A description model for regeneration through urban tourism in rural towns with underused historic real estate

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Abstract

This paper deals with the construction of a description model that will be helpful for an actual decision aiding situation posed by the urban planner for tourism development of rural towns in Sicilian hinterland areas. The decision problem concerns the town of Cianciana, which in recent years has become the protagonist of a particular international tourism phenomenon. We propose a multi-criteria evaluation framework for the rehabilitation of the historic town centre through tourism development. The description problem model that is presented here is focused on aiding decision makers to identify the best usage strategy of under-utilized historic real estate for tourist accommodation. Although the evaluation framework has been inspired by the particular case of Cianciana, it would fit well for evaluations undertaken in analogue circumstances.

Keywords: underused real estate; tourism development; decision aiding; description problematic; cognitive artefact; urban restoration; local development.

1. Evaluations for the rehabilitation of old towns

The conservation, renovation, and re-use of urban cultural heritage and forlorn areas are strategic actions of urban planning that are taken in order to achieve sustainability for cities (European Sustainable Cities and Towns Conference, 1994). The tourism industry is a key economic sector in Italy (Consiglio Nazionale delle Ricerche, 2013),
and it is regarded as an activator of urban physical and social renovation (Lew, 2007; Owen, 1990). Foreign visitors are mainly attracted by historical and artistic cities (44%), and seaside (17%), lacustrian (9%), and mountain (9%) resorts (ISTAT, 2016). In general, internal rural areas are not typical tourist destinations, unless they are included in special tourist networks. Nevertheless, as the case of Cianciana demonstrates, rural areas can offer peculiar destinations as cultural environments that have an attractive power on tourists with whom they create an empathetic link.

The financial evaluation of an urban rehabilitation project has a crucial role even in its early stages, when it can guide decisions on changing or dropping the plan (Cilona & Granata, 2015 a; Morano & Tajani, 2013). But, as the rehabilitation of old towns pose special questions due to existing physical and social ties, the widely recognised supporting role of multi-criteria evaluation in sustainable urban planning is more useful than ever in approaching these really complex contexts (Bellia, Granata, & Scavone, 2014; Cilona & Granata, 2014, 2015 b; De Mare, Granata, & Nestico, 2015, Fusco Girard, Cerreta, & De Toro, 2005; Rizzo, 2003; Torre, Morano, & Tajani, 2015).

In this paper, a multi-criteria decision-aiding evaluation framework for the rehabilitation of historic Sicilian rural towns through tourism development is proposed. The evaluation framework has been inspired by the particular case of Cianciana, but would fit well for evaluations undertaken in analogous circumstances. The following sections present the tourism situation of Cianciana, and go on to describe the proposed framework for a description (Roy, 1985) assessment model, represented through the cognitive artefacts of a decision-aiding process (Tsoukiás, 2007). The final section presents some reflections in conclusion.

2. The case study

2.1. The case of tourism in Cianciana

Cianciana is a small rural town in the territory of Agrigento, covering a relatively small area of 37.7 square kilometres (Atlante statistico dei comuni ISTAT, 2013). Its geographical points of reference are the Platani River and some mountains (the peaks of Chiappara and Cavallo, at 703 and 756 metres respectively).

The oldest parts of the town date back to 1583, and are located near the Chincana hamlet that was founded in the roman period. In 1646, Duke Diego Joppolo received authorisation (Licentia Populandi) to create a city of one hundred houses, a church, shops, a prison, and other infrastructures (Antista, 2013). Nowadays, we can see that the route traced by the main street, running along the royal country road (“trazzera”) called “Lettighe”, created the order of the city (Sanzeri, 2007). In the historic centre of Cianciana there are some ancient buildings that are without any particular historical or artistic values.

The population of this small town reached its peak in the century when sulphur mines were active, from about 1850 to 1960. In fact, the population went from 4,604 inhabitants in 1861 to 7,740 residents in 1961. Subsequently, when the mines closed, the population decreased, until 2011 when the last census registered just 3,517 inhabitants.

Despite its marginal context, typical of inner and rural areas, Sicily is an island that is endowed with many material and immaterial resources that are different from those available in other parts of the Italian territory. Here we can find a good climate, beautiful landscapes, an appreciated traditional gastronomy, a natural heritage, and a slow dimension of life that is encouraged by an insufficient accessibility (Prestia & Scavone, 2014).

Consequently, Cianciana has recently become the protagonist of a strange new phenomenon: since 2005 many tourists have chosen to live there. These tourists buy houses, refurbish them, and stay on in the town to live with the local inhabitants. They buy crumbling and abandoned houses and restore them, often with projects that are inappropriate to their style. They originate from England (no. 42), France (no. 9), Sweden (no. 3), Denmark (no. 11), Finland (no. 2), Russia (no. 2), and United States of America (no. 6). They don’t want to find work, because they already have jobs. Generally, they are actors, directors, writers, reporters, photographers, and artists, and with the rise of technology they can use the Internet to work. According to them, in Cianciana they can find relaxation, peace, natural and cultural heritage, and good food and wine. Furthermore the town is near to seaside places that can be easily and quickly reached, such as Borgo Bonsignore, Bovo Marina, Eraclea Minoa, and Torre Salsa. It is interesting to note that the phenomenon probably stems from the idea of the sole local estate agent (My house) to sell abandoned houses, apartments, and big farms in the old centre of the town or in the surrounding countryside.
Unlike the phenomenon of the Grand Tour that was evident during the eighteenth and nineteenth centuries, when foreigners came to Italy to complete their cultural formation and visit the most important Italian monuments, this new tourism phenomenon largely concerns inner areas that are generally characterised by a negligible tourism. In this instance, marginality has become a strength!

The main effects of this surprising phenomenon are the revitalisation of the local economy and of the historic centre, the halting of the depopulation, and the development of new social, cultural, and economic dynamics apart from the rural ones.

2.2. Perspectives

The real danger of this situation is the possibility of gentrification, as Ruth Glass described it in 1964 (Smith, 2007), since the restoration of houses and urban improvement can serve to attract high income residents and drive away local inhabitants with a low income. And gentrification is not urban regeneration (Annunziata, 2008)!

There is a real possibility that Cianciana could change, losing its “identity”, and the very aspects that visitors like: the cultural characteristics. We consider that a solution lies in stimulating the phenomenon, but modifying its course in order to safeguard the uses, customs, and traditions: in one word the “local” dimension that Dematteis (1995) calls milieu.

Cianciana does not have any hotels, and is not far from Agrigento, the city that attracts tourists from all over the world for its Valley of Temples, acknowledged as a Human Heritage site, but it needs tourist facilities. This objective should be attained in such a way that it ensures the protection and revitalisation of the historic centre. We propose a special type of tourist accommodation: the scattered hotel (Dall’Ara, 2010). This is an original model for touristic sustainable development of a territory that offers the possibility to enjoy a stay of a few days, without the need to buy a house. It is the best solution for visitors who are “travellers” rather than “tourists” (Costa, 2005). It is also a way to restore ancient and abandoned buildings.

The concept of a scattered hotel is based on the use of a certain number of separate buildings lying within a range of 300 metres from the main service buildings. They offer the possibility of living in a small town whilst enjoying the same facilities as a hotel: assistance, reception, food service, and common spaces. To realise this kind of hotel it is not necessary to construct new buildings and use new soil, but it is enough to re-use already existing buildings (Bellia, Pilato, & Scavone, 2013). It offers a way in which it could be possible to animate historic centres, and to involve local actors and producers. Scattered hotels offer more than a stay, they are a way of life!

This new type of hotel is capable of creating value-added, because they can offer a valid contribution to control depopulation of historic small towns that lie far from traditional touristic centres.

3. A description model for decision-aiding in the development of tourism for Cianciana

3.1. Methodology

A decision-aiding process is a sequence of cognitive artefacts resulting from the interaction of the client, who requires assistance to solve a decision problem (Ostanello, 1990), and the decision model maker or analyst (Tsoukiàs, 2007). For this work we have adopted a methodology that results from the integration of the constructive approach for the analyst in the aiding process, suggested by A. Tsoukiàs (2007), and the “down-up approach” of B. Roy (1985) in building criteria, that is the determination of points of view admitted by all actors in a decision problem. Keeping to this integrated approach, the description model for decision-aiding for the tourism development of Cianciana is attained through the following cognitive steps: 1. The representation of the problem situation, that is the identification of concerned actors and their objectives and resources; 2. The problem formulation through the identification of possible actions, points of view for evaluation, and the aim of the evaluation; 3. The definition of an evaluation model in the form of a description model. In the problem formulation and in the definition of the evaluation model, the “down-up approach” is applied, according to which, given the set of possible actions, the family of criteria is built by identifying the action consequences or attributes, and synthesizing them in a fairly complete set of criteria, that do not neglect any of the consequences of the actions. The family of criteria represents the system values of actors, and defines the main domains involved in the decision problem.
3.2. The decision problem

In the decision process formally represented here as a “description problem” (Roy, 1996), the planner, who plays the role of the client, pointed out that as with most rural towns in inner areas, Cianciana is nowadays undergoing a population loss due to an insufficient economic development. Despite the growing interest of international tourists to stay and experience the genuine cultural atmosphere of the town, Cianciana does not have accommodation facilities for tourists, but the tourism phenomenon referred to above does suggest the possibility of making the attraction power of the destination more stable in order to give a significant impulse to the local development.

Tourism activities influence both tourists and host communities (Uysal, Sirgy, Woo, & Kim, 2016), but the specific solution adopted to provide a suitable number of accommodation facilities for visitors may affect the people living in the destination site as well as those seeking a vacation experience. Furthermore, tourism activities generally affect the various stakeholder groups in a destination in different ways, and the goals of stakeholders must be properly matched to the planning and development of tourism projects (Shan & Pizam, 2012). As the urban planner remarks, urban regeneration projects must account for the current gentrification phenomenon, balancing the arrival of wealthy foreigners who may help to re-launch the local economy with the danger that lies in the loss of local identity through the replacement of the autochthonous population. Cianciana and similar inland towns have the typical characteristics of community-type destinations, in which local traditions and culture play a strategic role. From this perspective, interdependencies among visitors and local people are crucial for providing a pleasant destination experience to tourists (Zehrer & Hallmann, 2015), and cooperation from the local actors of a destination is required (Beritelli, 2011). From the previous analysis of the Cianciana international phenomena, the need to decide how to manage the situation emerges. Is it preferable to intervene by adopting a strategy for the endowment of the town with accommodation, or to allow the spontaneous and individual intervention of the foreign visitors to continue (or stop)? If the accommodation offer is created, what is the preferable solution to adopt? In the case under consideration, the planner felt that her preference was for the realization of a scattered hotel, but a rational comparison with other possible solutions was required.

3.3. The problem situation

The decision problem involves the local community, in which a certain number of actors (Roy, 1996) can be identified. In the decision problem considered, the key actors and their objectives and resources comprise: 1. Local residents, divided into estate owners in the historic centre, service providers (restaurateurs, retailers, transportation companies, and sport activity suppliers) (Zehrer & Hallmann, 2015), employees, and people living in and outside the historic centre. All these could be recipients of the economic and extra-economic benefits of the tourism projects, and could offer their financial and human resources and old real properties. 2. Visitors, divided into temporary and permanent ones. They are, respectively, attracted to stay and to live in a genuine Sicilian cultural site, and in either case demand the maintenance of the traditional physical and cultural environment of the town. 3. The local authority, which aims to limit the risks of gentrification and progressive depopulation, and to improve the economic welfare of local people. It can support the community-type destination by imposing regulations, and by constituting and controlling a special destination marketing organization.

3.4. The problem formulation

The need to provide a response to a growing demand for accommodation could be met by the following options, most of them using historical abandoned real estate:

- Alternative 0. Independent initiative of foreign visitors.
- Alternative 1. Diffused hospitality supply with an individual management (bed and breakfast hospitality, short-term lease of house, residential hotel).
- Alternative 2. Scattered hotel, with a unitary management.
- Alternative 3. Traditional hotel accommodation.
It should be noted that the alternative 3 is taken into consideration in our analysis, as it provides an interesting term of comparison with solutions based on the use of historical real estate, however it should be borne in mind that under the current town-planning scheme, new buildings cannot be constructed in the old town centre.

Several studies reported by (Uysal, Sirgy, Woo, & Kim, 2016) identify the main impacts of tourism as lying in the cultural, socio-economic, physical and environmental domains. These are also the main dimensions of redevelopment. The economic effects relate to the possibility of reviving the local economy. The social effects regard the improvement of the wellbeing of autochthonous people. The cultural aspects concern the preservation of the material and immaterial local cultural heritage, historical buildings, traditional urban landscape, gastronomic traditions, and local handcrafts. Finally, the environmental aspects concern the use of energy and water resources, and the production of pollution and waste.

The main relevant factors concerned with the decision problem were derived through a wide review of the literature on the quality of the vacation experience and factors influencing the choice of travel destinations, and on the quality of life of destination place population (Dwyer, 2005; Harrill, 2004; Jang, Bai, Hu, & Wu, 2009; Jurowski & Brown, 2001; Perdue, Long, & Allen, 1990; Shan & Pizam, 2012; Wise, 2016; Yu, Chancellor, & Cole, 2011; Zehrer & Hallmann 2015). This data was adapted to the small scale of rural towns and to the special perspective of the decision problem on urban development strategy through tourism planning. Following our literary review, we identified the main consequences of our potential actions as follows: 1. Accentuation of gentrification, with the risk of expulsion of local residents from the old town centre. 2. Involvement of the local population in the tourist business. 3. Integration of visitors in the local culture and social situation. 4. Improvement in residential facilities. 5. Creation of a tourism culture from the interaction of hosts and guests. 6. Income generation. 7. Real estate appreciation. 8. Conservation of the fabric of the town and of historical buildings. 9. Flexibility in the use of buildings, in case of exhaustion of the tourist phenomenon. 10. Creation of employment opportunities for residents through the local tourism industry. 11. Increasing of social cohesion through the filtering down of profits to the local population. 12. Creation of private enterprise opportunity for the supply of transportation, retail, sporting activities, and other services. 13. Valorisation of local agricultural and sheep-farming productions, on which the current economy is based. 14. Increase of income for local business owners. 15. Over-use of land. 16. Preservation or increase of autochthonous population. 17. Revitalisation of local handcrafts and involvement of local craftsmen. 18. Maintenance of local cultural and food and wine traditions. 19. Income distribution. 20. Reuse of abandoned buildings. 21. Opportunity to increase the collective sense of identity and community pride, contributing to the enhancement of social capital. 22. Supply of full hotel services, such as day and night reception, attendance, common spaces, and services for guests. 23. Marketing and tourist promotion expenses. 24. Real estate redevelopment investment and operational expenses related to tourist accommodations. Note that general factors affecting tourism planning, such as security, safety of destinations, and educational opportunity for local people through tourism, were ignored, as their effect is negligible in European contexts. Likewise, other factors typically inherent in mass tourism, such as daily congestion, mass consumption, energy and water consumption, and waste production were also ignored. All the possible actions noted are those compatible with regulations, laws, and planning tools currently in force. Finally, we recall that the aim of the evaluation is the identification of the best approach for the establishment of an accommodation supply in Cianciana, for the wider benefit of the local community.

3.5. The evaluation description model

In order to enable a better comprehension of the problem, to communicate with involved people, and take aware decisions on what course of action to follow for the provision of suitable and sufficient tourist accommodation for a historic rural town, we propose the use of a cognitive and assessing multi-criteria description model.

A “description problem” is aimed at clarifying a decision on the basis of a description of potential actions and their consequences (Roy & Bouyssou, 1993) without seeking to elaborate a final recommendation (Roy, 2005). Facing a description problem, the analyst plays the role of guiding the decision makers in a process that is aimed at highlighting the sought “elements of responses”, helping them to identify the consequences of actions and even possible actions, criteria and aggregation methodology (Ostanello, 1990). Tackling a description problem, a crucial task is the rigorous identification of all the possible effects of alternatives, so that the interests of all the actors may be represented by the
family of criteria (Roy, 1996). The outcome of a description problem is the evaluation table, synthesizing the performances of the potential actions according to all the relevant points of view. The evaluation table is in itself, therefore, an effective source of information in a decision process (Roy, 1996).

The proposed description model comprehends the set of potential actions that were identified in the previous section, the family of criteria (table 1), on which the analyst supposes that there could be a consensus by the actors (Roy, 1985), an initial system of weighting, and a first qualitative evaluation of actions on criteria given by the urban planner (table 1). The performances of alternatives on criteria were measured on a scale with eleven degrees, from 0 to 10, while weights were assigned using the point allocation technique (von Winterfeldt & Edwards, 1986). The proposed cognitive description model includes four domains and ten criteria, and was validated by the client.

Table 1. The evaluation table.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Code</th>
<th>Criteria</th>
<th>Weights</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>C1</td>
<td>Economic effect, resulting from income generation and real estate appreciation</td>
<td>20</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Social</td>
<td>C2</td>
<td>Local identity</td>
<td>12</td>
<td>0</td>
<td>8</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>Social cohesion, resulting from the employment opportunities for residents, the private enterprises opportunity and the increase of income for local business owners</td>
<td>8</td>
<td>2</td>
<td>7</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td>Reduction of depopulation</td>
<td>15</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Cultural</td>
<td>C5</td>
<td>Valorization of traditional local economy, that is agricultural and sheep-farming productions and handicrafts</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>C6</td>
<td>Creation of a tourist culture from the interaction of hosts and guests: involvement of population and integration of visitors</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>C7</td>
<td>Preservation of the traditional urban landscape</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Physical</td>
<td>C8</td>
<td>Reuse of abandoned buildings</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>C9</td>
<td>Supply of residential facilities</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>C10</td>
<td>Flexibility in the use of buildings</td>
<td>4</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

3.6 Discussion of results

The description model may be used as a basis for a multi-criteria expert assessment, or for the construction of a multi-group evaluation process. Although it is not a part of a description model, we tested our cognitive model by aggregating the marginal preferences given by the expert client by using the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) (Hwang & Youn, 1981), dealing with numerical and monotonically increasing or decreasing information on the attributes. It is a compensatory aggregation procedure that does not require the criteria to be independent, and provides a cardinal ranking of alternatives. The ranking of alternatives that was obtained is 2 (scattered hotel), 1 (diffused hospitality), 3 (traditional hotel accommodation), and 0 (independent initiative of foreign visitors). The client recognized this recommendation as being consistent with her preferences.

If a widening of decision-aiding is required, in order to attain a shared choice solution, the criteria, the weights and even the potential actions could be modified in a following phase of confrontation with the decision makers and actors, in order to attain a validation of the considered system of values from actors (Cerreta, Panaro, & Cannatella, 2012). Furthermore, discriminating powers of criteria (Roy, 1996) could be required for better modelling of the decision-maker’s preferences. In the light of additional information obtained from local decision makers, a suitable aggregation operator should be identified among multi-criteria decision-aiding methods dealing with a set of discrete alternatives according to the modelling of decision-maker’s preferences, the allowed level of compensation, and the quality of input information available (Guitouni & Martel, 1998).

Even in the initial form presented here, the description model shows the usefulness of multi-criteria analysis for the settlement of urban policies for the revitalization of rural towns through tourism development, as it can help to clarify the manifold involved interests. In particular, the use of the “down-up approach” in building criteria seems to be effective, reducing the effort of identifying relevant interests. Moreover, a relevant outcome of the proposed study
is that, for the definition of urban tourist policies, the contribution of several technical, social, and human disciplines is necessary, such as town planning, business economics, psychology, sociology, anthropology, and so on, due to the involvement of physical spheres, but also of emotional and sensitive spheres. Thus, in order to develop the proposed description model into an assessment model to provide a ranking or a choice in a decision problem based on local actors’ system of values, the model could be improved through the identification of multidisciplinary quantitative and qualitative attributes for an in-depth evaluation of possible actions on each criterion.

4. Conclusions

Dealing with the revitalisation of rural towns is a complex issue for which multi-criteria analysis seems to be a suitable tool to gain the objective. In the framework of decision aiding, we have focused on the “description problem” that is aimed at attaining “elements of response” to the preferable way to supply tourist accommodation in Cianciana, in order to revitalise the rural town. In this type of decision problem, the role of the analyst is to help the decision makers in identifying consequences of actions, possible actions, criteria, and aggregation methodology.

The proposed cognitive framework may have different applications. A first use could be to direct the local authority towards initiatives supporting the development of Cianciana through the tourist flywheel, as suggested by the client. A second use could be to involve the local population in a project of tourism development, as it is known that successful tourism programs depend on the attitude of residents (Nunkoo & Ramkissoon, 2012; Liu & Chou, 2016). Thirdly, the cognitive model could be used as a decision tool in itself, or as a first assessing framework on which a further collective decision process aimed at identifying the preferable way of implementing the town’s tourist development could be based. In this case, the previous ranking of potential actions, obtained on the basis of the expert judgments of alternatives on criteria, can be considered only as an initial evaluation result that needs to be confirmed by an assessment based on the perspective of local actors. The present study is then susceptible to further developments concerning the local validation process of prefigured values, and the application of a suitable aggregation procedure able to provide the decision makers with a final recommendation. The choice of the aggregation procedure will depend on preference information by local decision makers that are not known at the current phase of the research.

Finally, we recall that although the description model was inspired by the case of Cianciana, it has a general validity for analogous contexts.

Attributions

This paper is the result of an interdisciplinary collaboration. The sections 1 and 4 are attributable to both the authors. The section 2 is attributable to Valeria Scavone, while the section 3 is attributable to Maria Fiorella Granata.

References
