Sustainable urban planning interventions in the historical center of the Greek town of Kalavryta

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ARTICLE INFO

Abstract

This paper presents a case study, still in progress in the Greek town of Kalavryta, where modern methods of urban planning interventions are applied to the historical center, in order to lead towards sustainable development. The choice of the particular town was made because of the new requirements that emerged as quite recently Kalavryta was appointed as the capital of a new large municipality. The history, the position and the character of the town, as well as the needs and prospects of its residents, are some of the factors that should be taken into consideration. The proposed interventions are based on three axes: Urban planning, Public utility networks and Architecture - all sharing as common objectives the improvement of the town image and the support towards its sustainable development. Some of the solutions applied are the modification of the building restrictions, traffic arrangements, pedestrianizations, public utility network improvement, architectural interventions and overall redevelopment of the historical center. All the above also contribute to make the historical center friendlier to the pedestrians. With a large part of the project already implemented, creation of high-quality public spaces, sustainable improvement of the natural and built environment as well as enhancement of the local economy have been achieved.

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1. Introduction

Located in the mountainous region of the Prefecture of Achaia in northern Peloponnese, Greece, on the right bank of Vouraikos river, Kalavryta (Καλαφρύτα) is a picturesque town frequented by people all over the year. Its lush vegetation and breathtaking views make it a place of exquisite natural beauty. River water, mountains, caves with unique rock formations and forests are some of the Nature's elements for the surrounding area to show. The town has also been closely associated with major historical events of a key role to the history of Greece. In 1821 it served as the birthplace of the Great War of Independence and later on, in 1943 (during World War II) it became the place where the Massacre (Holocaust) of Kalavryta by the german occupying forces took place. In the past, the local residents depended mainly on agriculture and stock-breeding for bread-winning. Everyday life conditions were hard since in the winter, the area is hit by adverse weather conditions and heavy snowfall occasionally disconnects it from other major cities in the vicinity. Thus, transportation is made difficult and gradually the local population saw a remarkable decline of −8.8% through the decades 1971−1991 (according to the Hellenic Statistical Authority, www.statistics.gr). The opening of a ski-center on the nearby mountains, gave the area a face lift in the late '80s. It reshaped the social, commercial and economic nature of the town by establishing Kalavryta as a tourist destination for winter sports lovers. It propelled the opening of positions in the tourist industry and services, with hotels, restaurants, cafeterias and rental rooms making an appearance, and thus, providing more jobs prospects for the local residents. Consequently, the town started urbanizing (Li, Wang, Wuzhati, & Wen, 2016) with many visitors either buying or building a country house in the area, resulting in the expansion of the settlement. However, further increases in developed area, have significant implications for landscape and urban planning. The management of urban growth and protection of open space became the subject of extended research (Bengston, Fletcher, & Nelson, 2004; Brander & Koetse, 2011; Thompson, 2002) as policy makers must estimate the future effects of their decisions (Aig, Kline, & Lichtenstein, 2004; Wei, Huang, Lam, & Yuan, 2015).

Gradually, Kalavryta faced a need for “Development”. This development would primarily accommodate the current needs of the town. Development that lasts through time is “Sustainable development” (Williams, 2000) and achieves the above with...
respect for the environment and its natural resources. Even though the definition of a sustainable city is highly contested (Chiesura, 2004; Childers, Pickett, Grove, Ogden, & Whitmer, 2014), no one can deny that this has to do with people’s well-being. Well-being, however, does not only mean attractive cities. It involves the right to decent housing, job and food, education, health and welfare, reducing energy consumption, natural resources conservation, environmental quality and protection, etc. (Theodoridou, Papadopoulos, & Hegger, 2012). All these affect human’s health as well (Jackson, 2003). At this point planners, designers and engineers of almost all specialties step in to provide their expertise towards materializing the common goal (Fig. 1). And from this point of view, the primary goal is to make the urban areas more self-sufficient, sustainable, and enjoyable places to live in.

With the implementation of the “Kallikrates Program” (New Architecture of Government and Decentralized Administration, Law 3852/2010), which reformed the administrative division of Greece in 2011 and redefined the boundaries of local and regional units, Kalavryta attracted public attention once again because it was appointed as the capital of a new large municipality. This new municipality (Fig. 2) was created by joining four neighboring municipalities with total land area 1.065,5 km² and a population of 11.045 residents (of which 1.674 in the town of Kalavryta) according to the 2011 Census. With this change, new needs and new perspectives were created. The new perspectives involved further growth, tourism, cultural prospects, recreation, research - technology and services, upgrading and promoting the rich natural and cultural surrounding but also made it impending for Kalavryta to face the new challenges and adjust to the conditions that will lead to sustainable development. Thus, the appropriate interventions need to be undertaken.

“Kalavryta’s Historical Center Redevelopment” is the general title of a series of projects targeting the improvement of the town image with the view to facilitating the lives of the local residents and accommodating efficiently the large number of visitors. In order for the local authorities to materialize all this, numerous of projects and studies have been conducting for over ten years now. Many of these projects have already been completed, some others are under construction and there is much more to be done to achieve the objective. All these studies take into consideration that the strategic approach for planning sustainable cities is “ecological planning” (Yigitcanlar & Dizdaroglu, 2015). According to Cadenasso and Pickett (2008), cities are ecosystems, heterogeneous, dynamic, whose human and biophysical components interact, and biophysical processes remain important to them.

The proposed intervention area falls into the category of “Historic city centers” as an area that formed the original core of central functions of the town and in addition has a traditional character, in the sense of the existence of preserved architectural structures, important buildings and monuments as well as shopping center...
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