#### Víctor Calderón-Fajardo

# Analysis of the Social Challenge of the City of Barcelona Under the Model of the Quintuple Helix in a Covid-19 Context

#### **Abstract**

This study performed an exhaustive analysis of the context that has given rise to the related phenomena of tourism-phobia and touristification in the city of Barcelona. The Quintuple Helix innovation model developed by Carayannis, Barth, and Campbell is used as a model of open innovation to present a new perspective through which to counter the challenges of today's society. The Quintuple Helix supports the formation of a win-win situation between ecology, knowledge, and innovation, thereby creating synergies between economy, society, and democracy. The research also draws on the strategic city plan of Barcelona, articles in the specialized press, and reports presenting the opinions of a diverse range of professionals. The statistical data from official bodies and the answers to a questionnaire are validated through the World Tourism Organisation (UNWTO) model. The research analysis is a process of innovation that has not yet begun, thereby highlighting exciting questions about the potential role of the different actors involved. Our results support the idea that tourism-phobia in Barcelona remains uncontrolled and that a lack of understanding exists between the different actors. This leads to a fragile innovation process that is incapable of solving the social challenges posed by the tourism monoculture. The study offers a precise diagnosis of the actors' lack of control and cohesion and suggests that policymakers rethink how to manage the city together with tourism rather than focusing solely on tourist activities. Finally, we find that the current context of the Covid-19 pandemic perpetuates a model of unsustainable tourism-philia that will eventually feed back into tourism-phobia.

Keywords: tourism-phobia, touristification, tourism-philia, quintuple helix, Barcelona

#### 1. Introduction

Barcelona, a port city with a solid cultural foundation and a centuries-long deep-rooted multicultural commercial tradition, continues to face political, economic, health, and identity crises that threaten its development model. Since 1992, when it hosted the largest world event in Spain's recent history – the XXV Summer Olympic Games – it has followed a capitalist tourism development model that does not satisfy all the actors involved.

In Spain, the model of tourism monoculture began to take shape after the "Swedish myth" at the end of Franco's regime – an aspect that contributed significantly to the increase in Gross Domestic Product (GDP) and employment. In addition, the process of modernization that led to the proliferation of changing customs and rejuvenation helped to drive the transition to democracy and freedom. From then on, Spain implemented a policy of unstoppable tourism development that was grounded in a short-term unlimited profit mindset. Spain's success in tourism was mostly due to its strategic position, its mild climate, the grandeur of its natural and cultural heritage, competitive prices, and, above all, constant capital investment. Subsequently, the coastline became disfigured by an extensive urban planning policy, and in the first decades, the excessive development, as exemplified by the resort town of Magaluf, sowed the seeds of tourism-phobia, wherein foreigners, mainly Germans and English, began to be seen as a problem disrupting the balance of cities.

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This trend continued for decades until its official collapse in 2017 in Barcelona, when a significant part of Society openly declared itself to be tourism-phobic. Conflicts and rethinking of the model arise, and a sustainable policy for the city begins to be developed. Until the world health crisis arose with Covid-19 and the scenario changed dramatically, the circle of dependence on the tourist monoculture, which represents 14% of Barcelona's GDP, began again.

With all this, this research attempts to analyze, first of all, the whole context that has given rise to a model of frenetic development in crescendo from 1992 to 2017, a crucial moment when, for the first time, the backbone of this research, the phenomenon of tourism-phobia - even though anthropologists had already noticed it - is normalized in the media; secondly, it diagnoses the direct consequences of tourism-phobia, manifests and analyses through the Carayannis, Barth & Campbell (2012) quintuple helix model the actors and interweaves it with a quantitative methodology in descriptive data and a qualitative one with a set of valuable opinions from professionals and residents. Finally, it engages with Barcelona's new tourism development horizon, which again places a strong emphasis on tourism-philia as the most crucial development model.

This work is the first research to use Carayannis, Barth, and Campbell's Quintuple Helix model to challenge sustainable development in a city as touristified as Barcelona. Other studies have applied the previous Triple Helix, and Quadruple Helix models to sustainable development (Galvao, 2019), the quality of democracy (Carayannis & Campbell, 2014), innovation systems (Campbell et al., 2015), and even international cooperation (Casaramona, 2015), but the Quintuple Helix with the dimension of Society and environment is the first time it has been applied in this context.

This study uses a case-specific approach, following the exceptional scenario and uncertainty in the tourism industry due to Covid-19. It presents an analysis that provides a clear diagnosis of the current situation, although it looks back to moments in the city's past and present to face future challenges. Therefore, it is a diagnosis with a very concrete model of a specific city in a very exceptional context. Knowledge innovation models are clear and specific roadmaps for agents and social actors, which can redirect the situation with public policies that help foresee or correct bad tourism-political scenarios. It has been possible to characterize and map in detail the role of the different agents, especially the involvement of universities in generating a change of model and an urban, economic, and social transformation in the city of Barcelona.

After the introduction and the context of the specific case of the city of Barcelona, section 2 provides the theoretical framework of the concepts that relate to tourism-phobia, touristification, gentrification, etc., and concludes with an analysis of the whole situation with the Quintuple Helix model of Carayannis, Barth & Campbell (2012). Section 3 elaborates on the methodology used. On the one hand, a qualitative methodology based on secondary data from already available sources focused on highlighting the inability of the actors to understand how to face the common challenge of tourism phobia. On the other hand, a survey validated with the UNWTO model to residents of the districts of Ciutat Vella, l'Eixample, and Gràcia. This questionnaire was designed to provide information on the local community's concerns regarding issues or phenomena associated with tourism activity. Section 4 shows different results from the detailed analysis of the Quintuple Helix model of innovation for tourism-phobia in Barcelona and the results extracted from a survey of residents. Finally, the main discussion and conclusions close this paper.

#### 2. Theoretical framework

According to Milano (2018), tourism-phobia (also known as overtourism) is a problem for all the agents directly or indirectly involved in the tourism industry, but especially the public and private sectors, tourists, and residents. The large-scale arrival of tourists over decades has been promoted by public institutions and private companies, whether through ignorance, lack of planning and management, or greed; however, this has caused a tsunami of problems, such as pollution, social tension, waste disposal, real estate mobbing, conflicting political interests, overcrowding, and the disappearance of shops, traditional local trades or microentrepreneurs once multinational companies arrive on the scene (Taş, 2019). This situation soon degenerated into tourism speculation, leading to seasonality, a loss of identity, the trivialization and commodification of the city, the proliferation of vandalism and uncivil behavior, an underground economy, intrusiveness, and conflict between the actors (Con Iglesias, 2009).

Barcelona and other Spanish cities such as Mallorca have witnessed a phenomenon known as tourism-phobia due to the touristification of the city. This question is reflected in the sociological model Irridex, Doxey's irritation index or index, which places the city at level 4, antagonism, where tourism is already accepted and internalized as another problem in the reality of Barcelona society (Cols, 2014).

The responses that public administrations and the tourism industry identify and attribute to the direct impacts of tourism were identified by Novy and Colomb (2019). These can be summarised in three broad groups. The first is the "laissez-faire" or "ignore and do nothing" approach, i.e., the continuation of the "business as usual" chain that prioritizes tourism growth. The different actors have experienced a back-and-forth of conflicting interests. This idea has been seen, for example, in the gentrification suffered in Barcelona, which is intrinsically linked to the overexploitation of tourism.

The second approach is the attempts to delegitimize criticism and protests as absurd, reactionary, aggressive, and dangerous for the city's economic prosperity. Moreover finally, the third approach; is admitting minor policy adjustments and symbolic gestures to mitigate impacts and make tourism 'sustainable' or appear to be 'sustainable' (Novy & Colomb, 2019). Other measures of a technical nature that Milano (2018) exemplified with the 5 Ds strategy (deseasonalization, decentralization, diversification, decongestion, and "deluxe tourism") were deeply rejected by social movements as palliative and aimed at making investments to continue a tourism model based on endless growth.

Based on this theoretical framework, the first RQ arises: Tourism-phobia is out of control and, in part, is advancing due to the inability of the actors to understand each other.

On the other hand, the tourism industry is one of the most important economic pillars in the world. In 2018 alone, it generated \$8.8 trillion for the global economy, and the direct impact of tourism employs 319 million people (Fernandez, 2017). Barcelona has the tenth largest tourist flow globally, and its daily profit rate ranges between 18 and 22 million euros per day (Ramírez, 2014).

In addition, it is also imperative to note that any tourist activity has an impact on the space where it takes place (Ryan, 2003; Hall & Lew, 2009). Along these lines, Wall & Mathieson (2006) state that there are elements of the tourism industry that cause consequences due to direct and indirect interactions between visitors and locals in all three dimensions: economic, environmental, and social. Unfortunately, the argument of high GDP¹ as an indicator of progress is still at the political table today, and dependence on a tourist monoculture produces Dutch disease (Corden & Neary, 1982).

Other studies that applied the Quintuple Helix model (De la Vega et al., 2019; Sumarto et al., 2020) have presented limitations by not showing an evident scientific cooperation and exchange system in advanced democracies. They have also not applied the helix with interest to the education system (universities), and therefore the resulting innovation process may have been compromised.

Finally, understanding the influence of the Covid-19 pandemic on sectors as strategic for the Spanish economy as the tourism sector may be the first cornerstone for cementing more cohesive and diversified economic and tourism policies (García, 2020).

<sup>&</sup>lt;sup>1</sup> According to a report presented by Barcelona City Council in April 2017, 86.7% of Barcelona's inhabitants consider tourism to be beneficial for the city, but the majority, 48.9%, are against the city welcoming more tourists because they consider that it has already reached the limit of its carrying capacity (Mumbrú, 2017).



The Covid-19 context has been the catalyst for changes in the tourism models of countries with a high dependence on the tourism industry (Duro et al., 2022). The impact of Covid-19 has shown that there are no reliable forecasting scenarios to facilitate decision-making by managers and policymakers in complex situations. The Spanish tourism industry is still out of control and with an unsustainable model (Vena-Oya et al., 2021).

The second RQ is framed within this theoretical context: The new current context (with Covid-19) perpetuates a model of unsustainable tourism-philia that feeds back into tourism-phobia. However, if analyzed correctly, it could be a real turning point.

#### 3. Methodology

The study was carried out using mixed-method research based on secondary data. The data sources and analysis methods are detailed below.

Firstly, a mixed quantitative and qualitative methodology was chosen to address the research questions mentioned above. On the one hand, a qualitative methodology based on secondary data, i.e., from already available sources, was used to examine the inability of the actors to face the common challenge of tourism-phobia.

The Quintuple Helix model was developed by Carayannis, Barth, and Campbell (2012) as a model of open innovation to create a new perspective through which to face the challenges of today's societies. This model analyses the respective roles, concurrence, and involvement of the five helixes of society (the education system – universities and education centers; the economic system – companies and society; the media – culture; the political system – public administration; and the environment – the natural environment). Based on the analysis, the involvement of the five helixes in the same perspective is necessary to design a kaleidoscope and exchange multidisciplinary ideas, i.e., create a real innovation that can serve as a catalyst for a change that responds to a social challenge.

This research also explores opinions gathered through interviews with professionals and non-professionals extracted from four reports. Three of these are from the peak of tourism-phobia in 2017 (the 30-minute TV3 programs "Conviure amb el turisme" and "City for Sale", and the report "Bye Bye Barcelona") and the fourth is from the opposite scenario three years later in 2020, during the Covid-19 pandemic when there were no tourists (the 30-minute TV3 program "Sense turisme"). All of these involved various professionals with often opposing ideas.

In April 2017, 86.7% of Barcelona residents believed that tourism was beneficial for the city, but 48.9% were against the city taking in more tourists because they believed it had already reached the limit of its carrying capacity (Mumbrú, 2017). We use a quantitative methodology to analyze why tourism-phobia has not been overcome and explore how unsustainable models leading to tourism-phobia are being perpetuated in the context of a global pandemic and the significant dependencies on tourism monoculture.

We draw on a large set of secondary statistical data from official databases from the Department of Statistics and Data Dissemination of Barcelona City Council (specifically, the changes in hotel overnight stays in the city of Barcelona from 2010 to 2020). To investigate tourist movements at the border, we use data from the National Statistics Institute (INE) and Exceltur, an organization for Excellence in Tourism in charge of analyzing the socioeconomic perception of the relevance of tourism and its multiplier effects on the Spanish economy. Specifically, the data were extracted from the report on residents who had been expelled from tourist neighborhoods. Finally, the research is further enriched with data from the Barcelona Tourism Consortium, specifically on tourist tax collection from 2012 to 2017, and other statistical data on the average expenditure of foreign tourists in Catalonia (2016-2020) from the Statistical Institute of Catalonia (IDESCAT).

On the other hand, a survey validated with the UNWTO model to residents of the districts of Ciutat Vella, l'Eixample, and Gràcia. This local questionnaire model, or residents' questionnaire, was designed to provide

information on the local community's concerns regarding issues or phenomena associated with tourism activity (UNWTO, 2015). The model has an exploratory character and a fundamentally quantitative approach to a random sample of a population of residents in the districts of Ciutat Vella, l'Eixample, and Gràcia. The study aimed to determine the existing permeability and tolerance to tourists and tourist activity in the new pandemic and post-pandemic scenario.

The UNWTO questionnaire on sustainable development indicators for tourism destinations has been validated. In addition, it has been taken into consideration the internal consistency, which reflects the degree of the interrelation of the items. It was estimated through Cronbach's alpha coefficient, which was higher than 0.78, showing adequate internal consistency and reliability. On the other hand, to consolidate the validity of the questionnaire, the content validity, i.e., the representativeness of the construct, was considered. A panel of UNWTO experts familiar with the construct the questionnaire intended to measure judged the construct and the number of items needed (UNWTO, 2005).

Some specific questions have been added, as the questionnaire model allows for this, if they are destinationspecific questions, as is the case here.

Attitudes of local inhabitants towards tourism were operationalized using 14 statements about the influence of tourism on the local community using a five-point Likert scale ranging from "strongly agree" to "strongly disagree". In the same way, using the same scale, the residents were asked four questions about the measures undertaken in the City of Barcelona for tourism sector development. In the last question, the residents were asked if they want visits from tourists in their city in the future, again using a five-point Likert scale ranging from "much less" to "much more".

#### 4. Results

Three types of results emerge from this research. The first relates those underlying the analysis of Carayannis, Barth, and Campbell's (2012) Quintuple Helix model of innovation regarding tourism-phobia in Barcelona, analyzing whether the different actors acted in harmony in addressing the city's social challenges. The second set of results is the mosaic of contributions from professionals in the sector based on reports, articles, reviews, etc., in addition to appropriately interspersed statistical data from various official statistical sources. The third are the results of the survey model (validated by UNWTO), which deals with sustainable development and the phenomena derived from it, such as tourism-phobia.

#### 4.1. The results of the analysis of the social challenge of the city of Barcelona under the model of the Quintuple Helix of Carayannis, Barth and Campbell

Firstly, the education system - Universities and centers have been working for a decade to provide training, research, and alternative development models to the current one and focused on the city's sustainable development. The results and studies carried out in the three sustainable dimensions (economic, social and environmental) in Barcelona alone are overwhelming (Arias-Sans & Milano, 2019). Awareness and concern in the scientific community are omnipresent. It is necessary to understand that innovation and knowledge about sustainable development and the impacts of the tourism phenomenon have always been on the political table of the administrations. However, it may seem otherwise (Colau, 2014). In the words of the geographer from the University of Barcelona Vicenç Casals: "having opted for a tourist monoculture is a very risky bet [...] it has very little to do with the social interests of the population, with the interests of the city and, more specifically, with the interests of the neighborhoods affected" (TV3, program 30 minutes "Conviure amb el turisme").

Secondly, the economic system - the companies. It is necessary to differentiate between the macro-entrepreneurs whose daily agenda is to resolve, in the first place, their trade union struggles, e.g., tourist flats (legal and illegal), vs. hotel associations. On the one hand, they play a significant role in preventing tourism from developing as a new form of neo-colonialism. On the other hand, they expose the greenwashing of Catalan tourism companies and the sibylline idealized imposition of models of "unlimited industrial growth". All of them seem to be configured as a perfect lobby for the institutions to prevent unsustainable tourism models from being agreed upon or control that laws are not applied or applied arbitrarily. However, their strength is diluted as public administrations do not have tools for citizen participation in decision-making on tourism policies (Casellas, 2016).

According to the city's Hotel Guild president, Jordi Clos, the strategic plan does not guarantee that the city will not die of success. In his opinion, to resolve conflict situations, it is necessary to decentralize visitors, for example, by making room for new projects such as a possible museum island on Montjuïc or good tourism promotion to other destinations such as Sitges Montserrat or Figueres (Vargas, 2015).

Thirdly, Society and the Media - Culture. It seems that civil Society not only uses and puts knowledge into practice and demands innovation in the form of goods and services but also becomes an active part of the innovation system. For years, Barcelona society has been reluctant toward a development model that does not benefit residents but rather impoverishes them further. Local social actors express an evident generalized malaise (Palomeque, 2015), a mixture of factors such as the loss of cultural identity, traditional businesses, quality of life or the well-being of generations due to a conflict of interests. The different neighborhood associations have organized to protest against the ongoing non-compliance with the legislation, especially concerning illegal tourist flats, but have not been relatively successful. In the words of the representative of the Association of the Gothic Quarter, Reme Gómez: the complaints about illegal tourist apartments are at a standstill [...] there is a certain institutional passivity [...] there is no capacity to enforce the prohibitions [...] the hotel lobby is also powerful.

The media have not directly contributed to solving or deflating the problem, but they have made it highly visible and helped generate pressure for change. (Pérez-García & García Abad, 2018).

Fourthly, the political system - Public Administrations. The touristification of the city and the consequent tourism-phobia has been, in part, promoted by action or omission on the part of the political sphere, which, as commented at the beginning of this research, had adopted an unsustainable development model of laisse fair rather than savoir fair (Novy & Colomb, 2019).

The decade of the economic crisis (2008-2018) was a fertile ground for failing to curb the model of tourist development and overcrowding and, therefore, faced with the inability to deal with the congestion suffered by the city and the side effects of touristification, Catalan institutions adopted the measure of applying a tourist tax as a formula capable of squeezing this economic activity even more, and which, moreover, arose as the result of the dysfunctionalities in the financing of public bodies to cover the pressure of cities that live off the tourist monoculture (Cinco Días, 2012).

Since 2012, when the tourist tax began to be applied until 2017, the city has collected 28.7 million euros, half of which have been used to develop new tourism promotion projects by the Barcelona Tourism Consortium. (Europa Press, 2016). On the other hand, it is essential to analyze what institutional measures have been implemented to curb tourism-phobia and avoid an unsustainable development model. Within the strategic tourism framework of the Strategic Tourism Plan 2017-2020, the potential and endogenous resources of other neighborhoods were highlighted to decongest and diversify the areas most saturated with tourists, such as the Sagrada Familia, the Gothic Quarter, Barcelona, Parc Güell and the Born.

The idea was to focus on the neighborhoods that receive the fewest tourists to diversify the city's economic possibilities and guarantee a certain degree of equity and well-being for residents and tourists. Similarly, Barcelona City Council has sought to reverse the situation and, since the end of 2016, has been concerned with focusing on the problem and mediatizing the war on illegal tourist accommodation (HUT). To Ada Colau, the mayor of Barcelona, "there is the paradox that there are more beds for tourists than for citizens of Barcelona".

At the beginning of 2020, the Deputy Mayor for Urban Planning of Barcelona City Council, Janet Sanza, stated, "all the platforms, in one way or another, are in breach of the law". The business is still in the hands of organized groups that take advantage of existing legal loopholes. They offer the rental of individual rooms (a currently unregulated practice) and then rent out the entire property as a single flat. Barcelona City Council regrets and is powerless because its control of these loopholes depends on the modifications adopted by the Generalitat de Catalunya in the new Tourism Law of Catalonia (Benvenuty, 2020).

Fifth and lastly, the environment - the natural environment. It has always been and will always be decisive for sustainable development. It offers a "natural capital" that is indispensable for the harmony and development of societies. For some years now, the importance of the natural environment has been shown through the SDG objectives of the 2030 Agenda for the city. Barcelona's natural environment is subject to policies, especially those directly affecting its protection. Barcelona has embarked on a mega-project for the coming years, new green axes, "the superblock" of the Eixample, which will form part of tactical urbanism focused on recovering natural spaces and decongesting one of the most touristy areas of the city (Gyurkovich, 2019). Innovation in the Barcelona context involves striking a balance between offering products/services that are socially beneficial, environmentally responsible, and, of course, economically viable. However, in cities with more negligible economic diversification, such as Barcelona, where the tourism industry is established as the primary economic source, it is challenging to fulfill sustainable development's social and environmental dimensions (Guolo, 1995).

## 4.2. The results of contributions from professionals in the sector and some statistical data predict the difficulties in abandoning the tourism model labeled 'tourism-phobic'

The global pandemic has abruptly broken the growth pattern of the tourism industry. The inability to travel without severe restrictions has led to a dramatic drop in income received, which is mainly due to the city's touristification and its consequent reliance on tourist income. The scenario wrought by the pandemic has caused abrupt changes, as can be seen in the following two statistics (see Figures 1 and 2): First, the volume of overnight stays in Barcelona diminished significantly in 2020 to 95% less than the average for 2019. Second, tourist spending in Catalonia fell by 92.8% (see Figures 3 and 4). Without tourists and the income they bring for at least a year, it seems highly unlikely that the 14% contribution of tourism to GDP in Barcelona, which was the case when tourism-phobia was at its peak, can be recovered.

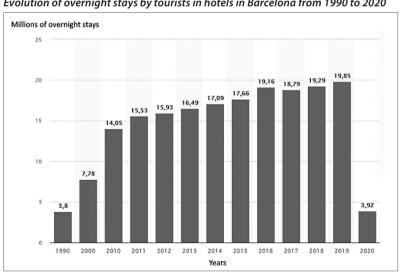
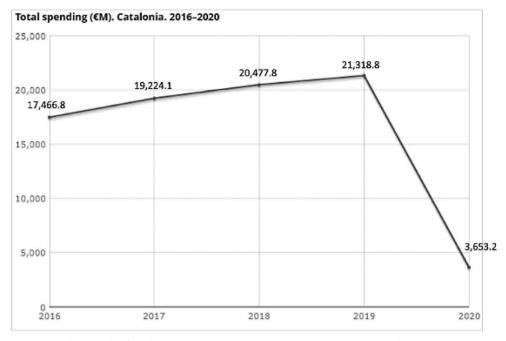


Figure 1
Evolution of overnight stays by tourists in hotels in Barcelona from 1990 to 2020

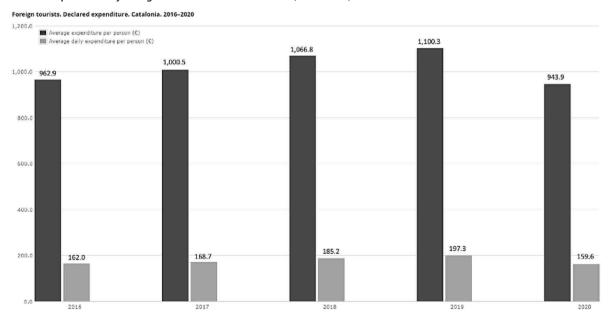
Source: Idescat, based on data of the INE.

Figure 2
Total spending in millions. Catalonia (2016-2020)



Source: Idescat, based on data from the INE's Tourist movement on borders survey and tourist expenditure survey.

**Figure 3**Declared expenditure by foreign tourists in Euros. Catalonia (2016-2020)



Source: Idescat, based on data of the INE's Tourist movement on borders survey and tourist expenditure survey.

Figure 4
Annual variation. Declared expenditure by foreign tourists in Euros. Catalonia (2016-2020)

Source: Idescat, based on data from the INE's Tourist movement on borders survey and tourist expenditure survey.

2017

The future scenario is uncertain and will move in a volatile and convulsive context, and it will be unknown after 50 consecutive years of economic growth. For this reason, the opinions of some professionals and experts in the field have been included in this research to analyze whether Barcelona and the rest of the world are facing a wave of tourism-philia, an intermediate point, or a new tsunami of tourism-phobia.

2018

2019

The fragility of the tourist monoculture has become evident and, although it may sound paradoxical, as José Antonio Donaire, professor of tourism at the University of Girona, points out, and I quote, "now people are reacting by asking tourists to come, they are not rethinking anything, there are no complaints, they are trying to save the season. I think this is legitimate, but it would be much more important to lay the foundations for new tourism. It is now or never" (Donaire, 2008).

Tourist activity in the world is so transversal and multidimensional that, directly or indirectly, it can almost annihilate many countries' survival capacities. Tourist guide Elisenda Soler adds, "tourism has to come back, we have to be able to make a living, but we do not have to sell our life to live". Jordi Gascón, Professor of Anthropology at the University of Barcelona, warns, "if you look up what the WTO says about tourism, it will say something like 'tourism generates many workplaces', but if you go to the International Labour Organisation, it reminds you that it is the tourism sector that offers the worst working conditions of all sectors and, as a result, we have an impoverished country".

Tourism researcher Joan Buades says, and I quote: "We have not prospered much, we have not learned from history, and history tells us that tourism can be good up to a point, as long as a diversified economy accompanies it also as long as the profits stay where the money is made and as long as resources such as water and landscape are taken care of.

Fabiola Mancinelli, professor of anthropology at the University of Barcelona, predicts a not very flattering context, and I quote: "the actors of tourist capital will press for the reactivation of tourism using even more powerful marketing than before, and this will once again trigger tension and conflict". For Professor José

-20.0

2016

Antonio Donaire, "we have to resolve this contradiction and learn to self-limit tourism or rethink how we do tourism" (Donaire, 2008).

In conclusion, we are heirs to a model of predatory tourism and not complementary. The analogy that the naturalist Jordi Sargatal makes between tourism and the environment is fascinating, and I quote, "as in species when there is an event that forces you to act or do something different, either you become extinct, or you adapt [...] the events force you not to be able to grow any more". Sometimes, both the positive impacts or benefits generated by the tourism industry in destinations and the interpretation made of it by the organizations and institutions make for such an enthusiastic reception that it could well be understood as a form of tourism-philia.

### 4.3. Attitudes of the local population towards the development of tourism in the city of Barcelona

Regarding the survey of 620 residents in the districts of Ciutat Vella, l'Eixample, and Gràcia, the data are pretty enlightening concerning the tourism industry, the phenomenon of touristification, and the economic recovery after the pandemic. The survey was sent by Google forms in September, October, and November 2021 to residents of the neighborhoods most affected by overtourism in Barcelona (during the years before Covid-19).

Women accounted for 46.2% of the responses, men for 53.1%, and 0.7% in the other category (people who consider themselves indeterminate sex: "another gender").

The average age of the respondents was 54 years old, and the most popular educational level group corresponded to the category with medium (non-university) education.

Practically half of those surveyed, 55.5%, consider tourism beneficial, and only 35.6% remain neutral in considering it as an activity that benefits them personally (see table 1). These residents strongly agree; 80.2% associated tourism with increased crime. Furthermore, 80.5% strongly agree that tourism is an activity that disturbs the development of local activities. Finally, 55.9% of respondents disagreed that the money generated by tourism stays in the community.

Half of the residents in the sample consider themselves dissatisfied with the current situation, and a majority, 72.5%, would like to see much less tourism activity in the future (see table 2).

A majority, 83.5%, would strongly agree with raising the tourist tax on foreigners. 40.8% think that the promotion of tourism in the city is unnecessary, and 64.7% strongly agree that the institutions will not be interested in putting an end to the current model of tourism in Barcelona, at least during the process of economic recovery. Half of them, 45.6%, do not trust that the pandemic will help to change the city's policies to establish solid sustainable foundations.

Table 1
Attitudes of the local population towards the development of tourism in the city of Barcelona

	Survey results in % (n=620)					
Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
EVALUATION OF IMPACTS OF TOURISM ON TO	JRISM DEVEL	OPMENT TO L	OCAL POPUI	LATION		
Tourism is beneficial to my community.	13.70%	55.50%	25.20%	3.10%	2.50%	
I personally benefit from tourism.	2.20%	21.10%	35.60%	22.90%	18.20%	
It creates jobs for local residents	24.50%	42.20%	15.80%	10.70%	6.80%	
It provides employment for local youth	21.20%	40.00%	32.10%	5.30%	1.40%	
It helps the community to obtain services	16.40%	12.50%	22.50%	30.10%	18.50%	
It increases the crime rate	80.20%	10.50%	1.80%	6.40%	1.10%	
It undermines moral standards	21.50%	45.40%	22.40%	9.50%	1.20%	
Disrupts the development of local activities	80.50%	15.40%	1.10%	1.50%	1.50%	

Table 1 (continued)

Damages the environment	66.90%	18.30%	10.70%	3.50%	0.60%
Impedes local residents' access to various places (parks, trails,)	75.50%	13.50%	5.10%	3.60%	2.30%
Stimulates local crafts and culture	1.50%	9.50%	18.90%	45.30%	24.80%
The community gets to control tourism	1.10%	1.60%	10.10%	28.60%	58.60%
Money generated by tourism stays in the community	1.60%	3.20%	15.60%	55.90%	23.70%
Local residents have easy access to areas used by tourists, etc.	0.40%	2.10%	6.70%	6.50%	84.30%
EVALUATION OF TOURISM POLICY MEASURES					
Tourist tax for foreign tourists can increase	83.50%	14.30%	1.70%	0.50%	0.00%
Promotion of tourism in the city of Barcelona is now unnecessary	40.80%	23.50%	7.40%	17.60%	10.70%
It will not be in the interest of the institutions to put an end to the touristification of the city of Barcelona during the economic recovery	64.70%	31.40%	1.60%	1.20%	1.10%
The pandemic will help to return things around and lay good, sustainable foundations to combat tourism-phobia.	2.30%	3.60%	15.80%	45.60%	32.70%

Source: UNWTO (2005, p. 533). Own adaptation.

Table 2 Attitudes of local population about tourist arrivals in the city of Barcelona

	Survey results in % (n=620)				
Statement	Much less	Less	The same	More	Much more
Opinion of local inhabitants about tourist activity in the future in the city of Barcelona do they want more or less tourism activity	72.50%	20.30%	4.90%	1.20%	1.10%
Statement	V unsatis- factory	Unsatis- factory	Satis- factory	Good	Excellent
General opinion on tourism activity in the community	64.30%	25.50%	5.50%	3.20%	1.50%

Source: UNWTO (2005, p. 533). Own adaptation.

#### 5. Discussion and conclusions

The lack of diversification in the Spanish economy has long been a recurrent theme in tourism analysis. On the one hand, the tourism industry, which promotes an uncritical discourse favoring tourism, is proud of its success and efficiency (Zerva et al., 2019). This sentiment has taken hold in the public institutions of many cities, and the inaction of public bodies in questioning the development and growth of tourism in the city has long been evident, despite studies such as the Doxey Index on the high level of irritation among the people of Barcelona. In the study by Valdivielso and Morata (2019), all respondents concluded that there is a need to decrease tourism in the city, but in this research, they do not respond to the taboo that this implies in the context of the Spanish economy.

The analysis by Novy and Colomb (2019) on the decalogue of the responses that policymakers offer to address the problems of the tourism industry fits perfectly with the initial approaches of this research in the context of Barcelona. This prognosis of uncertainty and skepticism even emerges in the interviews with professionals and the responses of those surveyed. However, as Novy and Colomb (2019) state, policymakers implement actions from the solid position of a prosperous "lifeline" sector in critical and convulsive moments. This analysis is in line with the results of this research, i.e., the new situation with Covid-19 will help to perpetuate tourism-phobia in Barcelona since, although tourism development is static, as García (2020) argues, the statistical data show the eventual collapse of tourism expenditure. Nonetheless, policymakers are continuing to apply the same historical recipe, as highlighted by the surveyed professionals.

By revealing the most important contributions of the Quintuple Helix model, we can see that the increase in the tourism-phobic discourse stems from the scarce participation of the various social actors in tourism planning and development, particularly due to the scarce involvement of the local population in issues that affect them directly (Tresserras, 2013). Likewise, in this model of innovation, there is a lack of cohesion on the part of public bodies, which seem to use the touristification of the city as a political weapon and not as a social challenge.

By applying Carayannis, Barth, and Campbell's model of the Quintuple Helix, it becomes clear that knowledge does not flow between the different helixes, and there is no fundamental common understanding. Furthermore, as pointed out in the first research question, tourism-phobia in Barcelona remains uncontrolled, leading to an increasingly fragile innovation process wherein the social challenges of the tourism monoculture and touristification remain entrenched. The conflict of interests is evident, and the inability to manage change is causing a significant setback that is difficult to overcome.

The data support a social reality, yet the political and economic helixes do not establish standard lines for discourse; as a result, the innovation process is fragile, and the necessary changes cannot occur. Our findings show that the city of Barcelona still faces the challenge of creating a model that can promote coexistence between locals and tourists. On the other hand, tourism-phobia in Barcelona has been stimulating and demanding essential policies and actions to change the entire structure of tourism governance. The lack of control and cohesion among the actors seems evident, and the challenge of how to manage tourism in the city – and how to manage the city with tourism – remains.

Tourism in Barcelona generates 14% of its Gross Domestic Product, employs 65,000 people, and produces 8 billion euros a year. The statistics shown are also compelling; the figures that tourism moves in the city are present at any political table. Although the figures for dependence on the tourist monoculture are clear (a drop in tourist spending and a rise in unemployment with historical figures), the neighborhoods affected by the city's touristification are very reluctant to return to or continue living the same life, although they are not very hopeful about understanding the current context as a change of route and a turning point for a future sustainable tourism policy. Therefore, concerning the second research question, the new current context (with Covid-19) does not seem to be the best ally to avoid the perpetuation and feedback of tourism-phobia.

The current distrust in the institutions to find a sustainable formula is inferred, and they do not believe that, with the recovery process after the pandemic, significant changes will emerge in the model that has "burnt" the neighborhoods so much. The public sector holds the key to intervening through legislation, incentives, control, spatial planning, investment, participation, management, demarcation, and protection. However, it is difficult to believe that, with the collapse of the unsustainable development model already vox populi, 2022 will be the ideal scenario for building the foundations for change.

This research has revealed in detail the origins of tourism-phobia and touristification in Barcelona, highlighting exciting questions about the role of the different actors. It also provides a basis for a future line of research on the case, the most important unknown, the "when" we will have a truly sustainable model for the city and when tourism will begin to be understood, not as a lifeline for the city economy, but as a cog in the wheel.

#### References

Agencia Efe. (2016). Un 34% de los extranjeros de Barcelona critican el turismo de masa [34% of foreigners in Barcelona criticize mass tourism]. Efe. http://www.efe.com/efe/espana/comunicados/un-34-de-los-extranjeros-barcelonacritican-el-turismomasa/10004010-MULTIMEDIAE\_2895030

Arias-Sans, A., & Milano, C. (2019). Case study 3: Barcelona, Spain. In World Tourism Organization, Centre of Expertise Leisure, Tourism & Hospitality, NHTV Breda University of Applied Sciences, and NHL Stenden University of Applied Sciences (Eds.), 'Overtourism'? Understanding and managing urban tourism growth beyond perceptions, volume 2: Case studies (pp. 21-24). UNWTO. https://doi.org/10.18111/9789284420629.3

- Benvenuty, L. (2020, February 4). A Barcelona se le atraganta la guerra contra los pisos turísticos ilegales [Barcelona chokes on the war against illegal tourist flats.]. La Vanguardia. https://www.lavanguardia.com/local/barcelona/20200204/473289505211/barcelona-piso-turistico-ilegal-ada-colau-bed-breakfast-alquiler-habitaciones.html
- Campbell, D.F., Carayannis, E.G., & Rehman, S.S. (2015). Quadruple helix structures of quality of democracy in innovation systems: The USA, OECD countries, and EU member countries in global comparison. *Journal of the Knowledge Economy*, 6(3), 467-493. https://doi.org/10.1007/s13132-015-0246-7
- Canalis, X. (2016, April 26). *Turismofobia: Un relato que va a más* [Turismofobia: A story that goes further]. Hosteltur. https://www.hosteltur.com/comunidad/004853\_turismofobia-un-relato-que-va-a-mas.html
- Carayanis, E., Barth, T., & Campbell, D., (2012). The Quintuple Helix innovation model: Global warming as a challenge and driver for innovation. *Journal of Innovation and Entrepreneurship*, 1, Article 2. https://doi.org/10.1186/2192-5372-1-2
- Carayannis, E.G., & Campbell, D.F. (2014). Developed democracies versus emerging autocracies: Arts, democracy, and innovation in Quadruple Helix innovation systems. *Journal of Innovation and Entrepreneurship, 3*, Article 12. https://doi.org/10.1186/s13731-014-0012-2
- Casaramona, A., Sapia, A., & Soraci, A. (2015). How TOI and the quadruple and quintuple helix innovation system can support the development of a new model of international cooperation. *Journal of the Knowledge Economy, 6*(3), 505-521. https://doi.org/10.1007/s13132-015-0253-8
- Casellas, A. (2016). Desarrollo urbano, coaliciones de poder y participación ciudadana en Barcelona: Una narrativa desde la geografía crítica [Urban development, coalitions of power and citizen participation in Barcelona: A narrative from critical geography]. *Boletín de La Asociación de Geógrafos Españoles*, (70), 57-75. https://doi.org/10.21138/bage.2162
- Cinco dias. (2012, January 11). La Generalitat se enfrenta al ministro defendiendo la tasa turística. https://cincodias.elpais.com/cincodias/2012/01/11/empresas/1326292781\_850215.html
- Colau, A. (2014, September 2). Mass tourism can kill a city Just ask Barcelona's residents. The Guardian International Edition. https://www.theguardian.com/commentisfree/2014/sep/02/mass-tourism-kill-city-barcelona
- Cols, C. (2014, September 29). La irritación sube a nivel 4 [Irritation goes up to level 4]. El Periódico de Barcelona. http://www.elperiodico.com/es/noticias/barcelona/irritacion-por-turismo-barcelona-sube-nivel-3556724
- Con Iglesias, D. (2009). *La ciudad mentirosa*. *Fraude y miseria del modelo Barcelona* [The lying city. Fraud and misery of the Barcelona model]. Catarata.
- Corden, W., & Neary, J.P. (1982). Booming sector and de-industrialisation in a small open economy. *The Economic Journal*, 92(368), 825-848. https://doi.org/10.2307/2232670
- De la Vega, I., Puente, J.M., & Sanchez, R.M. (2019). The collapse of Venezuela vs. the sustainable development of selected South American countries. *Sustainability*, *11*(12), Article 3406. https://doi.org/10.3390/su11123406
- Donaire, J. (2008). *Turisme cultural. Entre l'experiència i el ritual* [Cultural tourism. Between the experience and the ritual]. Edicions Vitel.la
- Doxey, G. (1976). When enough's enough: The natives are restless in Old Niagara. Heritage Canada, 2(2), 26-27.
- E-Notícies. (2016, February 21). Amor y odio en la Sagrada Familia [Love and hate in the Sacred Family]. http://sociedad.e-noticies.es/amor-y-odio-en-la-sagrada-familia-100898.html
- Europa Press (2016, December 29). Barcelona cobra dos millones de euros extras de la tasa turística [Barcelona charges two million euros extra from the tourist tax] http://www.lavanguardia.com/local/barcelona/20161229/412968037844/barcelona-cobra-dos-millones-de-eurosextras-de-la-tasa-turistica.html
- Fernández, F. (2017, December 12). España recibió 75,3 millones de turistas en 2016 [Spain received 75.3 million tourists in 2016]. Economía. http://www.elmundo.es/economia/2017/01/12/587751a246163f6d518b4600.html
- Fuertes Rocañín, J. (2015). *Ponga un psiquiatra en su vida: Manual para mejorar la salud mental en tiempos de crisis* [Put a psychiatrist in your life: A manual for improving mental health in times of crisis]. Editorial Desclée de Brouwer.
- Fundéu. (2017). http://www.fundeu.es



- Garcia Pozo, A. (2020). El turismo en la economia espanola y la irrupcion de una pandemia [Tourism in the Spanish economy and the outbreak of a pandemic]. Universidad de Malaga.
- Godsland, S. (2006). Francisco Umbral's 'lady' tourists: A fictional view of early female visitors to Spain. *Revista Canadiense de Estudios Hispánicos*, 30(2), 225–248. http://www.jstor.org/stable/27764049
- Guolo, V. (1995). Como promover un turismo compatible [How to promote compatible tourism]. COM/I Edizione.
- Gyurkovich, P. (2019). Supermanzana in practice. Ability to create people-friendly spaces upon the example of selected Barcelona-based projects. *IOP Conference Series: Materials Science and Engineering, 471*, Article 092010. https://iopscience.iop.org/article/10.1088/1757-899X/471/9/092010
- Hall, C., & Lew, A. (2009). Understanding and managing tourism impacts: An integrated approach. Routledge
- Infotur.Barcelona. (2015, June 25). Exceltur: Los pisos turísticos expulsan a los vecinos de Ciutat Vella [Exceltur: The tourist apartments expel the residents of Ciutat Vella].

  https://noticiasturismobarcelona.wordpress.com/2015/06/25/exceltur-los-pisos-turisticos-expulsan-a-los-vecinos-de-ciutat-vella/
- Milano, C. (2018). Overtourism, malestar social y turismofobia. Un debate controvertido [Overtourism, social unrest and tourism phobia. A controversial debate]. *Pasos: Revista de Turismo y Patrimonio Cultural, 18*(3), 551-564. https://doi.org/10.25145/j.pasos.2018.16.041
- Moisés R., & Simancas C. (2008). El sistema de cobro de una tasa pública por la prestación de servicios turísticos en las áreas protegidas de Canarias [The system of charging a public fee for the provision of tourist services in the protected areas of the Canary Islands]. *Cuadernos de Turismo*, 21, 201-237. https://revistas.um.es/turismo/article/view/25051/24341
- Mumbrú, J. (2017, April 15). Els barcelonins que no volen més turistes són majoria per primer cop [The barcelonins that do not fly more tourists are the majority for the first cop] Ara. Cat Turisme Societat. http://www.ara.cat/societat/barcelonins-que-volen-turistes-ajoria\_0\_1778822129.html
- Novy, J., & Colomb, C. (2019). Urban tourism as a source of contention and social mobilisations: A critical review. *Tourism Planning & Development*, *16*(4), 358-375. https://doi.org/10.1080/21568316.2019.1577293
- Organización Mundial del Turismo. (2005). *Indicadores de desarrollo sostenible para los destinos turísticos: Guía práctica* [Indicators of sustainable development for tourist destinations: A practical guide]. Madrid.
- Palomeque, F. (2015). Barcelona, de ciutat amb turisme a ciutat turística. Notes sobre un procés complex i inacabat [Barcelona, from a city with tourism to a tourist city. Notes on a complex and unfinished process]. *Documents d'anàlisi geogràfica*, 61(3), 483-506. https://doi.org/10.5565/rev/dag.296
- Pérez-García, G. & García Abad, L. (2018). Turismofobia: Presencia, impacto y percepción del concepto a través de los medios de comunicación impresos [Turismofobia: Presence, impact and perception of the concept through the printed media]. adComunica. Revista Científica de Estrategias, Tendencias e Innovación en Comunicación, (16), 201-219. http://dx.doi.org/10.6035/2174-0992.2018.16.11
- Ramírez, N. (2014, April 16). 'Bye bye Barcelona': El documental contra el turismo masivo ['Bye bye Barcelona': The documentary against mass tourism]. El País.

  https://smoda.elpais.com/placeres/bye-bye-barcelona-el-documental-contra-el-turismo-masivo/
- Ryan, C. (2003). Recreational tourism. Demand and impacts. Channel View Publications.
- Smith, N. (1979). Toward a theory of gentrification: A back to the city movement by capital, not by people. *Journal of the American Planning Association*, 45(4), 538-548. https://doi.org/10.1080/01944367908977002
- Smith, N., García Herrera, L., & Sabaté Bel, F. (2016). *Gentrificación urbana y desarrollo desigual* [Urban gentrification and uneven development]. Icaria.
- Sumarto, R.H., Sumartono, S., Muluk, M.R., & Nuh, M. (2020). Penta-Helix and Quintuple-Helix in the management of tourism villages in Yogyakarta city. *Australasian Accounting, Business and Finance Journal, 14*(1), 46-57. http://dx.doi.org/10.14453/aabfj.v14i1.5
- Taş Gürsoy, İ. (2019). Beauty and the beast: A fairy tale of tourismphobia. *Tourism Planning & Development, 16*(4), 434–451. https://doi.org/10.1080/21568316.2019.1582086



- Tresserras, J. (2013). El uso del patrimonio cultural para el turismo cultural: Una mirada desde la comunidad para el desarrollo endógeno basado en un turismo sostenible y responsable [The use of cultural heritage for cultural tourism: A view from the community for endogenous development based on sustainable and responsible tourism.]. In *Ponencia seminario internacional "El patrimonio cultural, un aporte al desarrollo endógenos".* Universidad Andina Simón Bolívar (UASB), Quito.
- Valdivielso, J., & Moranta, J. (2019). The social construction of the tourism degrowth discourse in the Balearic Islands. *Journal of Sustainable Tourism*, 27(12), 1876-1892. https://doi.org/10.1080/09669582.2019.1660670
- Vargas, A. (2015, March 27). El Gremio de Hoteles de Barcelona reconoce que los apartamentos son necesarios, pero hay que regularlos [The Barcelona Hotel Association recognizes that apartments are necessary, but they must be regulated]. Hosteltur. https://www.hosteltur.com/110412\_gremio-hoteles-barcelona-reconoce-apartamentos-son-necesarios-hay-regularlos.html
- Vena-Oya, J., Castañeda-García, J.A., & Rodríguez-Molina, M.Á. (2021). Forecasting a post-COVID-19 economic crisis using fuzzy cognitive maps: A Spanish tourism-sector perspective. *Current Issues in Tourism*, *25*(13), 2048-2062. https://doi.org/10.1080/13683500.2021.1944995
- Wall, G., & Mathieson, A. (2006). Tourism: Changes impacts and opportunities. Pearson Prentice Hall.
- World Tourism Organisation. (2005). *Indicadores de desarrollo sostenible para los destinos turísticos: Guía práctica* [Indicators of sustainable development for tourist destinations: A practical guide]. UNWTO.

#### **Appendix**

**Table 3**Appendix of terms, neologisms and expressions used.

• •	
Touristification	This refers to the impact of tourist overcrowding on specific neighborhoods or cities' commercial and social environments. Specifically, the impact on residents is that services, facilities, and shops are more oriented toward tourists than toward the citizens who live there permanently (Fundéu, 2017).
Tourism-phobia Tourism-phobic	It is used to refer, more specifically, to the rejection of touristification, a tourism model characterized by overcrowding and the negative consequences for the population and workers (Fundéu, 2017).
Tourism-philia	Understood as the opposite of tourism-phobia.
Dutch disease	In economics, the Dutch disease is the apparent causal relationship between the increase in the economic development of a specific sector and a decline in other sectors. By attracting all investment into resource-intensive productive sectors, to the detriment of other economic activities, there is a lack of resources to diversify the economy. The problem is that if this exploitation becomes uncompetitive or exhausted, the region may suffer a decline as it cannot restore the productive structure to attract new activities (Corden & Neary, 1982).
Gentrification	This phenomenon causes the urban space to be transformed with new establishments that imply new costs for rents, supplies of raw materials, and new municipal taxes that former residents cannot afford and, consequently, they are forced to leave their homes and move to peripheral neighborhoods, leaving their areas to social classes with more significant economic capacity (Smith et al., 2016).
Doxey Index	This model suggests that tourist activity provokes a degree of irritability in the local community, differentiating five stages (euphoria, apathy, irritation, antagonism, and ending) (Doxey, 1976).
"Swedish myth"	The arrival of Nordic tourists, especially Swedes, generated a rejuvenation in Spanish thinking, and the arrival of foreign currency was extolled by the stereotype of sensual and liberal tourists (Anon, 2006).
Magaluf Syndrome	You get the horrible feeling you get when you return home after a holiday to Magaluf. The psychiatrist José Carlos Fuertes describes it as a symptom of a society that is total, sick, decadent, and out of control (Fuertes, 2015). It refers to the development and proliferation of binge tourism and all that it entails, drug use, and uncivil behavior caused by low-cost tourism in mainly coastal areas.

Source: Own adaptation.

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