Didáctica Geográfica nº 21, 2020, pp. 291-298
ISSN electrónico: 2174-6451

WALKING TOUR AS GEOGRAPHY LEARNING STRATEGY APPLIED IN SARGADELOS (LUGO)

Keumbee Lee
Universidad Autónoma de Madrid
goodlkb@gmail.com

Alfonso García de la Vega
Universidad Autónoma de Madrid
alfonso.delavega@uam.es

1. INTRODUCTION

Ceramics is one of the oldest human manufactures, and both through its domestic and decorative-ceremonial uses, it fulfills a practical and artistic function. Many researchers have studied its production aspects; however, in recent years, the trend of research has shifted towards cultural exchanges.

As the ceramic production underwent the industrialization process, the factories changed the landscape by intervening in the environment and modifying natural and artificial landscapes. Until now, the relationship between ceramic manufacturing and its environment has not been studied sufficiently from an educational perspective. This paper will examine the geographical conditions and educational advantages of the ceramic production sites, focusing on the educational role of the ceramic/historical museum and recommendable educational methods. Finally, it will present the characteristics of the Sargadelos ceramics plants' location in Cervo (Lugo, Spain) and propose a museum activity using the area's geographical contents from the lower and upper secondary educational curriculum.

2. CERAMIC PRODUCTION AND INDUSTRIAL LANDSCAPE

The relationship between the industrial facilities' location and the geographical factors has been widely studied in the field of economic geography (Rangiya, 2007). Because of the demand for a large number of natural resources, mines were excavated, river paths were used for transportation, and other auxiliary industries were developed.

As a large part of our territory is occupied by industrial installations and their subsidiary facilities (Trachana, 2011), it is necessary to draw attention to those landscapes that were modified by these industrial activities originating what has been denominated "cultural landscapes". The definition of cultural landscape has been established at both international and European levels by the 1992 World Heritage Convention and the European Landscape Convention. The European Landscape Convention (European Union, 2000, p. 2) defines a landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." Regarding this definition, Sodano (2017) notes that this convention highlights everyday life aspects of the landscape, which were not presented at the UNESCO Convention. The definition of the cultural landscape from the Spanish National Cultural Landscape Plan includes those landscapes modified by industrial activities.

The catalog of cultural landscapes of Spain presents various cases of the cultural landscape with industrial features such as mining, hydraulic, and railway activities. These show a historical framework, where the most significant changes in the territory took place. Like this, the cultural domination subjugates the territory, making it difficult to establish the threshold between nature and human intervention (García de la Vega, 2014). In this context, Trachana (2011) argues that the cultural landscape is impregnated with the memory and history of the industrial society, and it's the value that must be preserved as a cultural legacy.

The ceramic production modifies the landscape not only by the production activities such as exploitation of minerals or installation of facilities but also by some post-production activities like disposal of ceramic wastes. Besides the production-related activities, the final product, like architectural ceramics, is also considered a key factor of the modification of the landscape.

Ceramic manufacturing contains cross-cutting educational values associated with various disciplines. From a geographical perspective, ceramic manufacturing sites have the potential to facilitate the understanding of the relationship among location, economic development, and the everyday life of the population, making it possible to see the traces of these activities marked in a landscape. This, this makes cultural landscapes to project social values and entrenched paradigms among the members of a society and also

represents their collective identity (Martínez de Pisón, 2010; Álvarez Munárriz, 2011; García de la Vega. 2011).

The values of the industrial heritage and the industrial landscape are well explained in The Nizhny Tagil Charter for the Industrial Heritage of TICCIH (2003). According to this charter, industrial landscapes should be considered as a cultural heritage in this post-industrial period. It is necessary to recognize which kind of role the old factories can play within a natural or urban environment and their significations from a historical and spatial point of view.

The involvement of the museum in the management, care, and protection of the landscape was proposed in the Siena Charter by ICOM (2014), which, together with UNESCO, recommended preserving the heritage and promoting cultural and natural diversity. Regarding these characteristics, museums and cultural landscapes in which they are located can be considered a suitable place for an educational program for geographical contents. These programs' methodological details should complete the guidelines mentioned in the curriculum (García de la Vega, 2011).

3. THE MUSEUM AND ITS ROLE AS AN EDUCATIONAL INSTITUTION

In the present day, museums' role as educational institutions has been defined internationally and nationally by ICOM and the Spanish Historic Heritage Law of 1985. According to Hooper-Greenhill (2007), museum education has great potential depending on the nature, purpose, and environment of each museum as it presents more freedom of choice than traditional education. Also, as the museum activities do not conclude with exams or evaluations like in school, participants do not hesitate to try new experiences (Huerta, 2010). Thus, educators can approach different topics to stimulate the participants' curiosity.

Recently, many of these heritage sites have been musealized, offering educational programs and cultural projects for the general public and school groups. In this context, it can be considered that the museums in the ceramic production sites have another advantage: they can provide various educational activities using not only their collection but also their environment.

In many places where ceramics production is the leading industry, the museums are more focused on the historical or artistic aspects of ceramics. However, these museums can play a proactive role as a symbol of the community that serves to increase social cohesion as well (Artero Gonell, 2019). In other words, it means that these institutions' roles as local museums go beyond just simple museums of ceramic collections or museums of the history of ceramics.

Methods and techniques for museum education should consider various factors, such as the visitors' profile, the target group, or the museum's resources. According to Van

Veldhuizen (2017), guided tours are the oldest and most popular didactic method in museums, and as one of its variations, "(city) walk" is frequently being used.

Walking in the city or the rural area or nature can be understood within the context of didactic itineraries for geographical learning. It offers the opportunity to observe and feel the elements of a geographic space and analyze the relationship among them (Sebastiá Alcaraz and Tonda Monllor, 2000; García de la Vega, 2004; Liceras Ruiz, 2018b). This method provides the students with the opportunity to think geographically through the acquisition of various geospatial skills, which are part of lifelong learning (Hammond, 2018; García de la Vega, 2019).

Within the didactic itineraries, there are differences in their objectives and format, depending on the educational context, type of institution, or educational setting. According to Coombs and Ahmed (1974) definition of formal, non-formal and informal education, the didactic itinerary of formal education and that of non-formal education, such as the walking tour that museums for the open public, show differences in their purpose, aim and educational methods.

Non-formal education is less hierarchical, relies more on students' self-motivation than formal education, and gives them more liberty of choice in a relatively open system (Livingstone, 2001; Rogers, 2004). Thus, the contents and objectives of each program are more flexible. Participants can acquire contextual learning through experience by interacting with society (Rogers, 2004; Choi, 2011).

For this reason, walking tours provided by the museums have different characteristics from didactic itineraries of formal education. For example, since the museum education is considered as a part of permanent education, people from different ages groups and socio-cultural backgrounds participate together (Lebrún Aspíllaga, 2015). Another advantage of the museum walking tour is that it provides an experience of a didactic itinerary to the general public with the contents of geography.

The conditions of formal learning need to be changed in the case of the walking tour aimed at school students. Students learn from a museum educator who is not their usual school teacher in a group with colleagues of different ages and places. Through the didactic itineraries within non-formal education, students will have a chance to complement and reinforce the knowledge that they have learned during formal education (Jerez García, 2012; Pérez Melgar and Morón Monge 2016). Museum educators also have the advantage of using the contents of different school courses in the program's selection and organization.

Another positive characteristic is in the spontaneity of the participants. They participate voluntarily with interest in the programs and are ready to learn from the first moment (Byeon, 2008). In this respect, in non-formal education, some differences can

be seen from museums' informal education concerning the museum's objective and role as an essential and active institution of education in a community, as Hein (2006) pointed out.

4. A DIDACTIC POTENTIAL IN THE MUSEUM FIELD: WALKING IN SARGADELOS

The Sardelos Ceramics factory, located in Cervo (Lugo), has been declared a Cultural Interest Asset (2014). In July 2020, the current plant opened its own museum that offers a guided tour of the gallery and the factory. The old steel and ceramic manufacturing complex is located in the vicinity of the current factory and was also declared a Cultural Interest Asset in 1972. Currently, some parts of the old complex sites are musealized, and there is a short hiking route to the dam in Xunco river that provided power to the old factory. Historical Museum of Sargadelos (dependent on the Lugo Provincial Council) is located in the original building of the Administration House. This institution can take an essential role as a transmitter of education with abundant geographical and historical resources and the organic relationship among the elements of the landscape of this place.

4.1. Location and historical context

In 1791 Antonio R. Ibáñez obtained permission to begin constructing the iron and steel industry in Santiago de Sargadelos (Cervo, Lugo). Cervo was an especially attractive location because of the geographic proximity to two important ports in Galicia and essential natural resources from nearby areas (Prado Gómez, 1993).

The original plan was not to manufacture ceramics, but metal pots like those imported from Bordeaux. In August 1792, the construction of a canal and a dam on the Xunco River began as an energy source for the factory. These interventions in the landscape were the first changes to its physiognomy, as the buildings for industrial production, such as kilns or warehouses, continued. There is evidence of the production of ceramics in Sargadelos, at least from 1804. Ibáñez's primary objective in the ceramic field was producing "creamware," imitating the Bristol's style, and offering them at a lower price. (Martul Vázquez and Varela Zapata, 2009). In 1813, the company received the name of Royal Factory of Sargadelos.

After the Independence War, the ceramic manufacturing underwent successive extensions, adding more facilities and the company passed through various hands and associations. In 1875 the last owner decided to close the doors of the factory in the Santiago de Sargadelos complex, and in 1903 he opened a modernized plant in Burela (Pérez Vázquez, 2011).

The current plant is located within the Galician Laboratory of Forms project, created in 1963 by Luis Seoane and Isaac Díaz Pardo. The old industrial complex had been abandoned since the end of the 19th century. However, in the present day, buildings in the complex show different degrees of conservation since some facilities are being reused for various purposes, such as an Entrepreneurship Center.

4.2. Methodological guidelines for a walking tour

A geographic space can be observed from multiple angles through the "walking" methodology, not only from the historical aspect but also from the geographical perspective, taking into account the various relationships between the space and the industry.

In this context, the main objectives of this proposal are:

- Know and understand the different landscapes in a geographic space by observing and sensing them.
- Understand that the ceramic industry modifies and generates the landscape.
- Understand the relationship between the industry and the geographical characteristics of a region.
- Associate the cultural landscape with the museum collection and know that it is an object to be preserved.
- Recognize the value of continuous learning through museum activities with other people.

This proposal consists of the following three steps: 1. The educator must have full knowledge of the place, 2. It is necessary to carry out an interactive activity with sufficient communication with/among the participants and 3. Give the participants enough time to use the five senses in outdoor activities.

Regarding the second step, a simple explanation can lead the participants to lose interest. To attract the curiosity and interest of the visitors and stimulate their desire to acquire knowledge (Tilden, 1977), the educator can use different techniques, such as the question-answer technique. In this regard, it can be considered that this participatory activity has its base on the constructivist approaches in museum education, showing an aspect of self-learning (Hein, 1998; Jung, 2018).

These activities should be adjusted to the public's profile, like the intellectual capacities, physical and knowledge level, and the interest of the participants (Serrat Antolí, 2007; Asensio and Pol, 2008; Montenegro Valenzuela, 2011).

During the third step, enough time for the full sensory experience in the landscape should be allowed. Although these days, visitors can experience a virtual tour in

many museums with the introduction of virtual reality technology, these audiovisual experiences cannot replace the direct and unique experience of the outdoor activities (Tafalla, 2015; Liceras Ruiz, 2018b).

4.3. Contents of the activity

As this proposal is aimed at secondary school students, its contents should be based on the school curriculum. This region can provide a wide range of educational content, including geographic content of the curriculum of Geography and History for Compulsory Secondary Education and the curriculum of Geography for Upper Secondary Education.

This walking tour consists of 5 stops starting from the Historical Museum of Sargadelos to the current Sargadelos factory through the old steel and ceramic plants and then canal and Xunco River dam. By walking along this route, participants will be able to develop geographic thinking and geographic imagination with various content from different grades. For example, at the third stop, observing the Rio Xunco dam, they can think about why it was installed in that location and how it differs from the current hydraulic energy, and they will be able to recognize and interpret the human interventions in the area. This activity also offers them an opportunity to compare what they have learned in the classroom in a real environment.

Other complementary geographic content can be included as well to develop the ability to see the site from a holistic point of view, such as a historical or aesthetical aspect of the region. In addition, this walking tour can contribute to developing key competencies, like social and civic competence, by addressing current issues and conflicts in the region, rather than just focusing on cultural or natural heritage. The controversial case of eucalyptus in Galician forest or sustainable development issues related to kaolin mining can be good examples. These topics can stimulate the development of critical thinking about real-world problems by sharing the participants' thoughts.

5. CONCLUSION

This work has shown how the ceramics production regions have diverse educational values for geographic education, not only because of their location but also because of the landscape modified by ceramic manufacturing. Among these educational advantages, the possibility of geography education within the museum education has been proven. For this, the walking tour methodology has been selected, since as a non-formal education activity, it allows more freedom in the selection of content and improves autonomous learning abilities of the participants than formal education activities.

In the case of Sargadelos, the characteristics of the area, the influence of the ceramic industry, and the landscape modification make it an especially suitable place for a walking tour activity that covers several geographical contents reflected in the lower and upper secondary school curriculum.

This walking tour allows us to examine how the industry has intervened in nature, how the landscape has been evolving, and the role of old or current industrial installations regarding the landscape. Although it is aimed for students in secondary education, this proposal could be used for adults and family groups, promoting the role of the local museum as an element of social cohesion and an agent to enhance social values.