

# CHARACTERIZATION OF TYPOLOGIES OF REPRESENTATION THROUGH VIRTUAL ETHNOGRAPHY<sup>1</sup>

## THE PURÉPECHA ROADS IN THE PATZCUARO LAKE REGION AS A HERITAGE CORRIDOR.

CARACTERIZACIÓN DE LAS TIPOLOGÍAS DE REPRESENTACIÓN  
A TRAVÉS DE LA ETNOGRAFÍA VIRTUAL. LOS CAMINOS PURÉPECHA EN LA REGIÓN  
LACUSTRE DE PÁTZCUARO COMO CORREDOR PATRIMONIAL.

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Los caminos han comenzado en época reciente a valorarse como un recurso patrimonial que trascienden más allá de considerarse una infraestructura vinculada a la antropización del territorio. Actualmente, son escasas las propuestas metodológicas para su caracterización patrimonial. Por ello, este artículo muestra el diseño y aplicación de una metodología interdisciplinar apoyada en la Etnografía Virtual y basada en un análisis histórico-cartográfico que permite registrar y categorizar tipologías de representación asociadas a la evolución de los caminos. Se toma como caso de estudio la región lacustre de Pátzcuaro, en México. El análisis histórico-cartográfico a través de la etnografía virtual permite identificar tipologías de representación asociadas no solo a la evolución histórica de los caminos, sino que también de su vínculo con la antropización del entorno lacustre. Al llegar al periodo contemporáneo, la cartografía muestra los caminos como una mera infraestructura y visibiliza a los pueblos lacustres como piezas separadas en torno al turismo cultural. Con la aplicación de esta metodología, se confirma que la cartografía es una herramienta estratégica y que su evolución ha permitido establecer que, históricamente, los caminos han sido un eje vertebrador en la ordenación y el desarrollo del este territorio en distintos procesos históricos. Su vigencia es reflejo de que esta región se mantenga vigente, dada su actual transferencia al turismo cultural. Es importante visibilizar que son todas estas poblaciones en su conjunto las que le confieren una identidad cultural a la región lacustre y que los caminos son el medio que ha permitido que este territorio evolucione históricamente de acuerdo con la necesidad de sus poblaciones, situación que justifica su consideración como corredor patrimonial.

**Palabras clave:** cartografía histórica, etnografía virtual, infraestructura vial, corredor patrimonial, cultura Purépecha, pueblos mágicos

Roads have recently begun to be valued as a heritage resource that transcends being considered solely as an infrastructure linked to the anthropization of the territory. Currently, there are few methodological proposals for their heritage characterization. Therefore, this article shows the design and application of an interdisciplinary methodology supported by Virtual Ethnography and based on a historical-cartographic analysis that allows recording and categorizing representation typologies associated with the evolution of roads. The lake region of Patzcuaro, Mexico, is taken as a case study. Its historical-cartographic analysis through virtual ethnography allows identifying typologies of representation associated not only with the historical evolution of roads but also with their ties to the anthropization of the lake setting. The cartography, in the contemporary period, shows roads as a mere infrastructure and makes the lake villages visible as separate pieces for cultural tourism. With the application of this methodology, it is confirmed that cartography is a strategic tool and that its evolution has made it possible to establish that, historically, roads have been a backbone in the management and development of this territory in different historical processes. Its validity is a reflection of the fact that this region is still valid, given its current transfer to cultural tourism. It is important to make visible that it is these populations as a whole that confer a cultural identity to the lake region and that the roads are the means that have allowed this territory to evolve historically considering the needs of its population, a situation that justifies its consideration as a heritage corridor.

**Keywords:** historical cartography, virtual ethnography, road infrastructure, heritage corridor, Purepecha culture, magic towns.

## I. INTRODUCTION

Making roads visible as a historical and heritage resource and not merely as an infrastructure linked to territorial transformation and planning, became clear in the 1980s thanks to the research of John Brinckerhoff Jackson. From urban and landscape planning, he set precedents from a contemporary perspective on the importance of making the native landscape visible (Brinckerhoff Jackson, 2010) and, at the same time, to characterize how contemporary landscapes have been laid out by their roads (Brinckerhoff Jackson, 2011). However, few interdisciplinary studies identify road heritage and the value of this infrastructure as a cultural corridor (Loren-Méndez et al., 2016).

The culture associated with the past is an exogenous factor for the socio-economic development that has been generated around these infrastructures. Historically, roads have been associated with transportation and socio-cultural activities, often resulting in the construction of symbolic images associated with popular culture and the consolidation of social imaginaries (Payne & Hurt, 2015; Tubadji & Nijkamp, 2018).

In the case of Mexico, the lake region of Patzcuaro has positioned itself in the last two decades as a place of tourist interest, both nationally and internationally. The Federal Government, through the Secretariat of Tourism (SECTUR, in Spanish), has implemented tourism and heritage protection strategies. The trend of cultural tourism leads to recognizing the resources that are located in the Historical Centers as important, a situation that makes invisible resources that, due to their scale or location, are outside the urban core.

This study focuses on the lake district of Lake Patzcuaro, located in the heart of the State of Michoacán, Mexico (Figure 1), a place where the Purépecha culture was established and later where, in the Colonial period, the first capital of the Province of Michoacán was constituted. Currently, the resources linked to the historical, cultural, and natural identity of this region have been valued by diverse government entities, to promote cultural tourism in the region (Núñez-Camarena & Ettinger-Mc Enulty, 2020).

The historical importance of the Purépecha region is reflected in codices such as the *Relationship of ceremonies, rites, population, and governance of the Yndios of the Province of Michoacan (1540)* by Friar Jerónimo de Alcalá, or the canvas of Jucutacato, which were made between the 16<sup>th</sup> and 18<sup>th</sup> centuries, as well as in cartography where the reorganization of the territory is shown. With the perfecting of cartographic techniques, this is joined by travel stories which, for the most part, are exogenous views that characterized the uniqueness of the region. Examples of this are the works by Alfred Conkling, James Steele (1884), Thomas Janvier (1886), Marie Robinson Wright (1897), Wallace Gillpatrick (1911), and Reau Campbell and Hopkinson Smith (1914) (García Sánchez, 2015).

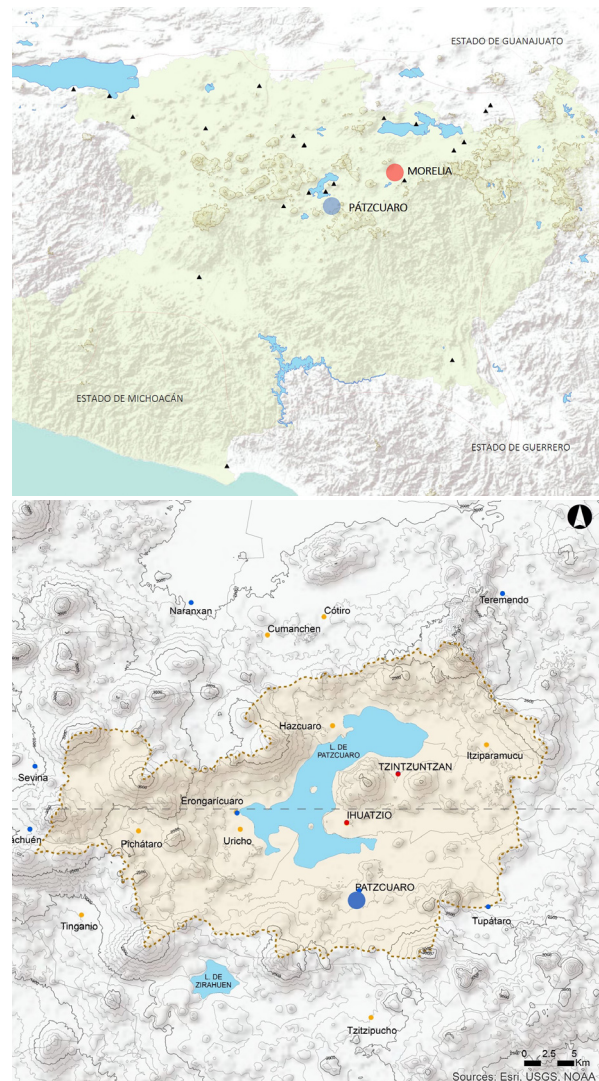


Figure 1. Location of the Patzcuaro basin. Source: Prepared by the author, GMNC, 2022.

The first quarter of the 20<sup>th</sup> century, during the time of Cardinism (1934-1940), saw the greatest-ever road development in Mexico, boosting the automobile industry and road tourism alongside the United States. The travel guides, road maps, and photographs issued at the time, recommended visiting the region of Patzcuaro to enjoy the freedom of traveling by car in picturesque Mexico (Martínez-Aguilar & Ettinger-McEnulty, 2021).

In 2001, the SECTUR launched the *Magic Towns* project at the national level, a cultural tourism strategy, with Patzcuaro being the first municipality in Michoacán awarded this label in 2002. In 2011, the Michoacán SECTUR launched the *Don Vasco Route*,

which includes the lake district, establishing a historical narrative where the roads allowed evangelizing the territory (Hiriart Pardo, 2018).

Through tourist cartography and the official discourse, visiting Pátzcuaro and Tzintzuntzan as *Magical Towns* was promoted, while the surrounding villages appear as mere location references. The *Magical Towns*, such as the *Don Vasco Route*, are limited by tourism, making visible buildings that are located on the perimeter of the historical centers, but unconsciously denying the existence and potential of resources, that due to their scale in the territory, are located outside the urban perimeter (Núñez-Camarena & Loren-Méndez, 2020).

This research intends to be a contribution where the historical-cartographic analysis, supported by virtual ethnography, allows constructing a qualitative methodology, where its results can be analyzed quantitatively. The analysis allows not only identifying the typologies of representation associated with the evolution of the roads but also recognizes the cohesive role that they have had around the identity of the lake populations, as they have historically evolved along the roads. From a contemporary perspective, the Purépecha roads as a result of historical anthropization, can be seen as a heritage corridor.

## II. THEORETICAL FRAMEWORK

To define the typologies of representation, contemporary research is taken as a reference where the road is characterized not as a mere infrastructure, but as a backbone of history and culture. *The N-340 road corridor as the historical axis of the Andalusian coastline: characterization methodologies and strategies for its patrimonialization and sustainable regeneration* (Loren-Méndez et al., 2016), collects how, through sustainable regeneration strategies, it is possible to recognize historical, cultural, and social elements in the territory, documenting the heritage associated with the development of historical corridors (Loren-Méndez et al., 2016).

The historical roads can be made visible as heritage corridors since their evolution is the result of the anthropization of the territory, where social migrations adapt and transform it to cover their basic needs (Byrne, 2016). Currently, roads are vulnerable resources and their transformations are the result of processes related to land use change. Without control, these dynamics bring with them the loss of intangible values of the populations that inhabit the territory (Hoppert et al., 2018; Nogué et al., 2013).

Theoretical approaches agree on the importance of applying interdisciplinary methodologies in the characterization, analysis, and identification of the historical, cultural, and natural permanences of a territory (Alba Dorado, 2019; Fernández Cacho et al., 2021). Virtual ethnography, in this sense, becomes a

powerful tool, allowing the reformulation of the space under which the research is carried out (Suárez-Vergne, 2020). This allows expanding upon, consolidating, and enriching the construction of a more solid database, understanding that the culture and the studied community are not direct products of a physical place or a single historical perception, since this evolves and is perfected over time (Hine, 2004; Suárez-Vergne, 2020).

The consultation of historical and bibliographic archives, which due to their longevity and physical location are in different geographical points, constitutes an excellent opportunity to expand the field of interaction between scientific production and cultural understanding (Hine, 2004; Mosquera, 2008). In addition, it allows contextualizing how, throughout history, culture is produced and reproduced in the media through social perception (Durán Salado & Fernández Cacho, 2020).

Therefore, social perception as an instrument of analysis indirectly drives an active action by the researcher (Bernard & Gravlee, 2014; Caliandro, 2018), discerning from the analyzed materials the phenomena that are sought to be studied, abstracting the typologies of representation reflected in historical resources such as cartography, since they are a reflection of the collective identity of a region (Noguera, 1995; Pellicer et al., 2013).

### Background of the region

Due to the historical, cultural, and natural importance of Pátzcuaro and its surroundings, its characterization has been approached scientifically in interdisciplinary fields. For just over a decade, after the consolidation of cultural tourism, research has been made that addresses the evolution of this territory and its passing to tourism. The image of the lake district as idyllic for rest has been cemented throughout history by the exogenous gaze visible in cartographies, narratives, travel journals, and tourist guides (García Sánchez, 2015). However, it is during the first decades of the 20th century, thanks to road development and the arrival of the automobile, that this region is touristically positioned (Martínez-Aguilar & Ettinger-McEnulty, 2021). The perception that the visitor had of the lake district was conditioned by the imaginaries that the government promoted from tourism, making the identity elements of the Purépecha culture their own, since the regionalist aesthetics framed the postcard of the picturesque, adding to it the road as a symbol of modernity (Ettinger-McEnulty, 2018; Jolly, 2018).

Contextualizing the scientific production around the Pátzcuaro region, the contribution of this article deals with recognizing the historical permanences associated with the evolution of the roads and whose reflection reveals their possible recognition as a heritage corridor.

ARCHIVES CONSULTED TO BUILD THE CARTOGRAPHIC SAMPLE

N°.	File Name	Country	N°.	File Name	Country
1	Ibero-Amerikanisches Institut	Germany	28	Digital Community, Massachusetts Collection	USA
2	Archive of the Royal Library of the Monastery of San Lorenzo del Escorial	Spain	29	David Rumsey Historical Map Collection	USA
3	General Archive of the Indies. PARS State Archives	Spain	30	JCB Archive of Early American Images	USA
4	General Archive of the Indies. Repository in Seville, Spain	Spain	31	John Carter Brown Library at Brown University	USA
5	Digital Library of the Bibliographic Heritage	Spain	32	Library of Congress, USA	USA
6	Hispanic Digital Library. National Library of Spain	Spain	33	TuckDB Postcards: database of antique postcards	USA
7	Royal Academy of History Digital Library	Spain	34	National Library of France	France
8	National Library of Spain	Spain	35	Gallica: Collections of the National Library of France	France
9	Collective Catalog of the Library Network of the State Archives	Spain	36	Alidrisi Cartography	Mexico
10	CERES: Digital network of Museum collections in Spain	Spain	37	General Archive of the Nation	Mexico
11	Institute of Cultural Heritage of Spain	Spain	38	Historical Archive of the City Council of Pátzcuaro	Mexico
12	PARES: Spanish Archives Portal	Spain	39	Historical Archives of Chihuahua	Mexico
13	Barrón Maps	USA	40	Digital Library of the Autonomous University of Nuevo León	Mexico
14	Barry Lawrence Ruderman. Antique Maps Inc.	USA	41	Mexican Digital Library	Mexico
15	Beinecke Digital Collections, Yale University	USA	42	Foundation for the Advancement of Mesoamerican Studies	Mexico
16	Beinecke Library of Rare Books and Manuscripts, Yale University	USA	43	Latin American Institute of Educational Communication	Mexico
17	Stanford University Library	USA	44	Mapoteca Manuel Orozco y Berra	Mexico
18	Yale University Library	USA	45	INAH Media Library	Mexico
19	United States Library of Congress	USA	46	Pátzcuaro postcard	Mexico
20	University of Berkeley Digital Library	USA	47	Indigenous Peoples of Mexico	Mexico
21	World Digital Library. Library of Congress of the USA	USA	48	Royal Academy of History	Mexico
22	Boston Public Library. Norman B. Leventhal Map	USA	49	Michoacan Nicolás León Regional Museum	Mexico
23	Umedia Library: University of Minnesota	USA	50	Cartography of the Netherlands	The Netherlands
24	Boston Rare Maps, antique maps	USA	51	Europeana Collection	The Netherlands
25	Barnebys auction house. Private collections.	USA	52	National Digital Library of Portugal	Portugal
26	BidSquare auction house. Private collections.	USA	53	akpool UK auction house Private collections	United Kingdom
27	Morton auction house. Private collections.	USA			

Table 1. Archives consulted. Source: Prepared by the author, GMNC, 2022.

METHODOLOGICAL CONSTRUCTION OF THE CARTOGRAPHIC SAMPLE CLASSIFICATION SYSTEM																										
CARTOGRAPHIC RESOURCES										HISTORICAL PROCESSES					THEMATIC BLOCKS											
Particular data				Typology			Scale			1° 2° 3° 4° 5°					Category Subcategory											
N.º	Authorship	Year	Title	anamus (Petroglyphs)	Codex	Cartography	Lithography	Photography	Global	Continental	National	State	Regional	Municipal	Appropriations in Western Mexico (1800 AD.C. - 1200 AD.)	Expansion and consolidation of the Tarascan State (1200 - 1521)	Integration and reorganization of the colonial territory (1521 - 1810)	Definition of the independent territory (1810 - 1930)	From industrialization to digital expansion (1930-2020)	Typology of representation	Typology of representation	Typology of representation	Typology of representation	Typology of representation	Typology of representation	
1	Chichimeca Culture	900	Janamus	x										x												x
2	Purépecha Culture	1200	Janamus	x										x												x
3	Henricus Martellus G.	1490	Map of the known world			x			x		x		x													x
6	Friar Jerónimo de Alcalá	1540	Codex. Relationship of Michoacán		x									x											x	x
7	Jerónimo Girava	1556	World Map			x			x		x		x												x	
11	Jacobo Gastaldi	1562	World Map			x			x		x														x	
122	Pascual Ortiz Rubio	1900	State Charter			x						x													x	
123	Secretary of Development	1900	State Charter			x							x												x	
212	INEGI	2016	Cadastral Letter			x						x													x	
213	INEGI	2019	Cadastral Letter			x						x													x	

Table 2. Classification system of cartographic sources. Source: Prepared by the author, GMNC, 2022.

### III. METHODOLOGY

#### Phase 1. Construction of the cartographic base and definition of the typologies of representation

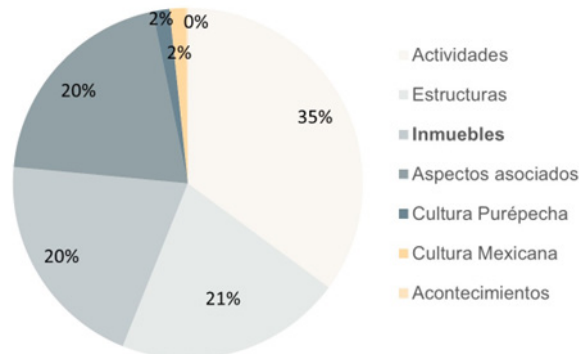
To build the cartographic base, virtual ethnography has made it possible to consult 53 archives in person and digitally, since these are physically located in seven different countries (Table 1). Expanding the field of research through the virtual field allows access to cartographic resources that, due to their physical condition, can no longer be consulted. A sample of 432 sources was obtained, and 213 where the Pátzcuaro lake district is represented, were analyzed.

To thematically define the order and hierarchy of the typologies of representation, the internal structure of the Thesaurus of the Andalusian Institute of Historical Heritage (hereinafter, IAPH, for its Spanish acronym) was consulted (IAPH, 2019). Its use is justified given that Mexico does not include a thesaurus that incorporates concepts of national heritage. Depending on how the typologies of representation are perceived, the explanatory power of perception will be defined when identifying, hierarchizing, and analyzing the permanences that continue to be in force in the territory (Fernández Cacho et al., 2015).

#### Phase 2. Development of the methodology of historical cartographic analysis

Three large blocks are established from which the mapping is

TYPOLOGIES OF REPRESENTATION		
Activities	1881	35%
Structures	1124	21%
Real Estate	1094	20%
Associated aspects	1087	20%
Purépecha Culture	83	2%
Mexican Culture	79	2%
Events	11	0%
	5359	100%
A. Typologies of representation associated with each thematic block		



**Table 3.** Hierarchy of the thematic blocks by their typologies of representation. Source: Prepared by the author, GMNC, 2022.

organized: 1. Sources consulted, 2. Historical processes, and 3. Thematic blocks (Table 2).

1. Sources consulted. 213 cartographic sources are arranged chronologically, indicating the year of production, the title of the work, and the name of the author or entity responsible for its production. The goal is to record and thematically classify the typologies of representation, to establish the extent to which the roads have evolved.
2. Historical processes. In a second block, five historical processes are established: Appropriations in western Mexico (1800 AD - 1200 AD); Expansion and consolidation of the Tarascan State (1200 - 1521); Integration and reorganization of the colonial territory (1521 - 1810); Definition of the independent territory (1810-1930); and From industrialization to digital expansion (1930-2020). The objective is to chronologically relate the cartography and the evolution of the typologies of representation.
3. Thematic blocks. This is the core part of the methodology. Here, each one of the typologies of representation that are reflected in cartography is defined, classified, and categorized thematically. Following the thematic structure of the IAPH Thesaurus, seven main thematic blocks are established: 1. Events; 2. Activities; 3. Associated aspects; 4. Structures; 5. Real estate; 6. Mexican culture, and 7. Purépecha culture. The last two blocks condense typologies typical of Mexico.

The methodology allows processing the results obtained from the historical-cartographic analysis and understanding how each thematic block evolves in cartography. The results are understood through two readings:

1. The weight of each thematic block is hierarchized according to the total number of cartographic sources that have been associated with it or, on the contrary,

2. The information is hierarchized according to the total number of typologies of representation grouped in each thematic block.

Both criteria are valid for this research. However, to characterize the image projected by the typologies of representation associated with the roads, the second criterion is chosen. This is based on the hypothesis that cartography shows elements that are recognized today as permanences in the territory and, in some cases, reflects resources where only the cartographic record remains.

#### IV. RESULTS

To analyze the data obtained, the criterion of hierarchizing the thematic blocks using the total number of typologies of representation grouped in each thematic block is chosen. Of the 213 cartographic sources, 5,359 typologies of representation were obtained. According to what can be seen in Figure 2, the order is as follows: 1,881 correspond to activities; 1,121 to structures; 1,094 to buildings; 1,087 to associated aspects; 83 to the Purépecha culture; 79 to the Mexican culture, and lastly, the events reflect 11 typologies (Table 3).

According to the objective of this article, the category of real estate is analyzed since, in their internal structure, roads are part of the road networks. In cartography, this infrastructure has territorial importance, since its continuity and evolution show an anthropized territory and with it, the existence of historical resources associated with its permanence. (Loren-Méndez et al., 2016; Rosell et al., 2020).

The historical evolution of road networks is shown in Table 4, with railroads being the typology that is most represented in

THEMATIC STRUCTURE FOR THE ANALYSIS OF THE IMAGE PROJECTED BY THE CARTOGRAPHY. Real Estate				Cartographic sample	Representations on the territory	
				2013	5359	100%
				Cartographic resources	Representations by thematic block	
5	Real Estate			149	1094	20%
5,1	Building area				278	
5.2.4	Territorial infrastructures			91	466	
5.2.4.1	Transport infrastructure					
5.2.4.1.1	Road networks			91	466	
	5.2.4.1.1.1	Dirt roads			8	
	5.2.4.1.1.2	Roads			152	
	5.2.4.1.1.3	Highway			67	
	5.2.4.1.1.4	Dirt tracks			4	
	5.2.4.1.1.5	Sidewalk			6	
	5.2.4.1.1.6	Vehicles			3	
	5.2.4.1.1.7	Infrastructures			11	
	5.2.4.1.1.8	Railroads			201	
	5.2.4.1.1.9	Itineraries			14	

**Table 4.** Types of representation: real estate. Source: Prepared by the author, GMNC, 2022.

cartography (201 representations). However, for our analysis, this resource is not a faithful reflection of the evolution of the roads, since its presence corresponds to the cartography developed at the end of the 19th century, which would make the evolution of the roads before the railways, invisible. The dirt roads and sidewalks are part of the evolutionary process of the roads until the arrival of the highway to the Pátzcuaro lake district.

### The uniqueness of cartography in the historical characterization of the Purépecha heritage corridor

As part of the territorial infrastructures, roads have had a direct impact on the transformation and planning of the territory. The results presented allow reflecting on the importance of their evolution in the Pátzcuaro lake district, from the period when the Purépecha culture was established to its contemporary transfer to cultural tourism.

Cartographic evolution reflects not only a better knowledge of the territory by the agents, since they are the ones who show how territorial properties were consolidated around the roads, in this case, religious sites, as well as population settlements. Going down the scale of analysis, religious, residential and non-residential buildings were built around the settlements, as well as service buildings. Socially, the roads have influenced

the development of socio-economic, festive-ceremonial, and magical-religious activities.

During the historical process of *Integration and reorganization of the colonial territory* (1521 - 1810) codices and cartographies were elaborated to record the uniqueness of the new territories and how they were ordered according to the new political-territorial structure. In 1540, Friar Jerónimo de Alcalá made the codex *Relationship of the ceremonies and rituals and population and governance of the Yndios of the province of Michoacán*, in which the layout of the roads and the aesthetics of the lake dwellings are shown. Currently, this typology of housing (the *Troje*) is being recovered, because with contemporary materials the use of this vernacular architecture was left aside (Figure 2).

Friar Francisco Ajofrín (1959) in *View of Pátzcuaro from the Calvary Church*, characterizes the natural environment of the basin, highlighting the topography of the territory. The roads, in particular those that give access to the city, have a hierarchical role. In Figure 3, buildings such as the Royal Customs house, the school of San Ignacio, and the Augustinian Convent are identified, whose buildings confirm the territorial hierarchy of Pátzcuaro compared to the other towns in the region (Figure 3).





Figure 2. Historical cartography, 16<sup>th</sup> century. Source: *Relationship of the ceremonies and rites, population and governance of the Yndios of the Province of Michoacán* (1540); INAH media library (2021).



Figure 3. Historical cartography, 18<sup>th</sup> century. Source: *View of Pátzcuaro from the Calvary Church*, Friar Francisco Ajofrín (1764).



In the first stage of evangelization, chapels and churches were built in the main population centers of the Tarascan State. In 1932, Pedro Beaumont, in *Chronicles of Michoacán*, indicated that the roads of the lake district were the guiding axis of religious discourse because, through their continuity, the orders were established first in Tzintzuntzan, and later in Pátzcuaro. This cultural miscegenation brought with it new uses and customs, which were reflected in magical-religious activities, such as the devotional practices shown in Figure 4.

In the historical *definition of the independent territory (1810-1930)* process, José Guadalupe Romero elaborates in 1865, the *Geographical map of the Department of Michoacán*. In it, the region that communicates the lake district of Pátzcuaro with the capital of Morelia is observed, showing the arrangement of the road networks, which evidences the hierarchy between dirt roads, sidewalks, and roads. The population settlements located around the connecting roads of the Pátzcuaro region differed from the rural-urban ones, as did the existence of ranches and *haciendas*. Of these last two typologies of representation, in some cases, only their cartographic record remains (Figure 5). because time has destroyed them.

The cartographic analysis itself supports the hypothesis that, according to the time when each cartographic resource is



Figure 4. Historical cartography, 18th century. Source: *Chronicles of Michoacán*, Pedro Beaumont (1772).

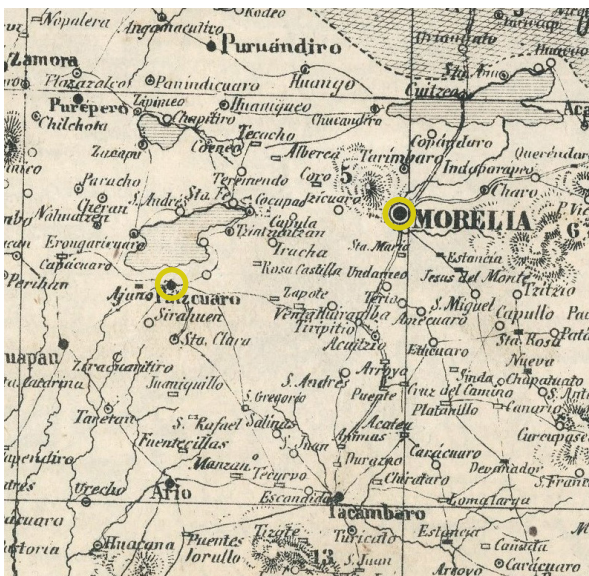


Figure 5. Historical cartography, 19th century. Source: Geographical map of the Department of Michoacán, José Guadalupe Romero (1865).

issued, the scale and resources that characterize the territory are prioritized. At the end of the 19<sup>th</sup> century and throughout the 20<sup>th</sup> century, the urban scale had a greater presence compared to the regional or state scale. The roads disappear visually and indications appear in the direction of the different off-roads that the population centers had. The urban scale favored the representation of the equipment and buildings that the main urban and rural centers had.

During the historical process *From industrialization to digital expansion (1930-2020)*, the Government of the State of Michoacán is the main agent in the cartographic elaboration of Pátzcuaro and its surroundings. In 1895, it produced the *Map of the city of Pátzcuaro* (Figure 6). The urban layout defined since its refounding is subdivided (at that historical moment) into sectors and inside each sector, there are squares, fountains, and temples. The hotels and inns were necessary for those who spent the night in western Mexico. These were located on the side of the main road entering Pátzcuaro, as well as in the surroundings of the public squares. Currently, most of these hotels continue to provide their service, while the roads as a service infrastructure become a highway. This process began during the first decades of the 20<sup>th</sup> century.

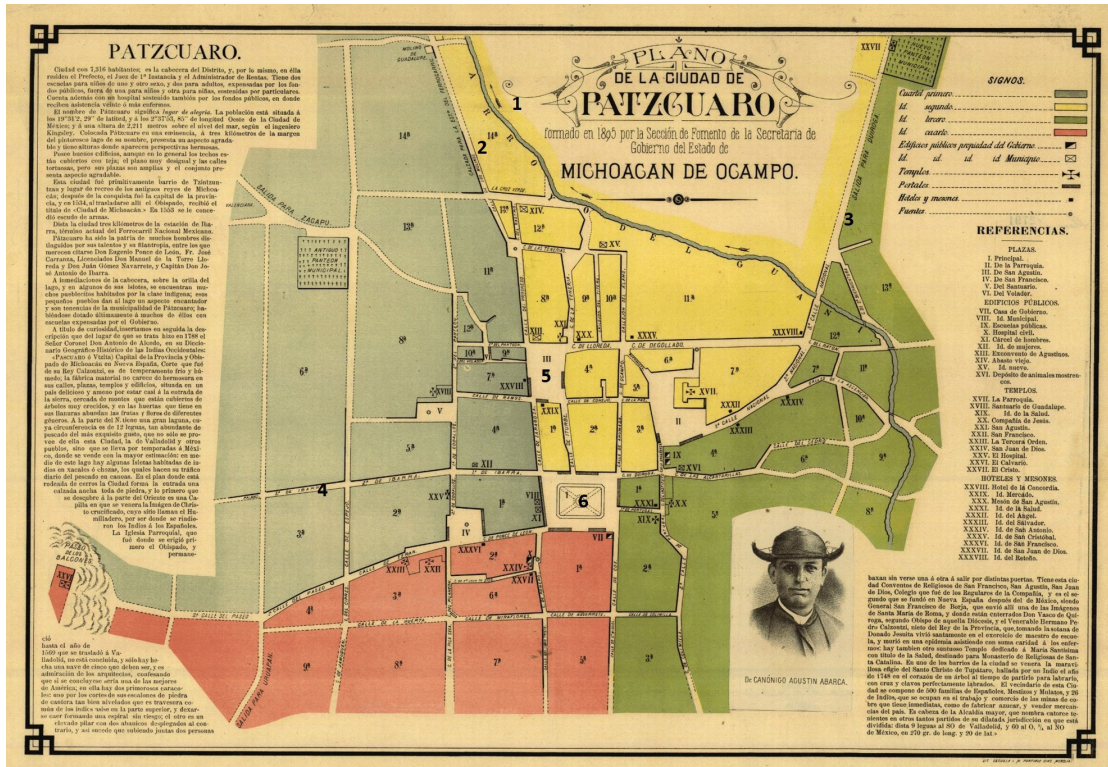


Figure 6. Urban layout of the city of Pátzcuaro. Source: Development Section of the Government Secretariat of Michoacán (1895), *City map of Pátzcuaro*.

In 1970, the *Map of the city of Pátzcuaro*, which differs little from that of 1875, was prepared. Its change is a result of urban development in the north of the city. Between 1930 and 1940 the road that would be the new entrance to Pátzcuaro was built, which allowed the arrival of vehicles, mainly tourists and foreigners. This road came from Ibarra station and the old road to the station was left for the tram (Figure 7).

Officially this territory begins its transfer to tourism in the 1930s. In 2002, with the incorporation of Pátzcuaro into the *Magical Towns* program, the strategy restructures the way to make the territory and its heritage visible, separating the lake district into individual pieces and valuing the historical centers of the towns with that denomination.

In 2012, the Michoacán Ministry of Tourism issued maps and tourist brochures to promote the *Magical Towns* of the State (Figure 8). In the case of Pátzcuaro, the tourist is invited to get to know the colonial heritage there is in the Historical Monuments Area (historic center). Existing resources outside the perimeter remain outside the official discourse. Churches are visible, as well as the cultural equipment built in religious spaces that were no longer dedicated to worship in the 1930s. The urban landscape



Figure 7. Urban improvements: improvement in the northern access of the city. Source: Government of the State of Michoacán de Ocampo (1970), *Pátzcuaro city map*.



Figure 8. Tourist cartography of Pátzcuaro. Source: Maps and tourist brochures, SECTUR Michoacán (2012).

is one of the resources promoted as part of the imaginary of the typical and picturesque town, adding to this the image of the contemporary Purépecha woman.

## V. CONCLUSIONS

This work contributes to demonstrating the necessary construction of interdisciplinary methodologies that allow characterizing the historical anthropization of roads and their possible recognition as a heritage corridor. In the case of the Pátzcuaro lake district, the historical-cartographic analysis identified 1,094 typologies of representation associated with road networks. Hence, it is stated that natural, built, and social permanences represented in the cartography are a reflection of the anthropization of this territory, leaving records of the time when the Purépecha culture was established and the Tarascan State was consolidated, until reaching the contemporary period where the transfer of this territory to cultural tourism begins.

It has been decisive to identify how, from the original cartography, the roads were represented, being the visual axis from which the image was constructed that showed the uniqueness of the lake district and how its environment was transformed. Tourist strategies such as the *Magical Towns* bring with them a reduction in the scale on which the tourist is shown the territory, making historical resources invisible that, due to their dimension, are located outside the urban environment. This happens with the roads.

The populations around Lake Pátzcuaro are as a whole those that, due to their culture, identity, and idiosyncrasies, have conferred a historical value to the territory and not only the

populations that have tourist recognition. Finally, in the case of the Pátzcuaro lake district, the roads are a faithful testimony of the anthropization processes that took place in this territory. The evolution of the typologies of representation is an example that the trinomial of roads, territory, and local population should be considered in its historical evolution, to generate the opportunity for the Purépecha roads to be recognized as a heritage corridor.

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