

TOURISM DESTINATION ZONING AND GOVERNANCE IN BORDER REGIONS

Daniel Blasco Franch

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Ph.D. THESIS

TOURISM DESTINATION ZONING AND GOVERNANCE IN BORDER REGIONS

Daniel Blasco Franch

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Programa de Doctorat en Turisme, Dret i Empresa

Supervisors: Jaume Guia Julve i Lluís Prats Planagumà

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Aquesta tesi és un compendi d'articles de recerca prèviament acceptats o enviats per publicar segons les referències completes de les publicacions següents, incloent-hi els co-autors, i constitueixen el nucli de la tesi, així com els seus indicis de qualitat.

Article 1:

Títol: Heritage tourism clusters in three borders in Mexico (in press).

Autors: Blasco, D.; Guia, J.; Prats, Ll.

Revista: Journal of Heritage Tourism

Hospitality & Tourism Index (Core)

Article 2:

Títol: Tourism destination zoning in mountain regions: a consumer-based approach (DOI:10.1080/14616688.2013.851267).

Autors: Blasco, D.; Guia, J.; Prats, Ll.

Revista: Tourism Geographies: An International Journal of Tourism Space, Place and Environment

JCR (2012): Impact Factor 0.731, 4t quartil (34 de 35, categoria Hospitality, Leisure, Sport & Tourism) - SJR (2012): Impact Factor 0.516, 1er quartil (92 de 492; categoria Social Sciences, subcategoria Geography, Planning and Development).

Article 3:

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Els Drs. JAUME GUIA JULVE i LLUÍS PRATS PLANAGUMÀ, de la Universitat de Girona,

DECLAREM:

Que el treball titulat TOURISM DESTINATION ZONING AND GOVERNANCE IN BORDER REGIONS, que presenta Daniel Blasco Franch per a l'obtenció del títol de doctor, ha estat realitzat sota la meva direcció i que compleix els requisits per poder optar a Menció Internacional.

I, perquè així consti i tingui els efectes oportuns, signo aquest document.

Signatura,

Girona, 29 de novembre de 2013

CONTRIBUCIONS INTERMÈDIES

A banda dels articles presentats en aquesta Tesi, la recerca duta a terme d'ençà l'any 2009, ha aportat altres resultats que es detallen a continuació.

1. Estades de recerca:

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2. Publicacions relacionades amb la recerca

BLASCO D., GUIA J., i PRATS Ll. (2010) La organización turística del territorio en la frontera. *Teoría y Praxis*, 8, p. 9-23.

BLASCO D., GUIA J., PRATS Ll. i SAEZ, M. (2009) Clústers turísticos en Cataluña. Una propuesta de organización turística del territorio. *Principales tendencias de investigación en turismo*. Ferrari G.; Mondéjar J.; Mondéjar J.A.; i Vargas M. (eds.). Septem Ediciones.

BLASCO D., GUIA J., i PRATS Ll. (2010) Clústers de productos turísticos: El caso de Cataluña. *Primer Coloquio Internacional en la Cátedra Patrimonial en Turismo Sergio Molina* (Universidad Autónoma de Ciudad Juárez). Publicació electrònica.

BLASCO D., GUIA J., i PRATS Ll. (2010) Desarrollo de un clúster transfronterizo de enoturismo entre Francia y España. *Cahiers Européenns des Sciences Sociales*, 1 (1), p. 37-53.

BLASCO D., GUIA J., PRATS Ll. i SAEZ, M. (2009) Clusters turísticos en Cataluña. Una propuesta de Organización Turística del Territorio. *RESTMA Revista de Economía, sociedad, Turismo y Medio Ambiente*, 8-9, p. 77-98.

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International Research Conference en el marc de la visita de estudi a Catalunya del European Union of Tourism Officers (EUTO). Ponència: "Innovation strategies in tourism. Local & regional development" (Sant Sadurní d'Anoia, 2009)

ATLAS Annual Conference. Ponència: "Destination Planning: mixing products and companies" (Aalborg, Dinamarca, 2009).

Jornada sobre Districtes Industrials / Clústers d'Espanya. Ponència: "Una proposta d'organització turística del territori: el cas de Catalunya" (Cuenca, 2009):

51° Congres de la Western Social Science Association i de la Association for Borderland Studies. Ponència: "Determinación de Clusters de Productos Turísticos con Potencial de Desarrollo en Regiones Transfronterizas: El caso de la Frontera Catalana Francesa". (Albuquerque, EUA, 2009).

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4. Altres publicacions. Finalment, altres recerques que s'han realitzat en aquests darrers anys:

PALAU R.; FORGAS S., BLASCO D. i FERRER B. (2012) An analysis of greenways from an economic perspective. *Tourism Planning and Development*, 9 (1), p. 15-24.

BLASCO D. i PRATS Ll. (coord). (2007) *Els Reptes de la Formació Continuada*. Ed. Universitat de Girona. Girona.

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Resum: Zonificació i governança de les destinacions turístiques en territoris transfronterers

.Els debats sobre les destinacions turístiques s'han incrementat en les últimes dècades, esdevenint un dels focus de molts investigadors. En la majoria dels casos, els estudis es situen dins de la dualitat modernista de la destinació turística com un sistema de producció i com un lloc de consum alhora, malgrat el fet què recerques recents han reconegut les formes en què destinacions de turisme evolucionen i canvien. Aquesta Tesi pretén contribuir a la bibliografia sobre la governança del turisme i la planificació de les destinacions, amb especial èmfasi en les zones frontereres.

A efectes d'aquesta dissertació, les destinacions turístiques s'assimilen a àrees funcionals on la mobilitat del turista té lloc, per al consum d'una xarxa d'atractius i serveis. Per tant, suposem que les destinacions turístiques són entitats dinàmiques que evolucionen al llarg de l'espai i del temps, a causa de la interacció d'una sèrie de factors, com ara: la presència, la concentració i qualitat de les atraccions turístiques, la distància amb les atraccions turístiques properes, i el paper dels actors locals i regionals en el desenvolupament i la promoció del turisme.

La major part de la recerca sobre destinacions turístiques s'ha centrat en l'anàlisi de les destinacions existents, que majoritàriament coincideixen amb les regions administratives. No obstant això, encara hi ha llacunes en el coneixement sobre l'aparició i l'evolució de noves destinacions turístiques, especialment en territoris propers a la frontera. Les fronteres representen la manifestació més explícita o expressió física dels límits de les regions administratives, com a resultat d'un lent procés de construcció de territoris al llarg de la història, i més aviat inalterable a posteriori. Per tant, les fronteres són factors determinants que incideixen en la creació i l'evolució de les destinacions turístiques.

La investigació inclou mètodes quantitatius i qualitatius, per tal de fer front a les diferents realitats analitzades en els casos d'estudi. Els objectius de la recerca es poden resumir de la següent manera: 1) desenvolupar una metodologia que ajudi en la identificació de les zones turístiques basades en patrons de consum turístic amb un elevat potencial dins d'àrees més grans, com regions, estats, països, i específicament en

regions transfrontereres; i 2) aprofundir en el coneixement dels factors que obstaculitzen o fomenten el turisme i la cooperació transfronterera.

En síntesi, doncs, aquesta Tesi contribueix al debat sobre la creació i la governança de les destinacions turístiques en contextos transfronterers, tendint un pont entre el coneixement sobre els patrons de mobilitat i el comportament dels consumidors, i les teories de govern de destinació. Al final, aquesta Tesi relaciona la geografía del turisme amb la governança del turisme, per contribuir amb resultats interessants que poden ser continuats per futures investigacions. A continuació, s'aborden una sèrie de qüestions a mode de conclusions finals.

La investigació ha demostrat que els mètodes d'anàlisi clúster i SIG es poden utilitzar conjuntament en la planificació i desenvolupament de les destinacions turístiques. Amb aquestes premisses s'ha proposat un mètode per delimitar "zones turístiques" des de la perspectiva de la mobilitat turística. En la identificació de noves zones turístiques, s'han detectat una sèrie de qüestions que fomenten el desenvolupament del patró de mobilitat turística anomenat 'camp base i excursions radials' (*hub-&-spoke*). Entre aquests factors, una de les aportacions més importants d'aquesta Tesi rau en la introducció de la distància entre els diferents llocs d'interès, tant geodèsica com distància "real" en temps, com la pedra angular per al càlcul d'àrees lògiques de consum per als turistes.

No obstant això, també s'ha argumentat que una distribució òptima de les atraccions combinada amb una bona dotació en comunicacions i infraestructura d'allotjament, per si sols no són sempre suficients arguments per a la creació de noves destinacions turístiques. De fet, el paper dels actors públics i privats és fonamental per tal de construir ponts de diàleg i de col·laboració que finalment transformen una regió transfronterera en una destinació turística.

Tots aquests factors tenen un gran impacte en contextos transfronterers, a causa de la gran quantitat d'impediments institucionals imposats davant les iniciatives de col·laboració transfronterera. No obstant això, en el cas de la vall de la Cerdanya, l'existència de símbols identitaris comuns, així com la complementarietat i l'especialització turística, en conjunt amb l'habilitat dels líders de determinats grups d'interès per construir xarxes, han provocat l'aparició d'una nova destinació transfronterera.

Aquesta Tesi obre vies prometedores per a la investigació futura mitjançant l'ampliació i aplicació de les evidències empíriques i les conclusions d'aquesta Tesi a altres contextos transfronterers, amb diferents atributs: ambients naturals, contextos humanitzats, regions més o menys desenvolupades, amb substrat cultural comú o amb fortes diferències ètniques, al llarg de les fronteres internacionals i intranacionals, etc. Específicament, la investigació futura pot decidir entre moltes direccions. En primer lloc, continua sent necessària confrontar aquests resultats amb el comportament real detectat en els patrons de consum dels turistes. Per exemple, l'ús de tècniques de seguiment podria permetre comprovar si els patrons de mobilitat dels turistes confirmen la importància (o no) de les noves zones turístiques proposades en aquesta Tesi. D'altra banda, investigacions futures es pot centrar en la introducció de factors per refinar els resultats en la direcció del patró de consum 'multidestinació', ja que les zones turístiques identificades en la Tesi poden fàcilment considerar-se com etapes dins d'un itinerari 'multidestinació' més ampli. Finalment, els resultats també plantegen una sèrie de reptes referits a la governança i a la gestió de les destinacions turístiques. El reconeixement i la comprensió dels rols de determinants actors institucionals i empresarials locals, el procés de construcció de xarxes de relacions, i la complexitat de la gestió dels processos en evolució constant, han mostrat ser factors importants en l'aparició de noves destinacions turístiques transfrontereres.

Resumen: Zonificación y gobernanza de los destino turísticos en territorios transfronterizos

El debate sobre los destinos turísticos ha incrementado en las últimas décadas, convirtiéndose en uno de los focos de muchos investigadores. En la mayoría de los casos, los estudios se sitúan dentro de la dualidad modernista del destino turístico como un sistema de producción y como un lugar de consumo al mismo tiempo, a pesar del hecho que investigaciones recientes han reconocido las formas en que destinos de turismo evolucionan y cambian. Esta Tesis pretende contribuir a la literatura sobre la gobernanza del turismo y la planificación de los destinos, con especial énfasis en las zonas fronterizas.

A efectos de esta disertación, los destinos turísticos se asimilan a áreas funcionales donde la movilidad del turista tiene lugar, para el consumo de una red de atractivos y servicios. Por lo tanto, suponemos que los destinos turísticos son entidades dinámicas que evolucionan a lo largo del espacio y del tiempo, debido a la interacción de una serie de factores, tales como: la presencia, la concentración y calidad de las atracciones turísticas, la distancia con respecto a las atracciones turísticas cercanas, y el papel de los actores locales y regionales en el desarrollo y la promoción del turismo.

La mayor parte de la investigación sobre destinos turísticos se ha centrado en el análisis de los destinos existentes, que en su mayoría coinciden con las regiones administrativas. Sin embargo, todavía hay lagunas en el conocimiento sobre la aparición y la evolución de nuevos destinos turísticos, especialmente en territorios cercanos a la frontera. Las fronteras representan la manifestación más explícita o expresión física de los límites de las regiones administrativas, como resultado de un lento proceso de construcción de los territorios a lo largo de la historia, y más bien inalterable a posteriori. Por tanto, las fronteras son factores determinantes que inciden en la creación y la evolución de los destinos turísticos.

La investigación incluye métodos cuantitativos y cualitativos, para hacer frente a las diferentes realidades analizadas en los casos de estudio. Los objetivos de la investigación se pueden resumir de la siguiente manera: 1) desarrollar una metodología

que ayude en la identificación de nuevas zonas turísticas basadas en los patrones de consumo turístico con un elevado potencial dentro de áreas más grandes, como regiones, estados, países, y específicamente en regiones transfronterizas, y 2) profundizar en el conocimiento de los factores que obstaculizan o fomentan el turismo y la cooperación transfronteriza.

En síntesis, pues, esta Tesis contribuye al debate sobre la creación y la gobernanza de los destinos turísticos en contextos transfronterizos, tendiendo un puente entre el conocimiento sobre los patrones de movilidad y el comportamiento de los consumidores, y las teorías de gobierno de destino. Al final, esta Tesis relaciona la geografía del turismo con la gobernanza del turismo, para contribuir con resultados interesantes que pueden ser continuados por futuras investigaciones. A continuación, se abordan una serie de cuestiones a modo de conclusiones finales.

La investigación ha demostrado que los métodos de análisis clúster y SIG se pueden utilizar conjuntamente en la planificación y desarrollo de los destinos turísticos. Con estas premisas se ha propuesto un método para delimitar "zonas turísticas" desde la perspectiva de la movilidad turística. En la identificación de nuevas zonas turísticas, se han detectado una serie de cuestiones que fomentan el desarrollo del patrón de movilidad turística llamado 'campo base y excursiones radiales' (*hub-&-spoke*). Entre estos factores, una de las aportaciones más importantes de esta Tesis radica en la introducción de la distancia entre los diferentes lugares de interés, tanto geodésica como distancia "real" en tiempo, como la piedra angular para el cálculo de áreas lógicas de consumo para los turistas.

Sin embargo, también se ha argumentado que una distribución óptima de las atracciones combinada con una buena dotación en comunicaciones e infraestructura de alojamiento, por sí solos no siempre son suficientes argumentos para la creación de nuevos destinos turísticos. De hecho, el papel de los actores públicos y privados es fundamental para la construcción de puentes de diálogo y de colaboración que finalmente transforman una región transfronteriza en un destino turístico.

Todos estos factores tienen un gran impacto en contextos transfronterizos, debido a la gran cantidad de impedimentos institucionales impuestos ante las iniciativas de colaboración transfronteriza. Sin embargo, en el caso del valle de la Cerdanya, la existencia de símbolos identitarios comunes, así como la complementariedad y la

especialización turística, en conjunto con la habilidad de los líderes de determinados grupos de interés para construir redes, han ocasionado la aparición de un nuevo destino transfronterizo.

Esta Tesis abre vías prometedoras para la investigación futura mediante la ampliación y aplicación de las evidencias empíricas y las conclusiones de esta Tesis a otros contextos transfronterizos, con diferentes atributos: ambientes naturales, contextos humanizados, regiones más o menos desarrolladas, con sustrato cultural común o con fuertes diferencias étnicas, a lo largo de las fronteras internacionales y intranacionales, etc. Específicamente, la investigación futura puede decidir entre muchas direcciones. En primer lugar, sigue siendo necesario confrontar estos resultados con el comportamiento real detectado en los patrones de consumo de los turistas. Por ejemplo, el uso de técnicas de seguimiento podría permitir comprobar si los patrones de movilidad de los turistas confirman la importancia (o no) de las nuevas zonas turísticas propuestas en esta Tesis. Por otra parte, investigaciones futuras se puede centrar en la introducción de factores para refinar los resultados en la dirección del patrón de consumo 'multidestino', ya que las zonas turísticas identificadas en la Tesis pueden fácilmente considerarse como etapas dentro de un itinerario 'multidestino' más amplio. Finalmente, los resultados también plantean una serie de retos referidos a la gobernanza y a la gestión de los destinos turísticos. El reconocimiento y la comprensión de los roles de determinantes actores institucionales y empresariales locales, el proceso de construcción de redes de relaciones, y la complejidad de la gestión de los procesos en evolución constante, han mostrado ser factores importantes en la aparición de nuevos destinos turísticos transfronterizos.

Abstract: Tourism destination zoning and governance in border regions

Debates on tourism destinations have increased during the last decades, being the focus for many researchers today. In most cases the studies fall within the range of the modernist dualism in terms of the tourism destination as a production system and as a consumption place, despite the fact that recent attempts have acknowledged the ways in which tourism destinations evolve and change. This dissertation endeavours to contribute to the literature on tourism destinations management and planning, with special emphasis on border areas.

For the purpose of this dissertation, tourism destinations operate as functional areas where tourists' mobility takes place, for the consumption of a network of attractions and services within the destination. Thus, we assume that tourism destinations are dynamic entities that evolve throughout space and time due to the interaction of a number of factors, such as: the presence, concentration and quality of tourism attractions; distance among tourism attractions nearby; and the role of local and regional stakeholders in tourism development and promotion.

Most of the research on tourism destinations has focused on analysing existing destinations, which predominantly coincide with administrative regions. Nevertheless, there are still gaps in the knowledge of the emergence and evolution of tourism destinations when they are near or along the border. Borders represent the most explicit manifestation or physical expression of the limits of administrative regions, resulting from a slow process of construction of territories throughout history, and rather unalterable a posteriori. Hence, borders are among the determinant factors that affect the creation and evolution of tourism destinations.

The research includes both quantitative and qualitative methods, in order to cope with the different realities analysed in the different case studies. The objectives of the research can be summarized as follows: 1) to develop a methodology that can help in identifying consumption pattern-based tourism areas of high potential within larger areas such as regions, states, countries, and specifically in cross-border regions; and 2)

to deepen in the knowledge about factors that hinder or foster tourism cross-border cooperation.

This Thesis contributes to the debate on the creation and governance of tourism destinations in cross-border contexts, by bridging consumer behaviour mobility patterns theories with destination governance theories. At the end, this dissertation relates tourism geographies with tourism management, to cast interesting results which can be followed by further investigations. A number of issues can be addressed as final conclusions.

The research has proved that cluster analysis and GIS-based methods can be used together in the planning and development of tourism destinations. With these premises we have proposed a method to delineate 'tourism zones' from the perspective of tourism mobilities. A number of issues that fosters the development of hub-and-spoke tourism mobility pattern have been taken into consideration for the identification of tourism zones. Among those factors, one of the most important contributions of this Thesis is the introduction of distance between the different attractions, both geodesic and 'real' distance in time, as the corner stone for the calculation of logical areas of consumption for tourists.

However, it has also been argued that an optimal distribution of attractions combined with good communication and accommodation infrastructure are not enough arguments for the creation of new tourism destinations. In fact, the role of public and private stakeholders is crucial to make things happen in order to bridging ideas and grounding collaboration that finally converts a cross-border region into a cross-border tourism destination.

All the previously explained factors have a great impact in cross-border contexts, due to the large number of institutional impediments arisen towards cross-border collaboration initiatives. However, in the case of the Cerdanya Valley, the existence of common identity artefacts as well as a complementarity of tourism specialization, altogether with the leadership of certain stakeholders to build networks can lead to the emergence of newly found cross-border destinations.

This dissertation opens promising avenues for future research by extending and implementing the empirical evidence and conclusions of this dissertation to other cross-

border contexts, with different attributes: natural environments, humanized contexts, more or less developed or undeveloped regions, with common cultural subtract or with strong ethnic differences, along both international and intranational borders, etc. Specifically, future research can decide among many directions. Firstly, it is still needed to confront these results with actual behaviour in the consumption patterns of real tourists. For example, using tracking techniques we could check whether their travel patterns in the identified tourism areas confirm the relevance (or not) of new tourism zones. Moreover, future research can be focused in the introduction of factors to refine results in the direction of multi-destination trips, since tourism zones can easily be seen as stages within a wider multi-destination governance and management in tourism zones. Acknowledging and understanding the determinant roles of institutional and business local stakeholders, the process of building networks of relationships, and the complexity of the management of on-going processes have proven to be important factors in the emergence of new cross-border tourism destinations.

CHAPTER 1. INTRODUCTION. TOURISM DESTINATION ZONING AND GOVERNANCE IN BORDER REGIONS.

Introduction: Tourism destination zoning and governance in border regions.

Debates on tourism destinations have increased during the last decades, being the focus for many researchers today. Yet, tourism destinations have been pointed out to be the most appropriate unit of analysis in tourism research (Haywood, 1986). In most cases the studies fall within the range of the modernist dualism in terms of the tourism destination as a production system and as a consumption place, despite the fact that recent attempts have acknowledged the ways in which tourism destinations evolve (Prats, Guia & Molina, 2007) and change (Saraniemi & Kylänen, 2011).

For the purpose of this dissertation, tourism destinations operate as functional areas where tourists' mobility takes place, for the consumption of a network of attractions and services within the destination (Jansen-Verbeke & Lievois, 2008; Russo, 2008; Shoval & Isaacson, 2007; Shih, 2006; Guia, Prats & Comas, 2005, 2006; Dredge, 1999). Thus, the spatial distribution of resources (which includes distance to the attractions), the intensity and specificity of attractions influence the consumption patterns of space (Weidenfeld, Butler & Williams, 2010; Hunt & Crompton, 2008; Michael, 2007). Understanding the movement patterns of visitors is important to defining and delineating 'effective' tourism zones or destinations. Literature has analysed two main different tourism mobility patterns, which are multi destination movements (Lew & McKercher, 2006). Moreover, some authors have argued that most common tourism movement pattern within destination is hub-and-spoke (Smallwood, Lynnath & Moore, 2012; Chancellor & Cole, 2008; McKercher & Lau, 2008), with a maximum within distance travelled of approximately 1:30 hours and 100 kilometres.

Most of the research on tourism destinations has focused on analysing existing destinations, which predominantly coincide with administrative regions (Zhang, Han-Hua & Zhuang, 2011; Weidenfeld et al., 2010; Zillinger, 2007; Hwang & Fesenmaier, 2003; Vasiliadis & Kobotis, 1999; Dredge, 1999; Leimgruber, 1988). Nevertheless,

there are still gaps in the knowledge of the emergence and evolution of tourism destinations when they are near or along the border. On one hand, destinations on the border have to struggle to fit in administrative regions located at each side (Ioannides, Nielsen & Billing, 2006; Lovelock & Boyd 2006; Timothy & Tosun 2003) that may substantially differ from their cultural and historical nature, or in other words, their border identity. From the tourist perspective, cross-border destinations may represent the opportunity to visit different countries with one single trip, which is motivating for most of tourists, and extremely important at least for some tourists who are specifically interested in the phenomenon of borders (Timothy, 2001). At some point of any tourism movement, international and intranational borders are being crossed. Borders represent the most explicit manifestation or physical expression of the limits of administrative regions, resulting from a slow process of construction of territories throughout history, and rather unalterable a posteriori. Hence, borders are among the determinant factors that affect the creation and evolution of tourism destinations.

This dissertation endeavours to contribute to the literature on tourism destinations management and planning, with special emphasis on border areas. The research includes both quantitative and qualitative methods, in order to cope with the different realities analysed in the different case studies. For the purpose of the papers, we assume that tourism destinations are dynamic entities that evolve throughout space and time due to the interaction of a number of factors, such as: the presence, concentration and quality of tourism attractions; distance among tourism attractions nearby; and the role of local and regional stakeholders in tourism development and promotion. The objectives of the research can be summarized as follows: 1) to develop a methodology that can help in identifying consumption pattern-based tourism areas of high potential within larger areas such as regions, states, countries, and specifically in cross-border regions; and 2) to deepen in the knowledge about factors that hinder or foster tourism cross-border cooperation.

The following chapters of this dissertation are organized as follows. Chapter 2 is an exploratory exercise about the organization of tourism attractions and products in border regions, and the identification of areas with potential to be developed as newly found tourism destinations, with no regard to political boundaries. The intention is to develop a methodology to identify clusters of tourism attractions which could be considered as potentially new tourism destinations, and then to test this methodology in a case study in three borders of Mexico. For this purpose, we specifically analysed heritage tourism in deep, and therefore the most important natural and cultural heritage tourism attractions were identified and geo-positioned in maps. Distance in kilometres was calculated among all attractions. Cluster analysis software was used to define the tourism areas, some of which happened to be cross-border, while others not. Additionally, in an effort to bring into the discussion the multiple destination concept, maps were displayed to show the different possibilities of corridors, as aggregations of the different clusters. Political barriers were not considered in the analysis, yet it is clear that they have different levels of impacts in terms of restrictions for the mobility of tourists. Most important findings include the identification of potential clusters or zones and corridors, each of them with a certain degree of potential and restrictions for cross-border cultural and natural heritage tourism development.

Having learned from the exploratory exercise in the borders of Mexico, Chapter 3 intends to analyse more in deep the interactions, opportunities and threads of the construction of tourism destinations along the border. For this purpose, we chose a vast European mountain range called Pyrenees, due to it is a large area which is divided in three different countries and several administrative regions within each country. One of the most important contributions of this paper is the inclusion of tourism consumption patterns into the discussion. For instance, tourism zones are calculated on a basis of time-distance (and not in kilometres), which is argued to be preferable when analysing tourism behaviour. The resulting tourism zones are very similar to historical regions, such as the Cerdanya Valley, thus sharing common cultural artefacts like language, despite being divided by current borders. Other important findings are based on the statistical calculations. On one hand, there is a high and significant correlation between 'attractiveness' (intensity and specificity of attractions) and accommodation units' concentration. This fact supports the hypothesis that unique first-class attractions foster the growth of tourism accommodation nodes. On the other hand, and even more important, there is a strong correlation between the number of borders and the level of attractiveness of regions, thus supporting the idea that borders are attractive for tourists. These results suggest that although border areas include adjacent territories belonging to different administrative regions, however from the perspective of tourism consumption, border areas are often perceived as tourism destinations by themselves. These findings

can lead to essay implementation as an exercise for tourism planning and development elsewhere.

Finally, Chapter 4 is devoted to deeply analyse the emergence of tourism destinations in a cross-border context. The article suggests that stakeholders are constituted in networks, and that governance processes of these networks in a crossborder context must take into account a number of issues that go beyond the traditional analysis of ties and nodes, and must strongly consider informal processes. In order to test these hypotheses in a case study, we chose one of the tourism zones that resulted from the analysis in the Pyrenees mountain range performed in Chapter 3. This is the area of the Cerdanya Valley-Catalam Pyrenees, a historical and cultural area divided by the border between Spain and France. Right in the middle of the Valley, Llivia is a Spanish enclave surrounded completely by French territory. Findings suggest that after several failed attempts to undertake a process of cross-border tourism destination all along the Cerdanya Valley, the latest attempt has succeeded due to a number of the factors that all together may help to explain the emergence of this new tourism destination. Among those, we highlight the role of the community of Llívia seen as neutral agent by both the Spanish and the French parties, and hence playing a unique role of betweennes in pushing the process forward.

The research has made his way through a number of limitations, which are briefly discussed here. Firstly, there is a general lack of information concerning crossborder regions, for example referring to statistical data or GIS applications, to name a few. This research has had to create own information to build upon. In addition, another limitation has been identified in GIS software, in order to make more accurate cluster analysis, as exposed in Chapter 3. Finally, the last limitation refers to the area of analysis to contrast validity of statistical results. For example, the inclusion of the area of Andorra in the analysis of the Cerdanya Valley could add more interesting results, considering proximity between both regions, as well as a similarity/difference analysis to establish comparisons, since Andorra is a country while the Cerdanya Valley is not. The different role of institutional powers and local business stakeholders can explain the evolution of both regions, by contrasting them with each other, due to their very similar nature, but very different evolution in history and situation in the present.

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CHAPTER 2. HERITAGE TOURISM CLUSTERS IN THREE BORDERS IN MEXICO

Heritage tourism clusters in three borders in Mexico

Journal of Heritage Tourism (in press)

This article seeks to find potential heritage tourism clusters in border areas. Literature about tourism destinations is essentially focused on administrativebound areas, while little attention has been paid to functional regions. The research is based on a methodological exercise to contribute to this debate by analyzing the case of three border regions between Mexico, the USA, Guatemala and Belize respectively. These borders have never been static but have changed throughout history, to the present day situation. It is argued that these changes have implications for the potential development of heritage tourism. The results identify a number of cross-border clusters and corridors in these areas with different levels of tourism underdevelopment, mainly because of political or legal restrictions. The results of this study contribute to an improved understanding of borderland heritages and regional clusters in the context of tourism.

Keywords: heritage, border, functional areas, corridors, distance, cluster analysis, spatial patterns, cross-border regions

Introduction

Usually, the boundaries of tourist destinations coincide with administrative boundaries (e.g. a country or region). Within destinations, there are different patterns of consumption and mobility. In fact, a destination can be defined as a complex system of attractions or functional area (Jansen-Verbeke & Lievois, 2008; Russo, 2008; Shih, 2006; Shoval, 2008) where distance represents an essential moderating factor for one's travel motivations and choice of attractions (Nicolau, 2008a; Nicolau & Mas, 2005; Nyaupane & Graefe, 2008; Zillinger, 2007). This article focuses on three border areas between Mexico and its three land neighbors: the United States (the border between the Mexican state of Chihuahua and the US states of Texas, New Mexico and Arizona);

Guatemala (the Mexican state of Chiapas and Guatemala); and Belize (the Mexican state of Quintana Roo and Belize, with an extension to the border between Belize and Guatemala). These international boundaries were chosen because they present a wide range of different realities and cover a broad spectrum of socio-cultural, political and economic situations in the potential development of heritage tourism. The purpose of this paper is to analyze these border areas based on the calculation and representation of heritage clusters to explore whether there are cross-border functional areas and mobility patterns that remain underdeveloped. The results constitute a basis for identifying coherent areas in terms of heritage that currently are divided by different administrative boundaries, and hence, tourism regions. The issues addressed in this research can be summarized as follows: the non-correspondence between officially-bounded administrative regions and heritage regions; the identification of factors that contribute to, or hinder, the development of territories, and hence, tourism destinations; and the moderating role of distance in proposing alternative tourism destinations.

Clustering, borders and heritage in tourism

This study contributes new knowledge about methodological approaches to tourism clustering, the implications of borders for the development of tourism, and the relationship between heritage and the identity of regions for tourism development.

Tourism clusters

Many worldwide examples demonstrate that tourism consumption patterns often follow a clustering process and clustered spatial patterns (Mommaas, 2004; Yang & Wong, 2013; Young, 1999). Tourism destinations operate as functional areas in terms of mobility of tourists for the consumption of attractions and services (Jansen-Verbeke & Lievois, 2008; Russo, 2008; Shih, 2006; Shoval, 2008). The accumulation, similarity, complementarity, specialization of attractions and the importance or hierarchy of tourist sites are crucial factors in this process (Hall, 2005; Hunt & Crompton, 2008; Jackson & Murphy, 2006; Michael, 2003, 2007; Nordin, 2003; Novelli, Schmitz & Spencer, 2006; Shoval & Raveh, 2004; Taylor, McRae & Lowe, 2007; Weidenfeld, Butler & Williams, 2010). Indeed, several authors have analyzed the effects of distance on travelers' motives for, and choices of, visiting a specific destination (Nicolau, 2008a; Nicolau & Mas, 2005; Nyaupane & Graefe, 2008; Zillinger, 2007). Hence, the distribution of tourist attractions in destinations becomes a major issue, where distance plays a moderating role in the functionality of tourism destinations (Smith, 1984; Smith & Xie, 2003). However, it is important to note that there are some mitigating factors, such as individual motivations towards a certain attraction or technological facilities to ease accessibility (Chen, 1998; Nicolau, 2008b; Shoval & Raveh, 2004). For the purpose of this article, clusters are equated to Reynolds and McNulty's (1968) cross-border functional areas—places where a certain number of distinguishable patterns occur.

Tourism destination boundaries

Destinations have their own limits or boundaries. From a geopolitical point of view, the tourism literature has generally taken the coincidence of political boundaries and destination boundaries for granted, as they are found today (Saraniemi & Kylanen, 2010; Sofield, 2006). Thus, relatively little attention has been paid to alternative crossborder tourism regions (Nilsson, Eskilsson, & Ek, 2010; Timothy & Saarinen, 2013). Indeed, some works point out that pre-existing organizations and institutions often act as obstacles to the development of new tourism destinations (Ioannides, Nielsen & Billing, 2006; Lovelock & Boyd, 2006; Timothy & Tosun, 2003; Timothy & Canally, 2007). Actually, though, borders change through time owing to historical, social, cultural, political, and economic factors (Nilsson et al., 2010; Paasi, 1996; Prokkola, 2007; Timothy, 2006), and occasionally become tourist attractions (Gelbman & Timothy, 2010). Thus, boundaries should be understood as a sum of dynamic elements that constantly develop and change (Gilbert, 1960; O'Dowd, 2010), figuratively and literally. New and alternative conceptions of tourism destinations and their boundaries have huge implications for tourism planning and development (Kauppila, Saarinen & Leinonen, 2009; Dredge, 1999).

Heritage and destination identity

Heritage helps determine the identity of tourist destinations (Palmer, 1999; Timothy, 2011). It is composed, among other things, of natural and cultural elements (Smith, 2009; UNWTO, 2001). Both are essential imprints that define to a great extent the identity of regions (Budruk, White, Wodrich, & Van Riper, 2008; Christou, 2005; Galí, 2012; Prentice, 1993), and thus, differences in both natural and cultural heritage make

tourism destinations unique. The natural elements of a territory constitute a first crucial factor in the creation of its identity (Boyd, 2002; Hazen, 2009; Timothy & Tosun, 2003). Indeed, there are natural or physical obstacles and also natural or geographical corridors that hinder or foster, respectively, the mobility of people within geographical areas. Over this underlying physical substrate, cultural evolution and development is the result of a gradual and long process of human interaction within each natural region. Further, technological factors and human action can modify these original natural and cultural patterns (Lloyd & Morgan, 2008; Orbaşli & Woodward, 2008). In terms of tourism development, natural attractions often constitute the point of first approach between tourists and new territories (Carson, Prideaux, Coghlan, & Taylor, 2009; Cochrane, 2008). Cultural attractions inject an additional layer of historical, anthropological and social dimensions of tourism destinations to the tourists' experience (Timothy, 2011; Weaver, 2011).

Methods

Studies have applied various clustering techniques in tourism (Michael, 2007; Vasilidis & Kobotis, 1999), yet little has been published so far in the context of cross-border tourism regions. The method used in this study seeks to identify regions with potential to become cross-border tourism destinations.

The methodological process was divided into three stages. The first consisted of identifying and representing existing relevant culture- and nature-based attractions in the Mexican cross-border areas. Attractions were identified with the use of tourism promotional material and in consultation with academic staff at regional universities in all three border areas. Field visits were also made to verify the information gleaned from promotional material and to gather additional information on attractions that were included in the analysis. The basis for including an attraction was that it should have enough appeal to stimulate international visits. For this reason, results can only be interpreted in terms of general movements of international travelers between main attractions in the border areas. Following those criteria, 17 attractions were identified in the Chihuahua-Texas/New Mexico/Arizona border zone, 45 were identified around the Chiapas-Guatemala border, and 33 attractions were identified at the junction of the

Quintana Roo-Belize-Guatemala borders. The attractions are listed on the pages that follow.

In the second stage, a matrix of distances between all attractions in each border area was devised. Information to build the distance matrix was drawn from Google Maps. The authors used the distances matrix for identifying clusters, using SPSS software (cluster analysis tool). Cluster analysis is a multivariate classification technique for grouping data into a reduced number of clusters. The clustering factor used was the distance in kilometers by road between tourist attractions in each border area. The Ward algorithm cluster method was used because it optimizes the minimal intra-group variance (Cea, 2002; Hair, 1998; Aldenderfer & Blashfield, 1984). Finally, the last step consisted of projecting the results onto maps.

After assessing the results of this approach, based on the moderating role of distance between cultural and natural attractions, the last step focused on exploring and analyzing the multi-clustering patterns identified in each border area, as an exploratory exercise. The methodological criterion followed was to identify groups of clusters that were closer and linked to each other by road. In other words, if tourists go from cluster to cluster, our main interest was which paths or itineraries will be followed. The objective was to deepen an understanding of multi-clustering patterns, and therefore underline them as relevant factors of tourists' mobility at a greater supra-cluster scale.

Tourism clusters in three border zones of Mexico

The borders of Mexico are a good laboratory for this research because often they do not coincide with natural or cultural divides—a consequence of political arrangements that prioritized other criteria when establishing today's international boundaries. Therefore, some historical territories (and eventually potential tourism destinations) with similar cultures and natural environments are divided between different countries/states. This research focuses on alternative projections or interpretations of the present-day borderlands of Mexico, the United States, Guatemala and Belize.

The Chihuahua - USA border

In three different mid-19th century treaties, Mexico ceded to the United States the territories that now comprise Texas, New Mexico, Arizona, Utah, Nevada, California

and parts of Wyoming and Colorado. Although only Texas and New Mexico border the Mexican state of Chihuahua, sites in Arizona are also included in this analysis owing to Arizona's historic connections to this part of Mexico and its current linkages with Texas and New Mexico. Because these areas were once Mexican territory and shared many indigenous and colonial cultures and natural features, many of the tourist attractions in this cross-border region have a similar historical background. However, although American tourists can visit the Mexican side of the border quite freely, Mexicans face many administrative barriers to visiting the American side, so that much of the regional tourism flow is one-way from the US to Mexico. The following table shows the principal tourism attractions in the area.

Number	Name	Cult.	Nat.	Number	Name	Cult.	Nat.
1	Paquimé	Х		10	Misión San José	Х	
2	Hacienda San Diego	Х		11	Misión San Antonio	Х	
3	Arrollo de los Monos	Х		12	Albuquerque	Х	Х
4	Petroglifos El Sabinal	Х		13	Silver City	Х	Х
5	Janos	Х	Х	14	Chaco Canyon	Х	Х
6	Guadalupe Victoria	Х	Х	15	Monument Valley	Х	Х
7	Ojos de Santa María		Х	16	Grand Canyon		Х
8	Estación Guzmán		Х	17	El Paso	Х	Х
9	Misión de Guadalupe	Х					

Table 1. Main cultural and natural attractions in the Chihuahua-USA borderlands

With the cluster analysis, the cross-border region is depicted as one single tourism destination, instead of being divided between two different states. As shown in Figures 1 and 2, analysis in this border area identified three cultural clusters and three natural clusters. In Figure 1, the cultural clusters are Paquimé-Juarez-El Paso-Silver City; Chaco-Albuquerque; and Monument Valley. In Figure 2, the natural clusters Juarez-Silver City-Ascensión; Chaco; and Monument Valley-Grand Canyon. The results show that there is one cross-border tourism cluster, in the area of Paquimé-Juárez-El Paso-Silver City-Ascensión. It is worth noting that although at this border there is more or less the same amount of cultural and natural attractions, they are somewhat sparse and spread throughout the region. In fact, great distances can actually threaten regional tourism development in this particular borderland.

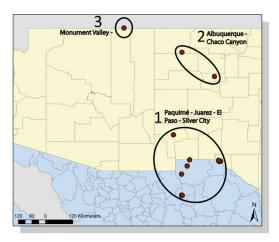


Figure 1. Cultural clusters in Chihuahua - Texas, New Mexico, and Arizona

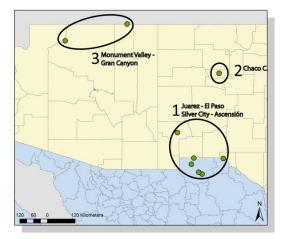


Figure 2. Natural clusters in Chihuahua - Texas, New Mexico, and Arizona

Chiapas - Guatemala border

Today's territory of Chiapas and Guatemala was historically part of the Mayan civilization. The Spanish occupied the region in the 16th Century, and colonial towns spread on both sides of the border. It is fair to say that Chiapas has not always belonged to Mexico. In fact, during the 19th Century it was part of Guatemala.

The border zone was divided for cluster analysis into two different corridors, one corresponding with the Mayan heritage region between Palenque in Mexico and Tikal in Guatemala, and the other around the colonial towns of San Cristóbal de las Casas, Mexico, and in southwest Guatemala. The reason for doing so is because distances between these two corridors are long, as they are physically separated by a mountain range between Chiapas and Guatemala, including Montes Azules Natural Park, Cerro Bisis Natural Reserve and Cuchumatanes National Park.

The inventory of tourist attractions in this border area resulted in the identification of 45 items, as shown in the following tables.

Table 2. Cultural and natural attractions near the Chiapas-Guatemala border, Mayan Corridor

connucr.										
Number	Name	Cult.	Nat.	Number	Name	Cult.	Nat.			
1	Cascadas de Agua Azul		Х	8	Yaxchilán	Х				
2	Cascadas de Misol-Ha		Х	9	Tikal	Х				
3	Palenque	Х		10	Yaxha	Х				
4	Cascadas Las		Х	11	Petexbatun	Х				
5	Tres Lagunas		Х	12	Uaxactún	Х				
6	Río Lacanjá Chansayab		Х	13	Lago Peten Itzá		Х			
7	Bonampak	Х			-					

Table 3. Cultural and natural attractions near the Chiapas-Guatemala border, Colonial Towns' Corridor

Number	Name	Cult.	Nat.	Number	Name	Cult.	Nat.
1	Catedral	Х		17	Templo San Lorenzo	Х	
2	Arco del Carmen	Х		18	Cañón Sumidero		Х
3	Templo Merced	Х		19	Templo Santo Domingo	Х	
4	Museo del Ámbar	Х		20	Templo San Francisco	Х	
5	Museo Cult. Populares	Х		21	Parador Turístico Art.	Х	
6	Templo San Cristobalito	Х		22	Templo Santo Domingo	Х	
7	Templo Santa Lucía	Х		23	Museo Dr.Belisario D.	Х	
8	Templo San Francisco	Х		24	Museo Comitán	Х	
9	Mercado artesanías	Х		25	Lago Atitlán		Х
10	Templo V. Guadalupe	Х		26	Mercado Panajachel	Х	
11	Museo Na Bolom	Х		27	Templo Panajachel	Х	
12	Templo Santo Domingo	Х		28	Volcán Atilán		Х
13	Museo Medicina Maya	Х		29	Catedral Sololá	Х	
14	Museo Jade	Х		30	Iglesia Santo Tomás	Х	
15	Templo Asunción	Х		31	Catedral Quetzaltenango	Х	
16	Templo San Juan Bta.	Х		32	Catedral Huehuetenango	Х	

As reflected in Figures 3 and 4, none of the clusters identified lie across the border. The results of the analysis of cultural and natural heritage clusters showed the following patterns. The cultural clusters for the Mayan corridor are Palenque; Yaxchilá-Bonampak; Petexbatún; and Tikal. In the Colonial Towns' corridor, the cultural clusters are San Cristóbal de las Casas and the colonial towns in Guatemala. The nature-based clusters in the Mayan corridor are Misol Ha-Agua Azul; Lacandon Forest; and Petén Itzá Lake. The nature clusters in the Colonial Town corridor are Sumidero Canyon and Atitlán Lake. In the border area between Chiapas and Guatemala there is a stronger

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presence of cultural clusters (both in the Mayan corridor and in the Colonial Towns corridor) than nature-based clusters.

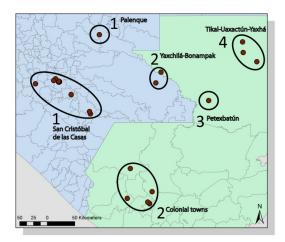


Figure 3. Cultural clusters in Chiapas - Guatemala border area

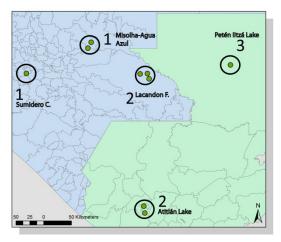


Figure 4. Natural clusters in Chiapas - Guatemala border area

Quintana Roo–Belize–Guatemala

The territory of Belize was historically part of the Mayan civilization, together with Guatemala, southern Mexico, northern El Salvador and western Honduras. The Spanish occupation of America did not reach Belize; in the 17th century, the English and Scottish settled in what is today Belize. The country gained independence from the UK in 1981.

The identification of cultural and natural attractions in this border resulted in 33 items, as shown in the following table.

			ť	oorder			
Number	Name	Cult.	Nat.	Number	Name	Cult.	Nat.
1	Mahahual		Х	18	Cahal Pech	Х	
2	Xcalak		Х	19	Caracaol	Х	
3	Dzibanché	Х		20	El Pilar	Х	
4	Kinichná	Х		21	Lamanai	Х	
5	Chacchoben	Х		22	Caye Caulker MR		Х
6	Kohunlich	Х		23	Blue Hole		Х
7	Oxtankah	Х		24	Community Baboon S.		Х
8	Calakmul	Х	Х	25	Ambergris Caye		Х
9	Xpujil	Х		26	Mayflower Bocawina		Х
10	Chicaná	Х		27	Shipstern Reserve		Х
11	Becan	Х		28	Bacalar Chico		Х
12	Bacalar	Х	Х	29	Santa Rita	Х	
13	Belize City	Х		30	Tikal	Х	
14	Xunantunich	Х		31	Yaxha	Х	
15	Cockscomb Basin		Х	32	Uaxactún	Х	
16	Crooked Tree		Х	33	Lago Peten Itzá		Х
17	Altun Ha	Х			-		

Table 4. Cultural and natural attractions near the Quintana Roo-Belize-Guatemala

The cluster analysis in this border area identified several cultural clusters: Calakmul-Xpujil; Chetumal area; Belize City-Altun Ha; and Tikal Caracoal. The nature-based clusters are Calakmul; Chetumal area; Altun Ha; The Cayes; Cockscomb B-Mayflower B; and Tikal. This border has the largest density of attractions. Cultural clusters are predominant in the inland region, while natural clusters are located near the coastline. The figures also show a number of cross-border clusters, including the Chetumal area (cultural and natural) and the Cayes (natural), both in the Quintana Roo-Belize border, and the Tikal-Caracoal (cultural) in the Belize-Guatemala border.

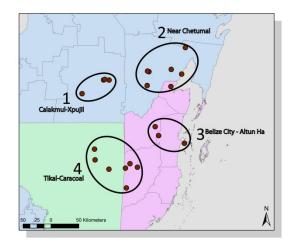


Figure 5. Cultural clusters in Quintana Roo - Belize - Guatemala border area

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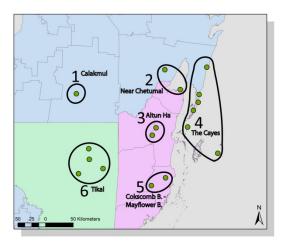


Figure 6. Natural clusters in Quintana Roo - Belize - Guatemala border area

Tourism corridors as an aggregation of clusters.

After the identification and representation of culture and nature clusters in the three border regions, the analysis went one step further. Observations were made as to whether the resulting clusters can still be aggregated, following multi-clustering patterns, in the form of cross-border tourism corridors, as shown in Figures 7 to 12. As explained in the methods section, the study attempts to identify closer and well-linked groups of clusters. In fact, most of the clusters identified do not overlap international boundaries, but still the assemblage of these clusters into corridors provides a new perspective about the potential for cross-border tourism development and consumption in larger areas.

Regarding the analysis of these tourism corridors as aggregations of clusters, the figures show a multi-clustering pattern in the border between Chihuahua, Mexico, and the USA, which traces an itinerary for tourists willing to visit all attractions in the area. It is remarkable that both cultural and natural cluster aggregations are very similar in this border zone, likely because of the similar distribution of both attraction types in the cross-border region. However, as was already suggested, long distances hinder the development of such corridors.

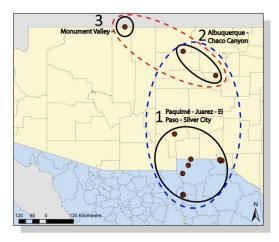


Figure 7. Aggregation of cultural clusters in the Chihuahua - USA border area

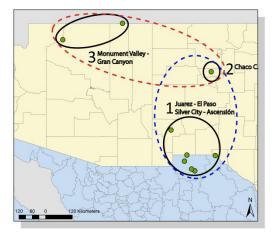


Figure 8. Aggregation of natural clusters in the Chihuahua - USA border area

Regarding the border between Chiapas and Guatemala, the analysis of aggregated cultural clusters reflects the reality of two corridors: the Mayan corridor from Palenque to Tikal, and the Colonial Towns corridor from San Cristóbal de las Casas to the Colonial Towns in Guatemala. These two corridors are connected in the Palenque-San Cristóbal de las Casas region. Natural clusters follow the same pattern in the Mayan corridor, with an extension to the Sumidero Canyon, but there are no natural corridors in the colonial towns' side.

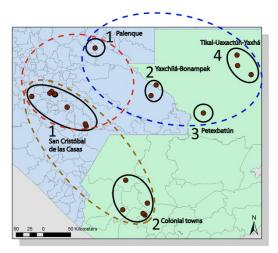


Figure 9. Aggregation of cultural clusters in the Chiapas - Guatemala border area

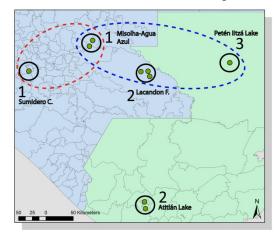


Figure 10. Aggregation of natural clusters in the Chiapas - Guatemala border area

Finally, multi-clustering patterns are more complex in the Quintana Roo-Belize-Guatemala border zone, where Chetumal (Mexico) acts as a central hub from which tourists choose between two main corridors, the first to the Calakmul area and the second crossing through Belize to the Tikal area in Guatemala. Complexity in this border is due to the large number of cultural and natural attractions in a relatively small area, which increases the number of combinations in terms of tourism development and tourist consumption patterns.

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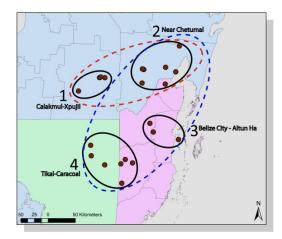


Figure 11. Aggregation of cultural clusters in the Quintana Roo - Belize - Guatemala border area

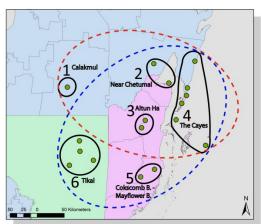


Figure 12. Aggregation of natural clusters in the Quintana Roo - Belize - Guatemala border area

Political barriers have not been considered in the analysis of clusters presented here, but most certainly they do have impacts in terms of crossing restrictions, both in the cross-border clusters and in the non-border corridors. In the Mexico-USA borderlands, strict US policies and procedures make crossing into the US for Mexicans and many other nationalities difficult and hence the consideration of this corridor as a functional area remains a theoretical ideal. In the Chiapas-Guatemala and Quintana Roo-Belize-Guatemala border areas, administrative restrictions are looser, although there are other restrictions derived from a lack of infrastructure (communications, transportation links, accommodations and other services), and marketing (promotion of cross-border regions as a contiguous product). Implications of this approach can be used for planning tourism better in these three border regions. It is clear that some tourists might be willing to consume alternative destinations, which nowadays remain hidden behind administrative boundaries. All the results are summarized in Table 5. This shows cultural and natural corridors and clusters as potential resources on one side and political restrictions to the development of tourism on the other.

		Pote	Restrictions			
	Cultural	Natural	Cultural	Natural		
Border	cluster	cluster	corridor	corridor	Administrative	Other
Chihuahua-USA	Х	Х	Х	Х	Х	Х
Chiapas-Guatemala	-	-	Х	Х	-	Х
QRoo-Belize-Guatemala	Х	Х	Х	Х	-	Х

 Table 5. Potential for and restrictions to heritage tourism development in the three borders zones.

Conclusions

The aim of this article was to contribute to understanding the present realities of heritage in border regions on the basis of tourist mobility and the functionality of territories. The potential of heritage attractions for tourism in border areas has been highlighted, as well as the impact of socio-political and technological evolution on the reconfiguration of these regions, in terms of the increase or decrease of homogeneity. The contribution may be meaningful in the establishment of links between natural and cultural regions with common heritage identities, for the projection of different scenarios in tourism development. This understanding of heritage values can be implemented in the development and management of tourism in border areas.

From the maps generated in this study, it is possible to identify different cultural and natural attraction clusters and corridors with different levels of potential for crossborder tourism development in all the three borders. From the results of this research, it is reasonable to affirm that there is a paradox between tourists' consumption patterns and the limitations and restrictions caused by destination or national administrative boundaries. A number of impediments can be identified for cross-border tourism development in these borders. On one side, there is a wide range of political strategies and cross-border administrative restrictions raised by centralist governments, and therefore, both in the northern and southern Mexican borders, the development of cross-border tourism faces many political difficulties. By the same token, these cross-border destinations are not being promoted by any government tourism agencies or DMOs, because both the creation and promotion of tourist attractions are usually restricted by administrative boundaries. Tourist motivations and interests, however, are attraction-based, regardless of political boundaries. For tourists, borders themselves are an inconvenient impediment that can keep them from visiting cultural and natural heritage on both sides of an international boundary.

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CHAPTER 3. TOURISM DESTINATION ZONING IN MOUNTAIN REGIONS: A CONSUMER-BASED APPROACH

Tourism destination zoning in mountain regions: a consumer-based approach

Tourism Geographies: An International Journal of Tourism Space, Place and Environment (in press)

ABSTRACT This paper puts into question the conventional way of delineating tourism destination borders in terms of taken-for-granted administrative boundaries. Despite the fact that the literature on destination boundaries advocates for conceptual frameworks where customer's consumption patterns play a more fundamental role, instances of actual attempts of structuring tourism geographies into 'new tourism areas' are scant, and instances of zoning on the basis of visitor's consumption patterns, absent. A method for identifying alternative and more effective consumption-based tourism zones, that combines geographical information system (GIS) and hierarchical cluster analysis techniques, and that relies on time distances between attractions, is thus proposed, and implemented in the case of the Pyrenees mountain region. As a result the region is re-structured into nine new tourism zones, which, compared with the original destinations are more uniform in size and have a higher correlation index between attractiveness and accommodation intensity; they also have different levels of cross-border intensity and are very similar to historical regions; and the more they differ from the original destinations the higher their attractiveness, which supports the effectiveness of the new zoning technique. Four types of tourism zones ranging from higher to lower tourism intensity are also identified.

Keywords: destination boundaries, tourism zoning, within-destination travel patterns, mountain regions, Pyrenees.

Introduction

Geography provides a range of recreational opportunities that can be harnessed for tourism development and management. In fact, the potential of a destination to attract tourists can be determined by the spatial distribution of attractions. Therefore, instead of taking tourism destination for granted as *a priori* areas delimited by administrative boundaries (Saraniemi & Kylänen 2011), there is an opportunity to find and define tourism destinations *a posteriori* on the basis of the spatial distribution of attractions in a geographical region and the way tourists consume space (Ding et al. 2011; Chhetri & Arrowsmith 2008; Zillinger 2007; Vasiliadis & Kobotis 1999; Van der Knaap 1999).

We acknowledge that tourism consumption patterns of space are affected by the spatial distribution of resources, which includes distance to the attractions, their intensity and their specificity. For instance, areas with a greater concentration and uniqueness of attractions have a higher attractiveness potential. We also know that among the most common within-destination tourists' movements (McKercher & Lau 2008; Lew & McKercher 2006) there is the hub-and-spoke or base-camp pattern (Smallwood et al. 2012; Chancellor & Cole 2008), particularly in areas where car-based movements are predominant (Zillinger 2007) like in inhabited rural or mountain regions.

Mountains represent scenic beauty, wilderness, solitude, well-being and recreation opportunities, and are prominent on global agendas because of their importance for tourism (Godde et al. 2000). In addition, inhabited mountain areas provide a sense of rurality. Moreover, mountains are socially well known physical features that in many occasions serve as a basis to establish administrative and political boundaries, both international and intranational.

On the basis of the above arguments, the paper proposes a method to delineate geographical areas, or 'logical' tourism destinations in mountain regions, which contain attractions that are closest to each other in time distance, and farthest away from attractions in other neighbouring tourism zones without any regard to administrative boundaries. Distance is measured in travel time instead of using the standard geodesic distance and, with this, the paper contributes to overcoming an important limitation of previous research on the topic. The proposed method is applied to a vast European mountain region, the Pyrenees. As a result we find that the region can be divided into nine 'logical' tourism areas or 'new' destinations, which significantly differ from, and are more effective than, the actual tourism destinations defined on the basis of national and regional administrative boundaries. The newly found tourism destination areas are,

then, classified into four categories ranging from higher to lower tourism intensity. Finally, in the last section of the article we discuss the findings and their implications for tourism destination management and marketing.

Tourist destinations boundaries

Tourism destinations are the most appropriate unit of analysis in tourism research (Haywood 1986). They have been studied from several perspectives (Saraniemi & Kylänen 2011). In economic geography-oriented research, a destination is regarded as a defined geographical area, such as a country, island or town, towards which people travel and where they choose to stay for a while to experience certain perceived attractions (Leiper 1995). Destinations are thus taken-for-granted, fixed territorial entities with administrative boundaries where tourist masses come and go via different routes (Saraniemi & Kylänen 2011). In marketing management-oriented research a destination is seen as a traditional commodity product that consists of separate components and, therefore, an agglomeration of facilities and services designed to meet the needs of tourists (Cooper et al. 2005). Now the destination is a geographical region that is considered by visitors as a unique entity, which is often given identity by its brand name. Emphasis is given on the managerial process aimed at managing tourism resources and products successfully. In customer-oriented research emphasis is focused on the experience of the visitor. Here the destination is reduced as a service environment facilitating the experience. From this perspective service providers facilitate an experience but cannot deliver it without the consumer, who is seen as a cocreator with whom the service process is executed. A fourth perspective on destinations, which goes beyond the modernist dualism in terms of production and consumption, is also discussed by Saraniemi and Kylänen (2011). These authors consider the tourism destination as a dynamic and historical-spatial unit that evolves over time and space. Destinations are thus not 'out there' (Allen et al. 1998) but they are produced and reproduced through combinations of social, cultural, political and economic relationships. An evolution from a pure supply-side or production oriented definition of destinations towards more demand-side or customer oriented perspectives can thus be observed, with the last approach transcending this dualism.

The boundaries of a destination are hard to define as they are constantly changing through complex practices and discourses: to some tourists, tourism companies, local people, and other market actors, the destination may appear totally different in terms of shape, content, and relationships. Destination boundaries are generally delimited by administrative boundaries (Zhang et al. 2011; 1999; Weidenfeld et al. 2010; Zillinger 2007; Hwang & Fesenmaier 2003; Vasiliadis & Kobotis 1999; Dredge 1999). None the less, we know that borders change due to historical, political, and economic factors (Nilsson et al. 2010; Prokkola 2007; Sofield 2006; Paasi 1996). Some works point out that pre-existing organisation and institutions often act as an obstacle to the development of new tourism destinations (Canally & Timothy 2007; Ioannides et al. 2006; Lovelock & Boyd 2006; Timothy & Tosun 2003) despite the fact that new and alternative conceptions of tourism destinations can have important implications in tourism destinations planning and development, such as cross-border collaboration, policy making, and marketing and management strategies. We acknowledge that this move towards conceptual frameworks where the customer plays a fundamental role in the definition of a destination has not been accompanied by a similar move by practitioners towards alternative configurations of tourism geographies that take the tourists and the way they consume space into account.

Within-destination tourist travel patterns

Understanding the movement patterns of visitors is important for a number of tourism management activities, such as attraction planning, and development of accommodation nodes and transport links (McKercher & Lau 2008). It has been argued that quantifying the movement patterns of visitors in terms of distance travelled (Zhang et al. 1999) or overlying data on movement patterns with other spatial datasets, may enhance the quality of management outputs. We add that understanding the movement patterns of visitors is also important to defining and delineating 'effective' tourism zones or destinations. Fortunately, there is a growing recent literature on within-destination travel patterns, (McKercher & Lau 2008; Lew & McKercher 2006), which can be imported into our discussion.

The complexity of visitors' movements within destinations entails a wide diversity of routes and attractions from which visitors can choose, and is affected by

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visitor and visit characteristics, and by the spatial distribution of resources. In fact, tourism destinations operate as functional areas in terms of mobility of tourists for the consumption of a network of attractions (Jansen-Verbeke & Lievois 2008; Russo 2008; Shih 2006). There are three main attributes derived from the spatial distribution of resources that affect space consumption patterns (Weidenfeld et al. 2010; Hunt & Crompton 2008; Michael 2007): distance or territoriality, intensity or number of attractions, and specificity or uniqueness of the attractions.

In general terms, distance to and between attractions is a main determinant of the appeal of tourist areas (Blasco et al. 2009; Nyaupane & Graefe 2008; Hwang et al. 2006; Nicolau & Mas 2006; Hwang & Fesenmaier 2003). Distance influences visitors, with numbers declining with increasing distance from the accommodation location to the attractions and from one attraction to another, which supports the concept of distance decay (Eldridge & Jones 1991). Despite the fact that some authors have challenged this concept (Lee et al. 2012; McKercher & Lew 2003), on the basis of new patterns of contemporary mobility, they do not apply in mountain regions. In addition, cognitive distance may play different roles for tourism mobility (Smith 1984; Reynolds & McNulty 1968), for example adding artificial distance between attractions separated by some kind of real or perceived obstacle, such as natural or administrative borders. The distances travelled by base-campers have been documented in only a few papers (Smallwood et al. 2012; Chancellor & Cole 2008). In both cases, a rural-mountain area and a nature-based tourism destination, the maximum distances covered by visitors were between 93 and 105 Km, and between 1:20 and 1:40 hours in time.

Intensity in terms of number of attractions also affects consumption patterns with low intensity correlated with more fixed patterns of consumption and higher intensity with a higher variety. Finally, the existence of prominent or unique attractions will increase the consumption patterns of space with visitors being ready to travel longer distances to visit them (Nicolau 2008; Nyaupane & Graefe 2008; Zillinger 2007).

Smallwood et al. (2012) found two characteristic within destination movement patterns: static and hub-and-spoke patterns. Static movement patterns imply staying at the accommodation location most of the time, while hub-and-spoke movements are characterized by daily trips to neighbouring attractions combined with exploration around the accommodation location. In fact, McKercher and Lau (2008) found that the most common movement style had a local exploration component combined with visits to one or more attractions within the destination. Similarly, Chancellor and Cole (2008) found that 93 percent of the visitors to Jackson County, a rural mountain area, were single destination travellers, among which 71 percent were base-campers, and 12 percent were static. Godde et al. (2000) argued that people look to mountain environments to gain a sense of renewal. This is specifically the case of domestic tourism, which dominates over international tourism in most mountain regions. Although there is need for further research on this topic it seems reasonable to assume that in inhabited rural and mountain areas the most common pattern of movement is domestic tourism and second homes car-based hub-and-spoke or a combination of hub-and-spoke and static patterns. Additionally, hub-and-spoke or base-camp territoriality is compatible with a stop-over and secondary destination in multiple-destination patterns (Hwang et al. 2006; Hwang & Fesenmaier 2003; Dredge 1999; Lue et al. 1993), as it can be then taken as a module of the multi-destination trip.

Tourism zoning and mobility in mountain regions

There is a growing concern by researchers on the use of a variety of methods to analyse tourists' movement patterns, which can benefit further research on tourism. Most of this research to date has focused on the analysis of tourism movement patterns in small areas such as cities, counties, protected areas or theme parks (Xiao-Ting & Bi-Hu 2012; Pettersson & Zillinger 2011; Chhetri & Arrowsmith 2008; Connell & Page 2008; Shoval & Isaacson 2007; Dietvorst 1995).

In contrast, the analysis of tourism mobility patterns in larger areas is less explored. The few existing studies at a regional level place the emphasis on the itineraries taken by visitors (Zillinger 2007; Van der Knaap 1999), the catchment areas of particular tourism destinations (Zhang et al. 2011; Chancellor & Cole 2008; Nyaupane & Graefe 2008), and the spatial distribution of attractions within tourism destinations (Ding et al. 2011). Still fewer studies have focused on measuring the potential for recreational opportunity determined by the spatial distribution of attractions and the identification of zones or areas with highest potential (Vasiliadis & Kobotis 1999). Here, the recreational potential of an area is measured as the total number of recreational opportunities available from a given point or location and accessible within its geographical neighbourhood (Chhetri & Arrowsmith 2008). Regarding tourism zoning in mountain areas only one attempt has been found, that focuses on the opportunities that can emerge from a different projection of tourist destinations in mountains (Zyryanov & Korolev 2009). In a study carried out in the Pamir Mountains, the authors argued that alternative destinations can be conceptualized following tourism infrastructure and demand criteria, and found seven alternative destinations for sport tourism, which differ from the administrative-regions. No accurate methods for zoning were provided, though, by these authors.

With this background we aim at contributing to this debate by proposing a method to identifying consumption pattern-based tourism areas of high potential within larger areas such as regions, states, countries, groups of countries, and cross-border regions, and specifically in mountain regions, and without any regard to internal administrative boundaries. With the proposed method, larger areas can be divided into smaller 'local-like' tourism destinations, which could otherwise be difficult to detect. It is argued that these smaller areas have a range of within-destination distances, which, in the context of tourism development in mountain regions, better fit for hub-and-spoke mobility pattern.

Hierarchical cluster analysis and GIS

We use hierarchical cluster analysis to find tourism zones within a region, following mobility patterns and distance to the attractions. The term cluster analysis encompasses a number of different algorithms and methods for grouping objects of similar kind into respective categories. It is an exploratory data analysis tool which aims at sorting different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise. In our case, the method clusters the attractions in the region into zones where the attractions within a zone are maximally close to each other and minimally close to the attraction in other zones. Although Kettenring (2006) argued that hierarchical cluster analysis is the most widely used form of clustering, and despite the fact that Vasiliadis & Kobotis (1999) proposed the nearest-neighbour algorithm as a clustering mechanism with potential interest for finding tourism zones, no previous research has used this method for this purpose.

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Moreover, as we are dealing with spatial data, the consideration of GIS-based techniques is essential. There is a number of GIS-oriented software that can run cluster analysis of spatial data. However, they have important limitations for our purpose. On one hand, the clusters can only be calculated on the similarity or dissimilarity of Euclidean or Manhattan distances between given points. Therefore, we use the statistical analysis software (SPSS) to obtain the geographical clusters, as it can cope with similarity or dissimilarity of all types of distances among variables, such as distance in time among all the attractions of the region. As explained earlier, the use of time distance as the relevant variable to analyse visitor patterns is an important contribution of our paper. On the other hand, the statistical software SPSS allows a broader range of clustering algorithms than the GIS-based software, as for instance the Ward algorithm (Ward 1963).

Therefore, the results of the cluster analysis conducted with SPSS are fed into GIS software to generate the map representation of the resulting tourism zones and their geo-references. There is room, though for GIS software developers to create an add-on with this cluster analysis functionality. The implementation of our method would be easier with this functionality embedded into GIS.

The Pyrenees region

The Pyrenees is a mountain range over 400 km long and about 100 wide. The mountain ridge with its high peaks divides the region into north and south with relatively few crossing points from one side to the other. At the two extremes the mountains reach the sea and are not as high as in the central area. No large cities are present, with San Sebastian, Pamplona, Perpignan, Girona and Pau being the most populated urban centres, all of them located in the periphery of the region close to the lower neighbouring flatlands.

It is important to remark that for tourism planning, management and promotional purposes, the Pyrenees region is divided into thirteen different regions from three countries, which fully coincide with existing administrative divisions of the territory (see Figure 1). Regarding the attractions in the territory, they are relatively homogeneous throughout the whole mountain range and very characteristic of inhabited mountain or rural regions in general (Godde et al. 2000; Debarbieux 1995), that is: there

is a majority of nature-based and active tourism attractions, as well as cultural attractions, and a more limited number of other categories. Due to proximity to the sea in both sides of the mountain range, there are also a few sun & beach centres and several second-home intensive areas.

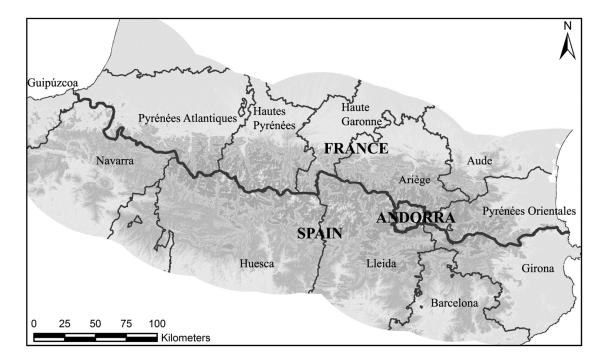


Figure 1. The Pyrenees mountain region.

The Pyrenees mountain range is a good example for the purpose of this study, as it exhibits the unique characteristics of mountain regions (Godde et al. 2000), which favours the hub-and-spoke consumption patterns. In addition, tourism destination boundaries in the region are drawn following administrative boundaries on the basis of natural features such as mountain ridges or rivers. We contend that an attraction-based approach to tourism destination boundaries can generate alternative tourism zones that better match tourists' most common destination consumption patterns.

Research method

The application of the method and the empirical analysis of our case is conducted in four stages. In the first stage, information about the existing attractions was gathered from published tourism guides of the Pyrenees region. About 50 guidebooks covering the Pyrenees were identified, from which, 12 were selected on the basis of three criteria:

being recently published; covering the whole Pyrenees region, and being addressed to both the general purpose segment with emphasis on car routes, and the more specific active or mountain sport tourists.

Within the selected guidebooks, a total number of 321 attractions were identified. Tourism attractions were then categorized according to two different criteria. On one hand, attractions were classified into those with higher level of attractiveness (level 1), and those with lower level of attractiveness (level 2) following a number of criteria, such as length of text written in the guides, format of text using bold fonts, inclusion of images, and ranking of stars given by the editors to each attraction. In total, 23 attractions of level 1, and 298 attractions for level 2 were identified. On the other hand, attractions were also classified with regard to their nature, in the following categories: cultural attractions, active tourism attractions, and nature-based tourism, entertainment attractions, spa & wellness, and sun & beach. The tourism attractions were located in a total of 187 municipalities.

The categorization was independently made by the authors and then compared and discussed to ensure reliability. The issue of lack of validity of data is addressed by many authors (Camprubí et al. 2012; Holsti 1968). Thus we considered Kassarjian's (1977) directives to increase the objectivity and reliability of the results.

The second step focused on measuring the distances between attractions. Distances between these municipalities were calculated in time by road. In fact in mountain areas the use of geodesic distances could generate bizarre results, as in locations geodetically close to each other and in separate sides of the mountain ridge geodesic distance is negatively correlated with time distance; in other words, the closer the geodesic distance, the farther the distance in time by road.

Thirdly, we built a matrix with these time distances, which was then used for the identification of clusters, with SPSS software. As mentioned above, the decision to use hierarchical cluster analysis is justified by the fact that it is the most widely used form of clustering (Kettenring 2006), and because it copes with similarity or dissimilarity of all types of distances among variables, including time distance. The Ward algorithm (Ward 1963) is the preferred method because it optimizes the minimal intra-group variance and hence adds less noise to the groups formed, in comparison to the original data (Ferreira & Hitchcock 2009; Cea 2002; Hair 1998; Aldenderfer & Blashfield

1984). This method also tends to form more similar sized clusters (Kuiper & Fisher 1975), or tourist zones in our case. The nine-clusters solution was chosen as the resulting areas have an average diameter of about 1-2 hours' drive time (see Figure 2), and thus, are representative of the actual within-destination space consumption pattern of hub-and-spoke tourists.

In the last step we assessed both the new tourism zones and original destinations in terms of several criteria with regard to their tourism attractiveness and managerial implications: a) *number of borders*, measuring the number of interregional and international borders within the area; b) *number of beds*, measuring the number of hotel beds in the area; c) *population*, measuring the number of inhabitants within the area; d) *intensity of attractions*, measuring the number of attractions within the area; e) *specificity of attractions*, measuring the level of attractiveness of the attractions, rating 1 for higher attractivity, and 2 for lower attractivity; and f) *variety of attractions*, measuring the number of existing attraction categories. We then calculated their correlation coefficients and compared their values for the new tourism zones and the original destinations. Finally, in the last stage we classified the nine tourism zones into categories or types by using hierarchical cluster analysis in SPSS, with regard to the above same set of variables. Anova and Eta tests were conducted to measure the significance of all these variables in each of the tourism zone types.

Results

The tourism zones

In an attempt to find effective alternative tourism areas for hub-and-spoke tourist consumption patterns in the Pyrenees region, the cluster analysis results in nine tourism areas (see Figure 2).

When we compare these new tourism zones (Figure 2) with conventional administrative regions (Figure 1) we observe major differences. On one hand, the spatial extension of existing regional tourism destinations (administrative regions) is less uniform than in the 'new' tourism zones. The former coincide with administrative regions. In contrast, the tourism areas proposed in this article have a more realistic scale for within destination tourism consumption, with maximal internal distances ranging between 1-2 hours' drive time. On the other hand, all new zones are cross-border, five

of them spreading over international borders and the remaining four over regional borders.

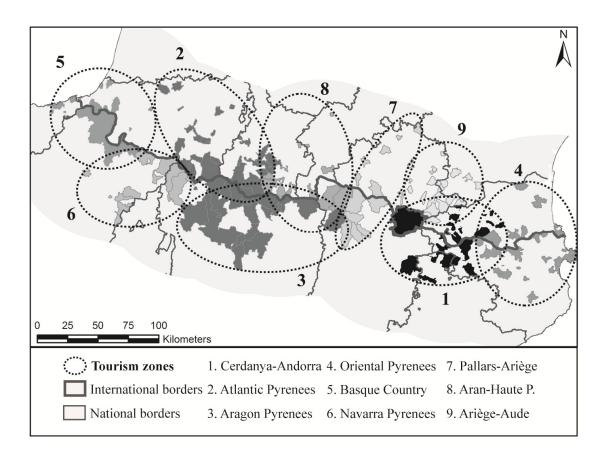


Figure 2. 'New' tourism zones in the Pyrenees.

We also observe (Table 1) how much the new zones are cross-border in terms of the percentages of space (number of municipalities) that belong to different administrative regions. So in one extreme we have Aragon Pyrenees as the less crossborder intensive area in that it coincides with Huesca Province in 93 percent and with Lleida province in only 7 percent. In the other extreme we find the Pallars-Ariège area with 46 percent of municipalities belonging to Lleida province and 54 percent to the Ariège department. The distribution of the rest of the zones fall somewhere between these two cases with the case of Cerdanya-Andorra worth mentioning: 39 percent in Pyrénées Orientales department, 19 percent in Andorra, 19 percent in Girona province, 14 percent in Barcelona province and 8 percent in Lleida province.

	Cerdanya-	Atlantic	Aragon	Oriental	Basque	Navarra	Pallars-	Aran-	Ariège-
Andorra	19	-	_	-	-	-	-	-	_
Girona	19	-	-	65	-	-	-	-	-
Lleida	8	-	7	-	-	-	46	15	-
Barcelona	14	-	-	-	-	-	-	-	-
Huesca	-	-	93	-	-	20	-	-	-
Navarra	-	-	-	-	50	80	-	-	-
Guipúzcoa	-	-	-	-	8	-	-	-	-
Pyrénées Atlantiques	-	60	-	-	42	-	-	-	-
Hautes Pyrénées	-	40	-	-	-	-	-	54	-
Haute Garonne	-	-	-	-	-	-	-	31	-
Ariège	-	-	-	-	-	-	54	-	72
Aude	-	-	-	-	-	-	-	-	24
Pyrénées Orientales	39	-	-	35	-	-	-	-	4

Table 1. Percentage of municipalities in tourism zones belonging to administrative regions

We also observe that the 'new' areas are in fact very similar to historical regions, and hence there is a strong relationship between these territories and the cultural dimension of space. The strongest examples are found in the areas of Cerdanya-Andorra, Basque Pyrenees (Basque Country), and Oriental Pyrenees (Northern Catalunya). In all these cases, the maps depict the 'natural' shape of the cross-border historical and cultural regions, which still share common languages, and traditions. Another interesting case is the Vall d'Aran county, a region of Spanish Catalonia that is geographically embedded on the northern slopes of the Pyrenees. Our results puts this region in a tourism zone together with other French departments that share the same Occitan language, thus depicting the actual historical and cultural region, now divided by modern borders.

Finally, the results strongly support our choice of time as the relevant distance criterion to identify the tourism zones. For instance, our method locates the municipality of Vall de Boí in the Aragon Pyrenees tourist area. If geodesic distances had been used it would have been located within the neighbouring Pallars-Ariège region (to which it belongs administratively). The presence of the Aigüestortes National Parks' mountains between Vall de Boí and the rest of the Pallars region means that distances are longer in time, excluding Vall de Boí from this zone.

Attributes of the tourism zones and how they correlate

The main goal of the study was to find consumer-based tourism zones in a large region and compare them with the conventional administrative areas. Thus we also explore how the main tourism attributes of these zones and regions are correlated and how they compare.

	Borders	Beds	Population	Intensity	Specificity	Variety
Borders	-					
Beds	0,640	-				
	0,063					
Population	-0,056	0,247	-			
	0,886	0,522				
Intensity	0,748*	0,913**	0,140	-		
	0,020*	0,001**	0,719			
Specificity	0,778*	0,902**	0,179	0,996**	-	
	0,014*	0,001**	0,646	0,000**		
Variety	0,506	0,251	0,625	0,445	0,496	-
	0,165	0,516	0,072	0,23	0,174	

Table 2. Correlation between relevant attributes in tourism areas. *p<0,05; **p<0,01.

Table 3. Correlation between relevant attributes in current destinations. *p <0,05; **p<0.01

**p<0,01.									
	Borders	Beds	Population	Intensity	Specificity	Variety			
Borders	-								
Beds	-	-							
Population	-	0,040	-						
		0,897							
Intensity	-	0,266	0,351	-					
		0,379	0,240						
Specificity	-	0,296	0,379	0,995**	-				
		0,327	0,201	0,000**					
Variety	-	0,416	0,375	0,489	0,547	-			
		0,157	0,207	0,090	0,053				

Therefore, as seen above, variables representing the intensity of attractions in the area, their specificity, and their variety are relevant to assess the potential differential attractiveness of the resulting zones. Variety is presented as the number of categories present in the area (nature-based, active tourism, cultural, spas, sun & beach and

entertainment attractions). In addition to these attraction-based attributes, we add three more general attributes of the zones that affect their characterization, mostly in terms of managerial challenges: number of beds, population and number of administrative borders within the tourism zone. For instance, zones with lower numbers of beds might have to focus on the management of growth strategies; the most populated tourism zones with important urban centres might benefit from short-term, short-distance breaks by inhabitants of the zone; and zones that cross both international and regional borders have major challenges in terms of co-operation and integration of joint tourism development and marketing strategies. A total of 6 variables were thus considered. The values of the correlation coefficient among these variables for both tourism zones and original destinations are displayed in Tables 2 and 3.

Several important findings from the correlation tables are worth mentioning. Specificity and intensity of attractions are highly and significantly correlated (r > 0,9; p<0,0), that is in the areas where there are more first-class or specific attractions there are also a higher number of total attractions. It seems, then, as if the presence of first-class attractions fosters the development of other 'complementary' second-class attractions. This is so in the case of both tourism zones and current destinations.

Moreover, both attributes, specificity and intensity of attractions, are also highly and significantly correlated with numbers of beds in the case of tourism zones (r >0,9; p<0,0), which is also an important finding, as it supports the idea that zones with high levels of attractiveness have a more developed tourism infrastructure in terms of accommodation availability. This is not, however, the case of the current destinations or administrative regions. This result supports the higher effectiveness of the tourism zones over the administrative regions in depicting the actual structuration and clustering of attractions and accommodation infrastructure.

We also observe that in the case of the tourism zones the number of administrative borders within the tourism zone is also highly and significantly correlated with intensity and specificity of attractions (r >0.8; p<0.0) and to a minor extent to the number of beds (r >0.6; p<0.0). This is a remarkable result as it proves that, at least in our case, the more the tourism zones differ from the administrative regions, the higher is their attractiveness.

Finally, as for the variety of attractions, we find no significant correlation with the rest of variables except for, to a certain extent, population (r > 0,6; p<0,0). This points at the idea that while all the zones have attractions belonging to most of the attractions' categories, only the more populated zones offer the whole variety of attractions. Local population living near tourism zones may consume some tourism products and attractions, and therefore it is reasonable to assume that tourism companies may consider closeness to highly inhabited areas as one of the factors when deciding their location. This is particularly the case for some products and services, which for example need an important investment in infrastructure when established, such as leisure parks or wellness centres.

Types of tourism zones

The value of the attributes for each of the nine tourism zones, are shown in table 4 below.

NAME	Cluster	Borders	Beds	Population	Intensity	Specificity	Variety
Cerdanya-Andorra	1	6	38.475	136.559	64	35	5
Oriental Pyrenees	2	1	15.739	383.139	39	21	5
Basque Pyrenees	2	2	10.491	325.226	33	18,5	5
Atlantic Pyrenees	3	1	29.198	145.966	44	23	3
Aragon Pyrenees	3	1	8.673	35.924	39	20	4
Navarra Pyrenees	4	1	2.875	207.221	21	11,5	4
Pallars-Ariège	4	1	2.392	17.749	19	9,5	3
Aran-Haute P.	4	2	5.506	16.593	31	16	4
Ariège-Aude	4	2	1.144	28.753	31	17,5	4

Table 4. Value of relevant attributes in the tourism areas.

Now, the results of the hierarchical cluster analysis conducted with these variables classify the nine zones into four types. *Type I* mountain tourism zone includes only one of the areas, Cerdanya-Andorra. This type of tourism area is characterized by being highly cross-border (with up to six borders, both international and regional); by having the highest number of accommodation units; a medium-sized population for a mountain area and the highest level of intensity, specificity and variety of attractions. *Type II* mountain tourism zone is composed of Oriental Pyrenees and Basque Pyrenees tourism zones. This type of tourism zone is the most populated with the highest variety of attractions, and medium values of intensity and specificity of attractions,

accommodation units and cross-border intensity. *Type III* mountain tourism zone includes the areas of Atlantic Pyrenees and Aragon Pyrenees. This type is characterized by medium levels of accommodation units, intensity and specificity of attractions, and low levels of population, variety of attractions and cross-border intensity. Finally, *Type IV* mountain tourism zone is composed of Navarra Pyrenees, Aran-Haute Pyrenees, Pallars-Ariège and Ariège-Aude; and is characterized by very low levels of all attributes.

We observe, thus, that Type I tourism zones have the highest level of tourism intensity, followed by both Type II and Type III, with medium values, and with Type IV representing the zones with lowest levels. In fact Type II and Type III zones have a similar level of accommodation units, intensity and specificity of attractions, thus only differing by the higher population of Type II zones. In the case of the Pyrenees the geographical distribution of zones depicts the Type I zone somewhere near the central area of the mountain range around Andorra and the Cerdanya valley; the Type II areas in the two extremes of the range where the mountains are lower and reach the sea and where there are more urban centres and transport infrastructure; the Type III zones are near the centre of the range where the peaks are higher and ski resorts abundant; and the Type IV are found between the central range and the peripheral Eastern and Western lower areas.

We also observe that in terms of international cross-border intensity, the central Andorra-Cerdanya tourism area is the most relevant, followed by Basque Pyrenees, Aran-Haute Pyrenees and Ariège-Aude. The rest of the zones only have one border, being international in the cases of Oriental Pyrenees and Pallars-Ariège and national in the other two cases. This result is important in that some of the most tourism intensive zones such as Cerdanya-Andorra, Basque Pyrenees and to a certain extent Oriental Pyrenees are cross-border areas. Engaging in tourism cross-border co-operation, in order to size on the opportunities offered by the new zoning poses a challenge for the Destination Management Organisations on the other side of these borders.

Conclusions and implications for destination management

This study contributes to a greater understanding of destination boundaries and tourism zones, which to-date, have received little research attention, particularly from the perspective of the consumer. Instead of taking tourism destination for granted as *a priori* areas delimited by administrative boundaries (Saraniemi & Kylänen 2011), there is an opportunity to define tourism destinations *a posteriori* on the basis of the spatial distribution of attractions in a geographical region and the way tourists consume space (Ding et al. 2011; Chhetri & Arrowsmith 2008; Zillinger 2007; Vasiliadis & Kobotis 1999; Van der Knaap 1999).

We acknowledged that among the most common within-destination tourist movement (McKercher & Lau 2008; Lew & McKercher 2006) is a hub-and-spoke or base-camp pattern (Smallwood et al. 2012; Chancellor & Cole 2008), particularly in areas where car-based movements are predominant (Zillinger 2007), such as in inhabited rural or mountain regions. In our research we concluded that areas containing important tourism attractions, where their distances fall within a certain, standard range for hub-and-spoke patterns of visitors consumption, may have more attractiveness potential than traditional administrative-based destinations. With these premises we proposed a method to delineate 'tourism zones'.

We have then implemented the method in the Pyrenees, which exhibits unique characteristics of mountain regions (Godde et al. 2000). We found nine tourism zones, which differ from the current tourism destinations. They are more uniform in size than the administrative regions; all of them are cross-border either interregional, international or both, and they are very similar to historical regions, thus sharing common cultural artefacts like language, despite being divided by current borders.

The results also show a high and significant correlation between the intensity and specificity of attractions and, in the case of tourism zones, the significant correlation between these and the number of accommodation units. Thus, the results indicate that unique first-class attractions go together with high numbers of lower level attractions nearby and that all together foster the growth of accommodation units. However, the correlation between intensity/specificity of attractions and accommodation units does not occur in the case of administrative regions and, therefore, tourism zones are more effective than administrative regions in representing the actual tourism structuration of space. The results also suggest that the more the tourism zones differ from administrative regions the higher their attractiveness is, indicating that around administrative borders the accumulation and relevance of attractions is higher.

Four types of mountain tourism zones were finally identified, ranging from high to low tourism intensity. Some of the most tourism intensive types were located in the central and peripheral coastal regions of the mountain range and have the highest international cross-border intensity. These results can inspire further research on the identification of tourism zones in other regions of the world and in all types of geographical settings (i.e. mountain areas, rural areas, urban areas, or cross border areas) and whether the higher relevance of tourism zones over administrative regions is also manifested in them.

The results also have major implications for the management of destinations. On one hand, current destinations should be aware of the way they belong to or are divided into tourism zones. This awareness must be the basis for neighbouring destinations to strategically initiate cross-border collaboration agreements, integrate their tourism policies, and even create new tourism destination brands, which can be more meaningful for visitors and more satisfying for the travel patterns they seek. We can already see some moves in this direction in the coastal area of Basque Pyrenees and in the area of Cerdanya. The valley of Cerdanya is divided in two administrative regions, one belonging to France and the other to Spain. It is a historical, cultural region, with a common language and shared traditions, and certain tourism functionalities. For example, accommodation, mostly placed on the Spanish side, also serves the ski resorts on the French side. In fact, cross-border initiatives in the Cerdanya have led to the development of cross-border management and promotion actions, such as the creation of cross-border promotional material. These examples suggest interesting perspectives for research in the field of tourism policy and planning. The creation of new tourism zones in cross-border regions entails important political challenges. Tourism stakeholders face additional impediments to cross-border development and their role seems to be crucial in the performance of cross-border collaboration strategies. In this sense, some stakeholders may play a more subservient role, while others play a more dominant role. Policy integration processes are needed between different regions sharing tourism zones, and marketing strategies need to be amended to address specific market niches, which may vary, to a certain extent, from previous conceptions of tourism space. For example, newly found tourism zones may have to become involved in multiple positioning strategies rather than in one single strategy. In addition, specific marketing strategies should be fostered if cognitive distance issues play a negative role for tourism mobility (Smith 1984; Reynolds & McNulty 1968), for example adding artificial distance in cross-border tourism zones between attractions that are located on different sides of the border. On the other hand, the correlations found among destination attributes and the identification of four types of mountain tourism zones can inform destination managers about the reality of both their territories and that of their neighbours, which should give them an advantage to manage and develop tourism in their territories.

Finally, despite the fact that in this study tourism zoning is considered in terms of within-destination hub-and-spoke consumption patterns, an important number of tourists are involved in multi-destination trips (Hwang et al. 2006; Hwang & Fesenmaier 2003; Dredge 1999; Lue et al. 1993). Tourism zones can also be seen as stages within the multi-destination itinerary. This also poses challenges for destination managers in neighbouring tourism zones if they plan to size on the opportunities of this tourism segment.

Further research should thus focus on analysing the actual behaviour of destination managers whose territories are within different types of mountain tourism zones, in order to know better how they see and manage cross-border issues, intensity and specificity of attractions, accommodation and local population matters and also to know their reaction when faced with the identified tourism zones. Finally, the results of this research would also benefit from further research on the actual consumption of these types of areas by actual tourists. By tracking tourists in this identified tourism areas we could check whether their travel patterns fit the premises taken in this study and thus confirm the relevance of tourism zones, and what the reasons were for a lack of fit, if that was the result.

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CHAPTER 4. EMERGENCE OF GOVERNANCE IN CROSS-BORDER DESTINATIONS

Emergence of governance in cross-border destinations

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ABSTRACT. This paper seeks to describe the processes through which crossborder networks emerge and to identify the main elements that either foster or constrain the consolidation of shared cross-border tourism governance structures. The case study analyses a process that initiates and solidifies cross-border structures in the Cerdanya Valley – Catalan Pyrenees region through a thick description of the stories behind their evolution. Major findings include five main categories of factors influencing emergence processes of cross-border destination making: institutional similarity, the existence of bridging actors, leadership and funding, relationship types, and serendipity. As a result the paper contributes with a conceptual framework for cross-border destination governance with interesting insights for managers and stakeholders involved in cross-border destination development and management.

Keywords: Cross-border destination; local tourism governance.

1. Introduction

Previous research on the local organisation of tourism has pointed out the relevance of public-private partnerships as effective governance mechanisms of local tourism destinations (Dredge, 2006; Scott, Cooper & Baggio, 2007). It has been shown that joint action and innovation are promoted through collaboration, networking and clustering (Rhodes, 1997; Sabatier & Jenkins-Smith, 1993). However, achieving collaboration has proved to be a problematic process due to differences in interests among stakeholders and their changing dynamics (Beritelli, 2011; Dredge, 2006). In this context, some historical studies on the development of local tourism organisations have helped to gain

insight into their genesis and managerial implications (Beaumont & Dredge, 2010; McKercher & Ritchie, 1997; Reed, 1999).

It is, however, well recognised that the local borders of a tourism destination are not easy to delineate as they are constantly changing through complex practices and discourses due to historical, political, and economic factors (Nilsson, Eskilsson & Ek, 2010; Paasi, 1996; Sofield, 2006). In fact, recent studies suggest that actual tourism destinations should be delimited on the basis of tourists' consumption patterns (Blasco, Guia & Prats, 2014), instead of on conventional administrative boundaries (Dredge, 1999; Weidenfeld, Butler & Williams, 2010; Zillinger, 2007). This is particularly so in places where local destinations lie on the border of their countries, where there is easy access to and from the cross-border neighbouring destinations, and there is the added value of the cross-border experience for visitors. It is argued that the particular location of regions with such conditions calls for an integrated governance of the cross-border destination as a whole (Ioannides, Nielsen & Billing, 2006; Prokkola, 2010).

Additionally, in cross-border regions, tourism destinations confront a number of impediments, derived from the power of the states to stick to the *status quo* (Lovelock & Boyd, 2006; Timothy & Tosun, 2003). Governance in cross-border local tourism networks is a complex issue. We acknowledge that the role of stakeholders is crucial in understanding public-private partnerships (Dredge, 2006; Strobl & Peters, 2013) and that informal relationships between actors can benefit destination governance (Strobl & Peters, 2013).

In addition, we argue that there is also little knowledge of local governance in cross-border settings. Thus, we aim at gaining further understanding of the processes through which cross-border destinations relational structures emerge. Here we find the main contribution of this paper, which is to improve our understanding of these processes and identify their managerial implications.

By way of a case study, the paper seeks to describe the processes through which cross-border networks emerge at local level. The paper also seeks to find the main elements that either foster, or constrain both the initiation and consolidation of shared cross-border managerial structures in this type of destinations. A case study approach is adopted since the understanding of processes is best achieved at a level where decisions are made and where interactions occur. In our case, the process of cross-border destination making and organisation in the Cerdanya Valley – Catalan Pyrenees region is taken as a source for learning, reflection and insights into tourism management in cross-border local destinations.

2. Cross-border tourism destinations

Borders of regions, nations or states are usually places where political entities collide, economies converge and cultures blend. Borders are also an important factor when deciding on the creation of tourism destinations and the types of tourism that could be developed on each side of the border (Timothy, 2001). However, previous academic work has accepted political boundaries when analysing tourism destinations (Dredge, 1999; Weidenfeld et al., 2010; Zillinger, 2007). Under this conception, borders remain static over time. Nonetheless, we know that borders change due to historical, political, and economic factors (Nilsson et al., 2010; Paasi, 1996; Sofield, 2006). On many occasions, borders may also become tourism attractions by themselves (Gelbman & Timothy, 2010).

Literature has defined cross-border regions as areas where two adjacent territories meet, and thus the history, economy and social attributes of the cross-border region is largely affected by proximity to the boundary (Hansen, 1981; Lundquist & Trippl, 2009). Actors in these regions share some common history, many cultural artefacts such as language, and other values, despite being divided by different jurisdictional entities. In order to diminish the negative effects caused by political boundaries, over recent decades cross border regional co-operation has been established in fields such as trade, social wealth, migration, environmental issues, economic development and tourism (Timothy, 2001).

Regarding cross-border tourism destinations, these can be analysed as functional areas where tourism movements take place for consuming a network of attractions within a certain catchment area (Jansen-Verbeke & Lievois, 2008; Shih, 2006), regardless of administrative boundaries, and that evolves over time and space (Saraniemi & Kylänen, 2011) through combinations of social, cultural, political and economic relationships. Cross-border tourism products are generally associated with the border, for instance with mobilities across the border and with boundaries themselves as

the objects of attention for tourists (Weidenfeld, 2013). The case of Baarle Hertog and Baarle Nassau enclaves on the border between Netherlands and Belgium represent a paradigmatic example of how to convert a distinctive cross-border condition into a number of tourism products (Gelbman & Timothy, 2010). Another example is discussed by Prokkola (2010), introducing the case of the Middle Tornio Valley between Finland and Sweden. Here, local identity expressions such as stories about smuggling across the border are used to develop tourism products.

At a business level, it is argued that inter-firm product dissimilarity between neighbouring cross border businesses stimulates the cross-border development processes. Therefore complementarities and variety are important factors in the creation of cross-border business networks (Ioannides et al., 2006; Lundquist & Trippl, 2009).

The study of cross-border tourism destination strategies has received increased attention from researchers over the last decade. Their findings have been determinant to better understand collaboration strategies used in cross-border destinations (Ioannides et al., 2006; Nilsson et al., 2010; Paasi, 1996); the roles and interactions of stakeholders in creating new identities (Sofield, 2006); the benefits of tourism policy issues in cross-border regions for the development of 'difficult' peripheral areas (Saarinen, 2004); and the obstacles and hindrances derived from pre-existing organisations and institutions towards cross-border development (Lovelock & Boyd, 2006; Timothy & Tosun, 2003).

2.1. Governance and the local organisation of tourism

Managing tourism destinations at local, regional, national or international levels involves a number of issues such as the structuring of networks, and the dynamism and strength of relationships within the destination (Paget, Dimanche & Mounet, 2010; Prats, Guia & Molina, 2008). However, actions are not always coordinated. Zahra (2011), for instance, claims for higher levels of subsidiarity among the regional and local agents involved. At various governmental levels, Local Tourism Organisations (LTOs) have been addressed by an increasing number of authors. The different approaches focus on the involvement of local governments in tourism development (Dredge, 2001; McKercher & Ritchie, 1997; Pearce, 2001); local tourism policy making

processes (Dredge & Pforr, 2008; Pearce, 2001; Reed, 1999); and complex networks and collaborative structures and practices (Paget et al., 2010; Reed, 1999).

Governance in these networks is complex and certain degree of conflict is unavoidable (Dredge, 2006). Local governments tend to assume greater leadership and responsibility within the network, even when it is unclear as to whether they accurately represent the broader communities of interests (Dredge, 2006). Similarly, since local governments are the principal source of financing, they feel legitimised in accumulating greater power within the networks. As stated by Ruhanen (2013, p. 80): "Governments have tended to adopt a more interventionist approach to tourism relative to other service sectors". In her research in five local government areas in Queensland, Australia, Ruhanen found that power struggles, tokenistic public participation and the strong influence of local government authorities on local governance structures were impediments to sustainable tourism development.

The role of stakeholders is crucial in understanding public-private partnerships (Dredge, 2006; Strobl & Peters, 2013) and the importance of power and actor interactions in tourism development (Bramwell & Meyer, 2007). Scott et al. (2007) suggest that stakeholders interact in formal or informal, co-operative or competitive relationships. In addition, Strobl and Peters (2013) argue that informal relationships between actors can benefit destination governance. Lemmetyinen and Go (2009) found that co-operation among business networks in tourist regions is determined by developing specific roles according to personal talent, actors' commitment towards the network, creating joint knowledge and intensive learning, and strong partnering capability for the sustainability of co-operation. Moreover, soft emotional aspects such as trust or sympathy (Beritelli, 2011) or having personal connections (Wang & Ap, 2013) are important in order to perform high levels of co-operation among stakeholders in tourism destinations.

Additionally, in cross-border regions, tourism destinations confront a number of obstacles, derived from the power of the States to stick to the *status quo* (Lovelock & Boyd, 2006; Timothy & Tosun, 2003). Regarding governance in cross-border contexts, a few authors have provided some insights; for example, Scott (1999) contends for cross-border regionalism as a new form of governance that takes into account local interests and aspirations; Gualini (2003) sees it as an on-going process and claims to

achieve a certain level of normalisation in the multi-level institutionalisation of crossborder governance structures; Pikner (2008) points out the importance of European funds for the creation of effective and flexible cross-border governance structures; and Weidenfeld (2013) asserts to low levels of mutual trust between stakeholders and cultural differences, arguing that they can harness the normal development of governance collaborative mechanisms in cross-border settings. However, despite all these contributions, there is still a lack of knowledge of the processes though which local cross-border tourism destinations' governance structures emerge and crystallise in time.

3. Methods

Cross-border destination governance is necessarily a complex, fuzzy process that transcends spatial boundaries, and therefore research on the topic needs to take into account the specificity of the case study at hand. Case studies are well suited to exploring dynamics and processes over time. Organisational processes in tourism destinations are socially, culturally and historically situated, and require rich narrative descriptions of actors and the sense they give to their actions (Paget et al., 2010; Ruhanen, 2013). The potential of this approach compared to other options such as quantitative research with questionnaires, is that qualitative-oriented research lies in the fact that interviewees can freely express unrestrained opinions, narratives and experiences. Although the results remain case-specific, they may bring light to phenomena unseen by quantitative approaches. In words of Czernek (2013, p. 89): "In such qualitative research paradigm, the essence of the phenomena is the reality, which is constructed by all individuals taking part in the research process. (...) In this type of research a purposeful rather than random sample is used."

For this article, data collection was mainly done through in-depth interviews with relevant stakeholders. Additional data such as dates and location of events, or the participation of certain stakeholders was also collected from destination brochures, reports and other sources of secondary data. Therefore, as a first step we identified some relevant stakeholders from information gathered in websites, through the researchers contacts and social networks. The purpose was to identify all the main actors directly or indirectly involved in the process of developing cross-border linkages and structures in the destination.

We started the interviews with the destination managers on both the Spanish and the French sides of the border in order to gain knowledge of further relevant stakeholders, and made use of the snowball sampling technique in all the subsequent interviews (Jennings, 2001). Therefore, the sample was selected on the basis of the actors' relevance to the research topic (Czernek, 2013; Strauss & Corbin, 1990). As a result of this process, entrepreneurs and local businesses, leading officers from municipalities and from DMOs, local politicians and some representatives of the local communities were invited to an interview. Participation was not denied in any of the cases and thus, a total of 13 interviews were conducted. After reaching a satisfactory saturation point, the final sample was composed of 7 actors from the Spanish side and 6 from the French side, which is considered adequate to illuminate the complex issues involved in the case (Wesley & Pforr, 2010). The interviews were held in Catalan or French, depending on the case, and lasted between one, and two and a half hours. The role of the interviewer was to allow and facilitate the interviewee to answer specific questions openly, thereby gathering rich data about new aspects of the phenomenon under study (Myers, 2009). Interviews were semi-structured with questions concerning the attempts of cross-border collaboration they know, whether they participated in them, who else had participated, what the story was, what difficulties and obstacles were found, how the attempt ended or what its current situation is. On the basis of the information elicited, researchers posed new questions with the purpose of getting complete narratives of the processes.

Within the constructivist paradigm, data should be analysed through a process of induction where the researcher constructs meaning from the data in relation to the research question (Janesick, 2000). The stories told by the interviewees were analysed by means of narrative analysis with the purpose of reconstructing the emergent processes whereby the creation of cross-border tourism structures was attempted (Emden, 1998). The core stories of the actors involved were then put together to obtain a multi-subjective, coherent story of the organisational process.

Then, with the constructed stories in mind, thematic analysis, also known as inductive content analysis, was employed to analyse the interview transcripts (Guest, MacQueen & Namey, 2012; Tuckett, 2005). This analytical method is inductive, content-driven, pays greater attention to the qualitative aspects of the material analysed, and searches for themes within textual data. Therefore, it is best suited for explorative research, which is our case.

Coding involved the organisation of data into categories on the basis of themes, concepts and similar features, from which new concepts were developed and relationships between concepts examined (Jennings, 2001). As a result of this methodological process, implications for tourism managers in cross-border contexts have been deduced and discussed in the following sections.

4. The case of Cerdanya Valley – Catalan Pyrenees destination

This tourism destination, straddling the border between Spain and France, is composed of three local and historical regions: Capcir and Haut Conflent are in France, while the third region, Cerdanya, is split into two parts, one in Spain and the other in France. The destination is 150 Km from Barcelona, 170 from Toulouse, 100 from Perpignan, and 160 from Girona, its main urban tourist markets. The two main towns in the Spanish Cerdanya are Puigcerdà (9,957 inhabitants) and Llívia (1,689), while on the French side the largest town is Font-Romeu (1,841) in the French Cerdanya. The Cerdanya Valley is one of the widest mountain valleys in Europe, with an average of 10 km, and has a dozen ski resorts in a 30 km catchment area from Puigcerdà.

In the past the whole region shared a common sovereignty and language, Catalan, as it belonged to historical Catalonia. The Treaty of the Pyrenees, signed by the French and the Spanish Crowns in 1659, delineated the border between France and Spain along the watershed of the Pyrenees mountains, except for the Cerdanya Valley, which after a long and curious process of negotiations (Sahlins, 1991) was split into two separate countries (see Figure 1). It is noteworthy that one of the municipalities of the Spanish Cerdanya, Llívia, became an enclave within the French Cerdanya as a consequence of these negotiations. After more than three centuries, the commonality of the traditional culture has been eroded little by little and the institutional divide has grown wider.

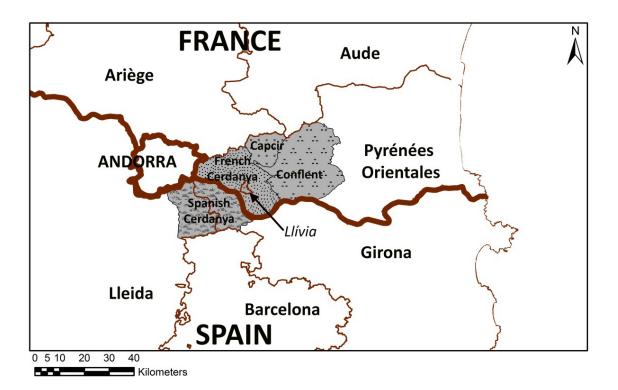


Figure 1. The Cerdanya Valley - Catalan Pyrenees region and Llívia

The Cerdanya Valley – Catalan Pyrenees region is a traditional mountain tourism destination. From the1950s onwards, this picturesque mountain area became a popular ski and summer holiday destination, and thus, ski resorts, hotels, campsites, second homes and other tourist facilities were built, alongside the progressive improvements in communications. Later, villages, towns and heritage sites were progressively developed as tourism attractions based on high quality rural, rambling, wellness and heritage-based experience that attracts these markets.

Despite the increasing number of tourists visiting the region, together with the increasing number of local and international ramblers, attempts to build a cross-border governance structure for the destination as a whole have been scarce. Only recently, one such attempt has begun to crystallise. In the present circumstances there is a widely held view that the area can potentially develop productive cross-border partnerships in the form of an integrated LTO.

5. The emergence of cross-border local tourism governance in the Cerdanya Valley – Catalan Pyrinees region

5.1. Local tourism organisations in the region

Spain was ruled under the dictatorship of General Franco until 1976. Franco suppressed the political institutions of Catalonia and banned most of the Catalan cultural artefacts, including the Catalan language. After Franco's death Catalonia gained the status of autonomous region in Spain and the Catalan culture saw a massive revival. In 1978 the territorial administration of Catalonia became more decentralised and the Spanish Cerdanya valley became a Catalan administrative region in its own right.

This new administrative reorganisation gave way to the creation of the Spanish Cerdanya Tourism Board (SCTB) for the area, a public body that coordinated local tourism policies with officers in the tourism municipalities, and with higher-level regional bodies. The first private tourism association in the valley was the Cerdanya Tourism Business Association (CTBA), which was also created in the 1970s, with the intention of joining forces and coordinating the promotion of tourism in the region. In 1998, the CTBA became a member of the SCTB, which is now acting as a public-private Local Tourism Organisation (LTO) in the Spanish Cerdanya.

The regional administrative system in France is much more centralised. Between the regional and municipal levels there are no intermediate structures. This means that the French side of our destination is very peripheral within its region and thus, the decision-making power is either too fragmented (municipal) or too distant (regional).

In the late 1990s a new intermediate administrative structure *communauté de communes* (CC) was created, and to which municipalities joined voluntarily. In the area under study, municipalities affiliated to three CCs, which correlated with the three historical sub-regions listed above, French Cerdanya, Capcir, and Haute Conflent (the last one only created in 2011). In France, beyond these intermediate structures and in mountain peripheral rural regions, there is another type of intermediate structure called *Parc naturel régional*, which are run by higher-level regional government structures

with the purpose of implementing environmental and sustainable economic development policies in these regions; and of coordinating their actions with the municipalities and CCs of the area. Since 2004, our case study area has one such intermediate structure which includes the French Cerdanya, Capcir and Haut Conflent CCs, under the name of *Parc naturel régional des Pyrénées catalanes* (PNRPC). This dual system of intermediate structures, CCs and PNRPC, is de facto, acting as an informal public Tourism Board for the area.

Within this complicated system of governance on the French side of the destination, the organisation of tourism has been very fragmented until quite recently. Regarding the local tourism business community on the French side, in June 2012, entrepreneurs from the border towns of Estavar and Saillagouse initiated conversations to create an association called *Accueil et Loisir Pyrenees Catalanes* (ALPC), as an interprofessional business association that includes business from all three CCs in the area, convinced of the need of a forum to discuss and share opportunities and problems.

5.2. The emergence of governance structures in cross-border destinations

Recent cases of limited co-operation in the cross-border region are the following. Regarding local cross-border culture, the Cerdanya Valley Community Day is an institutional itinerant festivity, created in 1981 with the purpose of bringing the two communities who had been separated by the border in 1659 together. As for public services, there is a history of collaboration for water supply and more recently for health services. In 2005 a pioneering cross-border hospital project was initiated, which makes sense due to the remoteness and peripherality of this cross-border region with respect to the main urban centres with hospitals in each side of the Pyrenees. In the field of tourism a first example of cross-border collaboration was the result of a purely individual business strategy of the tour-operator Intercerdanya. This was created in 1984 with the purpose of organizing tours from different areas of Spain to the ski stations in the cross-border area. Another case is also found in the 1990s, when a 376 Km trekking route called Camí dels Bons Homes from Berga, south of Cerdanya, and Montségur, and north of our destination, was created as a tourism product with the support of EU funds. Yet another case is found in 2012, when a plan to organise a large cross-border sports event in the region was designed, the Volta Cerdanya Ultrafons mountain race.

However, as observed above these attempts at tourism cross-border collaboration had limited scope.

The most relevant and inclusive attempt at cross-border tourism collaboration in the area started in Llívia, the Spanish enclave, in France in 2011 (see Figure 2). The local community in Llívia is very active and collaborative in social, cultural and tourism activities in the municipality. Llívia is located at the bottom of the Valley and therefore has no ski stations. However it has restaurants, hotels, campsites, shops and heritage sites. Most of the tourists visiting the enclave in winter are skiers doing *après-ski* activities. At this point, it is important to note that in Llívia, a group of local tourism businesses had been active in previous to this, and today are still working together with the municipal tourism office and local politicians in what could be considered as a municipal public-private informal LTO.

In 2011 a local Llívian politician asked the local ski club, Intercerdanya touroperator and the private snow-sport companies in the region to organise a large event in the village. The event was called Welcome Winter, and had the purpose of hosting a fair for a day, with representatives from winter tourism businesses in the entire cross-border destination (ski stations, ski products and brands, tour-operators, shops, etc.). Along with the exhibitions, there were speeches and panel discussions. For the first time ever, in one of these panels, all the ski-resort managers from both sides of the border sat together and discussed shared problems and needs. The success of the event was an incentive to organise the second edition in 2012. In this second edition, tourism business organisations from both sides of the border, CTBA and ALPC, who had already initiated contacts the previous year, signed a collaboration agreement. This was the first cross-border agreement among tourism businesses in the region ever. It is important to note that in previous years, and behind the scenes, a personal relationship between the local tourism politician in Llívia and the president of the ALPC, resident in Estavar, only 2 miles over the border from the enclave, helped to set the scene for this crossborder agreement.

Since then, these private business associations have managed to get tourism public representatives in the region involved in this collaborative initiative. Thus, it is fair to say that since the event, there is a proto-LTO in the cross-border region of Cerdanya, Capcir and Haut Conflent. This is due to the fact that since the Welcome Winter event, and for the first time, all public and private stakeholders from the crossborder region have started serious discussions around the idea of developing a crossborder destination.

In the meantime and since august 2012, other important actions were also taking place in the French side. The municipality of Font-Romeu, one of the main ski resort town in the region, made the unusual decision to abandon the French Cerdanya CC and apply for membership in the neighbouring Capcir CC. At this point the President of the Capcir CC, searched for support before deciding on the application of Font-Romeu. He organised a meeting where the representatives of the French Cerdanya CC, and the ALPC were invited, together with representatives of Font-Romeu. It was at this meeting when the representatives of the business association ALPC pointed out the potential of the cross-border region as a tourism destination, and contended for the formal invitation of public and private tourism representatives of the neighbouring Haut Conflent CC and Spanish Cerdanya region, as well as representatives from the PNRPC, to participate in the project.

Immediately after this, the Capcir CC organised a 16-week program of training courses for the local tourism community. One of the courses was on tourism and collaboration. The course was attended by over 120 people from all the public, private and public-private associative structures in the cross-border region, and became a regular meeting and discussion place for all the tourism stakeholders from both sides of the border. The event was a great success and strengthened their conviction of the need of collaborative activities.

Independently of these developments, in November 2012, the municipality of Font-Romeu in the French Cerdanya, hosted the event *Les Assises du Nordique*, a French Snow Sports Business Fair. Members from the public and private sectors of the Capcir, Haut Conflent, the French and the Spanish Cerdanya, representatives of Llívia, and the PNRPC were invited to participate at the event. Along with exhibitions, panel discussions were organised with the presence of high-ranking representatives from the French tourist authority. In one of the sessions, the president of the ALPC interacted with these representatives and explained the initiative of the cross-border collaborative project they had for the region. This resulted in these officers acquiring first-hand

knowledge of the cross-border reality, and consequently later giving priority and financial support to the project.

2011. First Welcome Winter event in Llívia
2012. June. Creation of the ALPC

August. Meetings between the CC's & ALPC
August – November. Courses organized by the Capcir CC
November. Second Welcome Winter event in Llívia;
Les Assises du Nordique event in Font-Romeu.

2013. Development of the project for a cross-border destination, the GVCCP.

Figure 2. Emergence of the cross-border tourism destination (years 2011-2013)

The success in having inclusively integrated all the regional tourism stakeholders in the project helped to secure the necessary funds from the French government, and in a second phase, also funds from the Spanish Cerdanya region. A cross-border formal collaboration agreement was signed between all public and private partners in October 2013 and as a result, there is now a cross-border public-private Steering Committee that meets regularly. The immediate work plan includes the design of a strategic plan, the creation of new cross-border tourism products, a web portal with booking engine for the cross-border region, the creation of shared promotional materials, agreement on a brand name for the cross-border destination, the organisation of new training courses, and the recruitment of a cross-border tourism product manager.

6. Discussion

From the thematic analysis of the collected interview data, six main topics were found in the way cross-border organisation has emerged in the Cerdanya Valley – Catalan Pyrenees tourism destination. 1. Cross-border institutional similarity/dissimilarity.

The more institutional similarities are stressed the more cross-border collaboration is likely to emerge. In our case study we observe three relevant categories of similarities/dissimilarities at play in: identity, function, and organisation.

Regarding identities across the border, long periods of sociocultural separation favour the emergence of mistrust, envy, rivalry, suspicion and other negative emotions between the two communities. For instance, in the Spanish Cerdanya there is still a perception among the older generation that their French neighbours behave with a sense of superiority, forged after several historical events. Similarly, the deinstitutionalisation of the Catalan language in the French regions, contrasts with the re-institutionalisation of Catalan in the Spanish Cerdanya since 1976, thus, stressing cultural dissimilarities. On the other hand, in recent times French Catalonia has experienced some revival of their identity as French Catalans, which has now tipped the balance over more cultural similarity, proximity and trust. This process has coincided with a strong reinstitutionalisation process in Spanish Catalonia. In this regard, we observe a progressive move from differences to more identity across the border, which is favourable to the emergence of cross-border collaboration and organisations.

The most relevant functional dissimilarities across the border for collaboration in tourism are found in the daily eating routine, taxes e.g. VAT, and language as a functional tool. The difference in eating habits, where meals are much earlier in France than in Spain used to be a constraint and a functional barrier for collaboration across the border: French tourists stayed mostly in France while Spanish tourists stayed mostly in the Spanish Cerdanya. Over the years, and as a result of globalisation, the rise of an international market beyond French and Spanish visitors, have more recently started to make this difference obsolete. Differences in taxes have also been a very important barrier. As in all cross-border destinations, the side with lower taxes has a competitive advantage to host accommodation, food and shopping facilities. This was, thus, an important obstacle for cross-border collaboration for the French stakeholders. Since the introduction of EU homogenizing policies and the introduction of the Euro as a common currency, the difference in taxes has been diluted. As a result, the creation of tourism products with the participation of businesses across the border is now possible.

Lastly, language differences across the border can create functional dissimilarities, unless the local population is bilingual, as in the case of the younger generations.

Regarding functional similarities, we have to stress the increasing recognition of mutual interdependencies on both sides of the border. Although this recognition is implicit in the daily lives of the local population, it becomes more evident when they can see and feel the positive effects of co-organizing these interdependences. The most striking case is found in the opening of the new cross-border hospital, which is going to considerably improve the quality of life in the region and is definite proof that the opportunities that stem from cross-border interdependencies can be seized through cross-border collaboration. Locals are also already aware that tourists visit the area without any regard for the border, and that cross-border collaboration in tourism can make the region more attractive and competitive. Therefore, these events are also favourable for the emergence of tourism organisation across the border.

Finally, as for organisational similarities/dissimilarities, we refer to whether the same type of organisational structures for tourism management on both sides of the border exists or not. For instance, we saw that in the earlier stages of the case, the intermediate level or organisational structure was lacking in the French regions. Then, when this was created, it was still fragmented with three CCs, when compared with the structure in the Spanish Cerdanya. Similarly, for a long time the business association or the public-private LTO only existed on the Spanish side. Therefore, it is not until the organisational structures of tourism management on the French side matches the structures in the Spanish side, that effective co-operation starts taking place.

2. The role of bridging actors and institutions

On one hand, as explained above, Llívia is a historical enclave within France, and thus is totally surrounded by French villages. The intrinsic separateness that an enclave confers to its inhabitants and the closeness of foreign neighbours make the identity of the 'enclavers' unique. Smuggling and commercial activities across the border are traditional economic pillars of borderlands in general, and enclaves in particular. On one hand, the extreme dependence of the enclave on its foreign neighbours, e.g. water supply, trade, etc., results in the inhabitants of the enclave becoming 'bi-cultural' in

order to communicate and exchange goods and services better. On the other hand, the physical separation from its neighbours is very small, e.g. less than 2 km from the French village of Estavar in our case, and therefore inter-marriages have been very common, making kinship, friendship and personal relations abundant.

On the basis of these unique circumstances, Llívia was the first actor to organise cross-border relations across the border with neighbouring Estavar. In addition, as a result of ancestral rights of pasture, Llívia privately owns a large, separate piece of land within French territory, *Les Bulloses*, which is like a sort of 'private' exclave of the enclave that belongs to the public entity of Llívia local government. There is an agreement by means of which, the area of *Les Bulloses* is open to the public, and in exchange the inhabitants of Llívia can ski for free in the French resort of Font-Romeu. Moreover, every year the Llívians gather together in *Les Bulloses* for a cultural event.

These circumstances clearly differentiate Llívia from other Spanish municipalities on the border in that the enclave has the characteristics and plays the conventional role of an intermediary, of a bridge, in network terms, or a quasi-neutral player. It is not surprising then, that the vast majority of attempts in the region at creating cross-border relations and structures are initiated either in Llívia, in Estavar or in both together, as illustrated by the story in the previous section, e.g. the recent cross-border approximation of both local tourism business associations was fostered by one business person from Estavar and one politician from Llívia; and the formal agreement was signed at the Welcome Winter Day, a cross-border event organised in Llívia, Therefore, it seems that the existence of enclaves in border regions can facilitate and foster the emergence of cross-border tourism organisations.

On the other hand, we are acquainted that at a local level, social relations are characterised by parochialism. The institutionalisation of these informal factions can be an important hindrance to introducing and accepting organisational innovations. When this happens, the existence of, somehow neutral, actors can again help to overcome this problem. Newcomers, that is, citizens that arrived in the area from other regions, but are well accepted and integrated in the local milieu, can play this role. In our case, we observe that two newcomers, the Llívian politician and the representative of the Llívia tourism businesses, are behind all the moves that coalesced in the creation of crossborder structures in the last 10 years.

3. Leadership and Financing

Another relevant theme drawn from the interviews regards the role of leadership and finance in these processes. Here we have found four main observations. In the first place, the attempts made among private actors tend to last longer or become permanent, while those initiated by public administration are more ephemeral. We saw that the first lasting case of cross-border collaboration was a conventional supply chain network built by the firm Intercerdanya, from Llívia; and the second was the collaboration agreement signed among the two business associations, ALPC and CTBA. However, most public attempts look at the potential prospect to obtaining UE funds for the development of cross-border areas. Our findings suggest that without a strong commitment from the affected businesses, such attempts are doomed to fail, while pure business initiatives are more likely to succeed. Nonetheless, the findings also suggest that business initiatives conducted with the support of public administrations seem to be the best combination to secure success, as the latter are better positioned to supply the cross-border LTO project with funds. In our case, the president of the Capcir CC, who leads the emergent crossborder tourism organisation Steering Committee (and has also ran a tourism business for over 30 years), is a clear supporter of this arrangement, as is the Llívian politician. In fact, it was the private tourism business entrepreneurs who were the first to understand that the only way to reach global markets was to sell the valley as one, and it was these entrepreneurs, organised in associations, who pushed the public sector representatives from all intermediate structures to be part of the cross-border destination project.

Secondly, we see that only a few actors on each side are active participants and actual champions of the cross-border initiatives. In our case about one third are active while the rest remain passive for different reasons, e.g. lack of next generation family members taking over the firms, lack of competences, etc. Again, these findings are relevant as they go against a common strategy found in destinations, by means of which all the businesses of the destination have to be equally considered by the public authority. It seems though, that identifying the most entrepreneurial actors and giving them support is a much more effective strategy for destination managers and tourism officers. Leadership must, then, be in the hands of the most entrepreneurial actors.

The third observation points out the relevance of generational change, particularly when most businesses are SMEs family businesses. In these cases, with the experience of the old generation, and the updated knowledge and motivation for innovation of the new coalesce, the entrepreneurial culture in the region is enhanced and leadership capabilities are multiplied.

Finally, the complexity of the tourism market, the loss of traditional visitors and the increasing competition from other destinations, creates an incentive to become active and entrepreneurial and to take the lead towards innovative practices. All these elements have played their role in the recent move towards cross-border governance in the destination.

4. Types of Relationships

The fourth theme that emerged from the analysis of the interview data concerns the types of relationships that foster the emergence of cross-border structures. Three main observations were found: business relations, personal relations, and power struggles.

First, regarding business relations, the case shows how they are successful in creating cross-border relations when the gain for all the businesses involved is clearly shared. This is easier to find when the different collaborating parties' activities are complementary, that is, when a supply chain is at stake. This is for instance the case of the operator Intercerdanya who through business relations across the border linked the market with ski stations and with accommodation businesses on both sides of the border.

However, in other cases where the interdependences are not based on interconnecting existing services, like the case above, but in creating and sharing new interdependences in the form of collectively designed new products, then business relationships fall far short of being effective. In these cases, personal and informal relationships, based on friendship, kinship or acquaintance are necessary, as mutual trust is the only protective mechanism against opportunist behaviour. The case shows the relevance of these types of relationships in the emergence of the cross-border network, e.g. between the Llívian politician and the Estavar businessman, and in the creation of the agreement between the two business associations, ALPC and CTBA at the second Welcome Winter event.

Finally, a second observation within this theme refers to the role of power, parochial power-struggles and aversion to losing power. In the case studied, this is mostly found in the municipalities of the two main French towns, Les Angles and Font-Romeu. Regarding Les Angles, we observed that it is the only actor that does not play any co-operative role with the rest, as they do not even belong to a CC. As for Font-Romeu, it is interesting to observe that a at one particular time it decided to abandon French Cerdanya, the CC it belonged to, and applied for membership of the Capcir CC. However, the fact that the President of the Capcir CC, invited the French Cerdanya CCs and ALPC for a meeting before eventually accepting Font-Romeu, is proof of its strategy to balance out the higher power of Font-Romeu. Therefore, although power struggles can be a hindrance to the development of cross-border structures, in our case there were relatively few power struggles and these did not stop the process, once initiated.

5. Serendipity

The last theme observed in the texts of the interviews is serendipity. As we have seen in the case, several limited attempts at cross-border collaboration were made during a long period of time, and it was not until very recently that a successful attempt started to emerge. The reasons that help to explain why these last attempts were successful while the previous attempts were not are set out above. Still, these reasons by themselves could not have guaranteed the current outcome. We need to add serendipity, or necessary, accidental occurrence, which could not have been planned in advance. For instance, the fact that the active and entrepreneurial Llívian politician married a Llívian woman and came to live in the enclave was accidental. The fact that he is enthusiastic and passionate about the historical separation of the two Cerdanyas is just another accident. The fact that he got to know the active French entrepreneur from Estavar who is an ancestral Catalan that speaks the language, and became friends is an accident. The fact that the entrepreneur from Estavar is also passionate about the same topic and found the friendship of the Llívian politician is yet another accident. Even the organisation of the Welcome Winter event in Llívia was some sort of an accident as it responded to the

will of the newly elected mayor to steer the local economy. It was also an accident that *Les Assises du Nordique* event was organised in Font-Romeu at that particular time. And finally, it was an accident that Font-Romeu made the unusual decision of changing their membership from one CC to another, which triggered the action by the then President of Capcir CC of calling all the regional stakeholders for full-blown collaboration. These are all instances of serendipity without which the current collaborative cross-border enterprise would not be as it is now.

7. Conclusions

This case study analyses a process that initiates and solidify cross-border tourism structures in the Cerdanya Valley – Catalan Pyrenees region, sheds light on the understanding of the emergence of cross-border organisation, through both a thick description of the story behind the process and the identification of the factors that explain this emergence. Five main categories of factors were identified: institutional similarity, the existence of bridging actors, leadership and funding, the type of relationships, and serendipity.

First, regarding the institutional cross-border similarity/dissimilarity, our findings support the well-known tenet that the more institutional dissimilarities are stressed, the less cross-border collaboration is likely to emerge; and vice versa. However the case allowed us to identify three different relevant types of institutional identity/differences: cultural, functional, and organisational. For instance, regarding cultural similarities, the perception of otherness or the sociolinguistic history of the region are at stake; with respect to functional differences, daily taxes, language, daily routines such as eating habits and schedules and a shared recognition of mutual interdependence were identified as predominant; and with reference to organisational difference, organisational levels, fragmentation, and stakeholder composition of groups stand out as decisive elements. Therefore, the paper contributes to single out the relevant manifestations of these types of differences, all of which deserve further research.

Second, we have observed that the presence of bridging actors and institutions makes the emergence of cross-border structures more effective. Although the role of

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bringing actors as intermediaries and connectors and their supposed neutrality is recognised in the academic literature (Molina-Morales, López-Navarro & Guia, 2002), this has not been researched in the field of cross-border tourism. Our case is unique in that the bridging role is not played by one individual, but by a whole community in the region, i.e. the enclave of Llívia. Although there is already an emergent literature on enclaves and tourism, the particular potential roles that enclaves can play, both as intermediary and as quasi-neutral actor, has so far been ignored. Moreover, the paper also observes the relevance of the role played by individual bridges, that is individuals that play a central bridging role in the process and that are seen as quasi-neutral; and shows that they can be played by newcomers to the region. Again, although the role of newcomers has been researched in tourism literature, it has mostly focused on explaining life-style entrepreneurship and cultural sustainability (Ateljevic & Doorne, 2000; Marchant & Mottiar, 2011), never on their potential role as mechanisms to overcoming parochialism and establishing cross-border bridges.

Third, the results stress the decisive role played by leadership and finance in these processes. We specify four main findings: (1) the attempts made among private actors tend to last longer or become permanent, while those initiated by public administration are more ephemeral; however business initiatives conducted with the support of public administrations are the best combination to secure success, as the latter are better positioned to supply the project with funds; (2) only a few actors on each side are active participants and actual champions of the cross-border initiatives; (3) the relevance of generational change for leadership, particularly when most business are SMEs family businesses; and (4) the loss of traditional visitors and the increasing competition of other destinations, is a strong incentive to act entrepreneurially and take the lead towards innovative practices. The findings call for new avenues of research in each of these four areas and particularly to better understand their particular role in cross-border destination management.

Fourth, we have seen how different types of relations play different roles in the emergence of cross-border relations and structures. Regarding business relations, the case shows how they are successful in creating cross-border relations when the different collaborating parties' activities are complementary, that is, in the case of cross-border supply chains. However, in other cases where the interdependences are not based on interconnecting existing services, but rather in co-creating and sharing new interdependences, business relationships fall far short of being effective, and, personal relationships, based on friendship are needed. Again, although the role of business and personal relations in the creation of networks and organisational structures is well researched (Lemmetyinen & Go, 2009; Strobl & Peters, 2013; Wang & Ap, 2013) their particular role in creating cross-border tourism organisations has been overlooked.

Lastly, the case shows the relevance of serendipity in these processes. Despite the role played by the previous factors in the successful emergence of (or lack of) crossborder tourism collaboration, yet they in themselves cannot fully guarantee a positive outcome. We need to add serendipity, as we observe in the case the necessary concurrence of unplanned accidents.

To finish, we recognise that the contribution of this explorative research has not only shed light on multiple new opportunities to do research on cross-border destination management, but also affords interesting insights for managers and stakeholders involved in cross-border destination development and management. Acknowledging and understanding the determinant roles of institutional differences/similarities, bridging institutions and actors, leadership and funding capacities, types of relationships and serendipity is a first important step for them to fare the still muddy waters of crossborder destination management.

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CONCLUSIONS

This thesis contributes to the debate on the creation and governance of tourism destinations in cross-border contexts, by bridging consumer behaviour mobility patterns theories with destination governance theories, and by establishing linkages at the macro and micro levels. At the end, this dissertation relates tourism geographies with tourism management, to cast interesting results which can be followed by further investigations.

The most important conclusions derived from the discussion are presented in this final Chapter. First, the results of each chapter are presented and then there is a section of conclusions derived from the crossed analysis of all researches presented in the Thesis. Finally, there is also a section for future research.

The second chapter has provided an overview on the general understanding of the functionality of territories in border regions. It is the first rough attempt provided to delineate tourism zones using cluster analysis and GIS methods, being distance between the existing tourist attractions the factor that is used as a proxy of the level of the motivation of tourists to visit each zone. As a result, a number of cultural and naturalbased tourism zones and/or corridors with different levels of potential for cross-border tourism development have been identified in the three borders of Mexico analysed as a case study. It has also been highlighted that both in the northern and southern Mexican borders, the development of cross-border tourism strategies entails political difficulties, despite the fact that tourists' motivations are attraction-bound, and therefore borders by themselves are not seen as an impediment. Such threads for the creation and management of new tourism destinations are recalled as intriguing venues for further research, and thus, are addressed more in deep in the next two chapters.

Chapter 3 is a more improved attempt to define destination boundaries and tourism zones from the perspective of the tourism mobilities within destinations, and in cross-border regions, and specifically considering the hub-and-spoke pattern (Smallwood, Lynnath & Moore, 2012; Chancellor & Cole, 2008), particularly interesting in areas where car-based movements are predominant such as rural and mountain areas (Zillinger, 2007). A number of nine tourism zones that differ from the current tourism destinations have been identified in the Pyrenees cross-border region. They are more uniform in size than the administrative regions; all of them are cross-border either interregional, international or both, and they are very similar to historical

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regions, thus sharing common cultural artefacts like language, despite being divided by current borders. A statistical correlation analysis of the newly found tourism zones have demonstrated that unique first-class attractions go together with high numbers of lower level attractions nearby and that all together foster the growth of accommodation units. All in all, tourism zones are shown as more effective than administrative regions in representing the actual tourism structuration of space. The Chapter concludes that policy integration processes are needed between different regions sharing tourism zones, and marketing strategies need to be amended to address specific market niches, which may vary, to a certain extent, from previous conceptions of tourism space. This Chapter is related to the previous one in that they share the same methods for the identification of the tourism zones, but with a number of improvements here, such as the introduction of time distance instead of geodesic distance between attractions, and a hierarchy of tourism attractions. Among other issues, this chapter ends with a call for future research of the factors that influence the emergence of tourism destination at the local level, which is then the focus of the research in the next Chapter, choosing the case-study approach in the Valley of the Cerdanya.

Finally, Chapter 4 has analysed the case of the Great Valley of the Catalan Pyrenees, a brand new tourism destination that has emerged after a period of over 30 years of negotiations at the local and regional level, which in the last two years have increased rapidly. A thick description of the stories behind the attempts and the identification of the factors that explain the emergence of this cross-border destination has been portrayed, and particularly important movements from certain stakeholders have been pointed out, in order to understand what specific reasons motivated changes and opened minds to the creation of a cross-border tourism destination between the Spanish Cerdanya region, and the French Cerdanya, Capcir and Haut Conflent regions. For example, the crucial role of the Llívia enclave community seen as a neutral agent in both sides of the border has been explained, and the specific decisions taken by a Politian in Llívia or the French business association representative that pushed the process forward have been exposed. Five main categories of factors that influenced in the emergence of this cross-border destination were identified: institutional similaritydissimilarity issues, the existence of bridging actors and institutions, leadership of private sector representatives and funding by public institutions, the type of relationships (business, institutional, and personal), and serendipity as a concurrence of some accidents which cannot be planned in advance.

As a result of the sum of theories projected in the first four Chapters of this Thesis, a number of issues can be addressed as final conclusions. The research has proved that cluster analysis and GIS-based methods can be used together in the planning and development of tourism destinations. With these premises we have proposed a method to delineate 'tourism zones' from the perspective of tourism mobilities. A number of issues have been taken into consideration for the identification of tourism zones, such as tourism attractions' distribution, their power to attract international tourists; complementarity issues among different tourism attraction categories; the concentration of accommodation units as hubs of tourism attractions nearby; and levels of communication infrastructures that fosters the development of hub-and-spoke tourism mobility pattern. Among those factors, one of the most important contributions of this Thesis is the introduction of distance between the different attractions, both geodesic and 'real' distance in time, as the corner stone for the calculation of logical areas of consumption for tourists.

However, it has also been argued that an optimal distribution of attractions combined with good communication and accommodation infrastructure are not enough arguments for the creation of new tourism destinations. In fact, the role of stakeholders is crucial to make things happen in order to bridging ideas and grounding collaboration that finally converts a cross-border region into a cross-border tourism destination. For example, some actors may have to take the lead in the emergence processes. We have seen some particular cases and specifically the community of Llívia as a whole entity playing a neutral and facilitator role in our case analized in the fourth Chapter. Moreover, usually natural leaders rise from the private sector, which appears to be more ready to bridging motivations and dealing with conflicts, and therefore is less tight to institutional bureaucratic restrictions. Another conclusion derives from the role of active players in the region, which results into a wide array of links and relationships, pushing the processes forward and finding the way through the formal and informal obstacles introduced by institutional tendency to remain sticked to the *status quo*. However, once the process has started with strength, public sector is necessarily included to guarantee provisions to finance the project.

Finally, in addition to the previous factors in the successful emergence of (or lack of) cross-border tourism destinations, we need to add one more factor, which is serendipity. There are several examples exposed in the fourth Chapter that can only be explained as a concurrence of some accidents which cannot be planned in advance, and which derive to a number of crucial events in the creation of a new tourism destination.

All the previously explained factors have a great impact in cross-border contexts, due to the large number of institutional impediments arisen towards cross-border collaboration initiates. However as explained in the case of the Cerdanya Valley, the existence of common identity artefacts as well as a complementarity of tourism specialization, altogether with the leadership of certain stakeholders to build networks can lead to the emergence of newly found cross-border destinations.

This dissertation opens promising avenues for future research by extending and implementing the empirical evidence and conclusions of this dissertation to other crossborder contexts, with different attributes: natural environments, humanized contexts, more or less developed or undeveloped regions, with common cultural subtract or with strong ethnic differences, along both international and intranational borders, etc.

Future research can decide among many directions. Firstly, it is still needed to confront these results with actual behaviour in the consumption patterns of real tourists. For example, using tracking techniques we could check whether their travel patterns in the identified tourism areas confirm the relevance (or not) of new tourism zones. Moreover, future research can be focused in the introduction of factors to refine results in the direction of multi-destination trips (Hwang, Gretzel & Fesenmaier, 2006; Hwang & Fesenmaier, 2003; Dredge 1999; Lue, Crompton & Fesenmaier, 1993), since tourism zones can easily be seen as stages within a wider multi-destination itinerary. Finally, the results also pose a number of challenges referred to destination governance and management in tourism zones. Acknowledging and understanding the determinant roles of institutional and business local stakeholders, the process of building networks of relationships, and the complexity of the management of on-going processes have proven to be important factors in the emergence of new cross-border tourism destinations.

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