

Preferences Evaluation with a Choice Experiment on Cultural Heritage Tourism

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Introduction

As is widely recognized, tourism is a powerful tool of economic development. It creates jobs, provides new opportunities and reinforces local economies. In this regard, linking tourism with heritage and culture can do more for local communities than promoting them separately. The concepts of heritage, tourism and local development are therefore connected in many ways, but scholars have probably not explored all the possible implications (Madden & Shipley, 2012). In effect, in those countries where cultural tourism has existed for a long time, recent social and cultural changes have led to an increasing number of new niche markets in destination countries, including culture-oriented holidays (Novelli, 2004; Uysal *et al.*, 2012).

This paper discusses the determinants of individual utility in tourism destinations with significant cultural heritage and multiple attractions. It illustrates the additional benefits accruing to the tourist when the destination supplies a range of services that facilitate the coordination among the various attractions – for instance, integrated tickets or targeted public transportation services –, or improve the tourist's overall experience at the destination – for instance, by including a culinary experience in the package –. Data from a survey conducted at the Savoy Residence Network (SRN), in the area of Turin, are analyzed in order to identify the tourists willingness to pay for such services.

Evidently, both the public and the private sectors are interested in protecting a community's cultural heritage in order to obtain the following benefits: a) an improved quality of life associated with the development of heritage resources; b) a reinforcement of the community's cultural identity through the education of new generations; c) a new provision of pleasure/recreation opportunities; d) and, last but not least, a local economic revitalization through tourism development. Unfortunately, cultural

heritage management is strictly influenced by conservation and protection priorities, particularly in those countries where a large share of humanity's cultural capital is concentrated. The lack of investments and public funding in a wider crisis scenario has further accentuated this problem. However, sustainable cultural tourism can in fact occur when the social benefits and the economic goals are considered jointly (McKercher & Du Cros, 2002). For this reason, the tourism demand/supply, which is related to cultural heritage, must be considered as a whole and not merely from the perspective of a single monument or site, albeit one of great importance. From a public policy standpoint, planning strategies which focus on a tourist evaluation of separate activities – when, in reality, the choice is determined by a combination of experiences – may lead to erroneous decisions being made in relation to local development structures, including transport, infrastructure and hospitality systems. This perspective has important consequences in the marketing and management of tourist destinations. For example, Dellaert *et al.* (1995) has underlined that a cluster of urban attractions could potentially open up new possibilities for planning and marketing strategies which would be more successful in attracting urban tourism.

Moreover, recent literature on tourism has perhaps placed excessive emphasis on individual needs and preferences without attempting to tie them to the problem of *on-site* supply, including both services that facilitate the coordination among the attractions, and other ancillary services that improve the tourist's experience. Prentice *et al.* (1998) has remarked that an emphasis on socio-demographic analyses concerning heritage tourism, as a method of experiential and/or benefits segmentation, could appear excessive as well as misleading. The tourism experience is, in fact, subjective and firmly anchored on several factors. These include: knowledge, awareness, recollection, feedback, etc. It is also closely tied to personal and cultural motivations, both in destination choice – with related movement from the place of residence to the site of interest – and during *on-site* visits and movements.

Recently, it has been noted that the increasing consumption of *experiential* elements – referring to goods and services – constitutes a distinctive aspect of tourism and leisure phenomena (Scott *et al.*, 2009). From a theoretical standpoint, Uriely (2005) has argued that the notion of the tourist experience, as disparate from the routine of everyday life, has been challenged since the 1990s by scholars who introduced the perspective of *postmodern* tourism. As Munt (1994, 104) has stated, ‘‘tourism is everything and everything is tourism’’: a simulated environment and virtual events are only some examples of experiences that do not necessarily require travelling. At the same time, if people do decide to travel, the tendency to combine a variety of activities is consistent with a *way of life* where entertainment, work, learning and culture interact mutually (Ryan, 2002). In this regard, Quan & Wang (2004) have defined the tourist experience as a whole, where many kind of services – *food & wine*, transport, shopping and accommodation – support the *peak* experience. This relates essentially to art, culture and heritage. The same authors have recognized two main scientific approaches in this field: a) the first is supported by the social sciences and focuses on tourist motivations (Cohen, 1988; Pearce, 2005); b) the second is fully inserted into the framework of consumer behaviour (Swarbrooke & Horner, 1999). The latter includes, more specifically, experiences of sites and attractions that contrast with people’s daily experiences, as a part of the total consumption of the tourism *product*.

Understanding the tourist experience from the marketing point of view has a number of implications, such as creating communication as well as directing certain kinds of experiences into market shares. However, tourism is temporary and spatially defined and differs from work time; it represents only one way in which free time can be used (Volo, 2009). The main questions remain: why should people travel long distances and stay *on-site*? Is this experience measurable or quantifiable in terms of preferences? Are traditional methods that are supported by the utility theory still effective in this field?

Unfortunately most of the literature relating to the question of tourism demand concerns subjective motivations or market segments and only a few studies explore the relationship with site attributes, which are believed to be essential for understanding heritage tourism (Poria *et al.*, 2003).

Less attention has been paid to the interactions between demand and *on-site* supply. This study adds to the existing literature on the topic, by investigating the impact of an array of services and facilities that improve the tourist's experience by providing on the one hand a better coordination among the attractions, and on the other hand additional services enjoyed by tourists.

A conjoint choice experiment is implemented in order to evaluate respondents' willingness to pay for packages offering a variety of activities, in some cases linked to the cultural/peak experience – for instance, integrated tickets, or targeted public transportation –, while in some others ancillary – for instance, *food & wine* –. Tourists, in general, benefit significantly from such additional services, more so for those that improve the coordination among cultural attractions.

The obtained estimates could be used in an *ex ante* evaluation of the expected impact of planning and marketing strategies of regional tourism. In this light, the results of the evaluation process could assist with the public provision to maximize the social benefits and improve the economic management of cultural heritage. At the same time, they could also give rise to interesting feedback relating to the understanding, measurement and evaluation of the tourism experience.

The work is organised as follows: the first section is devoted to an introduction of the methodology and its theoretical foundations; the second section is dedicated to an analysis of access to the Metropolitan Museum System of Turin City (Italy) in order to depict real *on-site* tourist behaviour and justify the choice of the experimental methodology. The details of the choice experiment, which is focused on the Savoy's Residences Network, are described in the third section together with the main results. Finally, some critical remarks are set out in the fourth section.

Conjoint Analysis and Choice Experiments

Conjoint Analysis (CA) is a very popular marketing technique with a vast number of applications. It has been applied to solve a wide variety of problems, ranging from consumer preferences and demand forecasting to the design of new products. CA is able to estimate the relative importance of the attributes of a product by breaking down the consumer overall choice regarding a certain set of alternatives. The fundamental principle is consumer utility and the two main assumptions are that consumer choice is governed by the maximization framework and that a product, or service, can be seen as a set of attributes from which a person gains utility (Green & Rao, 1971). This concept has been one of the most widely used by economists for over a century, though it was quite clear that the consumer was not familiar with the numerical values of its utility. The solution to this dilemma was that the values could be revealed through the individual choices between product-concepts, which are varied in a systematic way – *Revealed Preferences* (RP) toward *Stated Preferences* (SP) –. In this regard, the seminal works can be considered to be Lancaster's articles (1966), but the fundamentals of measurement of the partworths-utility are to be found in the classic text by Krantz *et al.* (1971). This method has continued to evolve until the present day, moving from the use of a ranking, or rating, scale of the proposed alternatives – each characterised by a series of attributes differentiated, in turn, according to a set of levels – to discrete *Choice Experiments* (CE), wherein the consumer is required to choose one, and only one, of the alternatives inside a certain set.

Subsequently, the *Random Utility Theory* (RUT) offered a solution to numerous empirical problems and experimental applications (Bloch & Marschak, 1960; McFadden, 1974). Briefly, the RUT connects the attributes of the utility function perceived by the consumer, which depends on the alternatives considered, to the probability function, which, in turn, depends on the function of perceived utility. In other words, the utility function is split into two components: one observable by the

researcher, and the random one; the first is able to quantify and estimate the consumer preferences.

Formally the model can be expressed as below:

$$\begin{aligned}
 U_j &= V_j + \varepsilon_j \\
 &= \mu \beta' X_j + \varepsilon_j \\
 P(j) &= P(U_j \geq U_{j'}; \forall j' \in J; j' \neq j) \\
 &= \exp (V_j) / \sum_{j' \in J} \exp (V_{j'}).
 \end{aligned}$$

where: U_j is the utility of alternative j , V_j is the structural utility of alternative j , μ is the scale factor of the utilities, β' is the vector of the parameter values of the attributes, X_j is the vector of the attributes of the alternative j , ε_j is the random error, J is the total number of alternatives j , and $P(j)$ is the probability that the alternative j is chosen by the consumer. This framework is, at the same time, coherent with the utility theory and with the probability rules. It is worth noting that the imposition of choices in a discrete set with probabilistic rules gives rise to various consequences, on a formal level, which cannot be entirely reproduced here (Train, 2003; Henscher *et al.*, 2005). Most applications of these models have used a specification with additive and independent error terms. Some normalization is required for an identification to be made, since any strictly increasing transformation of utility will lead to identical observations of choice. This may be done by imposing constraints on the distribution of the error term and on the specification of the V_j . In this respect, scholars commonly use a linear-in-parameter, which ignores the unobserved individual heterogeneity. It is widely recognized that assuming an IDD (Identical and Independent Distributions), or Extreme Value Type I (EV) of the random term leads to the Multinomial Logit (MNL) model. This represents a very successful specification due to its computational and analytical tractability. Successively, the Generalized Extreme Value (GEV) model relaxed the assumption of mutual independence of the alternatives and a mixture

of these formulations were derived (McFadden & Richter, 1991) to account for unobserved heterogeneity.

However, the neoclassical utility theory assumes that the individual has perfect rationality and discrimination capacity in the process of ordering alternatives, in respect to the axioms of completeness, transitivity and reflexivity. This approach has been criticized by many psychologists (Debreu, 1954; Tversky, 1972; Kahnemann & Tversky, 1979) and, more recently, by McFadden (McFadden, 1999). It is now commonly accepted that the decision rules can be considered as either compensatory or non-compensatory. In fact, in some situations, people may not explicitly avoid *tradeoffs*, but their choices suggest the use of a lexicographic rule, even when *tradeoffs* are not difficult to make (Tversky *et al.*, 1988).

Nonetheless, compensatory methods are used to identify attributes with the largest partworths utility. Such methods are computationally tractable and appear to provide excellent approximations of consumer consideration and/or choice processes. It is for this reason that, in the specific field of tourism, conjoint analysis has been implemented in a number of manners. It has also been successfully applied through CE (Goldberg *et al.*, 1984; Louviere & Timmermans, 1990). For example, Dellaert *et al.* (1995) have explored urban heritage tourism with the aim of capturing preferences through activity packages. Hong *et al.* (2003) have investigated a suitable combination of attributes for attracting potential green tourists. Mazanec (2005) introduces a set of interconnected explanatory variables, employing the second generation of structural equation models to perform random coefficients in a conjoint experiment on travel packages. As previously resumed, however, the present experiment emphasizes the problem of the evaluation of the *tradeoffs* between cultural heritage as a *peak* experience and other activities / services that may or may not prove complementary for the tourist/consumer.

Cultural heritage tourism: the case of Savoy's Residences Network (Italy)

As mentioned earlier, cultural heritage management, especially in countries where a great concentration of public goods exists, is faced with the priority of ensuring conservation for present and future generations. This leads to high restoration costs that, in many cases, cannot be sustained by single communities. Moreover, the investments required to restore a single monument may often lose sight of broader goals linked to the maximization of tourism flows. Usually, tourists do not visit a single site, even when traveling long distances. Rather, the increase in the expected benefits from an investment in cultural heritage is closely connected to the concept of the *cultural network* and its improvement. To this end, the experiment described below refers to a recent debate regarding the future of the Savoy's Residences Network (SRN) in the Piedmont Region (Italy). These resources were included in the UNESCO *World Heritage List* in 1997. The network is composed of the urban royal residences – *Madama Palace*, *Royal Palace*, *Valentino Castle*, *Villa della Regina* – in the City of Turin, as well as the sub-urban palaces: *Venaria Royal Palace*, *Rivoli Castle*, *Moncalieri Castle*, *Stupinigi Hunting Palace* and *Racconigi Castle*. These assets were calling for the implementation of new policies involving tourist management. Between 1999 and 2010, the local institutions developed a number of different programs and plans with the aim of achieving a strong integration of territorial and cultural policies, the focus of which was the SRN. Today, there is a shortage of public investments. This is due partly to the economic crisis and partly to the absence of a strategic vision relating to the future of cultural resources.

Regarding the previous consideration and with the specific aim of detecting multi-destination and multi-experience visitor behaviour, the SRN is inserted, first of all, into the broader ensemble of the Metropolitan Museum System of Turin (MMS). Data regarding the number of accesses to MMS, which were collected by the Cultural Observatory of Piedmont in 2009 and which are integral to the Annual

Report – a quantitative summary which sets out the results of cultural activity surveys divided into metropolitan museums and SRN – are provided in Table 1. In accordance with this classification, urban museums and SR therefore constitute the two categories of heritage which characterize the region, together with churches and historical urban centers. In 2009, 2,457,842 tourists visited the SRN and Turin’s museums. The site which attracted the most visitors was the *Venaria* Royal Palace – with a total of 703,749 accesses –, followed by the National Cinema Museum and the Egyptian Museum – with approx. 532,000 and 511,000 visitors, respectively. As regards the SRN in general, there has been a reduction in the number of visits to certain residences, such as the *Racconigi* and *Rivoli* Castles. This could be ascribed, on the one hand, to a normal decrease in arrivals following the post-Olympics effects of Turin 2006. On the other hand, it could relate to a reduction in planning and promotional activities as a result of the crisis scenario.

It would be helpful to match these first considerations regarding accesses to an analysis that takes into account the results of the annual monitoring which is carried out, in certain seasons of the year, at various MMS sites on samples of visitors. These interviews provide feedback regarding the origin of the tourist and his/her *on-site* experience. The analysis is based on a sample of 2,240 visitors that were intercepted at eight different sites. Table 2 reveals, for example, the multi-destination pattern – as mentioned above – of the tourist experience; 23% of visitors made only one choice, but about 77% made between two and four choices. On the other hand, the overall utility is due to a certain combination of visits. In a complementary manner, Table 3 highlights, line by line, the cultural sites at which the surveys were made and, in the columns, the other destinations that tourists declared they were going to visit in order to complete their *on-site* experience. The mean of the choices in the eight sites is highlighted in the last column. It is easy to see that, while the Royal Palace and the *Madama* Palace present a higher mean than 3, *Venaria* Palace has a mean of 2.25 and *Racconigi* presents the lowest mean equal to 1.84.

Evidently, these data support the hypothesis that a strong interdependence exists between the single destinations, considered as sites of tourist interception, and other cultural alternatives. The presence of succeeding sites, that the tourist would be willing to visit or which he has just visited during his stay, also reveals some patterns of preference in terms of combinations between the SRN and museums. It is worth noting that, on average, visitors declared 2.8 other choices *per capita*. Turin's museum visitors state, amongst other things, that they intend to continue their holiday, mainly by visiting other museums in the immediate proximity, while those interviewed at the SRN, including the Royal Palace and *Madama* Palace, expressed their preference, in any case, for royal monuments. However, a significant number of tourists, in the case of the *Madama* Palace, expressed an intention to also visit other types of monuments - summarized in the columns entitled 'Other museums and sites' and 'Other Savoy's Residences' – with a high symbolic value. These include, for example, *Carignano* Palace, the seat of the first Italian parliament and the Cathedral which houses the Holy Shroud.

The following questions, among others, may emerge: "do visitors coming from a long-distance usually opt for certain sites?"; or: "do visitors to the SRN tend mainly to combine sites belonging to the same category?". One might also ask: "are the combinations determined by inter-site distances?"; or: "is this behavior tied to logistic aspects – the transport system, first of all – and utility maximization according to *on-site* time available scheduling?" and so on.

The Conjoint Choice Experiment

The experiment was structured strictly in accordance with those steps that, in a CA, lead to: a) the identification of the attributes and related levels (Table 4); b) the determination of the number and format of the choice sets – 10 sets with 2 alternatives for each, in this case –; c) the choice of the experimental design – *random fractional factorial* – ; the random method employs sampling with

replacement for choosing concepts; it allows an attribute to have identical levels across all concepts, but it does not permit two identical concepts to appear within the same task; d) the choice of the interview protocol; in this case a *Computer Assisted Personal Interview* or CAPI, with facilitator; e) the identification of the site where the respondents were intercepted – ESOF international event, Turin (Italy), July 2010 –; f) the identification of the expected sample size, equal to 100-300 interviews; the valid interviews were, in this case, 122. The attributes listed in Table 4 were selected on the basis of two fundamental criteria: firstly, parsimony – in a comparison between discrete choices it is important to employ a limited number of attributes –, and, secondly, evaluation purposes. The full list of the other collected variables is resumed in Table 5. To this end, the choice experiment has been structured on the basis of a number of packages. Packages are means of combining services and of selling a tourist destination in an effective manner. More specifically, a package combines two or more products in order to grant the targeted consumer and market segment an advantage over buying the items separately. The benefits accruing to consumers as a result of packages are: a) they reduce the time and money spent looking for services and acquiring information on a destination; b) they cut the cost of products and services and provide greater discounts and better value for money; c) travel arrangements are generally pre-paid and confirmed prior to travel, reducing all kinds of risks; d) they relieve travel anxiety for new and older tourists, satisfying their need for security, reliability and companionship. In this light, packages have a specific *plus-value* for the consumer and guarantee a good level of profitability for the tour operators. In our survey, respondents are asked to evaluate packages, each characterized by different price and services levels

Pricing is a complicated problem in the provision of public goods (Bailey & Falconer, 1998; Frey & Steiner, 2010). An increase in the access price cannot be suggested, because it is normally regulated by the public authority. This is another reason why the single visit was not the only kind of experience that was proposed. For example, the actual condition includes the option of purchasing an annual card

for multiple visits – *Torino plus Piemonte Card* – or of receiving discounts for special categories of users: students, senior citizens, and so on. Therefore, the hypothesis of a package which includes more sites *plus* some public / private services was adopted. The full price identification was achieved by employing prices that were the sum of marginal costs; this confers credibility to the package. This choice was made with the goal of verifying cost and benefit – or economic – consistence. In other words, if the marginal willingness to pay proves to be comparable – in a monetary scale – with the marginal cost of different services, the experiment could be considered at least coherent. To this end, an economic evaluation helps to address the problem of measurement and evaluation of preferences, resulting in greater transparency and comparability to the experimental method. Table 6 shows the current entrance prices for the individual SR and the cost of the full discount card.

According to 1,220 choice sets, the marginal coefficients and their statistical significance – which make it possible to accept or reject the null hypothesis or to consider the attribute as a relevant factor in the choice of the population of tourists-consumers – were calculated by adopting a binary Logit model. The data were then processed using NLOGIT© software. The results of the reduced model are summed up in Table 7.

How can these be interpreted? Packages 1, 2 and 4 were tested, inside the model, as dummy variables, against the basic hypothesis, which is equivalent to the possibility of visiting only two museums in Turin or Province, an opportunity that does not add much to the *status quo*. Only those packages that include the entire SRN emerged as significant, with signs equal to those expected. The coefficient of package 4, which only includes the *Venaria* Royal Palace and one museum in Turin or its Province, although with the expected sign, did not pass the statistical significance test.

As regards the amount of marginal willingness to pay – which is equivalent to the ratio between the coefficient in question divided by the price coefficient – it should be noted that the prices that include the use of the shuttle refer to sub-urban locations with the option of ‘Shuttle’ equal to ‘Yes’.

Returning to Table 6, it is easy to see that the 51 Euro willingness to pay for a tour of the entire network of the SR is cheaper than paying the full price for the individual tickets, taking into account the fact that the fee includes the tourist shuttle.

The validity of the previous statement is substantiated by the case of the bike-sharing scheme. This system was not particularly well-appreciated as it is linked to the short-distance of *on-site* travelling. In effect, the coefficient did not seem significant. The reasons for these results could also relate to the problem of time-scheduling maximization behaviour, as stressed above. Tourists could be attempting to optimize time, particularly in cultural heritage experiences. The selection of *top* destinations, with relative inter-sites travelling, is, in itself, a time-consuming activity. In this case, a significant explicative variable could be represented by the 'Length of stay'. Unfortunately, although it was present in the data set (Table 5), this did not pass the significance test in the full model. Nevertheless, the variable runs with a negative sign, which means that the greater the length of stay, the less tourists are willing to buy a package of services related to the full visit of the SRN. This result would confirm, with a larger sample and a correct statistical test, the relationships between the problem of time scheduling and the sign of marginal willingness to pay.

In any case, potential visitors are able to appreciate only those efforts directed at the maximization of the SRN experience as a whole and are not particularly interested in mixing other activities. This is confirmed by their limited appreciation of the *food & wine* service. The respondents are in fact *not* willing to spend €8 to include a restaurant ticket in the package, or rather they prefer to freely spend this amount. However, they are willing to pay €15 to participate in a local *food & wine* event, for instance country festivals. How should the contribution of *food & wine* to the tourism *on-site* experience be considered?

Quan & Wang (2003) has demonstrated that food consumption in tourism can either constitute the *peak* tourist experience or the *supporting* consumer experience, but this depends upon specific

circumstances. In effect, the introduction of *food & wine* services into the package was motivated by the hypothesis that food consumption represents one of the key factors in destination marketing development. At the same time, it has nonetheless been proven to be an important means of selling the identity and culture of a destination (Hegarty & O'Mahony, 2001). It should be remembered that, in the present experiment, a package of services that includes access to some sites of the SRN and museums was offered to the respondents, together with food services. From the microeconomic point of view and considering the sign of the coefficient, the typical restaurant is probably considered a substitute, rather than a complement, of the heritage experience. In this light, the preference demonstrated for packages that include transport services for sub-urban locations, with a consequent reduction in travelling times, could help strengthen public services, rather than diversifying private ones.

Conclusions

In conclusion, in the course of drawing up the above considerations, several problematic nodes have emerged which must be stressed. The evaluation of tourist *on-site* preferences is not a fully consolidated field. A considerable amount of research still needs to be conducted in order to clarify the connections – and enhance the experimental base – between contiguous disciplines such as economics, sociology and psychology of behaviour which have addressed the tourism phenomenon in different ways.

These results reveal, to a large degree, that the cultural heritage experience is a special kind of consumption that cannot easily be assimilated to other goods or services. Traditional segmentation techniques, which are often used in the mass tourism industry, are not adequate to describe these phenomena, especially at the regional scale. Tourists do not appear to be willing to turn their cultural visit into a typical shopping experience, mixing too many different types of activities in a unique and

compact package. Instead, they hope to obtain more efficient and specifically dedicated services, aiming at improving the coordination among different attractions, and would in all probability prefer to optimize the timing schedule of their *on-site* vacation. Briefly, local transport is a complementary attribute to the visit, especially when cultural heritage is involved. This conclusion has also been found in other experiments, one of which refers to the case of *Racconigi* Castle (Giaccaria, 2005).

This conclusion has important consequences for future policies. The need for an efficient transport system is widely recognized as an important factor for any successful tourism development program (Albalade & Bell, 2010). However, little work has been made to investigate the impact of transport systems on cultural heritage management. Driving tourism flows could be an alternative to a free and independent travel experience, given that some cultural sites, or events, suffer from heavy congestion, while others are little known and sparsely visited. Every destination within a certain region should be configured with appropriate facilities according to the site characteristics, on the basis of its position on various and specific touring routes. In other words, policies relating to itineraries, transport modes and frequency regularity may result in significant economic, social and environmental benefits – or costs – for the host population. With reference to the case examined, an investment in RS' transport network could increase the resources attractiveness by reducing congestion and external costs. In effect, the literature relating to the impact of tourism has only occasionally addressed the social dimensions of leisure transport external costs, although the sustainability of tourist activities is a much discussed concept (Hall, 1999).

A related question has to do with how it is possible to simulate the interaction between public and private supply in a simulated scenario? The present research may suggest that tourists need clearer indications when a simulated market is involved. For example, the actual discounts to the entrance fees to MMS relate to the option of buying the *Torino plus Piemonte Card* – a ticket with a duration of two to five days – which allows free access to the museums as well as a number of special services.

However, it does not include urban public transport, the metro and the railway line which connects the airport to the city. It only includes a special shuttle, in the case of *Venaria Palace*, from Turin town center to the sub-urban area and *vice versa*. As mentioned above, the critical aspect is therefore transport system connections at the regional scale for the entire SRN. This situation almost certainly explains the tourists' preference for the package that includes the SR as a whole.

Nonetheless, knowledge of the *status-quo* of the public supply could be not perfectly shared by the respondents. Moreover, it could be difficult to convey it during the experiment. Although the CE are apparently flexible and permit a definition of future scenarios with regard to the improvement of tourism supply, it is clear that they cannot resolve problems such as imperfect or lacking information. Choices are, by nature, affected by many biases that cannot be easily controlled and are notoriously difficult to identify. It is possible that the respondents were influenced by a number of significant biases during the interview – such as lexicographic rule – especially when they were presented with a critical attribute, such as the shuttle. As already mentioned in Section 2, compensatory methods of evaluation are computationally tractable and often provide an excellent approximation of the choice process. However, if consumers are not making compensatory trade-offs, it might be worthwhile to devise a method for identifying those heuristics.

At the present state of the research, it is impossible to advance further and provide a full response to the above questions. In order to do so, it would be necessary to implement the present experiment using a larger sample of visitors – 500 - 1,000 interviews – and a more refined model. It should nonetheless enable us to identify the best-fitting heuristic of choice and also to estimate, in an efficient way, the socio-demographic characteristics of the visitor or, in other words, the individual components of utility. A further possible means of developing the research would be to conduct an investigation that employs revealed preferences with the specific aim of investigating the budget destination of the vacation towards different activities when cultural heritage tourism is involved.

Finally, it is worth returning to the question of how this work could bring about progress in our knowledge of the tourist experience. While it seems credible that cultural heritage represents a *peak* experience, the complementarity, or the substitution, effects with other kinds of activities are never evident or straightforward. The evaluation of the trade-off with food and transport seems to denote a clear preference for the second type of service, emphasizing the need to preserve the authenticity of the cultural experience. It was outlined as tourism *heritagization* (Poria *et al.*, 2003) which refers to the conversion of cultural resources and their mass customization into globalized products: the loss of authenticity and historical accuracy in communication, marketization and the reduction of culture and traditions, alienation and loss of cultural identity, undervaluation of local traditions and ways of life are all consequences of a globalized tourism.

Is there an alternative to the mass tourism proposal? Combining conservation goals and cultural heritage management could help us to avoid these problems. In any case, the clear perception, from the point of view of the tourist preferences, of what cultural heritage represents and the desire to fully make the most of it emphasizes the uniqueness of this experience and the indissolubility of the relationship between local community and cultural identity. Probably, what makes a cultural site a unique resource is what the visitor is looking for.

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Table 1

Metropolitan Museum System of Turin - Number of visitors - 2007-2009

Source: Cultural Observatory of Piedmont (Italy), 2011

	2007	2008	2009	2010
Regional Museum of Sciences	69.451	118.045	133.016	122.772
Egyptian Museum	508.376	510.952	508.756	576.200
National Museum of Cinema	526.811	532.196	522.336	565.798
Modern Art Gallery	91.549	92.061	71.797	76.701
Others Museums	1.006.531	1.061.817	876.924	797.703
Total Museums	2.202.718	2.315.071	2.112.829	2.139.174
<i>Madama Palace</i>	312.532	192.282	153.609	186.254
Royal Palace	128.857	130.185	120.227	204.697
<i>Villa della Regina</i>	22.308	11.587	10.587	6.906
Hunting Palace of <i>Racconigi</i>	183.074	140.812	135.539	182.766
<i>Agliè Castle</i>	51.268	52.593	60.646	68.426
<i>Moncalieri Castle</i>	7.374	2.698	2.871	148
Hunting Palace of <i>Stupinigi</i>	531	<i>closed</i>	<i>closed</i>	<i>closed</i>
<i>Rivoli Castle</i>	108.806	106.353	99.071	95543
<i>Venaria Palace and Borgo</i>	254.001	712.928	711.184	544.888
Total Savoy's Residences	1.068.751	1.349.438	1.293.734	1.289.628
Total MMS (SR included)	3.271.469	3.664.509	3.406.563	3.428.802
% SRN on Total	33%	37%	38%	38%

Table 2

Metropolitan Museum System of Turin (Italy) - Number of visited sites (Survey based on a sample of 2240 visitors)

Source: Cultural Observatory of Piedmont (Italy), 2009

Number of visited sites	Number of cases	%
Only one choice	520	23,2
Two choices	769	34,3
Three choices	473	21,1
Four choices	277	12,4
Five choices	118	5,3
Six choices or more	83	3,7
Total	2240	100,0
Sample mean (number of choices)	2,8	/

Table 3

Metropolitan Museum System of Turin (Italy) – Relationship between visited sites (Survey based on a sample of 2240 visitors)

Source: Cultural Observatory of Piedmont (Italy), 2009

	CIN	VEN	RAC	RIV	MAG	EGY	ROY	MAD	Other Museums	Other SRs	Other sites	Interviews Number	Mean of choices
National Museum of Cinema (CIN)	0	155	4	22	44	498	172	151	1376	216	2638	905	2,6
Venaria Palace (VEN)	70	0	8	18	16	107	42	47	288	192	788	350	2,17
Racconigi Hunting Palace (RAC)	3	10	0	1	2	5	3	4	8	24	60	38	1,84
Rivoli Castle (RIV)	7	17	1	0	7	13	8	7	96	8	164	42	2,84
Modern Art Gallery (MAG)	48	13	1	16	0	51	15	27	360	8	539	132	2,92
Egyptian Museum (EGY)	99	50	3	6	11	0	50	52	504	72	847	196	2,83
Royal Palace (ROY)	23	32	2	0	0	65	0	39	216	48	425	107	3,63
Madama Palace (MAD)	151	129	13	27	31	259	158	0	968	248	1984	470	3,5
Column Total	401	406	32	90	111	998	448	327	3816	816	7445	2240	2,8

Table 4

Attributes and related levels

Source: Our processing

Attributes	Levels	Description
<i>Price-shuttle</i>	10 – 60 €	Without shuttle
		With shuttle specifically dedicated to travelling between the sites (+ 20 € included)
<i>Packages</i>	1	Possibility of visiting all the Savoy Residences
	2	Possibility of visiting all the Savoy Residences + one museum of Turin
	3	Possibility of visiting two museums of Turin or Province
	4	Possibility of visiting two museums of Turin or Province + <i>Venaria</i> Royal Palace
<i>Food&wine</i>	1	No <i>food&wine</i> experience included in the package
	2	Meal voucher at selected typical restaurant
	3	Participation at <i>food&wine</i> event in the area
<i>Bike sharing</i>	0	Without <i>bike sharing</i> service
	1	With <i>bike sharing</i> service

Table 5

Variable description

Source: Our processing

Variable name	Scale	Levels description
<i>Travel motivation</i>	Categorical	1='Visit relatives/friends'; 2='Work'; 3='Only for tourism'; 4='Only for ESOF2010'; 5='Other'.
<i>Country of origin</i>	Categorical	1='Italy'; 2='Germany'; 3='Spain'; 4='UK'; 5='USA'; 6='France'; 7='Other'.
<i>Sex</i>	Categorical	1='Male'; 2='Female'.
<i>Age</i>	Interval	1='<20'; 2='21-30'; 3='31-40'; 4='41-50'; 5='51-60'; 6='61-70'; 7='>70'.
<i>Household income (net monthly)</i>	Interval	1='<1000 €'; 2='1000-2000 €'; 3='2000-3000 €'; 4='3000-4000 €'; 5='4000-5000 €'; 6='5000-6000 €'; 7='6000-7000 €'; 8='7000-8000 €'; 9='>8000 €'.
<i>Travel party size</i>	Categorical	1='Alone'; 2='Whit my partner'; 3='With my family'; 4='Whit a group'; 5='Whit friends/colleagues'.
<i>Length of stay (number of nights)</i>	Cardinal	From one to seven nights.

Table 6

Savoy's Royal Residences Network - Current access price

Source: Our processing

Savoy's Royal Residences	Current price
<i>Madama Palace</i>	9,50 €
Royal Palace	6,50 €
<i>Villa della Regina</i>	free access
Hunting Palace of <i>Racconigi</i>	5 €
<i>Agliè Castle</i>	8 €(*)
<i>Moncalieri Castle</i>	5 €
Hunting Palace of <i>Stupinigi</i>	12 €(**)
<i>Rivoli Castle</i>	6,50 €
<i>Venaria Palace and Borgo</i>	20 €(***)
<i>Torino plus Piemonte Card</i>	25 – 34 €(****)

(*) Gardens and park included.

(**) Starting from 2013.

(***) Gardens and *Borgo* included.

(****) Free access to MMS of Turin from two until five days of duration.

Table 7

Results of the LOGIT model (reduced) – Dependent variable: choice (0,1)

Source: Our processing

Attributes (Levels)	Beta	St. Error	Wald	Sig.	Marginal WTP (Euro)
Package_1	,557	,098	32,463	,000	51,13
Package_2	,329	,098	11,281	,001	30,18
Food&Wine_3	,186	,096	3,758	,053	17,08
Price_shuttle	-,011	,002	27,710	,000	1,00
Food&Wine_1	,314	,096	10,633	,001	28,80
2 Log-Likelihood	33,316				
Number of cases correctly forecasted (%)	55,25	Number of processed choice sets = 1220			
Price (sample mean)	35,71				