HOST, GUESTS AND POLITICS
Coastal Resorts Morphological Change

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Abstract: resort morphology goes through a predictable sequence of stages: from pre-tourism low to high-density development, and to an urbanised state. Three elements are considered essential concerning the coastal resorts morphological change: hosts, guests, and politics. Drawing from historical data from mass developed coastal resorts of the
island of Crete in Greece, ten principal characteristics are identified as determinants of the morphological change of coastal resorts. A temporal model of unplanned resort morphological change is also proposed. Although the study was constrained by limited data availability, the proposed model is deemed capable to represent the morphological change of Cretan mass-developed coastal resorts. **Keywords:** hosts, guests, politics, morphology, urbanization, coast, resort cycle, Crete.

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INTRODUCTION

The increasing demand for beach holidays brought about the emergence of quite a number of coastal resorts and the planning of many new ones worldwide. In this respect, a number of descriptions of the pattern of physical morphology of coastal resorts is available (Andriotis 2003a; Barrett 1958; Lavery 1971; Smith 1992a; Stansfield and Rickert 1970; Weaver 1993) although most of them have focused on the existence of elements such as promenades, central business districts, recreational business districts, the zoning patterns of development, the patterns of streets in relation to transport opportunities (rail stations, airports) and so on.

While all the aforementioned studies provide a description of the morphology of resorts, the majority is not placed in a historical context and, therefore, does not provide an understanding of the processes by which resorts are being transformed to urban space. As a result, they neither explain nor predict the resort evolution and hence, they provide limited understanding of the planning initiatives that must be undertaken by the public sector through the stages of the resort cycle. Addressing these shortcomings, Pearce believes that more emphasis should be placed on “changes in morphology so that the processes involved can be better understood and the evolution of future forms more readily anticipated” (1987:177).

This paper draws historical data from mass-developed coastal resorts of Crete in Greece and a number of existing models and concepts in order to build a model representing morphological changes of coastal resort expansion occurring as a result of unplanned activities. It is believed the suggested model will provide a useful framework for future research and its operationalization will help developers and planners to gain insight for morphological evolution of coastal resorts. The island of Crete constitutes an appropriate site for the study due to two factors. The first consists of the fact that, until now, research about morphological change brought about by tourism as regards
Mediterranean insular coastal resorts remains limited. Crete, a Mediterranean island with extensive tourism development, presents key characteristics, and, as such, can be taken as a basis when it comes to explaining changes in Mediterranean coastal resorts. The second is related to the fact that although the Cretan coastal resorts have undergone significant morphological changes between the early arrivals of tourists and their final urbanization, research concerning these changes has been significantly neglected. A notable exception is the study of Kousis (1984) for Drethia (a pseudonym for a coastal community in Heraklio Prefecture). However, this study was undertaken more than 20 years ago and although it dealt with various aspects of morphological change through tourism, it focused mainly on social change in a single coastal community.

In analysing change over time in Crete, historical data were necessary. Data for the earlier periods of development were obtained from Cretan newspapers and magazines dating from the beginning of the 20th century. Additional sources were used, such as the Internet, published and unpublished studies, which contained textual and/or pictorial data (mainly maps, plans and photographs). Finally, Cretan coastal resorts were observed over a number of years and experts’ opinions were taken under consideration.

COASTAL RESORTS MORPHOLOGICAL CHANGE

With the exception of instant resorts, planned exclusively for tourist use and undertaken by a single developer, the urbanization of seaside resorts does not take place all of a sudden but progressively. Since the impacts of tourism development to a resort, whether economic, physical, or sociocultural, are the result of a complex process of interchange among guests, host communities, and destination environment (Mathieson and Wall 1982; McMinn and Cater 1998:675), the understanding of changes in coastal resort morphology and the related processes is useful for predicting and mitigating the
potential physical costs in each stage of the resort cycle, thus avoiding the decline of the destination.

According to Butler (1980), the stages of resort evolution are exploration, involvement, development, consolidation, stagnation and decline or rejuvenation (Figure 1). Bearing this in mind, a number of authors (Smith 1992a, 1992b; Young 1983) have suggested that resorts morphology goes through a predictable sequence of stages: from pre-tourism, to low-density development, and from high density development to an urbanised state. These changes occur as a resort moves from a discovery stage to moderate, and, finally, to full tourism development. They involve changes varying from tourist visitation from explorers and drifters to incipient mass and finally mass tourism (Cohen 1972; Smith 1978), and subsequent changes in community attitudes and reactions from euphoria to apathy, and from annoyance to antagonism (Doxey 1975).

**INSERT FIGURE 1**

The discussion of morphological changes anticipated in each stage of resort evolution, as well as the main actors involved in the process which follows is based on Butler’s model of resort evolution, as well as past morphological studies (Meyer-Arendt 1985; Smith 1992b; Weaver 1993; Young 1983).

During the *exploration stage*, the resort is isolated showing signs of little or no development. Prior to the commencement of development a settlement only is present, perhaps a village, which is fishing and/or agricultural orientated. Tourists are discouraged by lack of access and facilities and only a limited number of non-institutionalised adventure tourists (explorers, allocentrics, poets and painters) visit the coastal village. They are welcomed by the locals.
In the involvement stage, tourists from the overcrowded urban center come to reside for some days at the village attracted by its relaxing and unspoiled landscape. Local entrepreneurs become aware of the economic potential of tourism and begin to provide facilities and services. The first hotel is constructed and accessibility to the resort is dramatically improved, guaranteeing tourists better access to the beach, the hotels and the second homes.

In the development stage, traditional houses are converted for business purposes, and more and more accommodations, infrastructure, commercial and recreational facilities are constructed, as well as second homes facing the sea. As the resort expands and reaches the stage of development, a strip development pattern emerges and the road network is extended. The number of incoming workers raises and more residences are constructed to accommodate the imported workforce. Locals tolerate the tourism’s unwanted effects because of its substantial economic advantages (Bramwell 2003).

In the consolidation stage, a drastic reduction of beach width occurs because of the construction of more accommodation establishments and businesses. Residential areas, relocated away from the beachfront, continue to increase in size in order to meet the housing needs of the incoming workforce. A well-delineated business district is now present. Some businesses aiming at the passing trade are also constructed on the road leading to the beach. The road network is further expanded in order to provide access to the accommodation establishments, businesses and residences. Prices fall as a result of the oversupply of hotel rooms and other facilities and the clients attracted are those aiming at the 4S (sun, sea, sand and sex) coming in tours exclusively organized by foreign tour operators. The community perceives some negative effects and an anti-tourist sentiment may emerge.

When the resort reaches the stagnation stage, the tourism landscape becomes dominant and the margin for further expansion shrinks (Meyer-Arendt 1990). Since the
beachfront is occupied, accommodation establishments are constructed in inland areas. As a direct result of the lack of direction and regulation, the resort becomes urbanised, its capacity levels are reached or exceeded, and it loses the local quality that made it attractive in the first place.

Attempts to test or modify Butler’s (1980) model of resort evolution are an enduring feature of research (Agarwal 1992; Bianchi 1994; Butler 1993; Cooper and Jackson 1989; Douglas 1997; Getz 1992; Ioannides 1992; Priestley and Mundet 1998; Tooman 1997). Nevertheless, comparatively few researchers have documented the changing coastal resort morphology by placing their studies in a historical context. Among the first researchers providing historical data for changes in the morphology of coastal resorts were Bollerey (1986), Funnell (1975), and Walton (1983). However, their studies were focused on European and North American coastal resorts in an era where mass access by international jetliners was not possible and these resorts emerged over a longer period of time than most contemporary coastal resorts did. As a result, these studies cannot account for the processes involved in the morphological transformation of most coastal resorts that evolved after the Second World War.

Young (1983) was among the first to deal with contemporary coastal resorts by suggesting a general model of the process of ‘touristization’ and landscape change of a Maltese fishing village being transformed by tourism. Later, Meyer-Arendt (1990) developed a model of the morphologic evolution of a typical Gulf of Mexico seaside resort consisting of three stages: exploration, infrastructural development and settlement expansion. Finally, Smith (1992b), describing the progress of a resort from natural beach to urban beach, suggested an eight stages tentative beach resort model that despite its various inconsistencies, can be considered as one of the best attempts to explain the morphological transformation of contemporary beach resorts.
Elements of Morphological Change and the Case of Crete

There are two kinds of preconditions of development: the necessary and the sufficient (Andriotis 2005a; Afty 1995; Rostow 1990). In tourism, necessary preconditions include various factors that direct people towards different destinations. Very often, they consist of agreeable landscapes and archaeological sightseeing. However, it must be noted that, although many destinations are rich in necessary preconditions, they never move from the stage of potential development to that of actually being developed, because they lack the sufficient preconditions. Such preconditions consist of a person’s will to develop the tourism industry, that is, to invest in infrastructure and accommodation (Andriotis 2005a). Based on this remark, it can be deduced that the morphological change of resorts is best conceptualized as an interaction of forces, which underpin development. According to Haywood (1986) these forces range from concerned publics to the needs and expectations of tourists and government intervention. Thus, in attempting to synthesize the morphological changes of coastal resorts, the three most important elements are: guests (who are the main cause for tourism induced development); hosts (who by supporting development and by being involved in tourism contribute to the success of a destination); and politics (which influence a destination’s overall development). The high amount of interplay between hosts, guests and politics, is guiding coastal resorts evolution, and, therefore, morphological change of Cretan coastal resorts is analysed in the framework constructed by the three elements in question.

Guests. Centuries ago, travelers, artists and men of letters (Pashley 1837; Sieber 1823; Spratt 1865) were fascinated by the Minoan ruins, the art, history and literature of
Crete, as well as the Greek legends of gods and heroes. However, before the Second World War, only a few thousand “of archaeologically or classically educated foreigners came on what amounted, for them, to a sacred pilgrimage” (Greger 1988:112). Most of these tourists used to arrive at the capital city of Heraklion by cruisers, in order to visit the museum of Heraklion and a few antiquities, such as Knossos Palace, and they departed the same day towards other Greek destinations.

During the 60’s, rich travelers started discovering Crete, attracted mainly by its archaeological sites. The movies “Zorbas” and “The King Must Die” made the island famous abroad. In 1962, approximately 23,000 tourists paid quick visits to Crete and hence spent small amounts of money (Basil 1964). The short stays and the delay of tourism development were a result of the low level of infrastructure, accessibility and poor communications of an island which had been caught in a series of wars between 1821 and 1950.

In the years that followed, the surge of historically minded tourists has been limited, and hippies, the so-called “flower people”, made their appearance. They “found a sympathetic response in traditional Cretan rituals of sharing,” but soon “it became evident that the visitors’ naivete, far from making them innocent, made their role in Crete a parasitic one” (Greger 1988:113). It was this evidence that, finally, turned the local population against them.

When the airport of Heraklion became international in 1971, and charter flights started to land, the mass organised tourists marked a new era of commercialization for Cretan tourism. Crete today is being visited by nearly three million mass tourists that represent Urry’s (1990) "collective" tourist gaze. Undoubtedly, most tourists visiting Crete are bent on having fun and end up with a conception of Crete that is far from being closely associated with the Greek classical past (Galani-Moutafi 2000). These tourists demand various types of facilities for accommodation, infrastructure, recreation and
leisure, necessitating public and private investments. Also, the last decade there is a strong demand by EU nationals for second homes in Crete. As a result, many coastal properties have been bought by foreigners attracted by the good weather, and the low, compared to their home countries, prices of land.

Hosts. During the first decades of the 20th century, Cretans had courteous feelings towards foreigners (Kritikes Selides 1938). However, incidents of exploitation were not unheard of. For example, a local newspaper reports that in April of 1933 a group of tourists in Heraklio was disappointed because of a slugfest between local drivers for the amount of money to be charged for their transfer to the archaeological site of Knossos (Drasis 1933).

Attempts of the Greek authorities to increase the number of arrivals such as the opening of Heraklion airport in 1939, came to an end with the declaration of Second World War. While Greece was recovering from World War II, the Cretan population showed a sense of cooperation and a positive attitude to development. Crete has been forced to adjust at an alarming speed to the differences between its own extremely conservative lifestyle and the relaxed behavior of its tourists (Hopkins 1977). The immodest and occasionally provocative conduct of the guests often made locals indisposed towards them. For instance, locals from the seaside village of Loutro used force against nudists walking naked in their village (Kritikes Eikones 1982a). In 1977, American soldiers profaned the Greek flag and abused the locals. The latter’s response was a thrashing (Kritikes Eikones 1982b). Despite such incidents, a 1981 survey addressed to the residents of Hersonissos demonstrates acceptance of foreigners, highlighting locals’ vested economic interest resulting from tourism (Kritikes Eikones 1981). Recent studies (Andriotis 2002, 2004, 2005b; Andriotis and Vaughan 2003) have
shown that although Cretans acknowledge some negative effects of tourism on society and the environment, they are quite firm in their support for tourism.

As a matter of fact, the local community played a significant role in the development of the coastal areas’ product, mainly during the early arrival of tourists. Nevertheless, later on, outsiders also invested in tourism. As Kousis reports after the Second World War most of the land in Drethia was cultivated by locals except for a few barren sections (1989:322). Between 1965 and 1972, land ownership changed substantially, and a large part of the coastal land was purchased by a handful of outsiders coming from different regions of Crete, Athens and from abroad to establish tourism businesses. As a result, large hotels are now standing on the fields in the best locations of Drethia, near the beach or along the road that connects the village center with the beach. According to Herzfeld, the most fortunate buyers were those who bought seaside properties before the Second World War at a value of one barrel of oil per kilometer strip (1991:154).

A follow-up of tourism evolution in Crete was the abandonment of traditional agricultural and craft-related occupations, which came also as a natural consequence since tourism-related jobs were considered more attractive and more profitable (Andriotis and Vaughan 2004; Kousis 1989). As Kousis reports for Drethia, with the arrival of tourists, “the number of farmers decreased dramatically, while those for small shopkeepers and wage earners increased considerably” (1989:332). In Hersonissos, the University of Cincinnati Sustainable Development Group (2001) reports that in the 60s the agriculture sector occupied 95% of the labor force, although today with the transformation of the coastal zone into a tourist destination tourism occupies more than 50% of total workforce. Today, tourism in Crete generates nearly US$1.5 million of foreign exchange and it is estimated that approximately 40% of the local population is directly or indirectly involved in tourism activities. Even, in the interior of the island, farmland is either being
abandoned or is being used for tourism-related activities, such as golf courses and water parks (University of Cincinnati Sustainable Development Group 2001).

Most Greeks view land as a way to create wealth, to increase social status and to pass on wealth to their children (Patton and Sophoulis 1983; Peterson and McCarthy 1990a). As a result, during the 60’s, when arrivals started flourishing and formerly useless beachside fields became immensely valuable properties, a more intensive form of coastal land use was generated. Cretans have responded to the scarcity of land and escalating prices in coastal areas by increasing its productivity. The ever-spiralling increase of arrivals has encouraged many landowners to build small, but often multi-unit, structures, often to the maximum legal capacity of the site or above, purportedly for various types of tourism and recreation activities together with residential areas (Patton and Sophoulis 1983). The originality of this specific pattern is not only associated with tourist arrivals but also with the construction of second houses, a kind of diffused urbanization that corresponds to a splitting of life between city, in winter, and the coastal resorts, in summer (Tsoulouvis 1998). Many Cretans see owning a house overlooking the sea as the most secure form of investment and as a status symbol. As a result, it is estimated that almost 50% of Greeks own a second home (Hope 1998), reinforcing the strip development pattern. To cover the high demand for coastal land and to increase productivity of valuable coastal properties most residences have been constructed in inland areas. In addition, the incoming workforce either lives in the nearby urban areas, or in interior locations.

Politics. The power of government bodies and other political players is important to the understanding of the evolution of resorts. However, in Crete, tourism before the Second World War played a minor role in the development of the economy, since the state involvement in tourism was limited, and tourism development was left entirely to the
initiative of local investors. A fierce resistance campaign against German occupation from 1941 to 1944 in conjunction with a savage civil war between the Conservative Party in power and the representatives of communist movements that followed after the end of the Second World War, marked the end of all previous attempts for tourism induced development and precipitated the decline of the Cretan economy, including tourism. Only after the end of the Civil War in 1949, did Greece enjoy political stability, and was the island’s infrastructure partially restored. However, public and private investments in tourism were very low, $307,820 (88,597 thousand Drs), between 1954 to 1964, since tourism’s potential as an activity that would boost foreign exchange earnings was not acknowledged by the first Five Year Plans of Economic Development (Andriotis 2001; Kanellakis 1975).

Only after the 1960s, a series of development plans concerning the tourism sector were given high priority. The weak point of these plans is the difficulty of predicting growth rates. For example, Basil (1964) predicts a demand of a total of 15,000 hotel beds and a volume of tourism investments of $20,846,340 (6,000 million Drs) for the year 1975, while, for the same period, Glikson (1965) predicts 3,000 beds and an investment of $2,432,073 (700 million Drs). In reality, the actual numbers for the year 1975 turned out to be 6,500 new hotel beds and $7,817,377 (2,250 million Drs). It must be admitted that the consideration given by the consultants, as well as by the authorities for the implementation of the plans was minimal.

Xenia, the first Greek state-owned hotel, was established by the Hellenic National Tourism Organization in 1965 in an attempt to increase tourist flow. Furthermore, the government’s involvement in the promotion of tourism came also in the form of allocation of funds for organising and developing the industry, and for providing financial assistance to the private sector. The funds were distributed in the form of grants, interest-free subsidies, tax-exempt allowances, and extra depreciation. They meant to enable the
construction of accommodation as well as any related facilities in coastal locations almost without limits (Andriotis 2001; Papadopoulos 1985).

Obviously, external support had a positive effect on development, although the exact degree to which international organizations contributed to the development of the Cretan economy is difficult to estimate. For example, one of the first development studies concerning the island (Basil 1964) was sponsored by Organisation for Economic Co-operation and Development. Also, significant funds started flowing to the island, pushing its tourism industry forward, when Greece joined the European Union in 1981 (Briassoulis 2003).

In 1967, year of the coup d’ etat, a military regime was put in place and, as a consequence, a significant number of the preconditions for sustained development created in the proceeding years were cancelled. However, despite fewer arrivals during the first two years of dictatorial rule (1967-68), the junta undertook several road building and other infrastructural projects which have eventually supported tourism expansion (EIU 1986:58). A few wealthy locals were in the appropriate financial position to take immediate advantage of the military junta’s indiscriminate stimulation of development (Herzfeld 1991:73). As a result, a period of considerable financial flow for development purposes commenced and tourism investments reached $5,937,732 (1,709 million Drs) between 1967 and 1971, a mere 6% of which were offered by the public sector (Regional Administration of Crete 1972). Because the junta feared the corrupting influence of decadent hippies on Greek youth, it placed at one stage a ban on bearded or longhaired men entering Greece (EIU 1986).

Subsequent to the political mishandlings which brought about the Cyprus crisis in 1974 and the fall of the colonels the same year, democracy was restored in Greece, and foreign tourist inflow started to increase. However, most governments, from the military junta (1967-1974) to recently elected ones have borne a rather ambivalent attitude
towards tourism. As a matter of fact, they did provide incentives for the construction of thousands of cheaply and poorly built hotels which have mushroomed all over the island’s coast, and damaged the shore along with any future tourism potential (EIU 1986). Notwithstanding strict legislation, quite a number of these establishments operate without licenses. Also, despite officials’ threats to demolish illegal buildings, illegal construction is widespread in many areas (Andriotis 2003a, 2003b). In practice, the main deficiency of the Greek legal system appears to lie more with the enforcement of the laws than with their creation.

The intense building in coastal areas has lately forced the Greek government to declare many areas of Crete “saturated”, to the effect of prohibiting any further construction of accommodation establishments (Andriotis 2001, 2003a). The recently established Ministry of Tourism Development aims to forestall stagnation and decline as well as to decrease the industry’s dependence on sunlust tourism and foreign tour operators by regulating the industry’s growth and diversifying its nature. Concurrently, local authorities seek to increase the product appeal and tourist spending by promoting the construction of integrated resorts. To these ends, they promote the construction of a massive tourist complex in Cavo Sidero, Sitia, as well as other proposals for large scale investments (Andriotis 2005a; 2006a).

A problematic factor is the overlap of responsibilities between various governmental bodies, resulting in administrative conflict and inefficiency. In Crete, local governments have been poorly funded, and, as a consequence, their ability to interfere in the tourism industry generally and the physical development of coastal resorts in particular, is curtailed. Plans are usually formulated by experts located in Athens, the capital, and therefore they do not make sufficient room for the local needs. As a result, policies frequently generate friction, and, sometimes, are withdrawn for revision shortly

**Morphological Change Over Time**

It follows that tourism does not grow in void but, usually, in large urban centers where some form of urban hierarchy and transport networks is to be found (Andriotis 2000, 2003c; Oppermann 1993; Pearce 1989). It comes as no surprise then that the pioneer tourists arrived at Crete via the capital of Heraklio since, on the one hand the currently mass coastal resorts were generally inaccessible, and on the other, the road system in general as well as any specific roads accessing sites of antiquities and beaches were insufficiently developed in 1950’s.

By virtue of the spread out effect, small seaside villages, dispersed in close proximity to the urban centers of the island, started to attract the first excursionists. Since these villages did not offer any facilities, the locals started to accommodate them. As Kousis demonstrates for Drethia:

In the early 1960s, on the beach of Drethia, there was a summerhouse owned by a retired mayor, coming from a higher status family. At that time, the first tourists made their appearance in Drethia. Since there were no facilities to accommodate them, the retired mayor started “hosting” them in his place. When more tourists arrived, in the next few years, he had extra rooms built as an extension of his house. This is the first tourist accommodation establishment on record in the area (1984:101-102).

Statistics indicate that a total of 2,315 hotel beds were available in Crete during 1962. Most of them were for local traffic and only 950 were of an acceptable quality. Nearly 60% of the latter were in Heraklion and its surroundings, 15% in Chania, 15% in
Agios Nikolaos, and only 10% in Malia, Archanes, Souda, Ierapetra, Sitia and Paleochora (Glikson 1965:154). Later, junta’s incentives to heavy handed promotions of large-scale tourism during the period 1975-1978 created a new type of coastal communities, which constituted a new form of diffused urbanization away from large cities, lacking any production activities other than those associated with leisure and tourism and any facilities to support a full-year stay (Andriotis 2006b; Greger 1988; Hopkins 1977; Tsoulouvis 1998). As Peterson and McCarthy suggest:

As but one example, much of Stalida, a tourism oriented beach community, is characterized by small, irregularly shaped parcels; there are few streets and most parcels are land-locked, with only informal, if any, access to either the streets or the beach; building-to-lot coverage ratios are high; and buildings are sometimes so close that one can touch the adjacent structure by leaning out a window or over a balcony. The overall appearance of Stalida is of cluttered and chaotic overbuilding (1990a:7).

Since the road network of coastal resorts was not sufficient to satisfy the increasing supply, the road system expanded as a consequence of the unplanned evolution, transforming eventually the informal tracks leading to coastal farming land to formal roads. On the other hand, some property owners have encroached on the street space further reducing the effective width of the street and creating bottlenecks for traffic (University of Cincinnati Sustainable Development Group 2001:10). Constructions often follow a drawn-out process “where the capturer first plants a public area to establish his interest; a few years later adds soil to make the site buildable; eventually adds a small ‘temporary’ structure that is expanded incrementally; and over time, the true ownership of the land is forgotten” (Patton and Sophoulis: 1983:261). The effect of these actions has been to produce a heavy concentration of buildings behind the shoreline, reducing beach width (Tzatzanis, Wrbka and Saubener 2003), and frequently calling for many kinds of
defensive structures to protect beachfronts and to prevent destruction of buildings, roads or bathing establishments at risk of the sea.

The tourist boom resulted in rampant, illegal coastline development. Until recently, Greece had no zoning and land registry system. For many years, anyone could construct any type of building, as long as modest building restrictions were respected (Andriotis 2000, 2003a, 2003c; Peterson and McCarthy 1990b), and local authorities frequently approved without objection private project proposals, either because of the lack of regulations, or because they were forced by market forces and social pressures. The practise of Greek political parties in electoral campaigns consisting of making promises and then enacting statutes which declared existing illegally constructed buildings to be in compliance with the law led to the construction of more than 5,000 illegally-built units in Crete, in 1983. The units in question contributed to coastal pollution and disfigurement (Peterson and McCarthy 1990b:168).

The high concentration of buildings has transformed many seaside villages into urban space. The number of hotel beds has increased from 5,178 in 1970, to 50,544 in 1986, and to 139,001 in 2004. The raising number of businesses attracted an increasing seasonal immigrant workforce (Andriotis 2005c; Andriotis and Vaughan 2004). For instance, Association of Hellenic Tourist Enterprises (1995) estimates that, in Hersonisos, a population of approximately 4,000 corresponds to an incoming workforce of 10,000 during the summer. Since the original resort has been overbuilt, there was not enough space for further development. As a consequence, new buildings were erected in inland areas to accommodate the aforementioned workforce. In addition, residents were relocated away from the beachfront to provide space for tourism related activities.

Undoubtedly, fishing villages such as Agios Nikolaos, Hersonissos, Malia and others, have been transformed to internationally renowned resorts which however lack in
authenticity and traditional character due to quick and easy profit generated from mass development. As Kousis reports for Drethia:

During the 1950s and early 1960s the village was famous for its fertile gardens, its picturesque windmills, and its beautiful view. In 1980s the intensive agricultural activities have been replaced by activities promoting tourism. Consequently, the scenery has now changed greatly. The coastal rim, as well as the two kilometres road that connects it with the village center, have been taken over by various forms of tourist accommodation. Motels, rent-room facilities, camping grounds, hotels of varying sizes, tavernas, restaurants, coffee shops, discotheques, and bouzoukia establishments are encircling and concentrating in and around the north part – closest to the shore – of the village (1984:55).

Because reinforced concrete is simple to use and relatively inexpensive, Cretans seem to prefer it, “right angles everywhere, rigid metal fences and balcony railings, concrete pillars often painted puce in honour of Knossos” (Hopkins 1977:189). In fact, buildings have lost the traditional architectural style and many coastal resorts are densely built with multi-storey houses. According to the University of Cincinnati Sustainable Development Group:

The built environment in the Port of Hersonissos has a harsh and transient feel. The style and construction of the buildings are not merely far removed from the traditional Greek style, but many of the buildings and hotels are placeless, with little attention paid to the relationship of the buildings to the culture which they preside. This lack of cultural identity is problematic…. The entire coastal area has a disorderly and overgrown appearance. A range of structures has been built as and where space was available, and with no relationship to one another, over a long period of thirty years. The port area is extremely piecemeal…. There is little uniformity in the orientation of buildings, the size and the direction of the streets, and the spaces between the building (2001:3).
In the context of globalization, Crete, as a peripheral island, is seeking to assert itself more strongly on the international scene. This along with the minimalism in state intervention have entailed the fact that the physical form of coastal urbanized space and the architectural landscape of contemporary Cretan resorts have been a product of step-by-step development – literally a property-by-property design of urbanization of the coast without much consideration about spatial entities such as the street, the square and the larger area. As a result, today, many Cretan coastal resorts appear worn and trivialized, and the physical environment spoiled. In an attempt to safeguard the island’s underdeveloped coastline areas, either from developers and public agencies who might greedily and uncaringly exploit them, or from hosts and guests who may not fully appreciate their symbolism and importance, many Cretans and local environmental groups, often express complaints to authorities and objections to further development (Kousis 2000).

Towards a Process Model of Coastal Resorts Morphological Change

From the historical data about the island of Crete presented, emerges a pattern of ten principal characteristics determining the morphological change of coastal resorts. These characteristics are shown in Figure 2, and are discussed below with respect to Crete. First, beach width has been reduced as a result of the construction of roads and private developments built on the immediate seashore. Second, although there are not any available data for the number of residential areas, an observation of coastal resorts over a number of years shows that the number has increased to meet the housing needs of the seasonal workforce, and the local population.

Third, with the expansion of tourism, farming land changed use in order to satisfy either tourist related activities that were considered more profitable, or the need of accommodation for locals and the immigrant workforce. Fourth, the road network
expanded rapidly, usually without any initial planning, to provide access to lodgings and businesses. Fifth, the establishment of *tourism businesses* has increased. However, it is not possible to define the limits between central business districts (a typical set of retail establishments) and recreational business districts (an aggregation of various recreational facilities and shops) because the resorts emerged without any initial planning. Sixth, *lodgings and infrastructural facilities* increased in number in order to satisfy the needs of the incoming tourists.

Seventh, although no data are available about the exact number of *second homes* in each stage of the resort cycle of Crete, it is clear that their number also has increased. Eighth, a *ribbon development* pattern has been formed from the construction of lodgings and tourism businesses across the sea. Ninth, the local *architectural and traditional character* has been lost only to be replaced by modern structures. Tenth, it is clear by the evidence provided in this paper that tourism demand and supply have increased in a formidable scale, thus resulting in a tremendous *morphological transformation* through a mixture of recreation with production and other incompatible uses such as second homes, hotels, and traffic. As a result, green areas are scarce, and Cretan coastal resorts are densely built going through the same processes as large cities. It follows that the Cretan shore has lost its authenticity and is no longer as beautiful and attractive as it used to be during the early tourists’ arrivals.

**INSERT FIGURE 2**

The aforementioned characteristics form a basis for the understanding of morphological change of Cretan coastal resorts. However, the literature review made obvious the absence of a clear description of the coastal resorts’ morphological change through Butler’s stages of evolution. Therefore, a temporal model of resort morphological
transformation is proposed. The model, shown in Figure 3, is based on the Cretan case, as well as on earlier work by Butler (1980); Meyer-Arendt (1985); Smith (1992b); Weaver (1993) and Young (1983). It illustrates morphological changes in the form of use of land, experienced by Cretan fishing villages while going through a continuum of stages. The process starts with an exploration stage, proceeds to an *ad hoc* addition of facilities, and, finally, following the T-shaped type of resort expansion, leads to a stagnated urbanised resort, where there is not enough space for further developing the original one.

**INSERT FIGURE 3**

**CONCLUSION**

This paper aims to outline the important morphological changes of contemporary coastal resorts by proposing a temporal model of morphological change of resorts of the island of Crete. The goal of the suggested model is to provide an understanding of predictable morphological changes of coastal Cretan areas as the resort undergoes urbanization through tourism-induced development. It shows that evolution processes can be better explained and understood when based on historical data and past research. However, one should consider the findings of this study with the stipulation that the stages presented in the model are the result of lack of physical planning and limited attention to environmental preservation, zoning, and research. Under these circumstances, landowners were free to develop their land as they wished, and many excessive unwanted features and undesirable impacts materialised necessitating immediate action. However, the *ad hoc* type of tourism development of the past, where private sector actions prevailed over industry and initiated a new stage of growth, will not function in the future. Instead, “a more holistic approach is necessary... one that takes into account economic, social and...
environmental considerations, and integrates the planning/policy regimes of all levels of government” (Faulkner 2002:284).

Notwithstanding the constraint of data availability for the area under concern, it is evident that the most important change taking place in Crete since World War II has been the development of tourism, which has reinforced urbanization and imposed a new morphology on the coastal landscape. But what lies ahead? In Butler’s model, the end of the cycle is marked by the post-stagnation phase, which may result in decline, if the tourist market continues to wane, or rejuvenation, through attempts to improve the overall morphology of the resort. These stages have not been illustrated in the suggested model because of the obvious difficulties in defining the post-stagnation stage. As a matter of fact, each resort’s morphology may differ at this stage, as already illustrated in Butler’s model where the post-stagnation stage comprises a set of five options. For example, different attempts can be considered and undertaken to avoid decline such as the introduction of casinos in Atlantic City, the establishment of Euro Disney in Paris and the greening of Majorca. As far as Cretan coastal resorts are concerned, decline and further negative effects must be avoided by improving their morphology. Future tourism policy should be conceived as a development strategy that, despite using local resources, manages and plans them carefully so that they stay in place for locals, guests and future generations alike. In doing so, a spatial plan for each Cretan resort must be drawn matched with listed priorities and strategies for their future development and the improvement of their morphology. The improvement in question must be achieved by preserving the environment and by respecting their landscapes.

The morphological evolution of resorts is a complex process which cannot be fully analyzed in a short paper. In this respect, it is extremely difficult to make generalised universally accepted models of coastal resorts morphological change since resorts different from the suggested model may exist even in the island of Crete. However, some
of the characteristics identified by the model may be recognised in other resorts, Mediterranean or not, and the model may become a useful device to test coastal resorts morphological change. Also, significant lessons can be drawn for the negative consequences of coastal resorts rapid growth. As Pearce suggests, “while details do differ, the basic structural features are frequently repeated from resort to resort. Imitation, particularly within countries, may account for some of these similarities but the form of these resorts generally reflects their specialised function” (1987:167). Therefore, the suggested model should be tested as regards other coastal resorts in order to evaluate the degree to which it can be used as a generalised description of the morphological evolution of contemporary coastal resorts and to determine if it must be refined.

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REFERENCES

Agarwal, S.

Association of Hellenic Tourist Enterprises
1995 Study of Qualitative Upgrading of Tourist Resorts - Pilot Study Hersonisos (in Greek). Athens: AHTE.

Anagnostopoulou, K., T. Arapis, I. Bouchy, and I. Micha
1996 Tourism and the Structural Funds - The Case for Environmental Integration. Athens: RSPB.

Andriotis, K.


Andriotis, K., and D. Vaughan

Auty, R.

Barrett, J.

Basil, F.

Bianchi, R.

Bollerey, F.

Bramwell, B.

Briassoulis, H.

Butler, R.


Cohen, E.


Cooper, C., and S. Jackson


Douglas, N.


Doxey, G.


Drasis

1933 The Announcement of King’s Fouat Arrival(in Greek). Drasis(15 April):1.

EIU


Faulkner, B.

Funnell, C.E.


Galani-Moutafi, V.


Getz, D.


Glikson, A.


Greger, S.


Haywood, K.M.


Herzfeld, M.


Hopkins, A.


Ioannides, D.

Kanellakis, V.


Komilis, P.


Kousis, M.


Kritikes Eikones


1982b They Walloped the American and They Stopped the Trouble. (in Greek). Kritikes Eikones (3 March):7-10.

Kritikes Selides
1938 Lassithi and the Excavations of the English Archaeological School (in Greek).

Kritikes Selides (July, August and September):211-220.

Lavery, P.


New York: Wiley.

Mathieson, A., and G. Wall


McMinn, S., and E. Cater


Meyer-Arendt, K.


Moore, R.


Oppermann, M.


Papadopoulos, S.

1985 An Economic Analysis of Foreign Tourism to Greece: An Examination of the Growth and Structure of Foreign Tourism to Greece 1960-1984 with a Planning

Pashley, R.


Patton, C., and C. Sophoulis


Pearce, D.


Peterson, C., and C. McCarthy


Priestley, G., and L. Mundet,


Regional Administration of Crete


Rostow, W.
1990  The Stages of Economic Growth: A Non-communist Manifesto(3rd ed.).
Cambridge: Cambridge University Press.

Sieber, F.

Smith, R.

Smith, V.

Spanou, C.

Spratt, A.

Stansfield, C., and J. Rickert

Tooman, L.

Tsoulouvis, L.

Tzatzanis, M., T. Wrbka, and N. Saubener

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Urry, J.


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Figure 1. Hypothetical Cycle of Resort Evolution
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<th>Elements</th>
<th>Exploration</th>
<th>Involvement</th>
<th>Development</th>
<th>Consolidation</th>
<th>Stagnation</th>
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</thead>
<tbody>
<tr>
<td>Beach Width</td>
<td>Maximum</td>
<td></td>
<td>Decreasing</td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Residential Areas</td>
<td>Few</td>
<td></td>
<td>Increasing</td>
<td></td>
<td>Peak</td>
</tr>
<tr>
<td>Farming Land</td>
<td>Peak</td>
<td></td>
<td>Decreasing</td>
<td></td>
<td>Few</td>
</tr>
<tr>
<td>Road Network</td>
<td>Minimum</td>
<td></td>
<td>Expanding</td>
<td></td>
<td>Maximum</td>
</tr>
<tr>
<td>Tourism Businesses</td>
<td>Few</td>
<td></td>
<td>Increasing</td>
<td></td>
<td>Many</td>
</tr>
<tr>
<td>Lodgings and Infrastructural Facilities</td>
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<td></td>
<td>Increasing</td>
<td></td>
<td>Peak</td>
</tr>
<tr>
<td>Second Homes</td>
<td>Few (if any)</td>
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<td>Increasing</td>
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<td>Peak</td>
</tr>
<tr>
<td>Ribbon Development</td>
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<td>Maximum</td>
</tr>
<tr>
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<td>Traditional</td>
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<tr>
<td>Overall Morphological Transformation</td>
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<td>Increasing</td>
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</tr>
</tbody>
</table>

Figure 2. Characteristics of Morphological Change
Stage 1: Exploration

Stage 2: Involvement

Stage 3: Development

Stage 4: Consolidation

Stage 5: Stagnation

Figure 3. Stages of Morphological Transformation of a Typical Coastal Cretan Resort