= inattentive driving), and have lots of hazards. In the case of the Black Spur, log trucks, and the Great Ocean Road, tourist buses. So I have never seriously considered it (‘Nancy’, Victoria).*

Conversely, regions which are not overly palatable by general-interest tourists may indeed prove attractive for bicycle tourists if safe, scenic cycling routes are nearby:

*At times a particular route is chosen purely as a means of getting from A to B, but more often than not a route is chosen due to its scenic appeal and the destination is second to that (unless the destination is to be a pivot point for day trips) ('Melissa', NT).*

Notably, when asked what features they look for in a bicycle tourism destination, respondents did not mention cycling routes in isolation. The common response was a combination of cycling routes and natural scenery. The theory of 'cumulative attraction' may therefore be useful in understanding independent bicycle tourists' decision-making regarding destination selection. Originally generated with the retail sector in mind, Lue, Crompton and Fesenmaier (1993: 296) suggested that cumulative attraction theory applied to tourism has implications for multi-destination itineraries, in that:

...the appeal of two or more attractions on a single route or in the same area is sufficient either to induce tourists to make a trip they would not have undertaken if there had been only a single attraction.

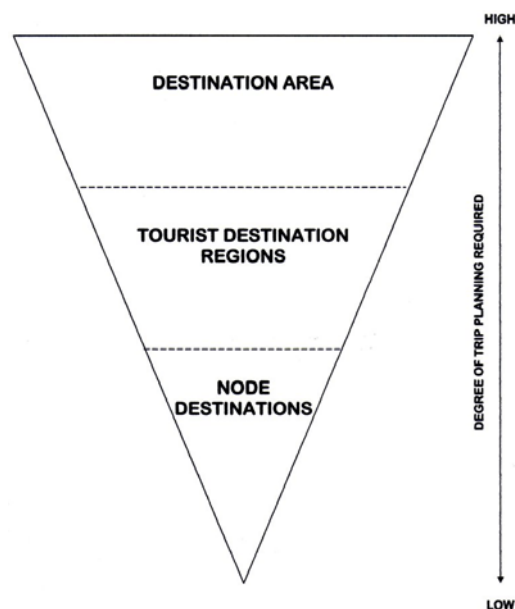
This theory could be relevant to independent bicycle tourism because it appears that for a destination to attract bicycle tourists, both cycling routes and appealing scenery (both potential tourist attractions in their own right) must be present. Lue *et al.* (1993: 297) also described *similar cumulative attractions*, which are two or more attractions, which when combined, "can draw more visitors than apart". For example, whilst a scenic driving route may be capable of attracting drive tourists, provision of wider road shoulders, signage, or a segregated cycling path along the same route may combine to form a similar cumulative attraction, capable of also attracting bicycle tourists to that area.

### **A Hierarchy of Destinations?**

Given the multi-destination nature of independent bicycle tourism, the concept of a 'hierarchy' consisting of three distinct forms of destinations may be useful in understanding the roles that various geographic points in multi-destination itineraries

play. Figure 1 depicts the proposed hierarchy, which identifies three distinct geographic destinations: destination area, tourist destination regions, and node destinations.

The hierarchy model represents three destination types, descending in geographical size from the top of the hierarchy to the bottom. The largest geographic destination type is 'destination area'. In examining destination selection by bicycle tourists, it was evident that a single destination is selected in isolation for a cycling tour: "*it's not like my destination is 'Sydney' or 'Uluru'*"('Peter', ACT). Instead, a large geographic region is selected, which acts as the tourist space (Framke, 2001) for an independent bicycle tour.



**Figure 1**  
**Geographic hierarchy of destinations for multi-destination itineraries (source: original for this study)**

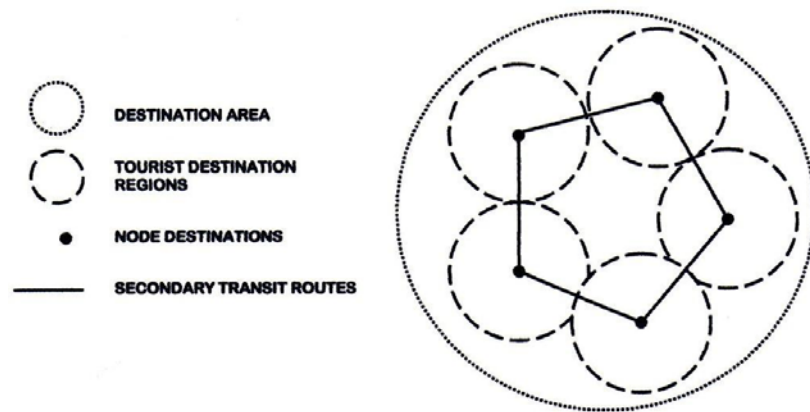
When examining multi-destination tourists, such as independent bicycle tourists, a distinction may be made between a destination area and a tourist destination region. Leiper's (2004: 128) definition of a TDR is problematic when applied to multi-destination tourism. Although Leiper acknowledges that TDRs may be "as small or as large as anyone wants to regard them", it is also stated that "the boundary of a TDR can be regarded as the feasible day-tripping range around a tourist's accommodation". This definition somewhat ignores movement within a broader destination area by tourists undertaking multi-destination itineraries. Zillinger (2007) supports this contention in arguing that many abstract conceptualisations (Leiper's model included) depict tourist movements within the TDR as being fairly static:

...such a system brings difficulties when it comes to round tours, as the intrinsic value of mobility is downplayed... At least parts of the transit route should be included in the tourist-receiving region, as mobility can be seen as playing an important role in the tourist experience (Zillinger, 2007: 12).

A 'destination area' exhibits characteristics which distinguish it from the two other destination types. First, a destination area features an entry and exit point; a point in the system where a traveller alights from the transit route and becomes a tourist, and vice-versa. For example, the South Island of New Zealand may be the destination area for an Australian bicycle tourist, for whom Christchurch International Airport acts as the entry and exit point. Second, the destination area is selected by the bicycle tourist primarily due to the presence of suitable cycling routes. Brotherton and Himmetoglu (1997) contend that this practice is common amongst special interest tourists, in that the activity to be pursued takes precedence over the destination in their decision-making.

The next level of destinations are 'tourist destination regions', identical in nature to TDRs as defined by Leiper (2004: 128). This concept represents the feasible space in which a tourist may travel during a day trip. Figure 2 illustrates the three destination concepts in an abstract itinerary incorporating five stopover destinations. Here it can be observed

that where the radial limits of two tourist destination regions intercept, is the point where the tourist enters a new TDR. Within TDRs are transit routes, which connect mobile tourists with the next 'node' destination, the final destination type acknowledged in the hierarchy.



**Figure 2**

**Abstract conceptualisation of a multi-destination itinerary incorporating the three hierarchical destination concepts (source: adapted from Leiper, 2004: 52)**

The third destination type is stopover destinations where independent bicycle tourists stop after each day's cycling. Framke's (2001) notion of a 'node' is adapted here in labelling such points as 'node destinations'. Node destinations are where independent bicycle tourists lodge overnight and make use of local facilities and services to refuel their bodies, physically recover, undertake bicycle maintenance/repairs, and replenish supplies. They are a point in transit, where sightseeing and other tourist activities are secondary in importance to the cycling experience.

The three hierarchical destinations may also exist along a continuum in terms of the degree of trip planning required, which decreases from the top to the bottom of the

hierarchy. For example, few travellers would arrive at an international airport without having a clear conception of the destination area they will fly to; this is typically planned well ahead of departure. It may also be necessary to obtain a visa, and/or any applicable inoculations, also requiring sufficient lead time. In contrast, once in the destination area, tourists are at leisure, and have much more scope to act in a spontaneous manner. Tourists may elect to move to another TDR at very short notice, or lodge at the same node destination for additional nights. This spontaneity may diminish if the tourist has purchased a packaged travel product which forbids changes in itinerary.

### **Two Transit Routes: Primary and Secondary**

Respondents reported deriving more pleasure from cycling between node destinations as opposed to the node destinations arrived at each day. As such, independent bicycle tourism experiences are consumed mostly whilst the tourist is traversing transit routes by bicycle, between node destinations. Leiper's (2004) model of whole tourism systems acknowledges only one form of transit route, which is problematic because independent bicycle tourists clearly make use of two distinct forms of transit routes.

Like all tourists, bicycle tourists traverse a transit route to depart the traveller-generating region and to enter the destination area to undertake the cycling component(s) of their journey. This is elementary, as a traveller must be away from their home region in order to be considered a tourist (Leiper, 2004; Mathieson & Wall, 1982). Similarly, bicycle tourists must traverse another transit route to depart the destination area and return to the TGR.

Transit routes connecting travellers between the TGR and destination area may be labelled 'primary' transit routes. Primary transit routes are characterised by the traveller's use of transport modes such as private vehicle, coach, train, or airplane, and are also by relatively long distances. The use of such transport modes applies to independent bicycle tourists unless the traveller departs their doorstep by bicycle to undertake a circuit in which they arrive back home by bicycle.

Independent bicycle tourists 'consume' the tourism experience whilst cycling along transit routes between node destinations, which may be labelled 'secondary' transit routes. In contrast to primary transit routes, secondary transit routes are traversed by bicycle, and are characterised by relatively short distances. They are also perceived in a different manner by the tourist. Primary transit routes are a transition from the TGR to the destination area. In contrast, secondary transit routes provide the tourist with the greatest source of pleasure, and constitute a key factor in bicycle tourists' decision-making regarding destination area selection.

Leiper (1990: 91) stated that transit routes are "where the major travelling occurs in the [tourism] system, as opposed to the visiting that occurs in destinations". This is not the case for bicycle tourists, for whom 'travelling' occurs whilst traversing primary transit routes. 'Visiting' takes place whilst cycling along secondary transit routes, where bicycle tourists explore the destination area by stopping in small villages, and taking in the sights, smells and sounds of the scenery, whilst travelling at a rather sedate pace.

There is a clear distinction between the two types of transit routes used by independent bicycle tourists, and it is inadequate to group the transit routes utilised by such tourists as one generic element of whole tourism systems. Clear conceptual definitions are required for both primary and secondary transit routes, and as such the following definitions are proposed:

*Primary transit routes are transitory paths that provide an outbound and return connection between the traveller-generating region and the destination area. Primary transit routes are characterised by the use of transport modes such as private vehicle, coach, rail and/or air, and often by relatively long distances. Primary transit routes may also be traversed by bicycle in the case of bicycle tours in which the traveller's home is the start and finishing point for the cycling component of the journey.*

*Secondary transit routes are experiential cycling routes traversed by independent bicycle tourists within the destination area. Secondary transit routes are traversed by bicycle and are characterised by relatively short distances. Such transit routes represent the element within the system where the tourism experience is consumed, and influence the traveller's overall satisfaction with the experience.*



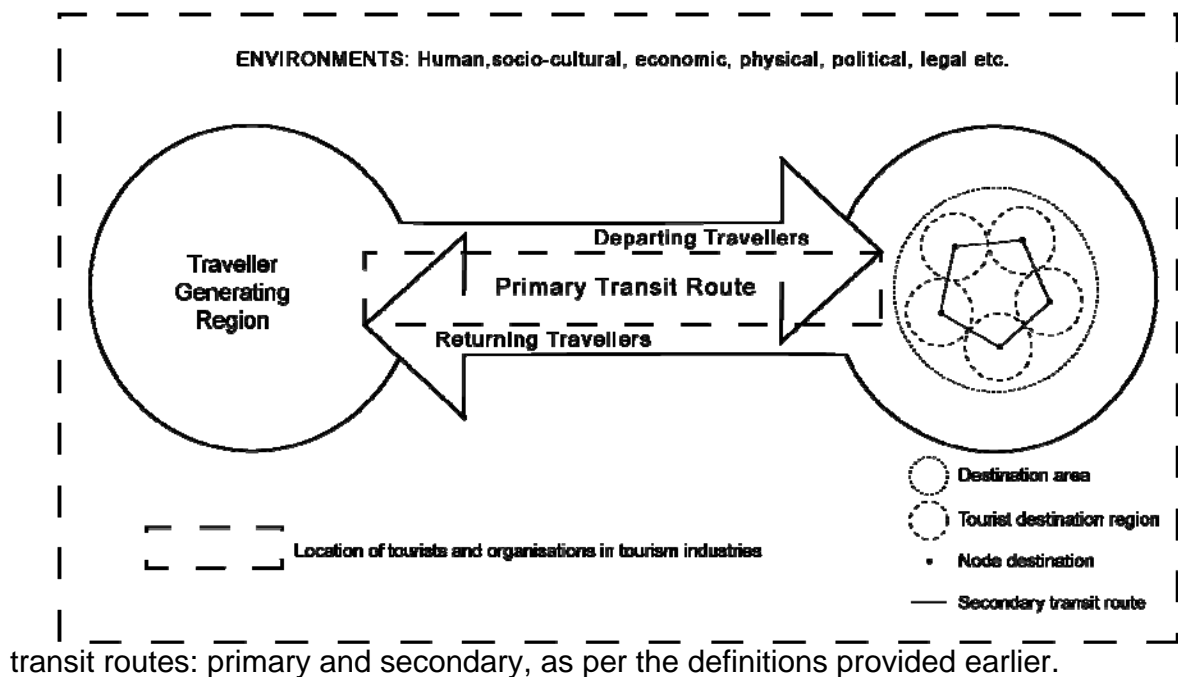
*Secondary transit routes perform a dual-role in that they also connect bicycle tourists between node destinations within the destination area.*

The 'efficiency' of primary and secondary transit routes is also influenced by different variables, which subsequently influence the level of accessibility to a TDR (Leiper, 2004). Efficiency of primary transit routes are influenced mostly by factors relating to carriers servicing such routes. Restrictive policies imposed by carriers regarding the carriage of bicycles may reduce the efficiency of a primary transit route, reducing access to a destination area for independent bicycle tourists. Different variables influence the efficiency of secondary transit routes, where surface quality, terrain, and road design all affect a cyclist's efficiency of movement. It is therefore imperative in conceptualising bicycle tourism as a system, that primary and secondary transit routes be acknowledged as distinct elements.

The previous sections have argued for the modification of some conceptual elements of the generic whole tourism system framework, as well as the need to integrate additional elements to better reflect the tourist flows associated with independent bicycle tourism. An adapted model depicting independent bicycle tourism as a whole tourism system is now proposed, and its associated implications are discussed.

## Independent Bicycle Tourism: An Adapted Model

Figure 3 presents the proposed whole tourism system framework for independent bicycle tourism. This adapted model represents a departure from the original model in that 1) the TDR element has been modified to reflect the three hierarchical destination elements associated with multi-destination itineraries; and 2) the inclusion of two distinct



transit routes: primary and secondary, as per the definitions provided earlier.

**Figure 3**

**Independent bicycle tourism depicted as a whole tourism system (source: adapted from Leiper, 2004: 53)**

Several implications for practice may be derived from this research. First, planners and policy makers must recognise that destinations do not attract independent bicycle tourists; secondary transit routes do. Planning initiatives for independent bicycle tourism must focus on meeting the expectations of bicycle tourists in terms of cycling route

surface quality, terrain, safety, and supporting infrastructure (such as signage, rest areas, toilets, drinking water).

Second, the attributes of secondary transit routes should be emphasised in marketing initiatives, such as appealing scenery, quiet roads or segregated paths/trails. Initiatives promoting packaged bicycle tours should consider distances between node destinations, which should be within reasonable cycling distance. The availability of products and services required by independent bicycle tourists such as bicycle repairs and maintenance, tourist information, food and drink provisions, are further considerations for marketing and product development.

Third, it is evident that destination areas not palatable by general-interest tourists may be highly suitable for bicycle tourists, if quality cycling routes exist along with appealing scenery, which has implications for regional development. For example, the Coed-y-Brenin forest is a section of national park in Wales which was transformed in the early 1990s into a basic trail system which quickly gained popularity. Corporate sponsorship later enabled the construction of a more elaborate trail system. Today Wales is internationally recognised as a mecca for mountain bike enthusiasts (International Mountain Bicycling Association, 2008).

## **Conclusion & Avenues for Future Research**

System theory has been frequently applied in many conceptual models of tourism, of which Leiper's (2004) model of whole tourism systems is a prominent example. Little attention, however, has been paid to assessing the applicability of this model to specific forms of special interest tourism. This paper has contributed to our understanding in this regard by examining independent bicycle tourism in light of two elements of whole tourism systems: transit routes, and tourist destination regions.

This study highlighted several limitations of Leiper's (2004) model of whole tourism systems in articulating flows associated with both independent bicycle tourists and multi-

destination tourists. A geographic 'hierarchy' of destinations was proposed, which acknowledged the mobility of multi-destination tourists through space, consisting of 1) a destination area, 2) tourist destination regions, and 3) node destinations. Further, two distinct transit routes were identified: 1) 'primary' transit routes, which connect the bicycle tourist to and from the TGR and the destination area; and 2) 'secondary' transit routes, traversed by bicycle, and along which the tourism experience is consumed. An adapted model depicting independent bicycle tourism as a whole tourism system was also proposed.

Several implications for re-creating tourism arising from this research were discussed. Such implications primarily related to a need for policy-makers and planners to be aware of the specialised needs and unique travel behaviours associated with this emerging form of tourism. Implications associated with the emergence of cycling-related tourism as a potential contributor to re-creating rural economies were also alluded to.

Several avenues for future research exist. First, limitations surround the present study due to the methods used. Empirical findings reported here are not generalisable beyond the cases which informed the research (Neuman, 2006). Notions put forward in this paper require validation through research incorporating a representative sample, and the use of quantitative techniques.

This research also provides a conceptual framework which may act as a platform for future research into independent bicycle tourism. Single elements of the framework may form the basis for studies into specific facets of independent bicycle tourism. The framework may also be applied in its entirety to assess a given region's ability to support independent bicycle tourism. Future research may also test the applicability of the adapted model to other forms of multi-destination tourism, of which long-distance hiking, and drive tourism are possible examples.

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