ADAPTIVE REUSE OF VERNACULAR ARCHITECTURE IN TRANSFORMED LANDSCAPES
THE CASE OF EVICTED VILLAGE OF ISÍN, AT SPANISH PYRENEES

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ABSTRACT

Rural territories in Europe are rapidly changing through local and global phenomena. One urgent issue in many European regions is the depopulation of rural areas and abandonment of villages, which transform -positively or negatively- the cultural landscapes.

In the highly affected area of the Altoaragonese Pyrenees, transformation of territories and emergence of dynamics related to a regenerated natural environment which offers new qualities, have triggered the development of different interventions aiming to recover and reactivate cultural landscapes beyond the nostalgia of the rural.

Among variety of users and proposals developed, this paper focuses in the tourism-related revitalization of Isín. Physical and programmatic transformation through adaptive reuse and their effects in the village and its territory are studied.

This research investigates the interest of the involved agents, the conditions and qualities of the place which enabled its reactivation. It analyses the process of transformation and its consequences on different scales. It assesses the design strategies applied to transform the place and proposes other possible interventions to tackle encountered issues.

Finally, it aims to evaluate and discuss how this type of regeneration projects contribute to preserve valuable cultural landscapes -architectural-cultural heritage and nature-, generating activity and thus becoming a tool to prevent depopulation.

Keywords: Transformation of cultural landscapes; adaptative reuse of vernacular architecture; reactivation of territories in transition; de(re)population; intervention strategies.

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INTRODUCTION: DEPOPULATION, LANDSCAPE TRANSFORMATION AND REACTIVATION INITIATIVES.

Architect-researcher Rem Koolhaas states that limited research has been developed in the recent past on countryside. Rural territories as well as urban areas are rapidly transforming. Increase of urban population has generated two opposite models of rural environment: a highly productive countryside characterized by artificiality and landscape rationalization, and the model of countryside as nature refuge for urban dwellers (Carlow 2016; Koolhaas 2015).

Depopulation of rural territories is an urgent problem triggered by this change, which affects many European regions (EUROSTAT 2018). Beyond issues caused, this new situation offers opportunities to redefine the territories. It requires rethinking rural development, accepting shrinkage to reorient rural policies through more holistic, proactive and place-based strategies consistent with current realities (ESPON 2017). These *terrain vagues* represent depopulated, unproductive, outdated and undefined spaces where past dominates over present, which nevertheless have big value being preserved as vacant (Solá-Morales 1995).

Abandonment of villages is one direct consequence of this phenomenon, being the region of Aragón at Spanish Pyrenees, with more than three hundred cases, one of most affected zones. Besides their remoteness, economic decline or outdate, in Aragonese Pyrenees many villages were evicted due to aggressive territorial policies under Franco regime, to develop water infrastructures and reforestation projects during the 1930s to 1970s, some of which were never realised (Palacios et al.2017). It generated problems: collapse and disappearance of valuable architectural and cultural heritage; disconnectivity of territorial networks; landscape threatens, like forest fires and plagues due to lack of management; and loss of memory, caused by deprivation of emotional meaning of these places (Filipe et al. 2011).

However, abandonment has enabled in the last sixty years regeneration of nature and transformation of territories which had previously been intensively exploited. Improvement of landscape quality in combination with growing interest from urban society in the countryside have triggered the emergence of activities linked to nature (Nogué 2016). In connection to these new dynamics certain recovery initiatives have been developed in depopulated villages, dealing in different ways with past identity and preservation of cultural landscapes. By generating economic and social activity these initiatives can become a tool to reactivate territories and thus prevent depopulation of close shrinking areas.

Within these initiatives, several agents are involved -previous inhabitants, tourists, neo-rurals, or government- each of whom have different interests, conditioning the type of intervention in relation to the opportunities the place offers, and generating conflicts. Recovery projects developed in this area were conceived ad hoc, without a territorial strategy or common criteria (Marín 2018), and therefore studying their effects is needed.

By understanding expectations of users and the impact of different interventions in cultural landscapes in relation to dynamics and opportunities which the territory offer, better tools can be designed to create efficient territorial policies, planning and strategic interventions.

This research paper deepens in some of previously described issues by tackling the specific question: How are reactivation initiatives linked to tourism transforming physically and functionally the depopulated cultural landscapes in the area of Aragonese Pyrenees?

RESEARCH METHODOLOGY

In order to answer this question, the reference case of Isin was selected for detailed analysis according to different parameters. It was a depopulated and ruined village that has been recently revitalized and entirely reconstructed, located in a natural and cultural challenged environment. It has been reactivated through touristic program, related to accommodation, and developed as one entity by a single owner and designer, experiencing a physical transformation where the existing and new structures can be traced.

The research methodology consists of the analysis of gathered through historic sources, reconversion plans and fieldwork, within the framework of spatial and programmatic transformation. Conclusions can be extracted and contrasted with other cases.

The existing consulted sources encompass: literature on the general theory; specific sources from the valley, texts on history and customs; existing cartography, aerial historical pictures and maps since 1956 until now; and information from archives of the designers of the project, such as plans, pictures of the process and texts. An important part of the data is collected through my own fieldwork, by observing and mapping spatial and functional parameters. Social aspects are investigated through narratives of different agents, collected in semi-structured interviews, aimed particularly to each type.

Data is processed, translated and linked to spatial aspects through graphical documents, mainly maps, plans, sections and other spatial representations. The analysis comprises an approach on different scales, from territorial, to urban and architectural extent, making incision in three key moments: the original state, depopulated state and recovered state.

The research output consists of analytical graphical documents, and texts. These synthesis documents investigate the conditions of recovery, transformation process and intervention strategies applied to adapt the village and reactivate it on different scales. Conclusions assess this process, compared to other ongoing initiatives and possibilities detected in the place, identifying lacks and opportunities. It enables to define other opportunities and possible strategies to tackle them more efficiently (Filipe et al. 2011).

TOURISM-RELATED RECOVERY INITIATIVES IN THE ARAGONESE PYRENEES: THE CASE OF ISÍN

Isín is a small village, formed by about twenty little buildings. It is situated in a secondary valley at ten minutes-drive from Sabiñánigo, main town of nine thousand inhabitants. Although its exact year of foundation is unknown, texts mention the existence of the village since the 15th century (Acín 2006). Isín was depulated in 1966 and sold to National Forestry Department, which developed a reforestation project there (Cheauvalier 1990).

The area suffered a process of degradation until 1998, when Benito Ardid Foundation -which works for disabled users- initiated a reactivation project in this village. Their aim was to develop an accessible leisure centre -formed by accommodation, activity and cultural spaces- enabling handicapped users to realise different activities within this qualitative cultural and natural environment, in close distance to other potential touristic spots. The project was commissioned to CAB Arquitectura, a local architecture firm.

Reactivation conditions

Selecting a suitable location in function of the type of users and the new program is one of first intervention strategies applied in the project. Certain administrative, location and physical conditions found in Isín enabled and determined the reactivation of this place.

Access to land ownership made the project administratively and economically feasible. The Government of Aragón offered a temporary concession of several abandoned villages of their property to be recovered, allowing to develop a project for the entire village.

Due to the program and users, the searched location needed to be in a secluded place, yet in proximity to a main town which could provide basic services. The aim of combining the activities developed in the village with other touristic attractions demanded nearness to them. Accessibility and development of infrastructures often represents a big investment which hinders the reactivation of isolated villages in mountain regions. The location of Isín at just two hundred metres from a paved road facilitated its access. The new projected program location required high landscape- and environmental value (IGA 2015): a forested and quiet area to interact with nature, views to landscape and favourable orientation.

Concerning physical conditions, the state of preservation determines possibility to reuse existing elements, capacity to read and understand how the village was, and the architectural value of the elements which have remained until today. In Isín, despite the long period of abandonment, many building elements were still recognizable and could be repaired and reused. Urban morphology conditions the capacity of adaptation of the previous place to new functions, determining how much its appearance might change. In this case having variety of size on existing volumes enabled to adapt the program and reuse them, respecting the original urban trace. The size of Isín is suitable to host all the uses, fragmented in phases. The architectural value of the village resided in the authenticity of vernacular construction and quality of craftmanship in the techniques used (Acín 2006).
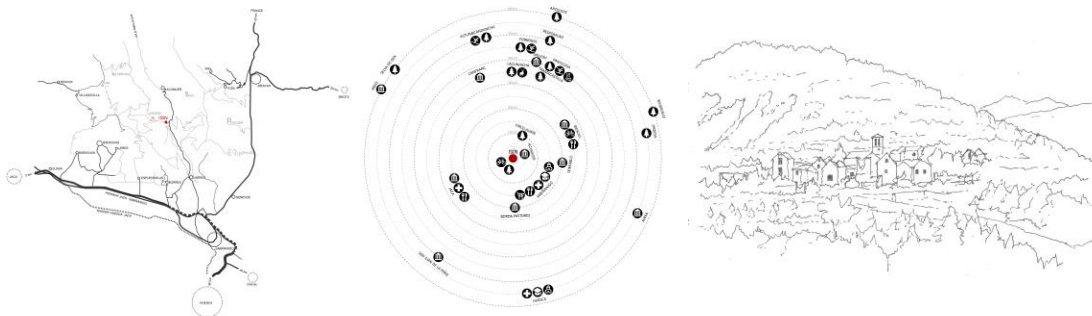

Figure 1.1: Infrastructural network.   Figure 1.2: Territorial links.   Figure 1.3: Landscape features (Galan I. 2019)

Transformation process: territorial scale

The recovery of depopulated areas through new uses implies a physical and programmatic transformation, modifying places and their significance for different agents (Rossi 1982).

In a territorial scale, during the last sixty years this region experienced big changes, from a pre-industrial agricultural territory, through the process of depopulation and the recent initiatives of reactivation based on recreational use, transforming villages and landscapes.

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Transportation networks have been developed, improving mobility and reinforcing linking axes between inhabited settlements and touristic interest places, but neglecting other routes connecting to depopulated areas. Access to services and commuting is facilitated, making less functions needed in the village than in the past. Interrelations between villages and their self-sufficiency have been weakened, being strongly dependent from Sabiñánigo. However reactivation of Isín provides new services to neighbours of Acumuer, generating jobs, economic support and social interaction for the area.

The territorial border of the village today is not the same than before the abandonment. At that time the territorial extension and interaction was much vaster due to huge amount of agricultural lands which needed to be farmed around. The intensively exploited landscape of cultivation terraces transformed during next decades into forest through natural regeneration and reforestation (García et al. 2018). New paths were opened to maintain the environment, which together with existing ones and due to the improvement of landscape natural qualities, enable to visitors of Isín and other users the development of other recreational activities such as hiking and mountain-biking.

However, the use of the landscape and its relation with the village is still mainly visual and quite limited and could benefit more from the opportunities and natural resources that the territory offers, developing other activities, reusing old abandoned paths, terraces or water infrastructure. The natural connection through the valley of Bolás to the area of Garcipollera and Sobremonte on the other side could be potentially reinforced, linking it to other main routes already in use. Finally, the possibility that accommodation offers in relation to other touristic-related interventions, of providing proximity and time to enjoy, should trigger different kinds of contact with its environment, relating its program even more to landscape. These strategies could give a higher autonomy to Isín and would help to manage and maintain more actively the landscape, taking advantage out of its opportunities sustainably.
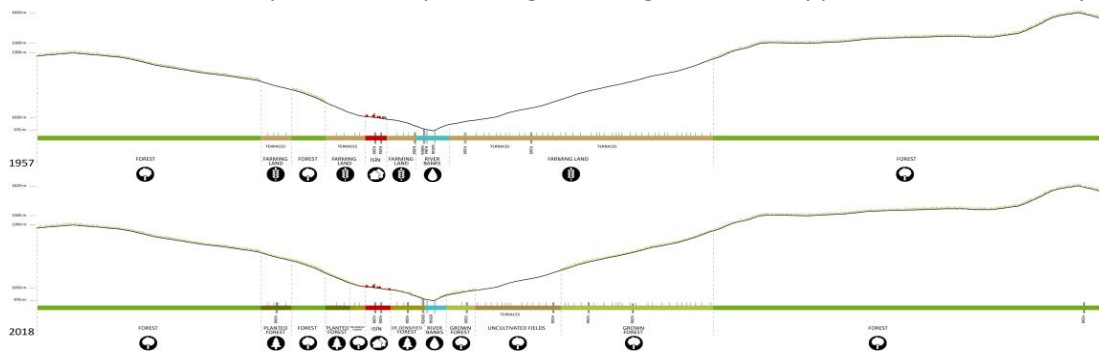

Figure 2: Territorial section of Isín's valley. 1957-2018. (Galan I. 2019)

Transformation process: urban scale

Different changes have occurred in its urban structure. After depopulated, fields around the village were reforested, and streets and buildings were invaded by nature. Since the ruins were quite visible, their position could be identified through remaining walls which resisted. Due to lack of existing cartography, CAB Arquitectura established a system to access the village and map physically the remaining constructions and places progressively, identifying main block contours, urban voids and circulation axes, and recomposing volumetrically the previous state, in order to understand the urban configuration and its functions.

The main original urban structure, formed by two main streets parallel to the topography and linked by secondary perpendicular streets, has been preserved. At the time of its abandonment, Isín presented different architectural typologies, from compact residential buildings in its centre to rather isolated simple agricultural volumes related to surrounding farming fields. This diversity of typologies and flexible urban structure enabled CAB Arquitectura to adapt most of the program to the existing volumetry of the village and to divide it into phases. New accommodations were located in the housing buildings, big events space is hosted in the church, and isolated agricultural constructions have service functions. Free spaces corresponding to entrance yards of houses or orchards became collective activity squares, and existing traces of the streets remained circulation spaces. Agriculture fields next to the village have recreational or logistic use. A new entry road is defined, reusing partly the previous earth path, preserving the original view and access.

In some cases where different buildings were attached it was possible to combine them to fit functions which required bigger spaces. Part of the program is also fragmented between different isolated volumes, connected through a set of exterior public and collective spaces. Few new buildings were built to host larger spaces, altering the original image and scale. Other architectural remains corresponding to further phases and which were not being built immediately were dismantled due to danger of collapse.

Programmatically, the tourism-oriented monofunctionality of the program leads to problems like periods of inactivity and lack of social interaction between different kinds of users. Involvement of previous inhabitants and neo-rurals could create mixicity, stronger community feeling and belonging sense, new functions and emergence of other productive activities linked to the territory, benefiting the place and visitors. This could provide other services to be more self-sufficient and activate a circular economy. It also helps to maintain the village and to spread cultural tradition.
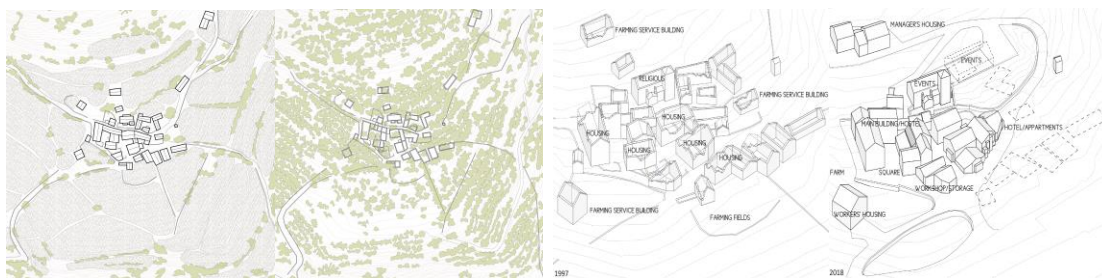

Figure 3.1: Urban Transformation, 1957-2018.   Figure 3.2: Volumetric-programmatic adaptation (Galan I. 2019)

Transformation process: architectural scale

From architecture perspective, the most valuable architectural elements, which define the spatial identity of the representative spaces, were identified and registered to be incorporated in the new design. The proposed program was adapted to the spatial possibilities and limitations. Most of the buildings have changed interiorly, combining or splitting buildings and redefining building typologies. However the original exterior volumetric image of the village was kept, adding new elements only where needed and differentiating them clearly from the existing ones through its form and materiality, but being in any case integrated in the local architectural logic.

Nevertheless, since many volumes had to be almost reconstructed, the topic of authenticity and the intervention method in relation with the memory of the place can be debated. Although a big part of the quality of Isín resided in the remaining elements preserved, especially for old inhabitants, their integration in the reinterpreted program is compatible and beneficial for both, previous users and new visitors, who can (re)experience this place.

Many of the singular exterior spaces, retrieve the original image which this place would have, but in another context and program. According to the previous inhabitants of Isín, *"it is still possible to identify and retrieve the memory of their houses and spaces as it used to be while visiting their village"*, which today has a new life.
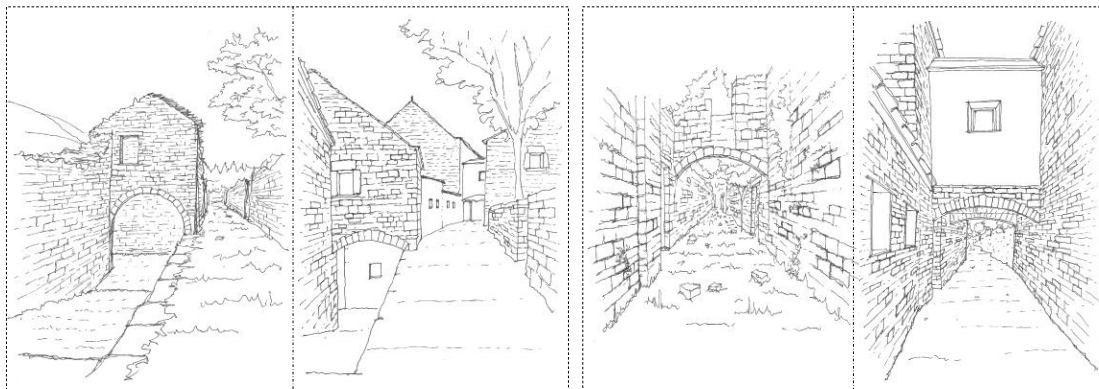

Figure 4: Spatial transformation. 1998-2018. (Galan I. 2019)

CONCLUSION AND DISCUSSION

The study of Isín shows that in this case adaptive reuse, through the transformation method followed, serves as a tool to reactivate space and preserve heritage. The ruins are understood not only as buildings to be reconstructed, but as an interesting conglomerate of internal and external spaces, which can host new activities and establish different relations with its transformed cultural landscape.

Depopulated villages at Pyrenees show a high resilience, adjusting to change of conditions and allowing to be reused. Vernacular architecture found in this area enables to host different programs and redefine its typology while preserving the structure and volume.

Certain inactivity periods and economic threats are detected. Maintenance costs are high, in relation to monofunctional touristic use, often seasonal, being part of the year less active. These type of projects focus mainly on the reconstruction of the village, missing territorial opportunities. Strategies which aim for an interaction of with the landscape and the territory need to be researched. Reactivation of villages is not possible without an active territory.

Still one weakness to be solved is that a large intervention is needed in these type of projects to make ruined villages and landscapes inhabitable again. Due to the state of preservation and new comfort conditions required, great investment must be made to clean and restore some parts, and to build new elements. Finding funding is one of the most complex tasks, making it difficult to replicate many of these experiences.

Another important aspect is the issue of memory and the impact this transformation has for involved agents, such as old inhabitants of the village or of the larger cultural landscape. Depending how respectful the intervention is with the original state, it might change their perception and interest about it, due to the emotional meaning that the place has for them. This relates to the issue of authenticity, heritage preservation and the intervention method used, which vary depending on the program and the interest of the involved agents. Other ownership conflicts might occur in case other stakeholders want to take part of it.

Territorial planning and a broader comprehension of the zone is needed to mediate between the possibilities of the area and the potential users in relation with other ongoing dynamics with a coordinated and integrative vision. The combination with other users and programs could complement each other and provide opportunities to face some of previously discussed issues. Condition of self-sufficiency in disperse developments avoiding conventional sources and networks, reusing more elements or alternative construction systems -prefabricated, modular or mobile- need to be investigated. These strategies could make the intervention economically, socially and environmentally more sustainable.

Tourism-related initiatives, through valorisation of cultural landscapes and recovery of vernacular heritage, in combination with other programs and considering ongoing territorial dynamics can create a benefit for its territory. Development of this study-case provides new insights, helping to understand transformation of depopulated villages through tourism and their effects, enabling to adapt strategies and propose innovative solutions which could be applied in other cases and learn from them.

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