Abandoned buildings and land in the city: venues for urban redevelopment and regeneration

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Abstract

Abandoned buildings and property is a common plight that urban centers face. A field research carried out in the CBD of Lamia, a typical Greek medium-sized town, recorded 60 abandoned buildings. Of these, 18.5\% were part of the designated built heritage, 27.7\% were classified as high risk of collapse, 21.7\% of medium risk of collapse, 38.5\% with extensive signs of abandonment in their facades, 15\% functionally abandoned (incomplete constructions), while 20\% were recorded as dangerous to the public health. The paper suggests that apart from the negative side, under certain conditions abandoned buildings and land can serve as venues for urban development and regeneration, offering a series of opportunities to the cities for growth, competitiveness and urban innovation.

Keywords: abandoned buildings; abandoned land; urban regeneration; urban development; Lamia (Greece)

1. Introduction: abandoned property in the city

Abandoned buildings and land in urban areas is a common plight worldwide; therefore it has been the subject of considerable research at an international level (Accordino and Johnson, 2000; Kohler and Hassler, 2002; Myers and Pratt, 2003; Mallach, 2006; Nefs, 2006; Han, 2014). Usually, abandonment has been viewed as an indicator of real estate market failure, as a symptom of urban disinvestment, whilst in some cases it is seen as the result of urban shrinking and the end of an area’s life-cycle (Accordino and Johnson, 2000; Mallach, 2006; Gospodini, 2012).

According to the existing literature, abandoned buildings and land in a city are responsible for: increasing crime rates (drug use, prostitution, etc.) (Baldwin and Bottoms, 1976; Curtis, 1987; Skogan, 1990; Spelman, 1993); increasing danger for public health and safety (collapsing parts of buildings, fires, etc.) (Mallach, 2006); depressing nearby property values (Keenan, Lowe and Spencer, 1999; Shlay and Whitman, 2006; Griswold and Norris, 2007; Harding, Rosenblatt and Yao, 2009; Han, 2014); generating low property taxes; increasing costs for local governments (to secure, inspect, provide additional police and fire services, etc.) (Goetz et al, 1998; Bruhns, 2000). In other words, abandoned buildings and land in the city contribute to the downgrade of the quality of life, creating an unattractive urban environment for the citizens and visitors, as well as for future investors.

However, apart from this negative side, under certain conditions abandoned buildings and land can serve as venues for urban development and regeneration, offering a series of opportunities to the cities for growth,
competitiveness and urban innovation (Sym, 1999; Myers and Wyatt, 2003; Mallach, 2006; Gospodini, 2012). At the same time, another reason for addressing abandonment in the city and for giving it high priority in local agendas (European Union, 2001; Myers and Wyatt, 2004), is that such derelict, impaired and underused property is directly related to the urban morphology. Indeed, if estimations made by the World Bank (2002) are confirmed and 80% of the population lives in cities by 2030, then local Authorities will certainly have to take a clear stand on the management of abandoned property (Kohler and Hassler, 2002): Would it be better to demolish abandoned property for the creation of new green space and lower densities in the city, or would it be better to re-use it in order to keep a city compact? It goes without saying that if edifices are not re-used, new buildings will have to be constructed, resulting in urban sprawl.

Given the above context, the present paper discusses issues related to abandoned buildings and land located in cities, focusing on their possible role to become venues for urban regeneration and development. This is especially discussed through the case of Lamia - a Greek medium-sized city – for which an original research was conducted. The research regarded a thorough analysis and recording of abandoned buildings located in the CBD (Central Business District) of Lamia. The ultimate scope of the paper is to provide insight on the Greek reality regarding the abandonment of buildings and land in the cities, as well as to discuss possible solutions for tackling impaired, underused and derelict properties, to the benefit of quality of life in the city centers.

2. The methodology of the research and criteria for the selection of the study area

Having as the key objective the identification of the degree of abandonment in the CBD of Lamia, the research methodology included the completion of a special Inventory that was created especially for the purposes of this survey. The Inventory aimed at selecting key information on the existing abandoned buildings in the CBD, such as: the type of the abandoned building, the size, the previous use, the location, the type and volume of the abandonment, the hazards and threats to public health and safety, the cultural value of the abandoned properties, their ownership status, etc.

The completion of the Inventory was based both on field work as well as on desk work. Regarding the desk work, it aimed at collecting information on the cultural value and designations related to the abandoned buildings, their ownership status, as well as the existence of Administrative Decisions or Protocols for their demolition (in case they faced high risk of collapse). Regarding the field work, it took place from October 2016 until February 2017. Field work included the scanning and surveying of the greatest part of the CBD of the city of Lamia (see Map 1) in order to record issues related to the type and volume of abandonment, the location of abandoned buildings, as well as regarding the threats for the public health and safety. During the field work, an invaluable album of photo documents was created, including a thorough and clear snapshot of the contemporary abandoned buildings in the CBD of Lamia.

The research regarding the abandonment in the city of Lamia was carried out in the framework of a Degree thesis, entitled "Abandoned Buildings: Recording and Rehabilitation Proposals in the Historic Center of Lamia", for the Postgraduate Program "Urban Development and Regeneration" of the Department of Planning and Regional Development (Eng.) of the University of Thessaly. The research was funded by the Municipality of Lamia and its Mayor, Mr. Nikolaos Stavroyannis. The topic of the research was of great importance to the Municipal Authority, given that in the recent past, abandonment of buildings in the CBD of Lamia – and especially in the historic neighborhood of Laou Square - resulted in the outbreak of a set of fires (in March and July 2016 and in March 2017), that put in danger both residents and properties.

Given the above facts, the study area of the research included not only this specific part of the city but the greatest part of the CBD of Lamia, in order to get a clearer view of the volume and type of abandonment in the city.
shown in Map 1, the study area is located in the heart of Lamia (geographical center), covering its business district as well as its Historical Center (designated for the first time in the Master Plan of 2012).

Map 1: The study area in Lamia

Source: Kakana, 2018

3. Abandonment in the CBD of Lamia

3.1. Key facts on the city of Lamia and the study area

The city of Lamia today is an important administrative center (capital of the Central Greece Region) located in the heart of the national territory occupying part of the Sperchios basin and the Maliakos Gulf. According to the latest Census (2011), Lamia has a population of 51,559 inhabitants and a density of more than 500 inhabitants per km². The Functional Urban Area (FUA) of Lamia is medium-sized, serving a population of more than 100,000 inhabitants and hosting a great variety of interregional, regional and intraregional administrative functions, social structures and other important facilities.

Long the commercial and administrative center of the Central Greece Region, Lamia has an economy mainly based on the tertiary sector and less on the primary sector. According to the 2011 census, the economically active population of Lamia was 21,358 people (41% of the total population). Among them, 17,157 were employed and 4,201 were unemployed. The vast majority (78.64%) were employed in the tertiary sector (especially in administrative positions, trade, services, etc.), 17.91% were employed in the secondary sector (product industry, construction industry, etc.), while in the primary sector (agriculture, etc.) the figure was 3.46%.

Lamia’s urban tissue spreads between the Kastro hill (Medieval Castle) and the hill of St. Lucas, and then to the north and south (where inclination is smoother). The first Urban Plan of Lamia dates back to 1836, whilst since then a series of revisions have been made. In its recent history the city has widely spread, especially in the 1960s and 1980s, when the revisions of Urban Plans authorized the expansion of the city and allowed the construction of
higher buildings (especially in the core parts of Lamia). Today, the spatial organization and the building regulations for the city are defined by the Government Gazette 346 of 2012, which constitutes the latest Urban Plan of the city. Regarding the existing building stock of the city (see Table 1), out of the 11,848 existing buildings, 412 were constructed before WW II (3.5%) and 58 were built before 1919. Regarding their use, 9,507 buildings (80.2%) are residential, while 463 buildings have a non-residential use (mainly office buildings).

### Table 1: The building stock of Lamia per decade of construction

<table>
<thead>
<tr>
<th>Period of construction of buildings</th>
<th>Total buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1919</td>
<td>58</td>
</tr>
<tr>
<td>1919 – 1945</td>
<td>354</td>
</tr>
<tr>
<td>1946 – 1960</td>
<td>1,649</td>
</tr>
<tr>
<td>1961 – 1970</td>
<td>1,880</td>
</tr>
<tr>
<td>1971 – 1980</td>
<td>2,286</td>
</tr>
<tr>
<td>1981 – 1985</td>
<td>1,330</td>
</tr>
<tr>
<td>1986 – 1990</td>
<td>884</td>
</tr>
<tr>
<td>1991 – 1995</td>
<td>888</td>
</tr>
<tr>
<td>1996 – 2000</td>
<td>870</td>
</tr>
<tr>
<td>2001 - 2005</td>
<td>854</td>
</tr>
<tr>
<td>2006 - 2011</td>
<td>631</td>
</tr>
<tr>
<td>Under construction</td>
<td>164</td>
</tr>
</tbody>
</table>


In conclusion, Lamia is a typical medium-sized Greek city, where the spatial organization and development visualized by most revisions of Urban Plans were based on continuous expansions of the urban tissue and on the construction of new buildings (instead of reusing the old and historical ones), whenever there was a need to host new populations. This choice, however, has certainly had various effects (positive and negative) on the morphology of the city (resulting in urban sprawl, etc.), as well as on the volume of abandonment of both old and newer buildings.

### 3.2. The results of the survey

As mentioned in previous sections, the study area is located in the heart of Lamia, which is the densest part of the city, where spatial regulations permit higher constructions and buildings. Being the central and most traditional part of the city, the study area is known for its rich built heritage; there are 40 buildings under protection either by the Ministry of Culture and/or by the Ministry for the Environment. Regarding the use of buildings, with the exception of very few blocks, the study area is the key business district, also hosting the main administrative functions and edifices. In the perimeter of the Kastro Hill, however, residential use prevails.

Within this area, the field research conducted recorded sixty (60) abandoned buildings, i.e. approximately 8.5% of the existing building stock (see Map 2). Regarding the degree of abandonment, it varied considerably (from light abandonment to complete ruins), as did the age of the abandoned buildings. Some of them were built in the late 19th century, whilst some others constituted incomplete constructions of the early 21st century.

Regarding the dispersion of these buildings, most of them were found all over the study area, with the exception of the area in the foothills of Kastro Hill, where a cluster of sixteen (16) abandoned buildings was identified. This specific part constitutes one of the oldest neighborhoods of the city (where the Christians used to live during the Ottoman rule) with a peculiar urban morphology: streets are very narrow, they have great inclination, therefore stairs/escalades are often used. As a result of this morphology, inhabitance and restoration of buildings found in this part of the city can be quite unaffordable (as well as meaningless); as a result abandonment rates are very high.
Regarding the historical value of these buildings, it is worth noting that eleven (11) of the abandoned buildings (18.5%) are part of the built heritage of the town; thus, they are under protection. This oxymoron however (having abandoned buildings under protection status), should come as no surprise. In the recent past (just before the year 2017), many buildings that were identified as of great historical importance by the study made for the latest revision of Lamia’s Urban Plan, eventually faced high risk of collapse and they were finally demolished after Decision of the local Authority. Today, among the 11 abandoned buildings with historical value that were found in the CBD of Lamia, one (1) is classified as of high risk to collapse, whilst two (2) are identified as dangerous to the public health (due to garbage concentration, etc.).

Map 2: The abandoned buildings in the CBD of Lamia (research year 2017)

As regards the degree and the type of abandonment, out of a total of sixty (60) abandoned buildings recorded in the CBD of Lamia, twenty three (23) were found with extensive signs of dereliction in their facades, thirteen (13) of them faced medium risk of collapse (but they could be restored), whilst sixteen (16) of them faced high risk of collapse (restoration was quite impossible and for safety reasons the buildings would best be demolished). Finally, regarding functional abandonment, nine (9) buildings in the study area constituted incomplete constructions (mainly in the floors beyond the ground level).

Regarding the dangers deriving from existing abandoned buildings, twelve (12) cases out of sixty (60) in total were recorded as dangerous to the public health (they were sites that attracted illegal activities, as well as trash disposal, rodents, etc). Finally, regarding the ownership status, it is worth noting that all abandoned buildings found in the CBD of Lamia were private property. This was not surprising, given the fact that the ongoing recession in Greece has
resulted in a great inability for owners to keep their property in good condition. Another reason for abandoning buildings in Lamia is the fact that too many properties have more than 2 owners (inheritance rights), which makes it more difficult to reach a common decision for the best management of their common property.

In conclusion, according to the research conducted in 2017, abandonment in the CBD of Lamia was quite extensive. However, since abandonment is a non-static phenomenon, this condition may easily change and worsen, if no actions are taken in order to raise the interest of owners of abandoned buildings and to involve the local Authorities that have jurisdiction over urban regeneration and development matters.

4. Conclusion and discussion

The abandonment of buildings and land in the city is a very common and multidimensional phenomenon. Abandoned property is directly associated with the quality of life and the urban morphology (compact cities vs urban sprawl), since non-reuse of impaired property results in a need for additional constructions in new parts of the city. Apart from this spatial dimension, abandoned buildings are also associated with the public health and safety of citizens, as well as with the real estate market: on the one hand, abandoned buildings negatively affect the value of surrounding properties, while on the other hand, abandoned buildings may be the result of real estate failures and changes of this market. For all the above reasons, management of abandoned buildings should primarily be a public affair and concern (to ensure security, quality of life, but also proper functioning of the real estate market) and then a private affair and matter (including initiatives for rehabilitation by the private sector).

In the case of Lamia, the research conducted revealed that the number of abandoned buildings found in the CBD of the city is important and it cannot be neglected. The research also revealed that quite a number of abandoned buildings were of historical importance to the city (and they were under state protection), whilst the area of the CBD that faced extensive abandonment was the most historical part of the city. In some cases though, abandonment regarded incomplete constructions (mainly in floors beyond the ground level).

However, even if discouraging, abandonment in Lamia could also have a positive side. Under certain conditions abandoned properties in the CBD of Lamia can serve as venues for urban development and regeneration, offering a series of opportunities for growth, competitiveness and urban innovation. Having this objective, the following proposals are made:

- Priority should be given by the local Authorities to the buildings that are dangerous to the public health and safety. These are buildings that face high risk of collapse or that constitute focal points for illegal activities (drug use, etc.) and rubbish disposal. These properties must either be demolished or be the subject of special initiatives in order to re-establish safety and security conditions.

- Priority should also be given to the rehabilitation of the abandoned buildings that constitute built heritage and might - or might not - be under protection. Apart from providing incentives to their owners (to restore their property), local Authorities should also examine the option of expropriation, in order to better protect and to make better use of these properties, especially for the hosting of public services, cultural industries, etc.

- Local Authorities should also consider the option of using the part of the study area with the highest concentration of abandoned buildings (north of Laou Square) as a venue for urban regeneration. In this case, selected abandoned buildings should be expropriated and demolished in order to achieve upgrade of the urban green, or to promote other urban innovation projects (such as bioclimatic designs, etc.).
In conclusion, it is worth noting that management of abandoned buildings is quite a complex issue; thus, it is not easy to address. Usually, abandoned properties are private (with specific ownership - and other legal – rights), whilst re-use (or expropriation) of abandoned buildings may be a choice of extremely high cost. Therefore, it is important that competent Authorities proactively act, before a building or a property becomes irreversibly abandoned. Besides, property abandonment and dereliction is a non-static phenomenon. It takes time to evolve; therefore, it can be reversed under certain conditions, and especially if local Authorities and private owners effectively collaborate for this purpose, to the benefit of all sides.

References


