

INTEGRATION OF RURAL ARCHITECTURAL HERITAGE: THE CASE OF THE ALQUERÍAS IN NORTHERN VALENCIA

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ABSTRACT

This work deals with the conservation and integration of the so-called "alquerías", the traditional rural houses scattered in the historical agricultural landscape of the Huerta de Valencia, which has been surrounding this Spanish city for centuries. The first alquerías were built during the Medieval Muslim period, for farming and housing purposes. Their uses have been evolving throughout history, following the agriculture and cultural changes, thus resulting in a great diversity of shapes, sizes and types. Today, these buildings are considered as an important part of the local heritage of Valencia, testifying of the traditional way of life and construction. However, the urban growth and modern lifestyle have not been always respectful towards the alquerías: many of them have been demolished to make way for new neighborhoods. Others have been sadly abandoned and left in a state of ruin. Cases of absorption have experienced unequal situations, from forced accommodation to full integration. In general, the remaining alquerías are threatened and require protection actions, as well as a quality integration to the urban fabric in order to prevent their deterioration, marginalization and even destruction.

This research work consists in an analytical study of the alquerías of four northern

districts of Valencia – Benicalap, Rascanya, La Saïdia and Benimaclet – aiming at providing an insight of the current situation regarding the issue of rural heritage integrated into urban fabrics. General conclusions will be extracted from a statistical study of the collected data, and highlights will be given to the good practices' cases as potential solutions for the future integration projects.

KEYWORDS

Vernacular architecture; conservation; heritage; urban integration; absorption.

1. INTRODUCTION

The Huerta de Valencia (*huerta* meaning orchards or fruit trees garden) is a vast irrigated plain where market gardening is intensively practiced. Although it was already cultivated during the Roman period, the current structure of the Huerta is inherited from the medieval Muslim society (8th to 13th century). Therefore, it is a landscape heritage by itself. It also gathers other forms of heritage, such as architectural, like late medieval alquerías (13th to 15th century), silk alquerías (16th to 18th century), *casas de Labrador* (19th and 20th centuries) (see Fig. 1), modest vegetal roof *barracas*, and

hydrological elements (irrigation network, mills, etc.). Since the second half of the 20th century, the landscape of the Huerta de Valencia has been nibbled by the colonizing expansion of the city, to the point of endangering its survival. In addition, the Valencian agricultural production has been facing a crisis due to the strong competition with other markets, which led to the gradual abandonment of agriculture activities, and thus, the abandonment of some alquerías.

The architectural heritage of the Huerta which has already been absorbed by the city can be categorized in five different states of urban integration: ruin (partially or completely destroyed), abandonment (unused but not yet ruined), absorption (unexpected in the urban context), adaptation (forced to fit into the urban context), and integration (the context adapts itself to embrace the alquería).

Hopefully, in the recent philosophy of heritage protection and integration, different actions are being set up to prevent the disappearance of the Huerta and its forgotten heritage, such as informing the general population and the city stakeholders about the cultural and historical wealth of the alquerías, and the threats they face. For example, one of the objectives of the *Plan de Acción Territorial de la Huerta de Valencia* (PAT 2018) is to maintain the landscape and rehabilitate the existing architectural heritage as a sample of historical and

traditional ways of life. Indeed, the *Catálogo de Protecciones* of the PAT constitutes an inventory of the protected constructions, precisising their legal preservation figure: BIC (*Bien de Interés Cultural*, meaning "Asset of Cultural Interest", a national recognition since 1985) and BRL (*Bien de Relevancia Local*, meaning "Asset of Local Relevance", a Valencian recognition since 1998). However, the alquerías of the region of Valencia are not all inventoried, and even when they are, this does not ensure their good state of conservation as the analysis will show in this paper.

This article is part of this initiative of spreading awareness about this local topic, which can also be applicable to other similar urban development and heritage conservation cases all over the world. The main objective is to conduct a study on the current state of the urban integration of the alquerías of four northern districts of Valencia. It was done in the context of D. Gosselin Calvignac's master thesis (Gosselin 2022). This study aims at providing with specific knowledge about the problematics of the rural heritage when integrated into the urban fabric. The analysis of the data will aim at enlightening the cases of good practices, shown as examples for future projects. This will also be the opportunity to give more alternatives and advice to the ones that have already been developed.



Figure 1. The three main historical types of alquerías: late medieval alquería (alq. del Moro), silk alquería (alq. de Falcó), casa de labrador (alq. Visquet). Source: (Gosselin 2022)

2. RESEARCH METHOD

This research work was conducted by following the scientific method of the case study. Indeed, it provides an in-depth analysis of 16 individual cases, with multiple variables: architecture, heritage, urban and integration aspects. Thus, the research takes place in two main phases: an analytical phase (detailed study), followed by a synthesis phase (generalization of conclusions from the statistical study).

The research process followed several steps. First, a bibliographic review was necessary to get into the subject of this investigation, which is defined more precisely afterwards. A compilation of possible cases was established while reading the literature and searching on the web. When not enough information on an alquería was available, the case was regretfully abandoned for this study. The information about the selected alquerías was implemented into a database. The study was narrowed to the four districts of Benicalap, Rascanya, La Saïdia and Benimaclet, which were involved in the rapid urban expansion of the 1960s. The next step was to visit the selected cases to collect on-site information, such as photos, sketches, and notes about the alquería's conditions and perception of the surroundings. Then, the information collected was encoded in the different sections of the database. For each of the 16 alquerías, it provides an in-depth analysis that was displayed in individual information cards (Gosselin 2022). By analyzing the different aspects of the study through statistical graphs and tables, it was possible to extract general trends, make comparisons and then conclusions.

3. RESULTS

In this section, several aspects of the analysis are explained based on a statistical study, aiming at providing insight on the current

urban integration state of the selected alquerías.

Therefore, the information gathered in the database is synthesized here, giving a general overview on the cases encountered, by comparing them and highlighting the trends that could stand out. The analysis of the results is presented following the order established in the information cards: Architectural and Typological approach, Historical and Heritage approach, Urban approach, and Integration analysis. In order to give complete explanations about some results, relations could have been established between different aspects and/or different sections of the study.

3.1. Architectural and Typological approach

This first part focuses on the historical typology, the volumetric typology, the structural typology, and the number of floors. Indeed, the understanding of the original shape of the alquerías is crucial to propose the most respectful intervention solution to the current building for a successful conservation and integration.

There is no predominant type of alquería in the studied set of cases, though it is interesting to notice that there are still quite a significant number of late-medieval alquerías left today (the most ancient type), spared from abandonment and demolition throughout history. The assignment to a defined historical type was done by looking simultaneously at the general architecture of the alquería and its supposed century of origin stated in the literature. However, sometimes this last information lacks precision and could be contradicted by different experts. Most of the alquerías that remain today underwent several architectural modifications throughout the centuries, so the assigned historical type is the one whose traces are still obvious today.

An interesting thing to notice regarding the volumetric study is that only six alquerías out

of 16 can be assigned to a single volumetric type (compact house, several bodies, with patio, or with turret). All the others have intersecting volumetric types. This is why this volumetric classification, proposed by Del Rey (2010), is not enough representative of the different types of alquerías. Most of them were compact at the beginning of their existence, and then new bodies were progressively added, enclosing even a patio. Turrets are remarkable attributes that give personality to the building, but cannot have the same classification level as a compact volumetry, for example.

The most common structural type encountered among the studied cases is a structure of several rows, parallel to the main facade (69%). The few others have rows perpendicular to the main facade. Only one alquería kept one single row.

The majority of the studied alquerías (88%) are composed of 2 levels: one ground floor and one upper floor. This upper floor was originally present in some cases or was added in a later extension phase in others, but every time it was for a specific function related to the fields (silkworms breeding, crops storage, etc). Thus, the rather low height of these buildings has to be taken into consideration when studying their integration in the urban landscape and in case of rehabilitation projects.

3.2. Historical and Heritage approach

This second part focuses on the date of construction, the current property status, the state of conservation, the legal preservation figures, and finally, the contemporary interventions. Indeed, the understanding of the history and current situation of the alquerías is also necessary to propose the most respectful intervention solution for a successful conservation and integration.

The buildings showed a rather regular distribution between the centuries of origin, though more than half of the alquerías

remaining today were built from the 17th to the 19th century. Alquería del Moro (Fig. 1) and alquería de la Torreta are the oldest, supposedly built during the Muslim period (13th century, before the Christian reconquest). Thus, it is interesting to notice that, even though the alquerías were invented by the Moors, the great majority of today's remaining alquerías were built after their period of influence.

All the studied cases are located on the map below (Fig. 2), featuring their state of conservation. We can surprisingly notice that more than the half of the studied alquerías are in a good condition of conservation (well preserved or slight deterioration), which is a positive point given the little consideration paid by the great public to this vernacular heritage. Indeed, the cases concerned have benefited most of the time from some refurbishment interventions. Five of the studied alquerías are quite deteriorated (medium to advanced deterioration). Some of them, like the alquería de Falcó, have only undergone a very few conservation measures to prevent them from collapsing or being demolished because of the safety risk they could represent for the people going inside or around them. The alquería de Albors is in a heterogeneous state of conservation because one half of the building has been rehabilitated, but the other is in a state of advanced deterioration (one wall collapsed and thus an entire row is left to open air).

Nearly half of the studied alquerías belongs to private owners. They have often been passed down by the families through generations, and are still used as housing or farmhouse, or in some cases, have been abandoned. The public alquerías, acquired by the municipality of Valencia, have been rehabilitated into new public spaces (library, museums, social services, offices...) or are still waiting for intervention, as the cases of alquería de Falcó (Fig. 1), de la Torre, or de Albors (which is partially ruined).

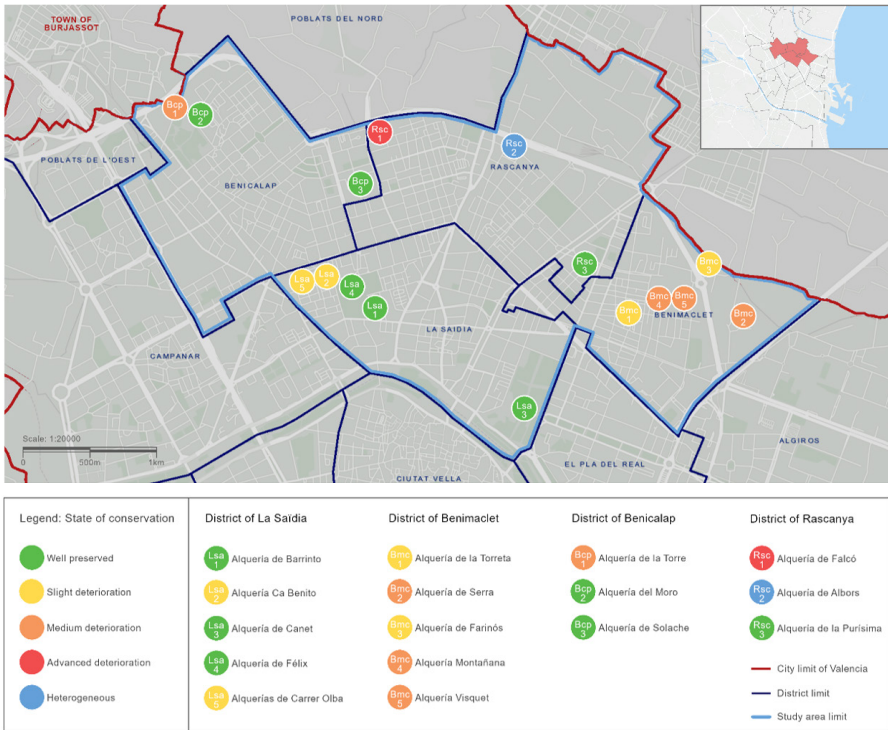


Figure 2. Location and conservation state of the studied alquerías in the districts of Benicalap, Rascanya, La Saida and Benimaclet. Source: (Gosselin 2022)

The results show that three quarters of the cases benefit from a local figure of protection (BRL), but only one, the alquería del Moro, is nationally protected (BIC). However, this encouraging information does not ensure the good state of conservation of the buildings, as we can see from the previous results. The four alquerías with no protection figure are not all in the same condition: the private ones (Montañana and Visquet) suffer from medium deteriorations, whereas the public ones (Félix and Solache) are well-preserved.

The great majority (nearly 90%) of the studied alquerías has undergone some contemporary interventions, ranging from the refurbishment

of a structural element (wall, roof) for conservation or safety purpose, to a complete rehabilitation. In some cases, like the alquería de Félix, contemporary bodies have been added to the original building to meet the new usage requirements. We can also notice that the cases which do not have any visible intervention, or only minimal conservation works, are often private properties, probably due to economic reasons.

3.3. Urban approach

This third part focuses on the urban context and the direct surroundings. Indeed, the

understanding of the relationship between the alquerías and their environment is necessary to propose the most respectful intervention solution for a successful conservation and integration.

More than 80% of the alquerías studied are in an urban area (Fig. 3.a), since the area of study, the northern districts of Valencia, was chosen as so. Only two of them, the alquería de Serra and the alquería de Farinós, are still in their original-looking rural environment, although the urban growth threatens the border of the fields. Because the great majority of the studied cases are in an urban area, their surroundings are generally housing buildings and public spaces (Fig. 3.b). One notable point to underline is the presence of parking lots found in half of the cases, which are often the ones in the worst state of conservation. Indeed, these spontaneous parking lots are frequently dirty and anarchic, and thus degrade the quality of the alquería's environment and its overall value.

3.4. Integration analysis

This last part focuses on use integration, height integration, spaciousness, urban fabric integration, ground level integration, accessibility, contemporary intervention integration on the heritage, and finally global state of integration.

The use of a heritage building is a critical aspect to ensure its good integration to the

neighborhood, and thus, its good conservation. The assignment of the "use integration" quality (same use, compatible use, contrasting use, incompatible use) was established based on various aspects: the relevance of the new use compared to its past one, the adequacy between the available space and the use, its benefits and perennity for the neighborhood. Thus, the alquerías with an "incompatible use" are those which are abandoned: their past productive activities have become obsolete, or spaces no longer offer the necessary functionality of today's lifestyle. A building without any use does not have a bright future, because it is seen as a useless stain in its environment. The alquería Visquet and alquería Montañana are used as familial second house, and thus look abandoned most of the time. Because they are located in the middle of a public space surrounding by high housing buildings, they lack some privacy. Their private use is in a way contrasting to what the neighborhood could need as public services. The cases of compatible use are hopefully numerous (44%). They are often the public alquerías owned by the municipality, which combine the protection of the heritage and the implementation of public services.

The results about height integration (Fig. 4.a) show that most of the adjacent or nearby buildings have the same height as the alquerías or are drastically higher (a difference of 4 floors or more in 40% of the cases). None are slightly

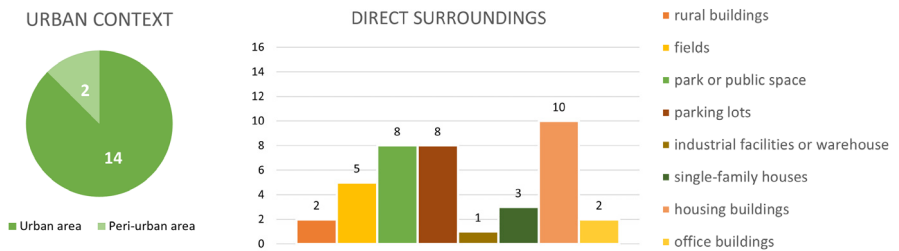


Figure 3. a) Graph of the urban context; b) Histogram of the types of surroundings encountered. Source: (Gosselin 2022)

higher (a difference of 1 to 3 more floors). This huge difference of height points out the oppressive ambient that many alquerías suffer from.

The height of the adjacent buildings plays a great role in the impression of spaciousness of the alquería's environment. Though, it is not the only criteria to spaciousness: the distance between the alquería and the other buildings is also taken into consideration and could explain why some cases are in a rather intermediate ambient instead of an oppressive one. However, a spacious ambient is not always considered as a positive point: some alquerías are just lost in the middle of an urban wasteland, such as the alquería de Falcó, and thus lack integration into the urban fabric.

The assignment of the "urban fabric integration quality" (Fig. 4.b) was established based on the streets and buildings' layout in regards to the alquería's layout. In fact, the urban fabric that has formed around the existing alquerías does not always contemplate a transition to the orientation and alignments of the original building, which shows a lack of consideration for this rural built heritage that was supposed to disappear soon. The most obvious example of a poor urban fabric integration is the group of alquerías in Olba street (Fig. 4.c): the 1970's high housing buildings have been built in a 45° angle with the original Olba street alignment (probably because there was no intention to preserve these buildings). The surface

area of the built elements is also one of the aspects that define the urban fabric: most of the alquerías appear to be really small and isolated compared to the large adjacent sets of housing buildings.

More than half of the studied alquerías has a slightly sunken ground level. This could be explained easily: the alquerías are ancient rural buildings, whereas the urban space that has been built around them gained throughout the centuries several layers of backfill, asphalt, etc. This difference of level can create a feeling of being left out in the middle of its context, even more if the exteriors have not been properly designed to create a link between the alquería and the street.

Only 13% of the cases are assigned with a "poor" accessibility, meaning that they have impassable or undeveloped pedestrian paths, often with a steep slope and gravels. The cases judged as "intermediate" could have better accessibility: they are lacking a ramp or are quite far from the public space, such as the alquería de Serra and the alquería de Farinós which are private and in a peri-urban area. The level of accessibility is often related to the type of property, public or private. Indeed, in a public building, good accessibility is needed for everybody including disabled people, thus it requires the addition of ramps and lifts, that can sometimes however impact the original architecture of the building, like the case of alquería de Albors, where the glass lift disfigures the back facade of the old alquería.

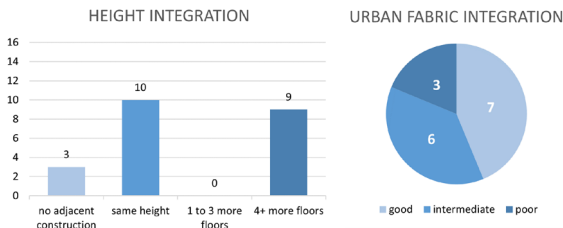


Figure 4. a) Histogram of height integration; b) Graph of urban fabric integration; c) Picture of the alquerías in Olba street. Source: (Gosselin 2022)

Out of the 14 cases which have undergone some kind of contemporary intervention, only one is considered “very respectful” to the heritage: the rehabilitation of the alquería de Barrinto, designed by architect and alquería expert Miguel del Rey who insisted on showing the building’s history marked into its walls. The “intermediate” cases are those where the contemporary intervention is not well integrated to the heritage building or is not respectful enough. It is often difficult to distinguish the old from the new. The history of the alquería is hard to guess by just looking at its walls (e.g. smooth facade coatings hide the texture of the original brick and stone walls). Finally, the “invasive” cases do not respect the integrity of the building, by only rehabilitating the part of the building visible from the street in the case of alquería de Alhors, or by affecting the building’s conservation in the case of alquería de Solache (the added low wall is causing rising dampness in the facade).

The evaluation of the global state of integration of the alquerías is based on different aspects of the analysis, including the state of conservation and all the previous sub-criteria of integration (use compatibility, height of the adjacent buildings, urban fabric integration, accessibility...). It acts as a synthesis of the integration analysis. We sadly notice that 1/5 of the studied alquerías are abandoned or in a state of ruin (Falcó, de la Torre, and de Serra), and more than one quarter

is absorbed, meaning that their presence is unexpected in the urban context. Hopefully, half of the cases are in a rather good integration status (adaptation or integration). These are the cases which gather the better points and that could be taken as examples for future integration projects.

4. DISCUSSION

4.1. Synthesis of the results

This analysis allowed us to observe certain facts. First, the state of conservation of the studied alquerías in the chosen urban area is very variable (Fig. 5.a). Even though the great majority of the cases has undergone some contemporary interventions (from basic conservation works to full rehabilitation), the integrity and/or heritage value of the building are not always respected, the work done is not always reversible either, and the conservation of the alquería may be jeopardized unintentionally.

Second, this study shows that the quality of the surroundings and the compatibility of use have also a significant impact on the long-term conservation of the alquerías absorbed by the city growth. Indeed, a correlation has been highlighted between the urban integration quality and the state of conservation.

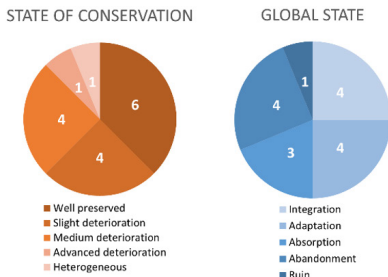


Figure 5. a) Graph of the state of conservation; b) Graph of the global state; c) Picture of the alquería de Barrinto. Source: (Gosselin 2022)

Finally, among the 16 studied cases, 3 alquerías could be considered as particularly endangered (Falcó, Torre, and Serra). These buildings are abandoned or already in ruins (Fig. 5.b). If serious actions are not taken soon, their existence would not be guaranteed. On the opposite, one of the best examples of a well-integrated heritage building is the alquería de Barrinto (Fig. 5.c) which certainly benefits from a privileged setting (a building with high historical and artistic values in the middle of a public park). The intermediate cases, absorbed or adapted into their context, must be monitored as themselves and their surroundings include a specific set of opportunities and threats.

4.2. Recommendations for heritage integration

These observations and findings justify the development of principles to be respected during an intervention project on heritage itself or any urban development project in the surroundings of the specific alquería, which would also be applicable to other heritage buildings.

On the one hand, interventions on the building itself must respect its heritage value (based on its historicity, oldness, aesthetic, and/or usage). Consolidation and reinforcement should prevail over a complete substitution of any structural element. Indeed, it is usual to see cases where the roof, floor slabs, or wood frames have been totally substituted, although they might provide great value. The traditional building techniques should be maintained and reproduced when it is possible, because they are often more sustainable and compatible for the building, as well as being part of the local heritage. For example, the use of traditional lime coatings for the facades allows the building to breathe, alleviating humidity problems, instead of the cement coatings which are counterproductive. The contemporary additions should be identifiable with respect to the old elements, as well as

being the most reversible and minimal as possible. They should not erase or impact the traces of the building's history which have been preserved through the centuries, but rather enhance them. A common mistake observed on the alquerías is the loss of the texture of the original wall sand and lime coating, repaired or hidden under a modern smooth coating with a very different texture.

On the other hand, the urban planning of the surroundings of the heritage building should be designed to integrate it in the best way. When applicable, the new function of the alquería should be useful to the neighborhood, which thus participate to its preservation. Indeed, a private use of an alquería in an urban context can be somehow contrasting and lead the building to degradations and possible abandonment. In the case of the peri-urban alquerías that are jeopardized by urban growth, like the alquerías de Serra and Farinós, it will be necessary to surround them with public spaces to offer them spaciousness and accessibility. The main access to the alquería should be preserved when new buildings are being built around it, and when it is possible, parts of the historic access road could be even conserved (e.g. alquería de Barrinto). Overall, the new urban fabric should be made compatible with the preserved alquería. The volumetry of the new adjacent buildings should not overshadow the small-scale alquería, although real estate developers have the tendency to favor profit and habitat density.

4.3. Limitations

The studied cases constitute only a sample of the alquerías present in these districts, those which are already inventoried and on which there is enough information. The other alquerías not studied in this work may be in even more risky conditions. Therefore, it could be advised to take a step back from the results, as they are not entirely representative of the current situation of the whole city.

Nevertheless, they offer a general insight of the issues. Besides, some of the studied aspects are sometimes non-quantifiable (like the use compatibility, the urban fabric integration quality, etc.), thus their interpretations may be somehow subjective and may be contradicted by someone else, but they are based as much as possible on factual data.

5. CONCLUSIONS

The objective of this research work has been to carry out an assessment on the current urban integration state of the alquerías in four northern districts of Valencia, as means to raise awareness about the conservation issues of the rural heritage when integrated into the urban fabric. By selecting a sample of 16 alquerías in the districts of Benicalap, Rascanya, La Saïdia and Benimaclet, a picture of the state of conservation and integration has been drawn up, as well as giving an overview about the architectural types and history of these local heritage constructions. Then, the collected data has been analyzed through a statistical study, whose results are more or less alarming.

Thus, the contributions of this new study are to extend knowledge on the numerous alquerías of Valencia and the current issues they are facing. The conducting of a general case study enabled to extract some trends that could be useful to identify and treat an endangered heritage building. In the future, this study may in turn be extended to other districts of Valencia or surrounding areas which could constitute the subject of next research works.

REFERENCES

- Ayuntamiento de Valencia. "Revisión simplificada del Plan General de Ordenación Urbana de Valencia (PGOU). Catálogo de Bienes y Espacios Protegidos de naturaleza Rural." Accessed May, 2022. <https://www.valencia.es/ayuntamiento/urbanismo2.nsf/vTramitacionWeb/753561921D4048A4C1257E70003CF04E?OpenDocument&Categoria=>.
- Baró Zarzo, José-Luis, Rosa-María Pastor Villa, and Carme Villar Bosch. *Las alquerías de la seda: Viaje por la arquitectura hortícola valenciana de los siglos XVII y XVIII*. Ciudad de México: III Congreso Internacional Hispanoamericano de Historia de la Construcción, 2019.
- Del Rey Aynat, J. Miguel. *Alqueries. Paisatge i arquitectura en l'horta*. Valencia: Consell Valencià de Cultura, 2002.
- Del Rey Aynat, J. Miguel. *Arquitectura rural valenciana*. Valencia: Museo Valenciano de Etnología (Diputación de Valencia), 2010.
- Generalitat Valenciana. "Inventario general del patrimonio cultural valenciano." Accessed May, 2022. <https://ceice.gva.es/es/web/patrimonio-cultural-y-museos/inventario-general>.
- Generalitat Valenciana. "Plan de Acción Territorial de la Huerta de Valencia (PAT)." Accessed May, 2022. <https://politicaterritorial.gva.es/es/web/planificacion-territorial-e-infraestructura-verde/pat-horta-de-valencia>.
- Gosselin Calvignac, Daphné. *Rural architectural heritage absorbed by urban development: the case of the alquerías in the northern districts of Valencia (Spain)*. Master thesis, Faculté Polytechnique de Mons, 2022.
- Llopis Alonso, Amando, and Luis Perdigón Fernández. *Cartografía histórica de la ciudad de Valencia (1608-1944)*. València: Universitat Politècnica de València, (book & cd-rom), 2010.
- Vegas, Fernando, and Camilla Mileto. *Aprendiendo a Restaurar. Un manual de restauración de la arquitectura tradicional de la Comunidad Valenciana*. Valencia: Generalitat Valenciana, 2011.
- Volle, Antonin. *Conservation of the traditional rural architecture of Valencia (Spain): the alquerías. Study of the urban integration, analysis of uses and proposal for a successful and long-term protection*. Master thesis, Faculté Polytechnique de Mons, 2019.