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Measuring the Impact of Game of Thrones on Tourism Through Online Reviews

We propose a new methodology for the analysis and measurement of film-induced tourism, choosing the television series Game of Thrones and its locations in Spain to implement it. We use the variation of the number of reviews on TripAdvisor and the percentage of travellers that mention the television series in their reviews as elements of measuring the impact of film-induced tourism. Preliminary results show that less popular destinations (before filming the series) are more affected by filming. Additionally, we identify that English-speaking travellers seem more motivated to visit these sites than the locals.

Key words: game of thrones, tripadvisor, reviews, tourism, film, television

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Introduction

One of the motivations of travellers to choose a destination is because it featured in a film or a TV series. This type of tourism has received various denominations: media tourism, movie tourism, film tourism, screen tourism, etc. However, the most recognized in the academic field is "film-induced tourism", that involves various on-site activities, forms and typologies when visiting film locations (landscapes, palaces, cathedrals, streets, etc.) such as film tourism as primary travel motivator, film tourism as part of a holiday, film tourism pilgrimage, movie tours, etc. (Beeton, 2005).

This type of tourism has become a very popular topic in academic literature in recent years. A paper by 2012 highlighted a rapid expansion in the literature during the previous ten years and a developing body of knowledge as demonstrated by the quantity of new research, and the number of journals featuring special issues on the subject (Connell, 2012). At that time, the development of the distribution platforms of television series and films on demand in streaming began, supported by the popularization of smartphones and smart-TVs (Netflix, HBO, Amazon Prime Video, Sky, etc.).

In this context, HBO premiered in 2011 "Game of Thrones" (GOT), which ended in 2019 after eight seasons, in which it has become the TV show with the most Emmy Award wins in history. It is set in an imaginary world, with some magical elements, such as dragons, zombies or witches, which has an atmosphere that we could consider corresponds to those of medieval Europe. The series is based on the existence of seven kingdoms, in addition to the area of Essos. The action takes place in different cities, castles, open spaces, etc. for which a combination of decorations expressly constructed for the series and real old buildings in several European countries is used, to which digital effects are frequently added. This has also led GOT to be one of the most expensive TV series reaching in the last season a cost of $15 million per chapter (Martin, 2019).

When series set is in a near present such as "Breaking Bad" (Tzanelli & Yar, 2016), locations that become popular because are featured on-screen had no prior tourist interest. However, in the case of GOT, in almost all cases we can see tourist spots that are suitable for the filming of a series set in an era reminiscent of medieval times. Therefore, most of the locations of this successful series have become examples of film-induced tourism.

The impact of filming a movie or a TV show in a site is related to the popularity of the production itself, the time that the place is on-screen or if it is in emblematic and memorable scenes for fans. Sometimes scenes are shot in already very popular tourist spots and filming is just an extra attraction for visitors. Conversely scenes are also filmed in not so popular places that have remained outside the circuit of mass tourism, which causes very significant impacts derived from filming.

As mentioned before, the impact in terms of increase in the number of visitors can vary substantially from one place to another, so quantification is a great challenge for public tourism authorities. When dealing with tourist spots where a ticket is charged for entering or there is an entry record, it is easier to quantify the impact. However, many of the places chosen are historical buildings than can be seen from outside, beaches or landscapes.

In this article we propose a film-induced tourism impact measurement system for specific locations, based on TripAdvisor reviews. On the one hand we analyze the variations in the number of reviews prior to the appearance of the place on screen, comparing it with the number of reviews that are included afterwards. On the other hand we analyze the percentage of users who mention the name of the show or movie that was filmed in the place they visit. We use the 14 most important locations of GOT filmed in Spain and downloaded data since the place was included in TripAdvisor until August 2019 (the last episode was in April 2019).

Literature Review

The interest in film scenarios has led to the appearance of the so-called "Set-Jetters", people who visit a particular place because it was featured in a book, tv show or film that they enjoyed. The phenomenon is impacting some film locations that get up to a 30% boost in bookings (The Guardian, 2005).

Most often, a shoot adds an extra attraction to a place, but does not constitute the main motivation to visit that place. For example, those who visit London and are fans of Harry Potter, are likely to consider the possibility of visiting some of the filming locations of the films and that makes them opt for this option when deciding on their vacation. But possibly they do it because that stay can be agreed with other tourist attractions in the city. In other cases, people do not know, when hiring their vacations, that a film or series was shot in the places they are going to visit, but they find it interesting to discover it when they arrive at the place.

In Spain, as in other locations of the series, public authorities promote tourist routes through the filming locations of the series (Andalucia Tourism, 2015; Euskadi Tourism, 2017; Extremadura Tourism, 2018), aware that it has become an important attraction added to their destinations.

For all this it is complex to quantify film-induced tourism and public authorities use more or less scientific methods to make estimates. In the case of GOT, United States Ambassador to Spain James Costos, a former HBO executive, estimated that initial figures of the fifth season of Game of Thrones in Seville and Osuna (Spain) boosted local tourism by 15 percent (Rolfe, 2014). Data from Dubrovnik show that Game of Thrones had driven about half of the city's 10 percent annual growth in tourism (Winfrey & Kuzmanovic, 2015). North Ireland authorities estimates that about 120,000 visitors came in 2016 to see this tv series

scenarios, which could be worth about €34 million a year to the local economy (McDonnell, 2018).

Some authors have paid attention to the application of web search data for tourism forecasting, using Google Trends or Baidu Index, that can be used to identify potential tourists and as indicators of tourist behaviors, including where and how tourists travel (Artola, Pinto, & García, 2015; Sun, Wei, Tsui, & Wang, 2019). Following a similar methodology, TripAdvisor reported an increase in traffic in seven Spanish towns (average 125%) where GOT scenes were filmed. Campillo de Dueñas (Castle Zafra) has been the Spanish town with the greatest increase in interest (291% more visits on TripAdvisor compared to the previous year) (Tripadvisor, 2017).

Several studies have considered the number of online reviews in websites such as Ctrip or Booking.com as a proxy for hotel sales (Martin-Fuentes & Mellinas, 2018; Viglia, Furlan, & Ladron-de-Guevara, 2014). Although only a percentage of travelers write their opinion on these websites, if the number of people who do so increases or decreases it is interpreted to be because the total number of people visiting that place varies. In the same way, if one place has more reviews than another it is because it is visited by more people.

Methodology

Based on the aforementioned prediction methodologies through online searches and correlation between the number of reviews and sales or visitors, we implement a novel methodology for measuring the impact of film-induced tourism.

TripAdvisor, apart from reviews about hotels and restaurants, offers reviews about all kinds of attractions and tourist places. We use the information that appears in the TripAdvisor profile for filming scenarios of GOT, identifying the number of reviews before the premiere and after the premiere of the first chapters in which each place appears. We also perform a

keyword search, which TripAdvisor allows, to count the reviews that refer to the filming of GOT in that site. We use the words "thrones" and "GOT" for the reviews in English and add the word "tronos" (thrones in Spanish) for the reviews in Spanish. On the identified reviews a manual checking is carried out, to eliminate those that use any of those words but do not refer to the series (it happens frequently with GOT, when the word is the past or participle of "get")

The 14 locations of GOT in Spain most mentioned in tourist articles (Escapada Rural, 2017; OM, 2019), which also have a profile on TripAdvisor, are selected for our sample. We considered the year of the premiere in its entirety as the first year of filming influence, since in the months prior to the premiere, fans already knew where it was filmed and it generates the first reviews on TripAdvisor. The total period is from the creation of the profile on TripAdvisor (in cases such as Real Alcazar is 2004) until August 15, 2019. When performing the search we observed how there are some cases of filming locations that did not have a profile on TripAdvisor before the GOT premiere.

We analyzed separately the reviews in Spanish and English, since those are the languages with the highest percentage of reviews in total (Spanish: 26,385; English: 15,329) and represent more than 80% of the reviews of almost all the locations studied. In this sense, we can also consider that most of the reviews in Spanish come from locals, while most of the reviews in English come from foreign visitors.

Findings

Table 1 shows the results obtained in the study, after analyzing the reviews of the 14 monuments, with a total of 48,406 reviews. The "increase since premiere" column is the result of dividing the number of reviews since the first chapter's release year by the number of

reviews in the previous years. When we talk about "mentions" we mean comments that mention something about the series in their review.

Table 1. TripAdvisor Reviews GOT locations

TOURIST SPOT	Premiere year	Before premiere	After premiere	TOTAL Reviews	Increase since premiere	% mentions SPA	% mentions ENG
PLAZA TOROS OSUNA	2015	0	18	18		38%	80%
TORRE MESA ROLDÁN	2016	0	32	32		40%	0%
CASTLE ST FLORENTINA	2016	0	38	38		27%	50%
CASTLE DE ZAFRA	2016	4	39	43	975%	56%	100%
LOS BARRUECOS	2017	66	82	148	124%	36%	11%
ZUMAIA	2017	54	193	247	357%	19%	47%
CASTLE ALMODOVAR	2017	368	420	788	114%	30%	45%
CASTLE TRUJILLO	2017	503	329	832	65%	7%	13%
ITALICA	2017	785	463	1248	59%	13%	23%
ALCAZABA ALMERIA	2016	695	1393	2088	200%	3%	9%
S JUAN GAZTELUGATXE	2017	1332	1411	2743	106%	17%	25%
CATHEDRAL GIRONA	2016	1004	2140	3144	213%	9%	32%
PEÑÍSCOLA	2016	1497	3289	4786	220%	3%	13%
REAL ALCAZAR	2015	6515	25736	32251	395%	2%	16%
TOTAL		**12823**	**35583**	**48406**	**277%**	**5%**	**17%**

The results are sorted by number of reviews and we note that the first four locations have less than 100 reviews and also did not have any reviews in the year prior to the premiere of the chapters. However, these four locations occupy the first positions in percentage of users that mention the series in their comments. We see how that inverse relationship between number of reviews and percentage of comments related to the series is maintained, more or less clearly in the rest of locations.

When separating the data by language, we observe very significant differences, which show how English-speaking users mention the series much more. In the case of "Real

Alcazar" in Seville, which is the place with the highest number of reviews, English speakers mention the series 8 times more than Spanish speakers.

Conclusion

The results show us how the filming of the series has been a real revolution for some of the locations, especially the less popular ones. A very high percentage of the tourists who visit them seem to have discovered them from the broadcast of the television series or knew them previously, but the fact of appearing in the series has encouraged them to visit it. In places that already were popular among tourists, the relative impact seems to be less significant.

We understand that the differences between languages are not due to a possible lack of popularity of the series in Spain. As far as we know, the series has had great fame in this country, as in the rest of the world, broadcasting through different television and Internet platforms (Redondo, 2014).

The data obtained suggest an important presence of "Set-Jetters", especially among English speakers. Those high percentages of mentions seem to indicate that the only reason many of them have visited the place is the TV series.

It would be inappropriate to reach firm conclusions based solely on these numbers, as there are many other factors that condition the impact of the series at each location, as mentioned in the introduction. There are places like Zumaia beach that appear for a long time on-screen, it is very recognizable, besides being a place of free access and spectacular views. However, there are locations like "Alcazaba" in Almeria, which appear for a shorter time, are not easy to identify and require the payment of a ticket for access.

To these factors we could add the distance of the places to the great tourist spots in Spain. There are locations close to large tourist destinations, which can attract more easily

travellers by including those locations within their tours. However, there are more isolated places, such as those located in Extremadura (Barruecos and Trujillo) that are far from these great Spanish destinations.

This complementary information would help to interpret the figures obtained in the four examples mentioned above. In this article we present a first basic approach to this new methodology, showing descriptive statistical data. The following steps should be aimed at performing a more complex quantitative analysis, introducing more variables and combining it with qualitative methods.

In any case, we consider that this new methodology for the measurement of film-induced tourism can be very useful for tourism management entities, always being used in combination with other qualitative and quantitative information that may be available. It is a fast and free way to get relevant data to measure the impact of filming in places.

This same methodology can be applied to other TV series, in other locations and be an element of analysis for those destinations that are proposed to promote filming at their points of interest or that intend to make a forecast of visitors before a next filming.

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