

Article

Managing Cultural Tourism and Heritage Sites in Urban Areas—Application of Q-Analysis to Europe

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Abstract

Tourism is a complex economic activity all over the world shaped by distinct local resources: culture, nature, industrial heritage, urban ambiance, place-based uniqueness, and geographical accessibility. The simultaneous governance and management of economic growth motives, preservation of the cultural heritage base, and respect for nature and ecological quality calls for an evidence-based and multi-faceted policy analysis that seeks to achieve sustainable development among conflicting policy objectives in tourist areas. The present paper seeks to explore the feasibility of a sustainable balance for various heterogeneous cultural heritage areas in Europe ('urban pilot regions'), with particular attention to sustainable local development characterized by circular economic objectives and an ecological balance strategy based on the principle of stakeholders' co-creation. The paper addresses the knowledge gap between generic policy aims and site-specific views of actors or visitors. To that end, an extensive survey experiment was administered in the urban regions concerned, in which a wide range of relevant management issues/questions related to environmental preferences and perceptions were posed to stakeholders and visitors. The data were analyzed by means of a novel respondent-oriented multivariate statistical tool, viz. *Generalized Q-Analysis*, which is suitable for handling big databases with many respondents. The paper shows that the application of Generalized Q-Analysis to common survey data enriches the results from the application of a conventional Q-Analysis. Furthermore, the study also highlights that, based on the views expressed by the surveyed visitors, the tourist areas concerned are quite different from each other in attracting specific classes of visitors. Therefore, functional specialization in the tourist sector seems to be an important anchor point for effective governance of urban tourism, not only in Europe, but also elsewhere in the world.

Keywords: tourism paradox; circularity; co-creation; urban cultural tourism; heritage sites; sustainable development; Q-analysis; generalized Q-analysis



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1. Introduction

Tourism is becoming a global sector with increasing economic significance. This rising trend can be observed in almost all countries of the world. Europe is one of the

most popular tourist destinations in the world. It houses an enormous variety of cultural, historical, ecological, and natural assets. This continent is the home of a rich cultural–historical heritage and attracts a massive volume of tourist visitors from all over the globe each year. Its great attractiveness also makes it vulnerable, however, because a large influx of visitors may erode the environmental, cultural or social support basis of attractive tourist destinations (see, e.g., Arian et al., 2016 [1]). This ‘tourist paradox’ mirrors not only a global tension between man and nature or culture; crowding phenomena also manifest themselves locally in Europe, certainly in urban areas or destinations where tourist attractions have a high degree of ecological or cultural vulnerability. Finding a balance between conflicting objectives in the tourist sector calls for an evidence-based policy approach, in which tourism plans are developed and implemented with a view to the achievement of environmental quality and livability, a local or regional circular economy, and preservation of eco-cultural heritage. This calls for a data–analytical approach where views, expectations, perceptions and realities are empirically examined against the background of local or urban sustainable development objectives and governance of economic, environmental and cultural resources.

Tourism is a multi-faceted and place-based global economic activity that relies on several distinct user-oriented resources: nature, culture, urban ambiance, social capital, psychological experience options, geographical accessibility or place-based uniqueness (see, e.g., Li et al., 2023 [2]; Romao, 2025 [3]). Tourism is also an important growth engine for many places or regions in the world. The awareness of the tourism paradox has prompted the rise of the concept of sustainable tourism (see, e.g., Harris et al., 2012 [4]; Rasoolimanesh et al., 2023 [5]), which is nowadays also often positioned in the context of a territorial (or local) *circular economy* and of a *regeneration* (or *adaptive reuse*) of often less-known or more isolated cultural tourism assets (Rodríguez et al., 2020 [6]; Bosone et al., 2021 [7]).

The concept of a *circular region* is related to a city/territory in which the strategic *circular economy* (CE) model of sustainable production and consumption is adopted by “closing the loops” of urban metabolism in terms of flows of materials, water, energy and waste (see, e.g., Bocken et al., 2014 [8]; De Jesus & Mendonca 2018 [9]).

Circular cities and regions are those in which ideally no waste and other negative environmental externalities are generated and retained, while environmental productivity is enhanced through waste reuse, reduction in raw materials extraction, repair, recycling, refurbishment, etc. A circular territorial system is one in which spatial metabolisms are “closed”, thus enabling economic growth to be decoupled from resource consumption (Kirchherr et al., 2017 [10]; Korhonen et al., 2018 [11]). Circular cities are productive cities, reducing costs of materials as well as costs of production processes through synergies, increasing the quality and quantity of outputs while reducing the costs of negative environmental externalities. This enhanced local ‘productivity’ may be seen as a multidimensional anchor point, with relevant impacts on human and ecosystem health, and as balanced economic growth (more independent from resource availability and price volatility). A circular economy strategy calls clearly for concerted actions. Some examples of such circular action plans in various cities (London, Brussels and Paris) are presented in Figure 1.

The next concept, viz. *cultural heritage* (CH) *regeneration and adaptive reuse*, plays a key role for the achievement of a circular city–region (see, e.g., Fusco Girard & Gravagnuolo 2017 [12]; Fusco Girard et al., 2023 [13]; Gravagnuolo et al., 2019 [14]). It reduces inter alia soil consumption by re-generating existing buildings and sites on the basis of new functions and valorizes the embedded energy of built constructions, including historic heritage buildings and sites. CH can have positive impacts on local economies and jobs and may enhance the attractiveness of cities for residents, visitors and enterprises (Throsby 1999 [15]; Throsby et al., 2021 [16]). It generates positive social impacts by improving the quality of places—and thus quality of life and wellbeing—by favoring place attachment and local environmental

care through its symbolic values, while also contributing to local communities' bonds and a favorable civic attitude. Appropriate measurable evaluation criteria for balanced cultural heritage planning originate from particular fields like architecture, history, ecology and culture, and they are usually based on usability and integrity motives (see also Gravagnuolo et al., 2019 [14]).



Figure 1. Circular action plans in London, Brussels and Paris. Source: Authors' own images with AI tools.

It is widely accepted that the *circularity* of economic, social and environmental processes can be enhanced through CH regeneration and adaptive reuse (Fusco Girard, L., & Gravagnuolo, A., 2017 [12]; De Jesus & Mendonca 2018 [9]; Bosone et al., 2021 [7]). However, the costs of heritage regeneration are high, so a careful evaluation is needed to create evidence of net positive impacts of heritage investments and their contributions to sustainable development from the perspective of a CE approach and 'closed urban metabolism' (e.g., reuse, decoupling, refurbishment, closed loops, recycling, or conservation of use values). Tourism areas in different parts of the world exhibit a great variety of ecological and cultural attractiveness. Yet, they all share the need for sustainable development. Clearly, visitors to these areas may show a great heterogeneity in behavior, perceptions and preferences. Therefore, the design and application of an operational and commonly useful methodology is a pre-requisite.

Against this background, this paper sets out to develop and test empirically a set of criteria and indicators for integrated urban metabolism assessment and governance of cultural tourism, including flows of materials, water, energy and waste, but also social, cultural and economic aspects to assess the contribution of cultural heritage regeneration and adaptive reuse to the realization of circular cities and regions. It does so by exploring the sustainability potential and interest in various tourist pilot regions in Europe, with a particular view to the preferences and perceptions of classes of stakeholders or visitors.

A new methodological approach based on integration of multidimensional statistical analysis and metabolism assessment using empirical actor-oriented surveys is applied to assess the impacts of cultural heritage adaptive reuse on circular urban or regional development planning in various pilot regions in Europe. These regions have been selected in particular due to their relevance for and interest in circular economy approaches and heritage preservation. The new multivariate statistical tool developed and applied here is termed *Generalized Q-Analysis*. The standard Q-method, developed by Stephenson (1953) [17], seeks to trace the commonalities and differences in the actors'—or stakeholders'—priority rankings of a set of empirical statements. The application of the latter conventional tech-

nique will be the first step in our analysis. Next, we test the Generalized Q-method (see for details Dentinho et al., 2023 [18]) for our large data set; this tool allows the enlargement of the number of ranked combined statements based on a structured combination of the rankings of simple statements. We use in our empirical analysis both a Q-method and a Generalized Q-method for the same questionnaire data; we will shortly describe these tools and then apply both variants of the Q-Analysis to complement and test the evidence of our findings for the tourism areas concerned. The Q-method and the Generalized Q-method shift the focus of the analysis from the attributes/statements of people or places observed or questioned towards the study of representative or interested people or places, identified by a Principal Components technique. The great advantage of the Generalized Q-Analysis is that it allows the numerical sample expansion of people and places observed or questioned. Although the present study focuses on European tourism challenges, the methodology adapted is also able to address sustainability challenges elsewhere in the world.

This study is organized as follows. After this introductory section, we will explain, in Section 2, both the Q-Analysis and the Generalized Q-Analysis techniques. Section 3 then synthesizes the data collected in the different regions in Europe. Next, Section 4 shows the results of the standard Q-Analysis, while Section 5 presents and interprets the evidence of the Generalized Q-Analysis. Section 6 highlights the findings and conclusions.

2. Pattern Recognition Analysis of Participant Groups: Q-Analysis

2.1. Introduction of Q-Analysis

Governance of sustainable local development calls for an evidence-based consideration of interests of local stakeholders. In this context, a Q-methodology serves as a useful operational approach for uncovering subjective perspectives, enabling stakeholders to articulate their viewpoints on a particular matter. Generally speaking, this method allows for the identification of stakeholder groups that may converge or diverge in their opinions (Van Staa et al., 2008 [19]; Van Exel & de Graaf 2005 [20]; Webler et al., 2009 [21]; Watts & Stenner 2012 [22]; McKeown & Thomas 2013 [23]; Kamal et al., 2014 [24]; Moon & Blackman 2014 [25]; Fuentes-Sanchez et al., 2021 [26]). In a Q-study, participants, or stakeholders, are tasked with ranking a set of statements pertaining to the study's subject based on their individual preferences or opinions. A Q-methodology finds its suitability in investigating patterns in opinions, experiences, and interpersonal dynamics. It primarily focuses on capturing prevailing viewpoints and personal positions concerning a specific subject or issue.

The objective of a Q-study is to extract distinct lines of thought and strategic ideas rather than necessarily measuring in a completely representative way their prevalence in a population. A Q-Analysis employs multivariate factor analysis to pinpoint clusters (factors) representing cohorts of individuals who share similar perspectives and sentiments about the subject under study. In cases involving multiple stakeholder groups, the composition of these factors offers insights into which stakeholder groups align or diverge in their views (Raadgever et al., 2008 [27]). Importantly, it is worth noting that a Q-methodology does not aim to represent or estimate population statistics. Instead, its purpose is to sample a broad spectrum of expressed views without making statistical claims about the share of people holding these views (Cross, 2005, p. 208 [28]). Examples of recent applications of Q-Analysis can be found inter alia in (Dentinho et al., 2023 [29]). In the meantime, an extended and generalized Q-Analysis has been developed by (Dentinho et al., 2023 [18]). This new statistical tool will concisely be described in Sections 2.2–2.4.

2.2. From Conventional to Generalized Q-Analysis

The aim of this section is to present very briefly the Generalized Q-method that allows a systematic enlargement of the number of ranked combined statements on a topic of concern based on the structured combination of the ranking of simple statements, based on the assumption that respondents are consistent in their sequential rankings of simple statements (for a detailed statistical description, see Dentinho et al., 2023 [18]). A Generalized Q-method has significant benefits, because: (i) it allows the expansion of the number of respondents overcoming redundancy of many respondents in the usual Q-method; (ii) it facilitates the naming of the extracted components that are representative responses, and (iii) it tests the consistency of the responses. This will now be explained in greater detail.

2.3. Methodology of Conventional Q-Analysis

Q-Analysis is a powerful exploratory research technique used in the social sciences to analyze the commonalities and differences in the stakeholders' points of view on a topic of their concern. It was developed by Stephenson (1953) [17] and is frequently used in studying educational attitudes (Cuppen et al., 2016 [30]); in autoethnographic analysis (Ellis et al., 2011 [31]); in studies on credibility (Metzger & Flanagan, 2013 [32]); in a healthcare survey study (Churrua et al., 2021 [33]), in job satisfaction analysis (Guastello et al., 2024 [34]), in urban sustainability (Fuentes-Sánchez et al., 2021 [26]), and in several other fields that use a Q-method to transform subjective evaluations into objective statistical results.

The standard Q-method involves: (1) the collection of statements on a topic of concern; (2) the ranking of disagreement in an approximated normal distribution; (3) the transposition of collected data defining stakeholders as variables and statements as observations; (4) the implementation of Principal Component Analysis to reduce the response profiles into synthesized and orthogonal responses; and (5) the analysis of synthesized orthogonal responses, relating them with the typology of statements and with the stakeholder features. An empirical illustration of conventional Q-Analysis can be found in Section 4.1.

Despite its advantages, there are three main limitations inherent in the traditional Q-method. First, it assumes that respondents can simultaneously rank many statements, which, according to Miller (1956) [35], is not plausible nor empirically justified. Second, the number of nonredundant respondents (variables) is limited by the number of statements (observations), thus constraining the number of respondents and their relative representativity. Finally, the traditional Q-method does not provide objective information to name the extracted attitudes, and hence the results can lead to different interpretations (Brown, 1993 [36]).

2.4. Methodology of Generalized Q-Analysis

The Generalized Q-Analysis tries to overcome the main limitations of the traditional Q-method by working with graded combined statements based on combinations of basic statements ranked by small groups, assuming that respondents are consistent in their sequence of choices. A simple description will be offered here.

If there are (q) questions with (r) alternative responses each, we will have $(q * r)$ basic statements where the (r) responses can be ranked for each one of (q) questions. In the traditional Q-Analysis, respondents had to rank the $(q * r)$ basic statements. In the Generalized Q-Analysis, respondents make (q) rankings of (r) responses, but we get $(q \wedge r)$ combined and ranked responses. This Generalized Q-Analysis is statistically much richer in scope than the traditional one and will also be used in the present paper. This method

will be elucidated through a step-by-step presentation featuring an application to cultural tourism in European heritage sites, followed by empirical results.

3. Data

The data on the seven pilot studies comprise areal data, as the study does not focus on people, but on (perceived) attributes of cultural heritage regions against the background of spatial circular economies. Therefore, there are no outcomes for individuals or groups of people. Insofar as the underlying background studies (not undertaken by us) have employed data from visitors, they were fully anonymized, as the interest was on the typology of regions. Furthermore, this anonymous data collection was part of a broader EU Horizon project, for which strict ethical codes apply and were respected by the researchers concerned. All data handling complied with applicable European privacy and data protection regulations, including the General Data Protection Regulation (GDPR), ensuring that no personal data could be traced back to any individual. The procedures also followed standard best practices for ethical research under Horizon Europe guidelines. In conclusion, the data collection procedure is entirely clean and meets all regular privacy requirements in modern research.

The visitors' survey randomly targeted adult visitors (aged 18 and above) to cultural sites in various locations (seven in total) across Europe, resulting in a total of 899 responses, with 840 of them being non-redundant and useful for further analysis. The choices for variables, survey design, statement selection procedure, reliability tests and sampling method were made in the EU Be. CULTOUR project (see Acknowledgement). The resulting size of the surveys in each urban pilot region is given in brackets. The responses were obtained from the following urban pilot areas: the Cultural Park of the Rio Martin in Teruel province, Aragon region, Spain (165/164); the area of Vulture and Alto Bradano in Basilicata region, Italy (97/97); the Cultural Route of Stephan the Great at the cross-border area of Moldova and Northeast Romania (236/195); historic rural villages in Larnaka region, Cyprus (174/174); Karlsborg village in Västra Götaland region, Sweden (49/40); the Mark village in Västra Götaland region, Sweden (49/49); and historic rural villages in Vojvodina region, Serbia (138/121). The pilot areas are rather heterogeneous, which is not a negative feature, but it helps to test the validity of a new methodological instrument under varying external conditions.

Regarding the percentage representation of various regions, the relative size breakdown is as follows: Aragon, Spain (20%); Basilicata, Italy (12%); Moldova and Northeast Romania cross-border area (23%); Larnaka, Cyprus (21%); Västra Götaland region, Karlsborg village, Sweden (5%); Västra Götaland Region Mark village, Sweden (5%); and Vojvodina, Serbia (14%). Clearly, these seven areas are rather different, but they serve as a test case for the application of the Generalized Q-Analysis under varying circumstances.

The surveys were filled out by different participants: local residents, domestic visitors from the area, and visitors from other places outside the area concerned. Thus, some (limited) information on the place of origin of the surveyed people is available, even though a more detailed spatial origin contextualization would be desirable. In terms of the overall respondents' profiles, approximately 13% are residents in the areas in which the survey was administered, 41% are 'proximity travelers', and 47% are external tourists originating from outside the area or country. The respondents appear to have an average age of 44 years with a standard deviation of about 12. The gender distribution is 43% male, 56% female, and 1% without declared gender. Regarding the educational level, 2% of the visitors have completed only primary education, 31% have secondary education, 47% have higher education, and 19% hold a postgraduate degree. In terms of the visitors' occupations, 44% are employees, 7% have liberal professions, 2% are researchers,

5% are industrial employees, 8% are self-employed, 7% are entrepreneurs, 12% are retired, 7% are students, and 4% are primarily care-takers for their families.

The survey was structured into distinct sections, starting with demographic data and motivations for visiting the heritage site. Then, specific aspects of the experience in the pilot region were assessed, asking the level of satisfaction with regards to: cultural experience, transformative travel experience. Transformative travel experience refers to the opportunity to enjoy learning and educational activities in the cultural tourism destination, to establish meaningful human relationships between locals and visitors, or to connect with nature, people and places in a way that influences visitors' culture, beliefs and behaviors. The recent tourism literature focuses increasingly on transformative (or transformational) travel (Wolf et al., 2017 [37]; Martins and Santos 2022 [38]; Nandasena et al., 2022 [39]). Other assessed aspects included the European value of cultural heritage, environmental sustainability, destination managerial sustainability, overall satisfaction of the visit, and quality of services offered at the cultural tourism destination. The specific aspects were assessed on a numerical scale of seven degrees, where -3 was assigned as the lowest satisfaction level, 0 as the neutral point (not satisfied nor unsatisfied), and $+3$ as the maximum satisfaction level.

Regarding the visitors' motivations for traveling, 35% appeared to travel for leisure, 5% for business, 19% for cultural experiences, 21% for nature-related activities, 10% to visit friends, 8% to visit their own properties, and 1% had no explicit motives for traveling. The average duration of the visits appeared to be 3 days, with a high standard deviation of 3. When it comes to travel companions, 5% of the respondents travel alone, 14% with partners, 21% with friends, 27% with family, 7% with colleagues, and 26% with a combination of friends, relatives, and colleagues. Respondents became aware of these specific places through various marketing channels: the internet (29%), brochures (9%), tourist centers (13%), exploring the area (17%), social media (19%), or because of a historical or social connection to the place (17%).

As for the tourists' suggestions for improving the attractiveness or sustainable nature of the sites concerned, 5% mentioned smart working, 4% referred to theatres, 16% mentioned nature-related activities, 5% declared spiritual experiences, 4% were interested in virtual tours, 15% sought unconventional guides, 13% expressed interest in craft activities, 7% wished to meet locals, and 13% advocated for the reinforcement of local traditions. Additionally, 4% suggested green hotels, and 1% mentioned volunteer work.

Table 1 presents the averages and standard deviations of the evaluations provided by the 840 non-redundant responses from all seven pilot areas. Since the numerical evaluation classes range from (-3 = Strongly Disagree) to (3 = Strongly Agree), it is evident that the classifications are generally positive, with higher scores for cultural, transformative, and general experience, and lower scores regarding environmental sustainability and quality that, nevertheless, show higher differences between respondents in all seven areas. Clearly, the average results could also be presented in an area-specific way, but, due to a lack of space, this is omitted here.

Table 1 shows quite some variation in the attributes of European tourism regions. Clearly, at a world-wide scale, more heterogeneity among empirical data and evidence-based tourism may be expected, e.g., in China (see, e.g., Dang et al., 2025 [40]) or in other parts of the world (see, e.g., Sentanu et al., 2023 [41]). Thus, despite diversity, the novel methodological framing in our study has world-wide relevance.

Table 1. Average evaluation of travel experience and sustainability of destination area.

Sets	Travel Experience and Sustainability of Destination	Average	Deviation
Experience	Cultural and natural heritage	2.24	0.96
	Cultural events	1.66	1.06
	Tailor-made visit	1.75	1.06
	Satisfaction of the travel experience	1.94	1.03
Transformative	Authenticity	1.72	1.03
	Atmosphere	2.02	0.98
	Friendly people	1.22	1.35
	Connection with nature	1.71	1.08
	Learning	1.72	1.03
	Transformative experience	1.30	1.12
	Satisfaction of the transformative experience	1.70	1.02
EU View	Interest in European heritage sites	1.52	1.13
	Sense of belonging to European culture	1.03	1.15
	Interest in learning more about linkages of local heritage with EU history	1.64	1.11
Environmental Sustainability	Sustainable transport means	0.18	1.50
	Energy efficiency and use of renewable energy sources	0.61	1.23
	Freshwater consumption in tourism services	0.49	1.12
	Plastic-free and recycling-based policies in tourism services	0.68	1.25
	Preservation of green areas, fauna and flora	1.24	1.11
	Rural landscape maintenance	1.12	1.13
	Waste management	0.69	1.33
Managerial Sustainability	Green certification/label of tourism services	0.44	1.10
	Satisfaction of the destination sustainability	0.94	1.09
	Local and traditional food	1.49	1.15
	Local and traditional craft	1.37	1.15
	Conservation/reuse of local heritage and landscape	1.29	1.12
	Less-known places promotion	1.24	1.14
	Social corporate responsibility/human rights policies in tourism activities	0.87	1.13
	Tourism activities run by local people/families	1.49	1.07
	Tourism workers' skills	1.63	1.04
	Services for people with special needs	0.69	1.24
	Safety	1.87	1.08
	Satisfaction of destination management	1.40	1.10

Table 1. *Cont.*

Sets	Travel Experience and Sustainability of Destination	Average	Deviation
Satisfaction	General satisfaction	1.88	0.98
	Satisfaction compared to other similar places	1.68	1.01
	Satisfaction compared to expectations	1.75	0.99
	Willingness to come back	1.95	1.07
	Willingness to recommend	2.17	0.98
	Willingness to contribute/donate	1.09	1.25
Quality	Accommodation services	1.31	1.08
	Restaurants and food	1.53	1.14
	Sport and wellness	1.07	1.06
	Shops	1.02	1.10
	Public places	1.31	1.06
	Transports and roads	0.75	1.42
	Information to visitors	1.21	1.20

Colors scale: red indicates lower evaluation scores, while green indicates higher evaluation scores.

4. Empirical Results of Standard Q-Analysis

As mentioned above, the conventional Q-method is a technique used to identify commonalities and differences in stakeholders' rankings of a set of statements. The recently developed Generalized Q-method (Dentinho et al., 2023 [18,29]) allows for an expansion in the number of combined ranked statements, which is achieved through the structured combination of rankings of individual statements. In this study, we utilize the same questionnaire data, briefly describe it, and apply both variants of the Q-Analysis to complement the evidence. In all cases, as mentioned, the first step in our Q-Analysis is the application of a Principal Component Analysis. In the present section, the findings from both a standard and Generalized Q-Analysis will successively be given.

4.1. Empirical Results of Conventional Q-Analysis

Q-Analysis does not focus on average evaluations but rather on identifying commonalities and differences in evaluations or opinions. The standard Q-Analysis examines the 840 rankings of 46 visitors' statements with the aim of discerning what is shared and distinct within these rankings. It is important to note that due to the limited number of only 46 simple statements expressed by 840 responses, the analysis primarily serves as an exploratory analysis of the data commonalities. The explained variance of the successive components is depicted in Figure 2, including rotated and non-rotated factors.

Figure 2 illustrates that the 840 rankings can be condensed into a large number (46) of components (related to the visitors' attitudes, which suggests great heterogeneity in the pilot areas and related subjective evaluations). The first component accounts for 21% of the questionnaire responses, the second for 7%, the third for 4%, and so on, with the seventh component representing 3%, followed by approximately 2% for subsequent components. We will now describe these results in greater detail.

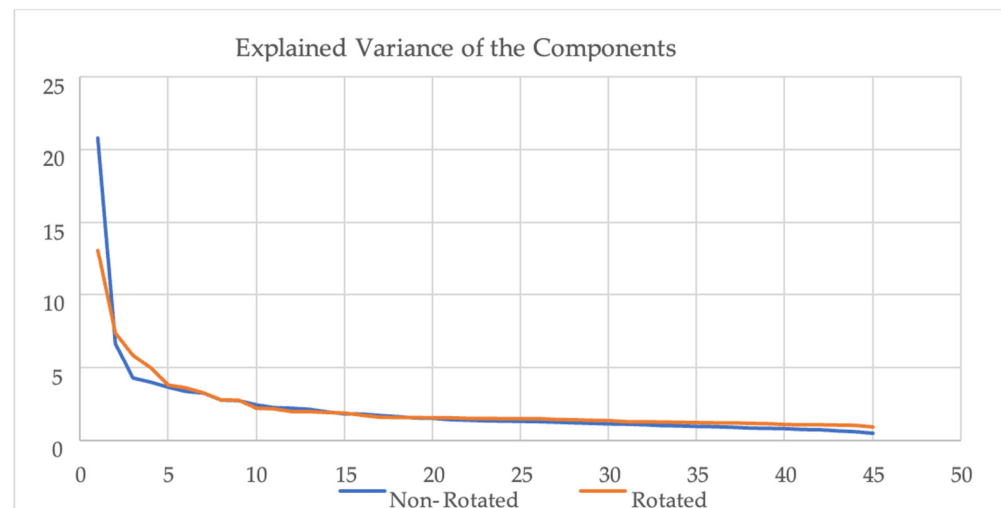


Figure 2. Explained variance of the components from the Q-Analysis.

4.2. Naming of Components

Grouping the first four rotated component scores into seven clusters using a hierarchical clustering technique with a Euclidean Distance Matrix and the Ward aggregation rule enables the identification of the main characteristics of each cluster. Although the interpretation of components always includes some subjective elements, a plausible naming is very well possible. Examining Figure 3 allows for the highlighting of the primary statements associated with each component:

- *Component 1* favors Cultural Experience, Managerial Sustainability, and Quality, but does not support the Transformative Experience, EU Perspectives, Environmental Sustainability, and General Satisfaction.
- *Component 2* emphasizes Cultural Experience, Environmental Sustainability, General Satisfaction, and Quality but is less supportive of Managerial Sustainability, Transformative Experience, and EU Perspectives.
- *Component 3* maintains a more balanced evaluation across all dimensions.
- *Component 4* values Quality, Satisfaction, and Managerial Sustainability, but dismisses all other evaluation dimensions.

Figure 3 now allows for a more analytical view of the key features of the pilot areas under consideration.

Next, we will correlate the component scores with the areas under consideration by performing a regression analysis on the component scores described above. Table 2 presents the regression results of the component scores of the visited places. These outcomes suggest that:

- Basilicata is clearly associated with Component 1, which favors Cultural Experience, Managerial Sustainability, and Quality, but is more at odds with Transformative Experience, EU Perspectives, Environmental Sustainability, and General Satisfaction.
- Aragon and Karlsborg are mainly linked to Component 2, which emphasizes Cultural Experience, Environmental Sustainability, General Satisfaction, and Quality, but is not linked to Managerial Sustainability, Transformative Experience, and EU Perspectives.
- Larnaka and Karlsborg are associated with Component 3, which maintains a balanced evaluation across all dimensions.
- Larnaka and Vojvodina are related to Component 4, which values Quality, Satisfaction, and Managerial Sustainability, but disregards the other evaluation dimensions.

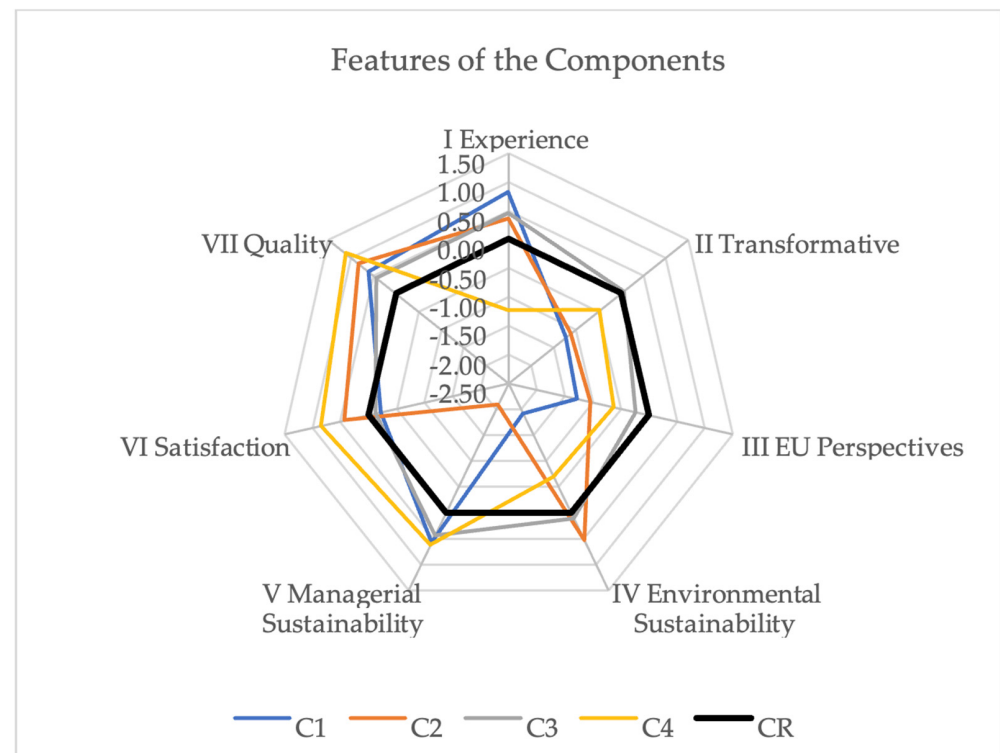


Figure 3. Features of the components.

Table 2. Regression results of the component scores of the visited places (with Romania–Moldova as the reference region).

M	R	R ²	Z	Sig.	Intercept	Aragon	Basilicata	Larnaka	VGR Kar	VGR Mark	Voljvodina
C1	0.325	0.105	16.34	<0.001	0.266 ***	0.064 **	0.153 ***	−0.105 ***	−0.072 *	−0.062 *	−0.012
C2	0.575	0.331	68.66	<0.001	0.103 ***	0.298 ***	0.056 ***	−0.001	0.165 ***	0.101	0.004
C3	0.457	0.209	36.70	<0.001	0.072 ***	0.008	0.069	0.235 ***	0.108 ***	0.042	0.009
C4	0.310	0.096	14.80	<0.001	−0.049 **	0.056	0.043	0.187 ***	0.037	−0.005	0.113 ***

Note: *** $p < 0.001$ ** $p < 0.005$ * $p < 0.01$ and Darker colors are used to facilitate the interpretation of the table and indicate more robust coefficients.

It is noteworthy that the empirical description of the attributes of the seven pilot areas corresponds largely to the intuitive mental maps we might have for these areas.

On the basis of the outcomes in Table 2, we will now provide a detailed interpretation of the regression results, which reveal how the component scores (C1, C2, C3, and C4) are associated with the successive visited places.

Component C1:

- The regression analysis shows that the Basilicata pilot area (Italy) is significantly associated with Component 1, exhibiting a positive regression coefficient of approximately 0.153. This indicates that individuals who visit the Basilicata pilot area tend to give more favorable evaluations in terms of Cultural Experience, Managerial Sustainability, and Quality. Conversely, visitors to Basilicata tend to have less favorable evaluations on Transformative Experience, EU Perspectives, Environmental Sustainability, and General Satisfaction, as indicated by the negative coefficients for these dimensions. In essence, the Basilicata pilot area of Vulture and Alto Bradano stands out as a destination where visitors highly value aspects related to Cultural Experience, Managerial Sustainability, and Quality, while other dimensions may not receive as much attention or positive assessment.

Component C2:

- The analysis reveals that both the Aragon pilot area (Spain) and Karlsborg village (Sweden) are strongly associated with Component 2, with positive coefficients of approximately 0.298 and 0.165, respectively. This suggests that visitors to these places put a significant emphasis on Cultural Experience, Environmental Sustainability, General Satisfaction, and Quality. However, visitors to Aragon and Karlsborg tend to provide lower ratings for Managerial Sustainability, Transformative Experience, and EU Perspectives, as indicated by the negative coefficients. This implies that the Aragon pilot area and Karlsborg village are destinations where cultural and environmental aspects are highly valued, but managerial aspects and transformative experiences may not be perceived as positively by visitors.

Component C3:

- The regression analysis indicates that both Larnaka rural villages (Cyprus) and Karlsborg village (Sweden) are positively associated with Component 3. This component represents a more balanced evaluation across all dimensions. It suggests that these destinations offer experiences that are perceived consistently across different facets.

Component C4:

- VGR Kar (Karlsborg, Västra Götaland County, Sweden) is significantly associated with Component 4, exhibiting a positive coefficient of approximately 0.187. This implies that visitors to VGR Kar attribute high values to Quality, Satisfaction, and Managerial Sustainability. However, visitors to VGR Kar tend to give lower evaluations for Transformative Experience, EU Perspectives, Environmental Sustainability, and General Satisfaction, as is shown by the negative coefficients for these dimensions. Essentially, VGR Kar is a destination where the quality of the experience and managerial sustainability are highly appreciated by visitors, but other aspects may not receive as much attention or positive appraisal.

In summary, this analysis provides valuable insights into how different components of visitors' evaluations are associated with specific destinations, shedding light on the varying priorities and perceptions of visitors to these places. Moreover, it underscores the importance of a human-centered smart data monitoring and management system for sustainable cultural tourism able to retrieve and assess the visitors' preferences and satisfaction, as it can aid in aligning the tourist experience supply side with visitor preferences and contributing to the overall sustainability of cultural tourism destinations.

5. Results

5.1. Empirical Results of Generalized Q-Analysis

The Generalized Q-Analysis conducted on the 840 rankings of 46 statements of visitors' expressions begins by reducing statistically the rankings of the 46 phrases into 21, which are organized into seven groups of three phrases each. This reduction is achieved using Principal Component Analysis to extract three components representing the valuations of each of the seven groups of statements presented in Table 3, with an average of 0 (values are standardized) and a rather varied standard deviation.

These groups are labelled as follows: Experience, Transformative, EU Perspective, Environmental Sustainability, Managerial Sustainability, Satisfaction, and Quality.

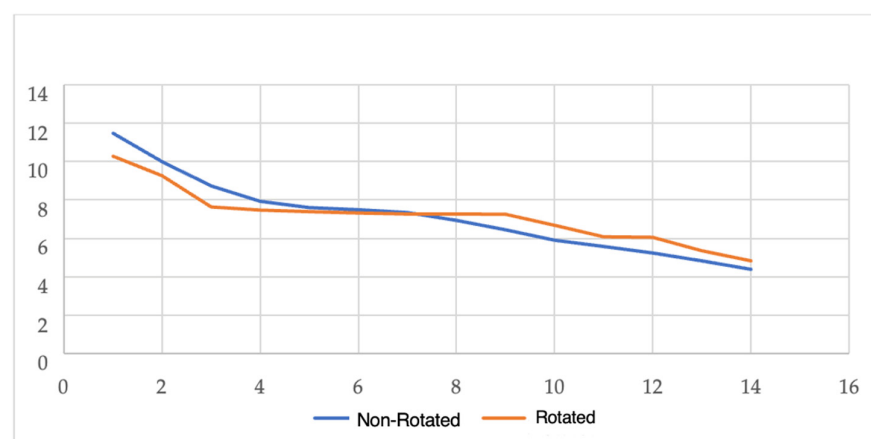
Next, the Generalized Q-Analysis seeks to estimate the combined valuations for the 2187 possible combinations (3^7) of the three phrases selected from the seven groups. The 840 valid responses, considered as variables in the Generalized Q-Analysis, can then be associated with the 2187 combined valuations treated as observations. Application of the Principal Component Analysis appears to result in the identification of 14 representative components synthesizing the perspectives of the 840 respondents.

Table 3. Standardized average responses from the surveys.

	Components of Initial Questions	Average	Std. Deviation
1	Experience1	0.0000	0.6668
2	Experience2	0.0000	0.6422
3	Experience3	0.0000	0.6769
4	Transformative1	0.0000	0.7894
5	Transformative2	0.0000	0.7802
6	Transformative3	0.0000	0.7121
7	European1	0.0000	0.8040
8	European2	0.0000	0.7867
9	European3	0.0000	0.7995
10	Envvironmental1	0.0000	0.7718
11	Envvironmental2	0.0000	0.7479
12	Envvironmental3	0.0000	0.7554
13	Managerial1	0.0000	0.8247
14	Managerial2	0.0000	0.7506
15	Managerial3	0.0000	0.7807
16	Satisfaction1	0.0000	0.7899
17	Satisfaction2	0.0000	0.7556
18	Satisfaction3	0.0000	0.7145
19	Quality1	0.0000	0.7972
20	Quality2	0.0000	0.7574
21	Quality3	0.0000	0.7134

Colors: red indicates lower standard deviation values, while green indicates higher standard deviation values.

Subsequently, the analysis estimates combined valuations for the 2187 possible combinations (3^7) of the three phrases selected from the seven groups. The 840 valid responses, considered as variables in the Q-Analysis, can then be associated with the 2187 combined valuations treated as observations. The Principal Component Analysis then results in the identification of 14 representative components synthesizing the perspectives of 840 respondents. In Figure 4, the explained variance of the Generalized Q-Analysis is depicted. It is evident that, perhaps due to the wide diversity of places and respondents under consideration, it is challenging to find a common perspective that can account for a higher percentage of the variance.

**Figure 4.** Explained variance of the components in the Generalized Q-Analysis.

The aim of this exercise is, on one hand, to identify and name the various components, and, on the other hand, to explore the factors that influence the similarities and differences between these components or attitudes regarding the different tourist regions.

5.2. Naming Generalized Q-Analysis Components

For a systematic naming procedure, Table 4 is divided into two sections. The first 14 lines of the table display the regression coefficients of component scores on dummies (D1 to D21) for composed topics. Following these, the subsequent lines establish the connections between the 45 questionnaire topics (the initial variables) and the 21 synthetic variables used in the Generalized Q-Analysis.

The interpretation of Table 4 is crucial, as it enables us to assign useful and interpretable names to the fourteen components derived from the evaluations of the 840 respondents. In this context, Table 4 clearly plays a dual role; first, it provides the information needed to name Dummies 1 to 21, and second, it facilitates the identification and naming of these components. The interpretation of the findings is as follows.

- *Component 1* demonstrates a favorable view towards most statements, with exceptions including the development of tourism activities by locals, promotion of tourism worker skills, and ensuring safety and wellness-focused tourism.
- *Component 2*, in contrast, generally contains a negative view towards most statements, with the exception of those related to the preservation of green areas and rural landscapes.
- *Component 3* tends to agree with most phrases but does not align with the concept of belonging to Europe.
- *Component 4* disagrees with most statements but shows a preference for friendly people and a connection with nature.
- *Component 5* aligns with most of the phrases but opposes the concept of authenticity and atmosphere.
- *Component 6* maintains a neutral stance towards most statements but opposes the willingness to return or recommend.
- *Component 7* generally opposes most statements but favors the idea of linkages with Europe.
- *Component 8* is in favor of most statements but does not support aspects related to waste management, green certification, and overall destination satisfaction.
- *Component 9* primarily focuses on the willingness to donate.
- *Component 10*, in contrast to Component 1, emphasizes the significance of tourism activities by locals, tourism worker skills, and ensuring safety.
- *Component 11* opposes several ideas, including landscape conservation, the promotion of less-known places, social responsibility, and services for special needs.
- *Component 12* does not endorse aspects related to quality of shops, public places, transportation, roads, and visitor information.
- *Component 13* does not align with the roles of culture and nature.
- Lastly, *Component 14* exhibits a dislike for availability of cultural events.

This structured analysis of Table 3 provides a comprehensive understanding of the components and their respective associations with the evaluated statements and topics, offering valuable insights into the varied common respondent attitudes towards various internal aspects of tourism and sustainability.

After this detailed presentation of findings, in Section 6 we will provide a more substantive interpretation.

Table 4. Regression coefficients of component scores on dummies (D1 to D21) of composed topics and component scores.

Group of Topics	Experience			Transform			European			Environment			Managerial			Satisfaction			Quality		
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	D21
C1 (10%)	1.2	1.6	1.4	1.2	1.3	1.2	1.2	1.9	1.4	1.2	1.1	0.5	1.2	0.5	−0.1	1.2	1.6	1.3	1.2	0.2	−0.5
C2 (9%)	0.3	0.1	0.6	0.3	0.9	0.4	0.3	−0.2	0.2	0.3	0.4	1.4	0.3	−0.6	0.5	0.3	0.7	−0.5	0.3	−0.2	−0.3
C3 (8%)	1.5	1.4	1.1	1.5	1.6	1.6	1.5	0.2	−0.8	1.5	1.5	1.1	1.5	1.4	1.8	1.5	1.3	1.5	1.5	1.1	1.1
C4 (7%)	−1.2	−1.2	−1	−1.2	−0.8	0.9	−1.2	−1.4	−1.2	−1.2	−1.2	−0.9	−1.2	−1.3	−1.3	−1.2	−0.9	−0.6	−1.2	−1.2	−1.4
C5 (7%)	1.7	1.5	1.4	1.7	−0.4	1	1.7	1.2	1.4	1.7	2	2.4	1.7	1.5	1.2	1.7	1.2	1.1	1.7	1.6	1.3
C6 (7%)	0.5	0.6	0.4	0.5	1	0.9	0.5	0.7	1	0.5	0.6	0.8	0.5	1.1	1.3	0.5	−1.4	−0.2	0.5	−0.3	−0.5
C7 (7%)	−1.2	−0.9	−0.8	−1.2	−1.6	−1.3	−1.2	0.5	−1.4	−1.2	−1.1	−0.5	−1.2	−0.9	−0.5	−1.2	−1	−1.1	−1.2	−1.3	−1.2
C8 (7%)	1.5	1.5	1.4	1.5	1.2	1.4	1.5	1.4	1.4	1.5	−0.9	0.4	1.5	1.4	1.6	1.5	1.3	1.3	1.5	1.5	1.5
C9 (7%)	0	0.2	0	0	−0.3	−0.7	0	−0.2	0	0	0	0.6	0	−1.1	−0.3	0	0.1	1.7	0	−0.2	−0.2
C10 (7%)	−0.5	−0.3	−0.3	−0.5	−1.2	−0.9	−0.5	−0.7	−0.1	−0.5	−0.4	−1.2	−0.5	0.2	1.1	−0.5	0.5	0.1	−0.5	−1.2	−1.3
C11 (6%)	0.7	0.6	0.5	0.7	0.5	0.9	0.7	1.2	1	0.7	0.9	−0.2	0.7	−0.9	0.6	0.7	0	0	0.7	1	1.2
C12 (6%)	0.5	0.5	0.5	0.5	0.4	0.7	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.3	0.1	0.5	0.5	0.5	0.5	−1.3	0.9
C13 (5%)	0.1	0	−2	0.1	0.2	0.3	0.1	0.3	0.3	0.1	0.1	0.4	0.1	0	0.2	0.1	0.5	0.1	0.1	0	−0.1
C14 (5%)	1	−1.3	−0.1	1	1	1	1	1.4	1.1	1	1	0.9	1	1.1	1.1	1	1.2	1.4	1	0.9	0.8
Cultural and natural	0.1	0.2	0.9																		
Cultural events	0.1	0.9	0.2																		
Tailor-made visit	0.7	0.5	−0.1																		
Satisfaction of experience	0.8	−0.1	0.3																		
Authenticity				0	0.8	0.1															
Atmosphere				0.1	0.8	0															
Friendly people				0	0	0.9															
Connection with nature				0.5	0.2	0.4															
Learning				0.7	−0.1	0.1															
Transformative experience				0.7	0	0.1															

Table 4. Cont.

Group of Topics	Experience			Transform			European			Environment			Managerial			Satisfaction			Quality		
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	D21
Satisfaction transformation				0.7	0.1	−0.3															
European heritage							0.8	−0.2	−0.6												
Belonging to Europe							0.8	−0.5	0.4												
Linkages with Europe							0.7	0.7	0.2												
Sustainable transport means										0.6	0.2	−0.1									
Energy efficiency										0.7	0	0.1									
Fresh water consumption										0.6	−0.1	0									
Plastic free										0.7	0.1	0.1									
Preservation of green areas										0	−0.1	0.8									
Rural landscape										0	0.2	0.7									
Waste management										0	0.6	0.2									
Green certification										0.1	0.7	−0.1									
Satisfaction of destination										0.1	0.6	0.4									
Local and traditional food													0.8	0	0						
Local and traditional craft													0.8	0.1	−0.1						
Conservation of landscape													0.2	0.5	0.2						
Less-known places promotion													0.1	0.5	0.1						
Social responsibility													−0.1	0.7	−0.1						
Tourism activities by locals													0.2	−0.1	0.6						

Table 4. Cont.

Group of Topics	Experience			Transform			European			Environment			Managerial			Satisfaction			Quality		
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	D21
Tourism workers skills													0	0	0.6						
Services for special needs													0	0.6	0						
Safety													−0.1	0	0.6						
Satisfaction of management													−0.1	0.1	0.4						
General satisfaction																0.7	0.1	−0.1			
Satisfaction compared																0.8	0	0			
Satisfaction & expectations																0.7	0	0			
Willingness to come back																0.1	0.8	0			
Willingness to recommend																0	0.8	0			
Willingness to donate																−0.1	0	1			
Accommodation services																			0.7	0	0.2
Restaurants and food																			0.8	0.1	−0.1
Sport and wellness																			0.2	0	0.9
Shops																			0.5	0.4	0.1
Public places																			0.3	0.5	0.2
Transports and roads																			0	0.8	−0.2
Information to visitors																			−0.3	0.5	0.5

Colors: red indicates negative regression coefficients, while green indicates positive regression coefficients.

6. Explanation and Interpretation

The results of our regression analysis will first be discussed. Table 5 displays the coefficients of the regression analysis of the component scores of visited places as well as several control variables. Several interesting patterns and policy-relevant lessons emerge from this empirical analysis:

- Visitors to the Aragon pilot area exhibit a preference for specific factors. They favor the development of tourism activities by locals, the promotion of tourism worker skills, ensuring safety, and wellness-oriented tourism (C1). Additionally, they value good waste management, green certification, and express satisfaction with the places they visit (C8). They also align with the importance of culture and nature (C13). However, they show reluctance towards willingness to donate (C9).
- Tourists in the Basilicata pilot area exhibit distinct preferences. They highly appreciate the places they visit (C8) and emphasize the significance of culture and nature (C13). Nevertheless, they are less inclined to prioritize tourism activities by locals, tourism worker skills, and safety (C10).
- Visitors to Karlsborg village in Sweden have clear and distinct preferences. They strongly favor the development of tourism activities by locals, the promotion of tourism worker skills, safety, and wellness-oriented tourism (C1). They also have a strong sense of belonging to Europe (C3). However, they do not emphasize the presence of friendly people or a connection with nature (C8). Moreover, they express disagreement with donations (C9) and favor aspects related to quality of shops, public places, transportation, roads, and visitor information (C12). Additionally, they have reservations regarding the role of culture and nature in tourism (C13). Tourists in Mark village in Sweden share specific preferences. They favor the development of tourism activities by locals, the promotion of tourism worker skills, ensuring safety, and wellness-oriented tourism (C1). They also appreciate the preservation of green areas and rural landscapes (C2) and acknowledge the role of culture and nature in tourism (C13). Additionally, they have a sense of belonging to Europe (C3). However, they are against the idea of linkages with Europe (C7).
- Visitors to the Vojvodina pilot area share special preferences. They align with the preservation of green areas and rural landscapes (C2) and have a sense of belonging to Europe (C3). However, they do not emphasize the friendliness of people (C8).
- Tourists in the Moldova/Romania cross-border area exhibit certain tendencies. They agree with the preservation of green areas and rural landscapes (C2) but are reluctant to express a willingness to return or recommend (C6). They are also opposed to the idea of linkages with Europe (C7) and do not perceive people as friendly (C8). Moreover, they do not acknowledge the existence of tourism activities by locals, tourism worker skills, and safety.
- The Larnaka pilot area in Cyprus demonstrates unique characteristics. It exhibits implicit values which are highly significant in Components 1 to 5 and also in Components 9, 12, and 13. Larnaka visitors seem to have less favorable opinions on the capacity of the destination to promote tourism worker skills, ensuring safety, and wellness-oriented tourism, as well as the preservation of green areas and rural landscapes. They disagree with the presence of friendly people and a connection with nature but agree with the concept of authenticity and atmosphere. We observe that not many control variables were found to be statistically significant. Traveling with friends had a positive impact on the regression of Component 1, while traveling with family strengthened the explanation of Component 2. Visiting alone reinforced the results of Component 3, but being of another

gender was associated with a negative impact on Component 4. Proximity to the destination also had a negative influence on Component 5, but moving to holidays and leisure activities reinforced Component 6. Control variables that contributed to Component 10 were related to schooling, while Component 13 was influenced by the frequency of visits, agreement with donations (C9), preferences for shops, public places, transportation, roads, and visitor information (C12), as well as the importance of culture and nature for tourism (C13).

The present study has made a serious attempt to demonstrate that the use of a novel data-based research methodology is able to address an important knowledge gap, leading to an outcome with great added value for cultural tourism and heritage governance. Overall, we may conclude that Generalized Q-Analysis has proven to be a powerful analytical tool for survey-based exploratory research. The empirical application in the present tourism study has demonstrated its great potential in the field of sustainable policy regarding heritage sites and circularity strategies in visitor destination places. The heterogeneity in the case studies clearly shows that spatial context plays an important role.

Table 5. Coefficients of the regressions of the component scores of the visited places and control variables (Larnaka is the reference region).

	Constant				Aragon		Basilicata		Karlsborg		Mark		Vojvodina		Moldova	
	R	S	B	p	B	p	B	p	B	p	B	p	B	p	B	p
C1 (10%)	0.292	<0.001	0.069	0.839	−0.443	0.001	0.001	0.993	−0.298	<0.001	−0.179	0.007	−0.027	0.600	0.028	0.570
C2 (9%)	0.222	<0.001	−0.151	0.654	−0.099	0.063	0.025	0.655	−0.168	0.009	−0.189	0.005	−0.275	<0.001	−0.228	<0.001
C3 (8%)	0.138	<0.001	0.606	0.060	−0.161	0.002	−0.009	0.897	−0.274	0.000	−0.309	0.000	−0.094	0.059	−0.135	0.004
C4 (7%)	0.125	<0.001	0.016	0.961	−0.102	0.044	−0.078	0.136	−0.243	<0.001	−0.076	0.228	−0.014	0.772	−0.087	0.063
C5 (7%)	0.093	0.004	0.074	0.820	−0.032	0.536	−0.055	0.300	0.065	0.290	0.014	0.832	−0.019	0.700	0.047	0.315
C6 (7%)	0.081	0.034	−0.337	0.302	−0.070	0.174	−0.095	0.073	0.062	0.316	−0.079	0.217	−0.077	0.126	−0.163	<0.001
C7 (7%)	0.075	0.082	0.084	0.795	−0.085	0.097	−0.071	0.179	−0.053	0.392	−0.164	0.011	−0.054	0.278	−0.103	0.030
C8 (7%)	0.095	0.003	0.525	0.103	−0.221	<0.001	−0.123	0.019	−0.220	<0.001	−0.227	<0.001	−0.179	<0.001	−0.168	<0.001
C9 (7%)	0.174	<0.001	−0.183	0.552	−0.219	<0.001	−0.003	0.956	−0.250	<0.001	−0.160	0.009	−0.043	0.368	−0.13	0.777
C10 (7%)	0.089	0.166	−0.450	0.152	−0.043	0.385	−0.118	0.021	−0.046	0.440	−0.077	0.215	−0.086	0.076	−0.096	0.035
C11 (6%)	0.077	0.058	−0.155	0.604	−0.024	0.605	0.079	0.102	−0.038	0.507	−0.078	0.138	−0.040	0.380	−0.033	0.442
C12 (6%)	0.156	<0.001	−0.418	0.141	0.042	0.346	0.081	0.079	−0.150	0.005	−0.009	0.872	−0.035	0.418	−0.038	0.350
C13 (5%)	0.124	<0.001	0.181	0.506	−0.131	0.002	−0.151	<0.001	−0.184	<0.001	−0.276	<0.001	−0.112	0.007	−0.108	0.006
C14 (5%)	0.064	0.306	0.179	0.504	−0.016	0.699	−0.033	0.452	−0.068	0.180	−0.086	0.105	−0.063	0.127	0.012	0.757

Colors: Darker colors are used to facilitate the interpretation of the table and indicate more robust coefficients.

7. Conclusions

Governance of tourist areas—especially under conditions of tourist crowding and ecological stress—is a major policy challenge nowadays. The present study has tested the validity of a new survey analysis tool, viz. Generalized Q-Analysis. Based on 840 valid survey questionnaires on areal sustainability challenges, our study was able to identify the primary components or attitudes of respondents regarding seven case study areas in Europe. The conclusion highlights that, in addition to variations in tourism destinations, there are indeed differences in the attitudes of heterogeneous visitors, as identified in

this study. Future research may explore further understanding and justification of these attitudes by considering variations in cultural and natural contexts (external factors).

In particular, the results highlight the nuanced preferences of visitors across different destinations, providing valuable information about their attitudes towards specific attraction elements. Remarkably, control variables, though present, exert limited influence on these attitudes. Factors such as travel companions and destination proximity show varying impacts.

This study specifically showed the prominent factors influencing the perceived attractiveness of cultural heritage destinations from several perspectives, including cultural, social and environmental factors. Cultural and natural heritage may definitely contribute to the regeneration of less-known and remote areas, making them attractive cultural and eco-tourism destinations. However, the balance between tourism services and preservation of authenticity and place atmosphere needs to be maintained to ensure longer-term sustainable regional development through cultural tourism. From the perspective of circular cities and regions development, less-known and remote cultural heritage sites may play a central role, enhancing less-exploited resources (“wasted” heritage) through human-centered and environmentally sustainable approaches (Fusco Girard & Gravagnuolo, 2017 [12]).

To conclude, this study on sustainable governance of attractive tourist areas, based on a sample of 840 valid questionnaires, underscores the presence of diverse visitor attitudes across seven case study areas. These distinctions go beyond basic location-specific variations and suggest the potential influence of unique cultural and natural contexts, all within the framework of human-centered smart data monitoring and management. Consequently, further research can more deeply explore these attitudes within specific contexts so as to provide a more profound and evidence-based understanding of the value of heritage sites in Europe and elsewhere, as seen through the lenses of visitors and stakeholders.

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Data Availability Statement: The data from the seven pilot studies comprise areal data, as the study does not focus on people but on (perceived) attributes of cultural heritage regions against the background of spatial circular economies. This is explicitly mentioned in the paper. Therefore, there are no outcomes for individuals or groups of people. In so far as the underlying background studies (not undertaken by us) have employed data from visitors, they were totally anonymized, as the interest was on the typology of regions. Furthermore, this anonymous data collection was part of a broader EU Horizon project, for which strict ethical codes apply and which were, of course, respected by the researchers concerned, as otherwise the study could not have been performed. This is explicitly mentioned in the text. In conclusion, the data collection procedure is totally clean and meets all regular privacy requirements in modern research.

Conflicts of Interest: The authors declare no conflicts of interest.

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