

# **Regional tourism opportunities in the Andalusian coast**

**Rafael de Lacour**

Area Architectural Design, Department of Architectural Graphic Expression and Engineering,  
School of Architecture, University of Granada, 38 Avenida de Andalucía, 18071 Granada, Spain.  
e-mail: rdlacour@ugr.es

## **Abstract**

At the School of Architecture of Granada, within the research line on Coastal Architecture, the uniqueness and variability of the different development cases arising in the Andalusian coast have been analysed, all of which were approached from the particularization of their fragmentary condition and establishing comparative relationships between them to help understand the complexity of the phenomenon.

All studied aspects have been contrasted in various fields thanks to the graphic treatment of the information. To achieve this goal, specific techniques associated with the selected parameters have been used.

All of this is used to provide new evidence for the future in order to propose alternatives and remedies for environmental imbalances, infrastructures based on the use of public transport and public facilities related to the landscape. These elements can achieve, as a whole, the recovery of the coastline understood as a strip of land full of valuable heritage providing, with the correct alignment, social cohesion to the territorial structure.

Keywords: coastal, landscape, territory, tourism.

## **Introduction**

In recent decades, the Andalusian coast has suffered severe and extensive urban development, which has exploited its natural resources due to residential tourism and agriculture. This has caused a demographic transformation with significant consequences on the territorial scale and on its landscape.

This recent coastal development phenomenon manifests itself as a general trend. The increase of population along the coastal strip and the growth of cities near the sea support this theory, to which the Andalusian coast is no stranger. Economic conditions in recent decades have favoured the exploitation of natural resources in order to obtain short-term benefits, offered by real estate speculation. The result is a strong expansion, experienced by coastal communities based on competition over tourism and capturing a growing population demand.

In this situation it is essential to study the phenomenon from the fields of architectural and territorial organization, something which could hardly be tackled from other sectorial fields. On the other hand, University research offers a fair approach, from a distance, when dealing with this subject; a distance neither which the market nor the professional production possess when addressing the issue from this perspective. Moreover, from the University's point of view, architecture provides ideal tools when managing sensitively environmental issues and social concerns, also focusing on the operation of production systems as well as paying attention to its technological dimension in order to propose new ways of planning.

To carry out the investigation, the use of different scales was necessary, providing complete territorial vision and awareness of various conditions: urban, productive, social, landscape, infrastructural, tourism and agricultural. The value of this research lies not only on the analysis of the factors studied

in isolation and the exchange between them, but also on the articulation of all actions on the strip of land along the coast, and in their ability to create, with all this production, a whole body of strategies through their interrelationship.

The area of study covers the whole Andalusian coast. The choice of specific sites is related to common themes and the types of study areas refer to locations of opportunity. To achieve this, drift explorations were performed and discretisation work was carried out on the areas with greater potential.

Architectural projects have achieved their definition according to the themes explored, to the identified needs and to the proposed novel uses considered, with a compelling degree of complexity and a significant dimension for their contribution as noteworthy research attempts and simultaneously as a project themselves. The overlap of architecture with the environment and landscape, its foundation within the urban, social and cultural reality, and the presence of technology as a transformer of that reality is crucial when addressing the various proposals.

The technological, structural and constructive aspects are present not only as mere resolution of technical issues but as a contribution to architectural ideas, both from the starting point and during the development phase of the design idea. In a manner consistent with the new targeted approach, the architecture proposed corresponds to new ways of expression, all capable of transmitting their viability and innovation.

## **Methodology**

The "Architecture and Litoral" line of research is linked, from an educational point of view, to the theme entitled "Coastal Architecture, architectural proposals on the Costa del Litoral Andaluz" for the achievement of Final Degree Projects within the School of Architecture at the University of Granada. This issue was approved in October 2008 on a biannual basis by the Commission for Final Degree Projects of this degree. The topic was proposed by the Area of Architectural Design within the Department of Architectural Graphic Expression and Engineering of the University of Granada. Subsequently, in October 2010, it has been approved by the commission, for two more academic courses, under the topic titled "Architecture in the coastal landscape: territorial dynamics on the Andalusian coast and architecture for a new sustainability", which is an effective continuum of the initial theme, supporting the research work generated and in response to the results obtained so far.

This circumstance involves the introduction of a research topic to the Final Degree Project, proposed directly by an area of knowledge belonging to an Andalusian university, dealing with a territorial ambit focused on the Andalusian coast, and covering all of its urban, social and territorial complexity. The participatory nature of this research project in terms of group-coordinated contribution through the sectorial analysis of specific areas developed by researchers, acquires an innovative character as it blends individual and collective efforts together.

Therefore a general framework prevails on the coast, coordinating partial investigations. This general interest on the Andalusian coast has to do with study experiences in planning and development in coastal metropolitan areas, characterized by a strong process of development and consolidation, as is the case of the Costa del Sol (ZoMeCS). Thus, the phenomenon can expand to a larger scope, as proven analysis tools can be applied effectively, and aspects such as natural areas are discovered, valuable for their scarcity along the coastline. Figure 1

It is then that, from a broader subject line, new possibilities for the proposed projects arise, for each area, with an impact on their full territorial extension. Thus, parts of the study expect to obtain thorough understanding of how profound each territorial delimitation is. And finally, from the specificity of both the study and the research process, a range of custom layout techniques appear, depending mainly on the topics covered or discretized, end up being critical in relation to the results obtained.

These techniques are based on the elaboration of complex systems of representation, including quantitative data obtained in the analysis, ultimately appearing as geo-referenced data in order to facilitate the reading and understanding of the reality of the coast.

The search for information requires, in most cases, the handling of large amounts of data, in need of separate organization techniques and requiring an effort to adjust their interrelationship with other fields, opening a new territorial perception due to concerns on cross-communication. Thanks to open databases present in a network and by facilitating public access to official files, it was possible to locate the information. This is of great importance when attempting to achieve the transfer of knowledge between subjects and when dealing with new interpretations that enable cross-analysis, and is also an interesting example of the transversal nature of knowledge.

With the use of two-dimensional and three-dimensional diagrams, an advanced systematic method of collecting information was obtained, allowing an intuitive perception and offering new possibilities of interaction as well as new cross-disciplinary data of the studied variables. Figure 2

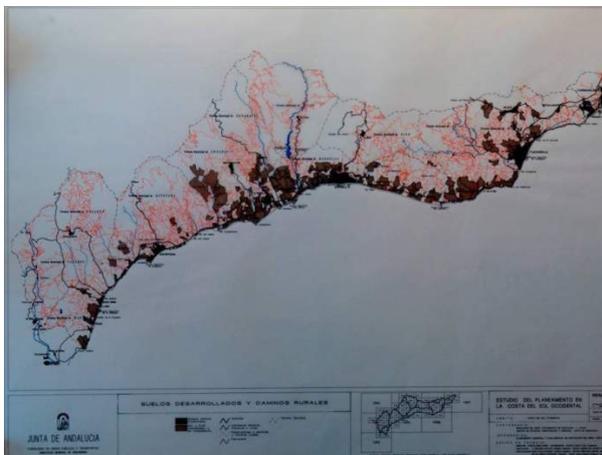


Figure 1

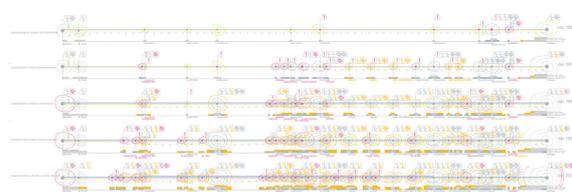


Figure 2

The maps obtained are typical of architectural production, urban planning and geographical studies, as they are a tool of representation of reality, collecting data, acquired knowledge in exploration and interpreting the analysis carried out on the information. But the maps, beyond the qualities of graphic expression, become instruments of conceptualization of complex phenomena that occur on the coast. These phenomena will hardly find a better way of explaining variables such as social structures, population or demographics, in conjunction with other parameters as distant as the physical, natural or artificial environments. Effectively, they connect socioeconomic qualities and locations; they are noticeable from objectivity through subjectivity, simultaneously constituting exploration and representation techniques, experimenting with transfers between different disciplines, even among researchers.

## Results

Concern for the environment is present throughout the investigation. Since the research has a design approach, the architectural proposals are intended to produce alternatives to conventional options through technologically innovative aspects consistent with the new ecological awareness mind frame. In addition, throughout the whole coastline studied, environmental and natural spaces are, in one way or another, related to the tourist areas, to agriculture, to fisheries, to infrastructures, etc... Outlined below are seven investigations that represent these relationships with their corresponding contribution to the representation of reality as well as the proposals developed:

*The implication of physical and fluvial dynamics on the coastline*

Research on the coast of Málaga and the delta of the Vélez River (Manuel Luque Eliberto Guerrero, 2010) confronts in an analytical and coherent fashion the link between the actions carried out in the rivers and their consequences on the coastal environment. From a deep understanding of the issue and a well-documented evolution of Málaga's coast, a unique study of one of the most peculiar rivers in the area is performed over the river Vélez. And then, comprehensive measures are proposed, going from the territorial scale of its landscape to the architectural scale by means of an integrated, coherent and ecological approach in order to achieve sustainability. Thus the architectural design of a Management Centre for the Park is elaborated at the mouth of the river Vélez as a further element of the investigation. This provides novel aspects in its landscape and environmental treatment, also suggesting ecological alternatives for the coastline and riverine areas in their full territorial dimension. Figures 3 and 4

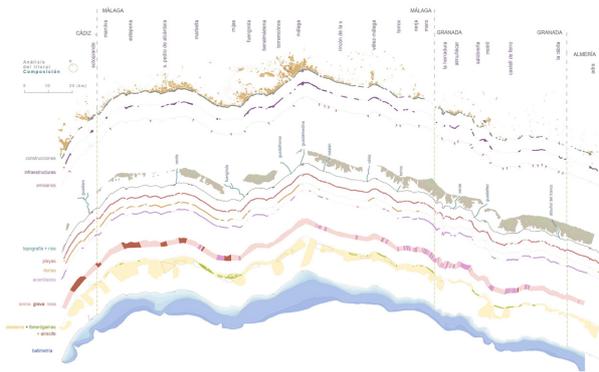


Figure 3

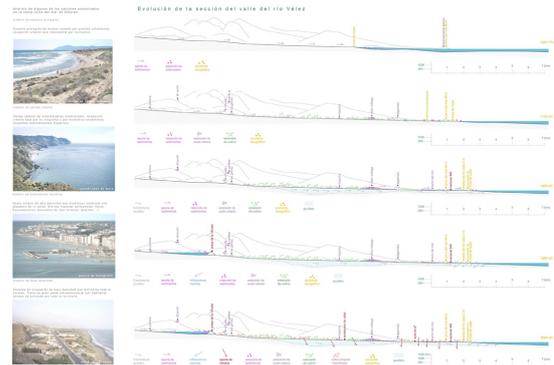


Figure 4

### *Infrastructures in the coastal tourism model*

The investigation of territorial dynamics in western Costa del Sol (Antonio Jesús Palacios Ortiz, 2010) is what gives meaning to the project itself in terms of approach, location, uses, and the development of its program. The main contribution relates to the territorial dynamics of infrastructures in overdeveloped tourist areas, which are addressed from an interesting angle by an enormous task of development and construction through graphical representation of abstract and conceptual understanding able to convey all of its complexity with great rigor. The project itself proves to be involved with this heterogeneous reality through the study and selection of an area of opportunity, its location in relation to its connection with the different flows of transport infrastructures and its commitment when attempting to qualify the territory through new relationships where hybridization of new proposed uses such as sports, cultural and leisure activities takes place. Finally, a subtle treatment of scale and its materialization prove consistency towards the coastal area. Figures 5 and 6

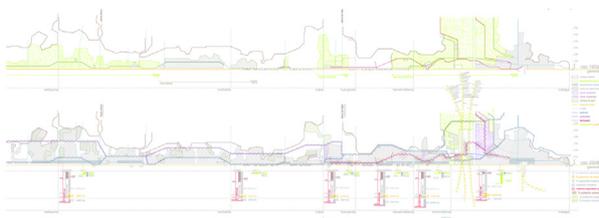


Figure 5

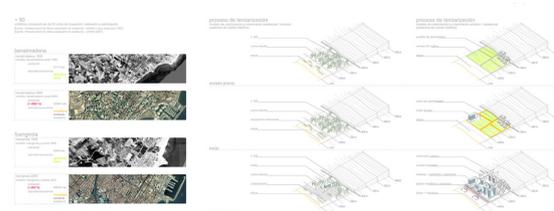


Figure 6

### *Environmental spaces and new infrastructures on the coast*

Research carried out on the future tunnel and the migration of birds in the Strait of Gibraltar (Jose Maria Mora Camacho, 2010) discusses in a new and profound way the relationship between territorial infrastructures, natural areas and migration linked to the Strait of Gibraltar, particularized in the case

of birds. It is, therefore, a unique study that attempts to reconcile the strategic development of the area through the future rail link between Africa and Europe with sensitivity towards ecological issues, not to mention other factors that influence the development of the area such as alternative energy use, specifically wind power. From this conscious analysis up to the infrastructural, ecological and technological scales, the proposed rail exchanger connects a network of bird observatories combined with the architectural and territorial dimension as elements of research, developed in this case as an architectural project. Figures 7 and 8.



Figure 7

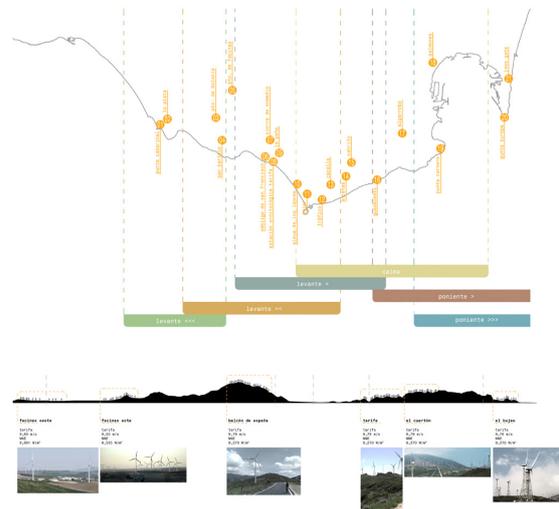


Figure 8

### *Coastal fishery production systems*

Research on the Cadiz coast (Miguel Ángel Fresno Hiraldo, 2010) discusses the evolution, from its Phoenician origin, of settlements engaged in fishing activities, mainly those based on the salt industry and marine farming, all associated and combined with the network of natural wetlands, estuaries and salt marshes, together with the study of ecosystems in the Bay of Cadiz. The cultural and historical approach is complemented by the proposed revitalization of the fishing village of Sancti Petri with an Interpretation Centre where morphological research is used to retrieve tidal systems within its own architecture. Similarly, territory and landscape understood as a whole, as an active and dynamic entity, are built from the paths that are generated throughout the Natural Park of the Bay of Cadiz. Figures 9 and 10.

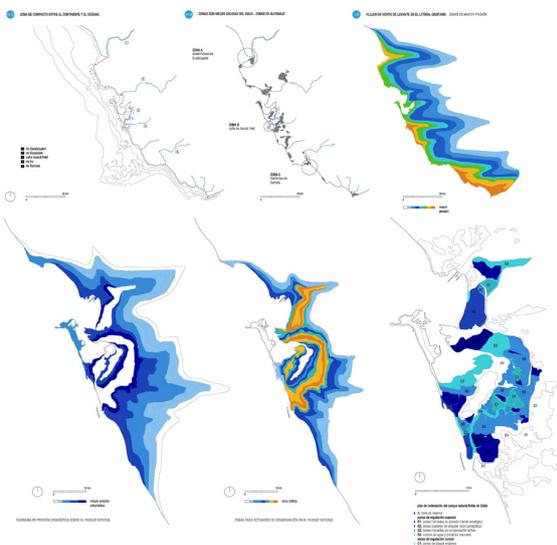


Figure 9

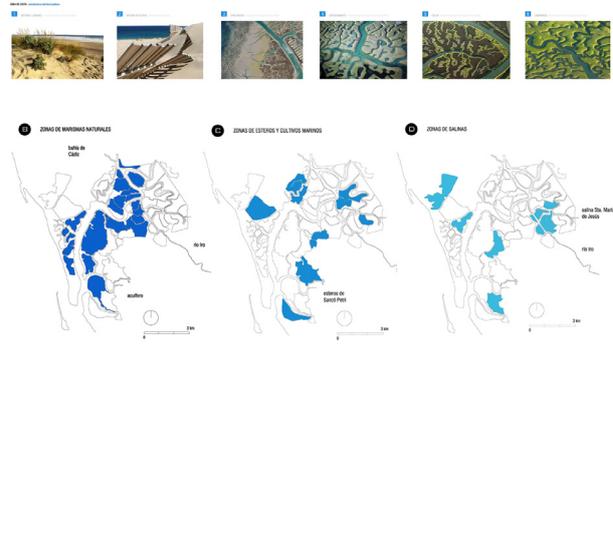


Figure 10

### *Intensive agricultural model on the coastline*

Research work on greenhouses of Almeria's Campo de Dalias (María del Mar González Dueñas, 2010) addresses deeply and comprehensively the situation of the intensive agricultural model of Almeria and its implications. The project analyses the production system in a detailed manner from all possible aspects (historical, economic, technical, energetic, environmental, planning, infrastructural ...) and confronts laudably the impact on a territorial, ecological and technological scale. In this sense, sustainability parameters are used to evaluate its behaviour. From here, she makes different proposals that range from the scale of territorial planning to the architectural scale addressing the problems encountered, all under the principles of self-management and self-sufficiency of the system. A new system of Territorial Planning and strategic lines of intervention is defined to undertake the innovative and sustainable growth of the region. A Coordination Centre for Research and Management for Sustainable Development is proposed on the architectural scale. Therefore, the development of the research process is essential for a successful program that integrates environmental solutions within the realization of architecture, both technologically and through construction. It also provides ideas put forward in the management and efficiency of energy resources, strengthening innovation by integrating the technical aspects of architecture. Figures 11 and 12.

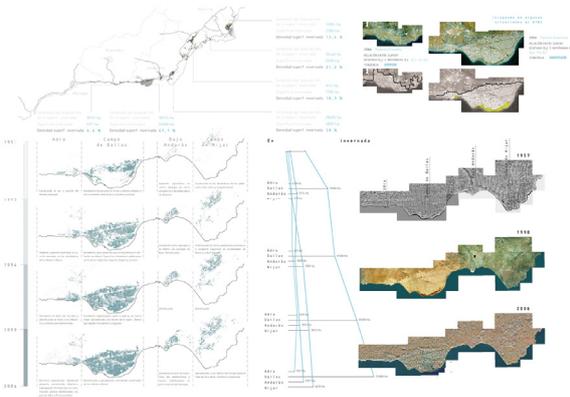


Figure 11

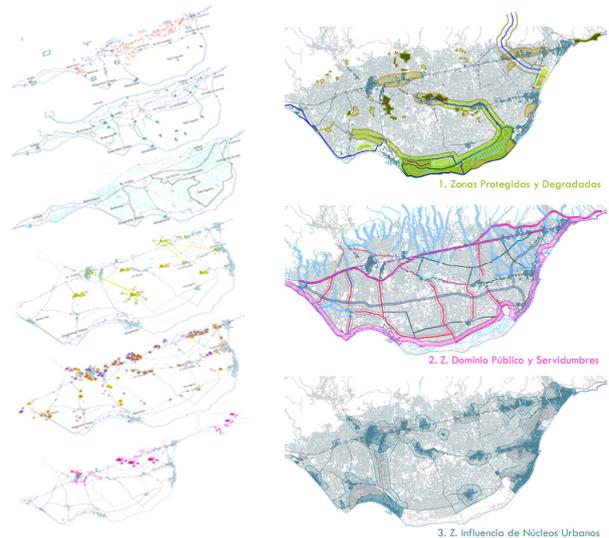


Figure 12

### *Agriculture and coastal-protected areas*

The research study on the evolution of agriculture on the edge of the Cabo de Gata Natural Park (José Carlos Fernández Martínez, 2010), combines the infrastructural character of the new access in cohabitation with a balanced implementation of greenhouses, in search of a sustainable limit. Summarized in the approach from the coastal scale towards the significance and level of impact of existing protected natural areas on the Andalusian coast, the particularisation of this case is of great interest based on the detection and the analysis of economic pressure affecting coastal environmental spaces. On the architectural scale, the Visitor Reception Centre is presented as a distributor of new access routes and primary trails associated with historical and geological ones, linked to public transport via rail, and a Study Centre combining the knowledge of soil science and geology of Cabo de Gata with intensive agriculture examples such as crop hybridization applications. Figures 13 and 14.



Agricultural and tourist models make up two of the great phenomena transforming the landscape or the natural environment, altering the physical conditions on the earth's crust, even ahead of mining, industry and infrastructures. As for the consumption of land within the construction industry, tourism is in a very strong position as expressed by Pie (2002): "You can say that in the second half of the twentieth century, and on a worldwide scale, the two major development phenomena have been, by far, self-built housing and architecture dedicated to tourism".

As such, these two large engines of development have been addressed during the research process in hindsight, and even with an anthological scope, bringing together the accelerated processes of territorial transformation in a short period of time. In this way, we observe that the changes have happened in parallel to both production systems associated with the historical situation, in the political and economic angles of the events.

Both systems alter the coastal territory, using very different mechanisms of occupation although they affect infrastructures in a very similar way, deteriorating the quality of available resources, even reaching overexploitation. For example, the case of aquifers damaged as a result of agricultural measures or the environmental impact caused by dams used to control water supply, all driven by tourism. Simultaneously, the effect of toxic pollutants on the earth and on the water through spilling or leakage into the sea can be noticed. As a result we witness the effects of the expansion of both systems directly affecting the environment.

Also, the two models have a contemporary genesis characterized by intense transformation due to a centralized policy guideline. The emergence stages of expansion during the sixties, the qualitative redefinition during the seventies and the transfer of the model to nearby areas during the eighties are all common to tourism and intensive agriculture.

Apart from tourism and the agriculture model, another example that is clearly identified today is the natural and landscape model, emerging almost by exclusion of the above on the Andalusian coast. This can be identified as an empty gap between the areas occupied by supposedly more developed fields. The enhancement of natural areas through the protection and preservation system has emerged gradually over time due to deterioration and lack of appreciation of these spaces during the span of accelerated tourism and agricultural development models. Awareness over environmental issues, through legislation and public valuation, has facilitated its present blossoming and the current regenerative possibilities of the entire coast.

In the natural model, the relationship with the geographical environment is evident. The identification of models with specific areas of the coast has a strong physical link due to location. Its appearance comes as a result of infrastructural reasons, due to accessibility by land, sea or air; over historical reasons that have favoured its genesis; because of cultural rooting and tradition; also through its climate, such as prevailing winds and sunshine, as well as geographical reasons affecting the relief or morphology of rivers, beaches and mountains.

Discretization schemes and comparative studies, made between models within the strategic lines that were decided upon, are based on a study of developmental and physical conditions, as a result of potential layout techniques employed. Seven models were suggested: 1, Costa del Sol as transfers of experience in tourism development, analysis of leisure areas and social impact of the environment due to anthropization, 2, Almeria's Poniente as a laboratory for the development of agricultural techniques and their impact on the environment. 3, Cabo de Gata as a model of natural areas, parks, locations and spaces of value. 4, The Bay of Cádiz in terms of coastal fishing areas, salt marshes and cultural spaces. 5, Campo de Gibraltar as an industrial hub with strategic positioning and communications in infrastructure and environmental values. 6, Costa de Huelva as a preserved coast due to its natural value. 7, Costa de Granada as a transition between agriculture and tourism. The hybrid experiences between these models result in different degrees of development, as they are interrelated and induced by various infrastructures.



Vizcaíno (Málaga Oeste-Guadalhorce), Antonio Jesús Palacios Ortiz (Costa del Sol occidental-Torremolinos), Jaris Briongos Auzmendi (Costa del Sol occidental-Mijas), José Manuel Sáez Padiá (Campo de Gibraltar-Algeciras), José María Mora Camacho (Campo de Gibraltar-Tarifa), Miguel Ángel Fresno Hiraldo (Bahía de Cádiz-Sancti Petri), Nuria Ortigosa Duarte (Bahía de Cádiz-Chiclana), Estefanía García García (Bahía de Cádiz-San Fernando).

We thank everyone who participated in the research, and specifically Antonio Jesús Palacios Ortiz, Manuel Luque Eliberto Guerrero, María del Mar González Dueñas, Pablo Gámez Arboleda, José Carlos Fernández Martínez, José María Mora and Miguel Angel Camacho Fresno Hiraldo, whose research projects have been instrumental in preparing this text, both with the graphic documentation provided and the conclusions reached in their work.

## References

- de Lacour, R and Lanzat, C. and Galacho F. J. (1995) Estudio del Planeamiento vigente en la Costa del Sol occidental. Inédito. Málaga: Consejería de Obras Públicas y Transportes, Junta de Andalucía.
- de Lacour, R and Romero, J.M. (2004) *020404 Deriva en ZoMeCS* (: un libro colectivo de estudiantes de las asignaturas Monográficos de proyectos y proyectos I, de la Escuela Técnica Superior de Arquitectura de la Universidad de Granada). Málaga: Rizoma.
- de Lacour, R and Romero, J.M. (2005) *Nerja Paisaje ZoMeCS* (: un libro colectivo de estudiantes de la asignatura Monográficos de proyectos, de la Escuela Técnica Superior de Arquitectura de la Universidad de Granada). Málaga: Rizoma.
- de Lacour, R. (2006) “Arquitectura y turismo, espacios para la colectividad” in Revista de la Universidad Politécnica de Cataluña.
- de Lacour, R. (2011) “Los espacios naturales del litoral como oportunidad territorial de paisajes” in Tapia, C. et al. El territorio como “Demo”(a)grafías, demo(a)cracias, y epidemias. Red Internacional de Estudios Socioespaciales (RESE), Sevilla: Universidad Internacional de Andalucía, pp. 270-288.
- García, E. (1986) “Turismo y agricultura en la Costa del Sol malagueña” in Revista de Estudios Regionales. 1985-86., VI, pp. 81-96.
- Loren, M. and de Lacour, R. (2008) *Costa del Sol: Arquitectura, Ciudad y Territorio*. Convocatoria de Ayuda a Programas de Investigación en materia de arquitectura y vivienda. Sevilla: Consejería de Vivienda y Organización del Territorio, Junta de Andalucía, 2006-2008.
- Pie, R. (2002) “La arquitectura vergonzante”. En: AA.VV. La Arquitectura del Sol. Barcelona: Colegios de Arquitectos de Cataluña, Comunidad Valenciana, Islas Baleares, Murcia, Almería, Granada, Málaga y Canarias, pp. 24-29.
- Serrano E. (2005). “La relación todavía no pensada entre turismo y territorio”. Archipiélago Cuadernos de Crítica de la Cultura, nº 68 Clase Turista, Madrid, pp. 59-68.