Objective

Although cities with World Heritage (WH) areas worldwide are socially active, specific social and cultural complexities can be observed, associated primarily with the abandonment and decay of some historic districts.



Contemporary habitation patterns in historic districts require further analysis which may benefit significantly from cross-referencing locative social media and open data sources.

Method: Following the objective, this study comprises three main stages.

First, the selection of five WH areas in medium-sized cities in Spain.

















The selection of five medium-sized WH cities

This study analyses the potential contribution of online data and user-generated content through online services to understand the contemporary socio-cultural situation in five medium-sized cities in Spain: Ávila, Cuenca, Salamanca, Segovia and Toledo.

These five cities were chosen because they had WH areas nominated for their historic centres and not exclusively for their monuments and also because geographically they share demographic similarities, symbolic heritage and cultural links.

These cities are located in the regions of Castilla La Mancha and Castilla León and were nominated in the 1980s and 1990s.

Method: Following the objective, this study comprises three main stages.

Second, the analysis of data to be evaluated.





The illustrative case study, based in Spain, uses freely available urban data from the Spanish Inspire Cadastral and National Statistics Institute (NSI).

This is followed up with data obtained from the Google Maps Services and Foursquare platform.

Method:

Second, the analysis of data to be evaluated.

	Ávila	Segovia	Salamanca	Cuenca	Toledo
Total area World Heritage (WH) (Ha)	34.67	134.28	48.93	22.79	259.85
Build area in WH zone (m2)	484,525	976,826	748,293	348,021	1,836,247
Residential dotation in WH areas (%)	67.20	70.91	55.57	69.44	65.39
Inhabitants living in the city (n)	58,369	52,057	144,825	54,621	85,811
Inhabitants living in the WH areas (n)	1,608	5,611	2,038	1,662	12,533
Population of the city living in WH areas (%)	2.75%	10.78%	1.41%	3.04%	14.61%
Average age in WH zone	44.60	43.70	46.45	42.30	43.56

Table. Relationship between population and surface areas. Source: Spanish Inspire Cadastre.

Method: Following the objective, this study comprises three main stages.

Second, the analysis of data to be evaluated.



Foursquare is a social network designed for smartphones based on geolocation. It works by validating the presence (check in) in real physical locations.



Display geospatial data on a map to help business promote their sites and customers make decisions.



Figure. Historic centre of Ávila. Examples of the Foursquare labels: 1. Cultural elements, walls of Ávila; 2. Outdoors and recreation, Mercado Chico square; 3. Hosting in the historic centre; 4. Shop and services, an example of a basic service shop that also sells visitors foodstuffs; 5. Outdoors and recreation, example of a traditional street in the historic centre; 6. Bar and Restaurant terraces. Source: photos by the authors and from Pixabay web.

Method:

Second, the analysis of data.



Method:

Third, the cross-reference of results.

Figure. Foursquare activities in the WH areas: 1. Ávila; 2. Cuenca; 3. Salamanca; 4. Segovia; .





fotal trade activities: In



Conclusions

Researchers have verified that social networks and open datasets are capable of mirroring social interaction in WH areas.

Both the method and the data cross-referencing have served to understand how contemporary situations may document and better manage future habitation tendencies.

Future directions

The New Urban Agenda 2030 established the reasons for urban conservation to be a social product and a social development process.

Heritage is now perceived as a cultural ecosystem subject to analysis by Communication and Information Technologies.

These methods will mark the nature of heritage in the twenty-first century, particularly in cities where the critical drivers of development are at stake.