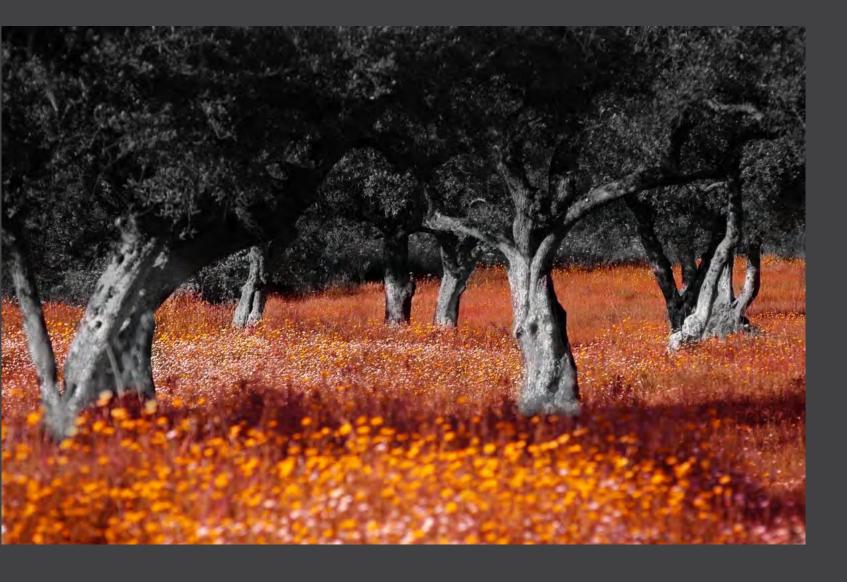
The regional-local nexus

A landscape-based integral design strategy for sustainable tourism development in coastal landscapes

Case study Dubrovnik Rivièra



J. Borsje & R.D.F.J. Tak Wageningen UR Chairgroup Landscape architecture February 2013 This thesis has been made possible by:









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General legend Tourism target groups



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Gastronomy & local products



Nature tourism



Nautical tourism



Rural tourism



Sun, sea & sand tourism



Wellness tourism

The regional local nexus

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Master Thesis Landscape Architecture Wageningen University

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Preface

This report is our thesis project for the Master of Science degree of Landscape Architecture and Spatial Planning at the Wageningen University, the Netherlands.

For about nine months, we did research on the development of sustainable tourism in the coastal landscape. In particular, the coastal Mediterranean landscape of the Dubrovnik Rivièra. Croatia.

In this research, different forms of tourism, tourism development and sustainable tourism development are investigated. On the other hand, the combination with landscape architecture is made. This synergy is explored and elaborated in an integral design strategy which can be used for the development of sustainable tourism. Designs on regional and local scale level show the site specific applications of this strategy.

During this project, we got great support of our supervisors Dr. Ir. Marlies Brinkhuijsen of the Landscape architecture group at Wageningen University and Dr. Irena Ateljevic, visiting professor at Wageningen University.

Thank you all for spending time and energy in our research project. Especially Marlies, for all the tutoring moments from the beginning until the end. Your sharp comments, inspiring words and enthusiasm about the project helped us to come to this result. Irena, thank you for all your effort in making connections with contact people in Croatia and your active role concerning the workshops. We would also like to thank Dr. Ir. Ingrid Duchhart of the Landscape architecture group at Wageningen University for the fruitful moments of feedback.

We visited our case study area twice, once in the second week of March (one week), the second time in June 2012 (two weeks). The first visit was about absorbing the Croatian culture and gathering information about the landscape. In June, we organized two workshops on the locations of the local designs (Trsteno and Lopud). During the preparation and execution of those workshops, Irena's support was indispensable. Her energetic personality and excitement about the project made the workshop sessions a great success.

Without the help of local people, it was not possible to have such successful workshops. Therefore we want to thank all the participants on both locations for their time and meaningful input. In particular Franka, Vanda and Sibila Karamehmedović for their great support and hospitality on both visits on the island of Lopud, and Stijepo Mojas for the arrangement of a location and participants for the workshop. Thank you Irena and Vido Peričević, for your hospitality and care during our pleasant stay in Trsteno and for the arrangement of a workshop location and participants.

We also thank Nikolina Vicelić of the Dubrovnik Tourist Board for her time and information.

Furthermore, we would like to thank Sander Rombout from Copijn Garden and Landscape Architects, Utrecht, the Netherlands, for the two moments of reflection and inspiration at the office of Copijn.

Also the NH Bos foundation, thank you for the financial contribution to this thesis. It made it possible for us to visit the study area twice, which was crucial for the project process.

Finally we would like to thank all our family and friends, who helped us during this thesis project.

Summary

Countries along the Mediterranean basin are popular tourist destinations. For centuries, the coastal landscape inspired millions of people to visit the pristine beaches, the picturesque historical villages, dramatic coastlines and cultural heritage sites (Koutoulas, 2008). The landscape served as a base for touristic activities and development and provided the basic ingredients for tourist experiences.

In the decades after the late 1950s, many coastal areas began to attract unprecedented numbers of tourists from northern Europe (Bramwell, 2004). This form of tourism, called Fordism, is characterized by the large-scale standardised production of tourist facilities and accommodations, accompanied with cheap package deals, collective consumption, crowded beaches and shopping malls. The rapid uncontrolled expansion of mass tourism resulted in footloose, generic resorts, which have no interrelation with its surrounding environment, mainly focused on the sea and sun. The high seasonal presence of tourists causes many problems for the local inhabitants and disadvantages for further tourism development. Next to seasonality problems, the orientation on sea and sun causes also spatial concentration on the narrow coastal strip of land, which is the most prominent place for these large-scale developments.

The rejection to this form of tourism is represented in experimental changes in the way that goods and services were consumed in the post-1970s. The post-Fordist tourist searched for alternative tourism products, which have more quality and are more diverse than the one-sided packaged product of mass-tourism. This required more alternative sites and attractions, which means also other forms of tourist accommodations and facilities; diversification of the tourism product. Individual, flexible travelling with a greater attention to discover site-specific qualities of the natural and cultural landscapes are characterizing the image of post-Fordist tourism. However, these alternative forms of tourism can be just as problematic as conventional mass tourism.

Since the 1980s, the concept of sustainable tourism emerged and is still evolving. The amount of research and literature about this subject increased exponentially, just like all the definitions and interpretations of the concept. According to UNWTO (2012), sustainable tourism is:

"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities". To achieve sustainable development, "a suitable balance must be established between these three dimensions to guarantee its long-term sustainability" (UNEP and WTO, 2005).

From our viewpoint as landscape architects, we acknowledge the importance of the landscape in the development of sustainability, it should work as a base for

tourism development. The focus of this thesis project is set on the sustainable development of post-Fordist form of tourism, applied on a case study in Croatia. Croatia used to have the same appearance of Fordist tourism as in Spain or Turkey, but the civil war caused a delayed or cancelled transformation into modern Fordist tourism market. Due to that Croatia had to start over and is now searching for a way to achieve sustainable tourism development.

In order to get an understanding of the contested concept of sustainability and the role of landscape architecture in this development, a theoretical framework is provided in which we determined the theoretical context of this thesis. By the means of this theoretical context, the research gap is identified to stress out the need of this research. It demonstrates that there is a lack of an integral approach in current tourism development. In many current attempts to achieve sustainable development, spatial interventions are not operating integrally. The missing link between topdown(large scale) and bottom-up(small scale) approaches and solutions can be made by integral approaches and inclusive processes which should provide the basis for tourism planning. Next to that, current attempts to integral development are lacking concrete spatial design solutions. These design solutions are needed in order to control the effects of tourism development on its social and physical environment spatially, and guide future development.

In order to complement the research gap, a case study is introduced which is located in the southern part of Croatia, in the Dubrovnik Rivièra. The case study is used to apply and test the contribution of landscape architecture to sustainable tourism development.

This contribution is on one hand focussing on the achievement of an integral approach, resulting from participatory processes and the acknowledgement of landscape as integrative, dynamic and evolutionary concept, which serves as foundation for future development (Koh, 2008).

On the other hand, spatial design solutions are offered which can make sustainable tourism practical implementable. In the case study, the integral approach is translated to a concrete design process which makes it possible to integrate top-down and bottom-up approaches by design. A six-step-process guides through different scale levels, linking the large scale context with local landscape characteristics, resulting in concrete detailed designs.

How this process exactly works, is described in this report. The first part includes an introduction in tourism development, a theoretical exploration in order to define the need for this research and the methods which are used in this thesis.

The second part introduces the case study area and the six-step-process which results in three detailed designs. Conclusions and reflections on the design process are discussed in the third part of the report, followed by further

recommendations and the appendices.

A more detailed description of the chapter division is explained in the readers guide.

Readers guide

This research focuses on the contribution of landscape architecture in the development of sustainable tourism on the coastal landscape of the Dubrovnik Rivièra, Croatia.

The first four chapters of this report form the context of our research, including an introduction in tourism development, our theoretical context, the methodology of the project and our position as landscape architects.

The second part, chapters five, six and seven, introduces the case study area and the six-step-process, applied on both regional and local scale levels.

Conclusions and reflections on the design process are discussed in the third part of the report in chapter eight and nine, followed by further recommendations and appendices.

Chapter 1

Introduces the development of tourism throughout history. It explains the characteristics and impacts of the main tourism forms on coastal landscapes. Also the different stages of tourism development are explained by using the Tourism Area Life Cycle-model of Butler.

Chapter 2

Describes the contested concept of sustainable tourism and also the horizon of this thesis. Our viewpoint as landscape architects on this phenomenon is clarified, together with the focus of the thesis. It also sets out the history of Croatia, proving the unique position of the country in the search for sustainable tourism development.

Chapter 3

The third chapter is providing a theoretical framework, in which we define the theoretical context of this thesis project. It concludes with the identification of the research gap, which determines that in current attempts to sustainable tourism development, an integral approach is lacking. Together with that, concrete spatial design solutions are missing as well. However, theory concerning landscape architecture shows that these missing links can be complemented by the application of landscape architecture on tourism development, in order to achieve sustainability.

Chapter 4

Explains the research questions and the methods which are used in this project in order to get answers on our questions. The six-step design process, which is applied on our case study is also clarified in this chapter.

Chapter 5

Gives an short introduction about the case study area. A tourism analysis is providing information about different tourism target groups, attractions, facilities, routes and landscape settings and sustainable transport. Next to that, a landscape analysis investigates the natural and cultural landscape of the study area. Furthermore, the chapter

stresses the need for participation processes within the development of sustainable tourism.

Chapter 6

This chapter shows the application of a landscape-based design approach in the form of a six-step process on a regional scale level. This process starts with the exploration of the area in its wider context. The site analysis in step two includes a tourism and landscape analysis, together with the identification of the landscape qualities and spatial problems in the area. The connection with tourism is made in the next step, followed by the formulation of design challenges and concept in step four. A phased development is described in step 5, elaborated in an ideal situation, step 6.

Chapter 7

The six-step process is also applied on a local scale level, which is described in this chapter. The main difference with the regional scale design process is the last step, because this results in concrete local design solutions, instead of a regional design strategy, as in chapter 6.

Chapter 8

Is reflecting on the six-step design process, concluding that both scale levels offer different elements for the integral design, which all together can form a comprehensive plan which works throughout the scales. Both scales have elements which can be very useful to incorporate in the designs on the other scale, as it makes the link between them stronger and raises the quality of both scales.

Chapter 9

Overall conclusions are set in the ninth chapter. The research questions are answered and our contribution as landscape architects is discussed.

Chapter 10

Recommendations for further research are find in this chapter.

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FOKKE & SUKKE

VINDEN HET EEN GERUSTSTELLENDE GEDACHTE

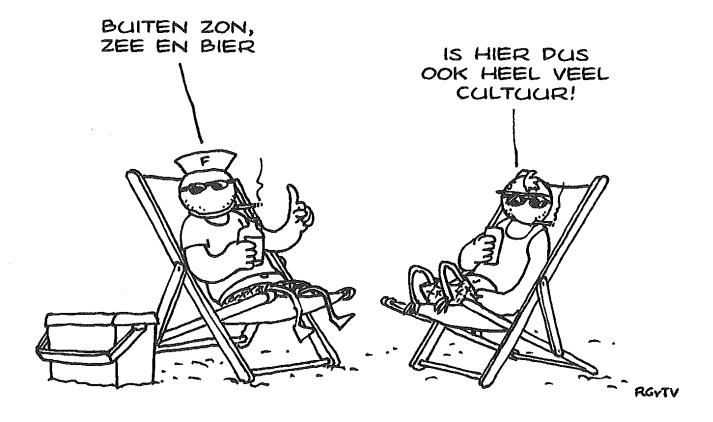


figure 0.1: Fokke & Sukke, a Dutch comic from the 2012 Block calender, date 25 July



Chapter 1

Tourism development



1. Tourism development

Sustainable tourism development is a very contested concept. To get an understanding of this complex phenomenon, we start with an introduction in the development of coastal tourism throughout history.

This chapter gives a brief overview of the major forms of tourism development and which motives are steering these developments. Early forms of tourism are for example strongly based on the natural and cultural environment(paragraph 1.1). while other forms like Fordist tourism are directed by infrastructural developments and transnational organisations as well(paragraph 1.2). The rejection to this generic tourism type and the motives for a qualitative shift towards the diversification of the tourism product are explained in paragraph 1.3. How tourism development can be conceptualized is illustrated in paragraph 1.4, with the example of the Tourism Area Life Cycle model.

Throughout this chapter there are several intermezzo's and examples which illustrate and underline the phenomena as discussed in the paragraphs.

1.1 Coastal tourism in the Mediterranean

Natural and cultural landscapes are often important assets for tourism development. The landscape served as a base for touristic activities and development and provided the basic ingredients for tourist experiences for centuries.

When speaking of coastal tourism in the Mediterranean area, people often think of the traditional summer migration of people towards the southern shores. The countries along the Mediterranean basin are popular tourist destinations. The landscapes inspired millions of people to visit the pristine beaches, the picturesque historical villages, dramatic coastlines and cultural heritage sites (Koutoulas, 2008).

Even though the coastal landscape is nowadays the main attraction, the first European resorts weren't even located on the coast. They were built inland, at places in the landscape where cold, lukewarm and hot springs came to the surface (Venema, 2008). This is where the Romans built their imposing complexes of bathhouses and spas. Initially, these spas were founded as homes for the sick and people who needed to recover, but more and more they developed as exclusive places with important side-activities as fashion and other facilities which attract leisure-seekers, in particular the rich upper classes (Williams, 2009). In Europe, the number of health resorts increased rapidly in the eighteenth century (Venema, 2008)Through this development, the spa resorts grew to central places with a lot of social life and interaction.

In a certain sense, these first health resorts can be considered as the forerunners of the contemporary seaside resorts (Venema, 2008). The long tradition in sea bathing and seawater treatment characterises the resorts along the Mediterranean littoral. This was be considered as more

effective and exclusive than the treatment that the inland spas were offering. This extraordinary treatment and the pleasant climate in the south triggered a gradually shift of visitors towards seaside developments after 1800 (Williams, 2009). Still, the growth of coastal resorts was based on site-specific landscape qualities and developed little by little.

1.2 The legacy of Fordist tourism

With the change in mobility by the technological developments in the field of transport, a strong impulse was given to the holiday industry (Mowforth and Munt, 2009). Especially the motor car and the airplanes took a key role in the rapid development of the tourism industry. The post-war prosperity resulted in higher incomes, longer and packed holidays which combined transport and accommodation, provided by large scale tour operators (Bramwell, 2004).

In the decades after the late 1950s, many coastal areas began to attract unprecedented numbers of tourists from northern Europe (Bramwell, 2004). Because of the better weather prospects, large numbers of people from diverse social groups settled down on the southern Europe's shores. First in Spain and Italy, later on followed by Greece, Malta, Cyprus and former Yugoslavia in the late 1970s (Bramwell, 2004). This tourism form with a large volume of cheap package deals, collective consumption, crowded beaches and shopping malls is characterized by large-scale standardised production (Bramwell, 2004). Such economies of scale with mass-produced and mass-consumed goods are known as Fordism(named to Henry Ford's assembly lines making mass-produced cars)(Mowforth and Munt, 2009). Accommodations and other commercial facilities which accompany these new developments were often realised by external investments within the destination area (Bramwell, 2004). The static image of mass tourism, with the only requirement of sun, sea, sand and sex, resulted in a rapid expansion of footloose, generic resorts, which have no interrelation with its surrounding environment. This major standardized growth in tourism in southern Europe contributed to the wider process of globalisation.

The inclusive tours that are offered by tour operators, are dominating the whole summer holiday market from the northern parts of Europe towards the warmer destinations in the Mediterranean basin. As a result, an oligopolistic situation arose, directed by a few major powerful tour operators. (Koutoulas, 2008). The tour operators can have a strong influence on the local economy of a certain area (Bramwell, 2004). When the tourism development is based on large scale foreign investment, the investor can outcompete local suppliers and extract money from the local market, because of the cheap production of bulk activities and services. Many suppliers are therefore depending to a large extent on those

tour operators for securing consumers (Koutoulas, 2008). This dependency isn't always an advantage, when looking at the recent downturn in tour-operator-generated traffic after the economic slump in 2000 (Koutoulas, 2008). There is a risk that local suppliers are not able to recover without the help of the external tourism magnets.

Next to that, foreign capital often means foreign profit. Bramwell(2004) describes an example in Crete where some local businesses are bought out by foreign multinationals. Nowadays, the foreign tour operators own 70% of the tourist beds, while local tourism businesses are extending their proceedings outside the region.

Seasonal and spatial concentration

The tourism product of the Mediterranean mass tourism is mainly focussed on the sea and sun. Obvious is that this causes a high seasonal presence of tourists. This seasonal peak in demand brings several problems or disadvantages for further tourism development. The negative side-effects of seasonality are not only limited to an area in which the tourist activities occur in a certain period, it influences the whole economy and investment climate throughout the year. According to Bramwell(2004), this seasonal concentration can lead to:

- periods of intense congestion;
- times when the long hours of work disrupt the rhythms and activities associated with more traditional ways of life;
- low levels of use of tourist facilities out of the main season and thus reduced economic returns on investment
- it can affect the need to invest in infrastructure and water management
- it can entail seasonal unemployment

Besides the seasonal concentration of coastal mass tourism, there is also the spatial clustering which comes together with the orientation on the sea and major infrastructure like airports, ports and highways. The narrow coastal strip of land is the prominent place for these developments, because of the sea views and easy access to the sea. Facilities, infrastructure and accommodations are centred near and connected to the sea-side resorts. For gaining optimal profit and to meet the tourist demand, high-rise buildings and large-scale infrastructural elements are realized directly to the narrow coastal strip.

Locations that represent this emergence and development of mass tourism perfectly are the coastal regions of Turkey and the Spanish Costas. In the following examples, the impact of powerful tour operators and the transformation of a coastal area will be shown. Turkey tried to develop the non-coastal regions as well, with the attempt to expense the equality among regions and social classes, but failed as a result of external pressure (Tosun et al., 2004).

The example of Spain shows us the stages that can be distinguished when looking at the expansion of coastal mass tourism. The doom scenario of how a coastal landscape can be transformed is illustrated by the story of Venema(2008).

Turkey

After the Second World War, Turkey adopted tourism as an alternative economic development strategy to create new jobs and a favourable image in the eyes of European people. This would help the acceptance of Turkey for the full membership in the European Union (Tosun et al., 2004).

What started with the attempt to increase the economic growth at the expense of equality among regions and classes, ended in an increased disparity among those two. Not because this was well-planned by the governmental institutes, but as an result of the influence of powerful multinationals.



figure 1.1: Alanya 1950 (source: antalya.de)



figure 1.2 : Alanya 2008 (source: antalya.de)

According to Tosun(2004), the development of Turkey is shaped by transnational organisations which have marketed the country as an cheap sun and sea destination. This resulted in a focus of foreign tourists on the coastal areas and not on the non-coastal, underdeveloped regions. With their dependence on foreign companies, the government didn't invest in the less-developed regions, which enlarges the gap between rich and poor. Obviously, the western coastal regions where the mass tourism growth was attracting large numbers of tourists in expanding resort areas, while the less successful poorer regions were lacking further behind. What was intended as a mean to achieve overall development, resulted in further regional inequality.

Spain

As Venema(2008) describes in his chapter about coastal tourism, a few stages can be recognized when looking at the expanding of coastal mass tourism in the southern coast of Spain. Until the 1950s, the Spanish Costas were practically untouched by tourism and almost Terra incognita for the rest of Europe. The transformation started with the absence of tourist infrastructure, combined with stable labour relations and low wages. This offers perfect conditions for a new kind of bathing culture, with cheap mass tourism, nestled in fishing villages and harbours. In the late 1980s and 1990s, mass tourism was consolidated on the southern coast of Spain (Venema, 2008).

In the first stage of exploitation, tourist facilities and activities are based on existing population centres, like fishing harbours and coastal villages. Second stage is when urbanism takes

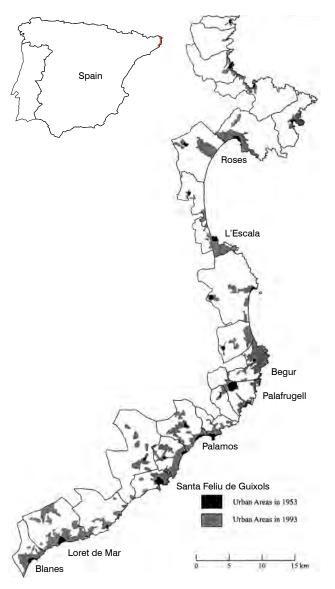


figure 1.3: Urbanization in the Costa Brava, 1953–93. source: adapted from Cartografia Militar de España(1993)



figure 1.4: Mass tourism Alicante, Spain (source: national geographic)

a more compact form. Hotels, apartments and facilities are built at a higher density. To link these urbanised centres, new roads along the coastline are constructed. This line of development causes a built-up strip directly behind the beach. In the next stage, this infrastructural development sprawls more inland and creates a second coastline. In this third stage, the large-scale construction of apartment buildings and second homes is added to the existing facilities. Together with these large-scale developments, completely independent residential districts are built that function as gated communities with no relation to its surroundings. The landscape and existing cultural structures are experienced as scenic embellishments, not as base points for development. As Venema(2008) continues, the final stage arrived. The coastal zone is transformed into a closed urban system, based on the development of resorts and gated communities location on the coast or just inland. Accessible by good roads, leading from and to an airport, motorway or harbour. These places are devoid from meaning that lack any relation with landscape or local community. The resorts are like islands on the coast. The result is an fragmented landscape with several enclaves and leftover places. Driven by shortterm profit, the coastal developments eroded the qualities of the landscape and existing environment and left areas which are no longer seen as tourist attractions nowadays.

1.3 Post-Fordist tourism

In contrast with Fordism, post-Fordist tourism represented the "qualitative shift from mass production and consumption to more flexible systems of production and organisation" (Mowforth and Munt, 2009). This "flexible accumulation" (Harvey, 1989) made experimental changes in the way that goods and services were consumed in the post-1970 period. This resulted in "changing consumer tastes and the emergence of niche and segmented markets" (Mowforth and Munt, 2009). This post-Fordist tourist is searching for alternative tourism products, which have more quality and are more diverse than the one-sided packaged product that mass tourism has to offer.

This rejection of certain forms of mass tourism resulted in the need for alternative sites and attractions, which means also other forms of tourist accommodations and facilities. As collective cheap packaged holidays are characteristic for Fordist tourism, small grouped tours and individual journeys are striking for post-Fordism.

The post-Fordist tourist is considered to be wealthier, better educated, more interested in discovering differing environments and local cultures (Feifer, 1985). The three T's (travelling, trekking and trucking) are replacing the traditional S's of mass tourism (Sun, Sea, Sand, Sex). These motives can be related to the ancient reasons for tourist consumption: site-specific qualities of the natural and cultural landscapes.

The shift in the consumption patterns changes the ratio producer-consumer as well. "The consumers are increasingly dominant and the producers have to be much more consumer-orientated" (Mowforth and Munt, 2009). According to Harvey(1989), the flexible accumulation has been accompanied by a greater attention to quick-changing fashions and a cultural transformation. The static aesthetic of Fordism is replaced for a more instable form of culture that celebrates difference, fashion and ephemerality and is less and less functional.

Important in this transformation on the consumption side is the coupling with the production process. The on-going expansion of capitalism, where reducing the turnover time and a quicker circulation of capital are steering objectives (Mowforth and Munt, 2009), is reflected in the way new products were developed. The acceleration in turnover time led to a shorter lifetime of goods, but also of sites, experiences and events in the field of tourism. "Fewer repeat visits and the proliferation of alternative sites and attractions" (Mowforth and Munt, 2009), are the consequences of this diversification of the tourism product.

Postmodernism

The proliferation of this alternative tourism has also a reverse. The acceleration in the pace of everyday life effected also places and destinations. Because of the change in fashion, places and destinations flew on and off the tourism map, and tourists are moving elsewhere. The local cultures and lifestyles on these locations were therefore struggling with their own identity: "As an increasingly globalised world has resulted in a global economy, so too there is an inevitability that the same processes have resulted in the emergence of a global culture" (Mowforth and Munt, 2009). For local communities with native cultures and lifestyles it is hard to sustain their traditions in a world where constant erosion of cultural difference is taking place. This struggle is called the

FORDIST	POST-FORDIST
Mass Packaged 4 Ss' (Sun, Sea, Sand, Sex) Unreal, footloose, generic Irresponsible (socially, culturally, environmentally)	Individual Unpackaged/flexible 3Ts (Travelling, Trekking, Trucking) Real, place specific Responsible

figure 1.5: source: adapted from Mowforth and Munt(2009)

[intermezzo]

Çirali: the village that has escaped

Çirali is a small village on the Turkish coastline, eighty kilometres from the centre of Turkish coastal tourism hotspot, Antalya. But, instead of being overruled by beach resorts, the local community took a stand.

For the first time in Turkish history, a whole local community resists against the expanding mass tourism. "We don't want to make the same mistake as elsewhere. In Antalya, people are building hills from concrete. Many people here have relatives who are unhappy about the situation there. We don't let them take Çirali to do the same" (v. Bemmel and Jans, 2007).

Before the construction of the main road in 1976, just a few nomads inhabited the village of Çirali. Since then, the first cultivated fields appeared, accompanied with several tourist facilities and accommodations. The aim of the community is to stop these short-term profit investments and remove all the current illegal settlements. No cheap packaged holidays, but ecotourism and local products are the base for future development.

After seven years of discussion, there are now limits for tourism growth in the village. Landowners aren't allowed to build more than 10% of their land with tourist accommodations, which have to be low-rise (v. Bemmel and Jans, 2007).

The reason behind this success is the rare and endangered 'Hawksbill'-turtle, which lays its eggs on the beach of Çirali (Venema, 2008). When a company from Istanbul wanted to buy large pieces of land to develop a golf resort, local farmers used the turtles as ammunition to stop the large-scale tourism developments. They took the company to court and showed pictures of the endangered turtles to the judge. When he saw the pictures, he decided to cancel all the constructions plans.

After this victory, the local resistance got in touch with the WWF, which are still active in the coastal village nowadays.

According to them, the Çirali experiment can be used as a 'sustainable' model for the whole Mediterranean basin, as attempt to stop the expanding mass tourism by means of local opposition.



figure 1.7: Hawksbill-turtles heading to the sea (source: tripadvisor)



figure 1.6: Çirali beach (source: dicoverthetrip.com)

[intermezzo]

Mallorca: a tough transformation

In his book 'Mallorca and Tourism', R.J. Buswell is giving an overview of the tourism landscape in Mallorca, by understanding the historic processes and examining en route the social, economic and political forces that shaped these patterns. The focus lies on the development of mass tourism, the transformation in tourism and the response to the problems it caused.

For many travellers, the nature of Mallorca's microcosmic world was the major attraction. Together with a pleasant Mediterranean climate, which is an added attraction (especially for North Europeans)during winter time. Furthermore, the island has a rich cultural heritage, with stone structures and estates in the countryside. British travellers in the 19th century noticed the lack of facilities on the island, such as decent hotels for tourists (Buswell, 2011). But, these early visits were, largely before the beach and sea became an important resource for tourism. More important in that time was the cultural landscape: churches, monasteries, the city of Palma and the estates (Buswell, 2011). As an island in the Mediterranean, Mallorca and other islands(like Malta and Cyprus) served as stepping stones between Europe and the continent of Africa. For tourists this is important because it involved travel, initially by sea and later by air(Buswell, 2011). Secondly, the island was perceived as a 'place apart', where different life could be experienced. The fascination of an island, with its remoteness, isolation, smallness and unique nature are important motives for tourist visits.

According to Buswell(2011), many Mallorcan analysts have turned to instead is the model of Fordism, which is described in paragraph 1.2: cheap flights, low-cost hotels and easy access to clean, safe beaches. This model laid the foundation for Mallorca's fortunes. As he describes, many large elements of this model are still present in the today's landscape. But, he stated that it is very important to demonstrate against this model which isn't entirely inflexible and incapable of change. Persistent pressure from



figure 1.8: Mallorca tourist map (source: studiolum.com)

environmentalists led to the legislation to constrain coastal development and a more careful management of the natural resources of the island. Not only spatially, also the attitude of hoteliers and tour operators changed, in the way they reformed their practices. Partly because of the changing consumer demands, but also for internal economic reasons. They invest effort in the diversifying of the tourism product, which contributed to the seasonal balance. "Many different forms of leisure activity now take place on the island, but the hegemony of the five 'Ss'' (Sea, sand, sun, sangria and sex) remains a very powerful form of holidaymaking for many of the 9 million visitors who come to Mallorca each year" (Buswell, 2011, p.10).

The need to diversify has been motivated by many factors since the late 1970s,like reducing the environmental impact, reduce the seasonality and attract the so-called 'new tourists' (new middle classes, see paragraph 1.3). To date, the spatial implications which have to support the diversification, are largely on an ad-hoc basis.

The policy in Mallorca implied two broad factors that have to steer the shift in development.

First, the structure of the tourism industry is changed to accommodate a diverse range of tourists, at different times of the year. The income derived from this must at least equal the current income levels, preferably adding to them If there in an increase as a result('new' tourists + mass tourists), the externality costs mustn't increase unless the gross national product increases sufficiently to pay for them(Buswell, 2011). The second measure concerned the total Mallorcan economy. Other parts like agriculture, the tertiary and quaternary sector will need to be able to innovate new forms of activities and products and at the same time be accommodated within the island's social, economic and physical environment.

Positive effects of this policy (still ad-hoc implementations) were noticed in the mid-1980s. Tourism became less seasonal related and new forms of tourism have become evident. Buswell(2011) pointed out that "the socio-economic profile of tourists has been broadened and some additional geographic zones have been developed, notably away from the crowded coasts". The second operation, which concerned the non-tourist economy was less successful. The agriculture declined and diversified only marginally. The manufacturing behaved the same, but the service industries knew a big change. Largely in the public sector and in public services as education, health and transport. A number of new sectors, ranging from conferences to hiking and walking are examples of attempts for the diversifying the tourism product.

With the eyes on the future, the island is taking preparations for further change in the tourism sector. They expect that the technological innovations, particularly in the energy sector, will participate in the creation of new tourist landscapes. They know that new tourists have new demands for products and services, but they believe that when the island forgets or neglects its core business on mass tourism, the holidaymakers will go elsewhere and other places will meet their demands.

'crisis of representation'. The outcome of this phenomenon is postmodernism, what refers to the emergence of new cultural styles and services (Mowforth and Munt, 2009). Harvey(1989) marked two important main developments in postmodernism:

- Acceleration in the consumption of lifestyles and recreational activities
- The shift from the consumption of goods into the consumption of services

Another trend which is linked with postmodernism is the expansion of the so-called 'new middle classes'. These classes are the bearers of cultural change, inherent to postmodernity (Mowforth and Munt, 2009). They are the social groups that took the new cultural processes and consumption patterns to a higher level. The new middle classes are the major initiators of 'new tourism', which is linked with the change in lifestyles. The range of lifestyles are important indicators for the behaviour of people. It determines where people choose to live, what they eat, and what kind of holiday they take. The new middle classes are constantly attempting to identify and indicate what their position is in the 'new social and cultural order' (Mowforth and Munt, 2009). Mowforth & Munt(2009) claim that these classes are also the key groups which promoted and implemented the notions of sustainability.

Looking back at the impacts and development of mass tourism, it can be assumed that 'new tourism' causes less environmental damage than the former. As it "would appear much more in tune with the principles of sustainability as it is often characterized by its small scale and involvement of local people, and by an emphasis on appreciating nature, landscapes and cultures" (Bramwell, 2004).

But, as Bramwell(2004) stated, these alternative forms of

tourism can be just as problematic as mass tourism. Mass tourism is for example more spatially concentrated than the alternative forms of tourism. The latter is often drawing on spatially scattered natural and cultural resources, what is more widespread than the concentrated appearance of mass tourism. The question is if this is more sustainable, because when a mass tourism cluster decides to 'go green', it might put less pressure on its environmental surroundings and can diffuse sustainable initiatives (Bramwell, 2004). While it seems more difficult to let all local owners of hotels adopt environmental measures individually.

This consideration illustrates the difficulty of the discussion about sustainability. The notion is applicable on both view points, but the degree of sustainability really depends on the way of execution and spatial implementation.

1.4. Stages of tourism development: the Tourism Area Life Cycle

As Venema(2008) describes in the example of Spain(paragraph 1.2), several stages of development can be determined in the expansion of coastal mass tourism in a certain destination area. A model which is often used as an attempt to describe and understand these stages of development is the Tourism Area Life Cycle model of Butler.

Since the first appearance of the original model in 1980, it is still being cited and used for current tourism research (Butler, 2011). The model makes the assumption that tourist destinations and in particular coastal resorts, are essentially products (Butler, 2011). "They have normally been developed and modified to meet the needs of specific markets (holidaymakers) in a similar way to the pro¬duction of other goods and services" (Butler, 2011, p.4). Butler based his model on the product cycle concept, which means that



figure 1.9: the image of 'new tourism' (source: sheknows.com)

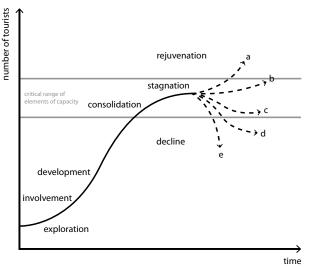


figure 1.10: the model of TALC, source: adapted from Butler (2006)

the sale of a product first proceeds slowly, than accelerates, stabilizes, and eventually declines (Butler, 2006). This 'life cycle' principle is applied on the way tourist destinations develop. "The purpose of the model was to draw attention to the dynamic nature of destinations and propose a generalised process of development and potential decline which could be avoided by appropriate interventions" (Butler, 2011, p.6).

At first, visitors will come to a place in small numbers, limited by the lack of access and facilities (Butler, 2006). This number increases when the awareness grows and tourist facilities are provided. Further marketing and more facilities will contribute to the popularity grow of the tourist destination. However, when the carrying capacity of the area is equalled or reached, the number of visitors will decline as a result of overuse and negative impacts of the visitors (Butler, 2006).

In the TALC model, the generalised process of development of tourist destinations areas is described in six stages (Butler, 2006):

The exploration stage: small number of visitors, with an irregular visitation pattern. They are attracted by the unique natural and cultural features of the area. No specific tourist facilities are provided, the visitors are relying on contact with local residents, which is an attraction itself. The tourist activities have little impact on the environment, economy and social life of the local inhabitants.

When some local residents start to provide facilities for the growing number of tourists, they enter the involvement stage. In this stage, locals advertise to attract more tourists and the first signs of a tourist season emerge. Some level of organisation and tourist arrangements puts pressure on governments to provide more facilities and better infrastructure.

The development stage reflects a further increase of visitor numbers, with heavy advertising in a well-defined tourism market. In contrast with the earlier stages, local involvement and development control are declining. The local facilities are outcompeted by external large-scale organizations, which provide facilities particular for visitor accommodations. These man-made facilities supplement the original attractions, the natural and cultural landscape. These developments cause noticeable changes in the physical environment of the area, which are not approved by most of the local population. Next to the facilities and attractions, the type of tourist changes as well. A wider market is drawn upon, whereby the number of tourists at the peak period exceeds the local population.

The rate of increase in the number of visitors declines eventually in the consolidation stage, although the number of tourists is still increasing. Tourism is the major part of the area's economy and marketing and advertising stimulate the further extension of the visitor season and market area. The large number of tourists and the accompanied facilities and marketing can result in some opposition among the local community.

In the stagnation stage, the peak number of tourists is reached. The carrying capacity of the area is exceeded, which causes environmental, economic and socio-cultural problems. Natural and cultural attractions are replaced for 'artificial' facilities. The popularity of the area is declining, with surplus bed capacity as result. Organized mass tourism causes alienated resorts, divorced from its geographic environment.

After the stagnation stage, the direction of the curve is open for several interpretations (Butler, 2006). Direction 'a',



figure 1.11: tourism decline caused by war. Kupari, Croatia

redevelopment can result in further expansion and renewed growth. Still growth, but reduced, due to the adjustment of capacity levels is shown in curve 'b'. A readjustment to a more stable level of visitation after an initial downward curve is illustrated with 'c'. More decline as a result of overuse and the lack of competiveness is marked in the 'd' curve. An immediately decline can caused by interventions of catastrophic events, like war, diseases, which effect the number of visitors directly. When the decline continues, the destination area may be no longer attractive to the majority of tourists, even when the problem is solved.

Although the model of Butler is in the first place helpful to conceptualize the development of tourist resorts, it also puts attention to the need for appropriate interventions which could avoid potential decline.

Because of the TALC is a creature of its time, it reflects the image of tourism in the 1970s, when the rapid expansion of Fordist tourism was underway, driven by the rapid process of globalisation. The proposed interventions to ensure survival are therefore not sufficient for today's development, but the awareness of how the process of development could be steered with interventions in a certain stage are still relevant.

With the focus on future development, the TALC may help to determine the stage of development of a certain tourist destination and if there is a need for appropriate interventions to prevent stagnation.

Summary chapter 1

- Early forms of tourism were based on the natural and cultural landscapes.
- Fordism: mass tourism with a large volume of cheap package deals, collective consumption, crowded beaches and large-scale standardised production. Seasonal and spatial concentration caused high pressure on the narrow strip of land near the sea where all the developments take place.
- Post-Fordism: the rejection of mass tourism resulted in the need for alternative sites and attractions, accommodations and facilities: diversification of the tourism product. This new tourism form putted an emphasis on appreciating nature, landscapes and cultures.
- The Tourism Area Life Cycle model is often used as an attempt to describe and understand the development of tourist destination areas. This is illustrated by a 'S'-shaped curve, which shows the increase and decline of development. The generalised process of development is further explained with six stages of development.



Chapter 2

Sustainability in tourism



2. Sustainability in tourism

2.1 The concept of sustainable tourism development

As shown in the previous chapter and the intermezzo of Mallorca, the concept of sustainable tourism (or sometimes called responsible tourism) development is playing an important role in the contemporary development of tourism. The concept emerged in the 1980s and is still evolving. The amount of research and literature about this subject increased exponentially, just like all the definitions and interpretations of the concept. To get an insight of the definition, this paragraph will start with a commonly used one, as defined by the UNWTO (2012). According to them, sustainable tourism is:

"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities".

The description consists of two parts, the first covers the three main pillars on which the concept of sustainable tourism is based on: economic, social and environmental sustainability. The second part emphasizes the special relationship between tourism and sustainable development according to UNEP(2005).

The three main pillars of sustainable tourism are generally explained by the UNEP and WTO(2005) as follow:

Sustainable tourism should:

- Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity.
- Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
- Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

These three pillars of sustainability are further underlined by the Agenda 21, the action plan which emerged from the UN Conference on Environment and Development in Rio de Janeiro (1992) and the plan of implementation from the World Summit on Sustainable Development (UNEP and WTO, 2005). This action plan describes that tourism has a special role in the contribution to sustainable development

and the challenges it presents.

On the first place, because of the dynamism and growth of the sector, and secondly because of the special relationship between customers, the industry, the environment and local communities (UNEP and WTO, 2005).

This relationship leads to three important and unique aspects according to UNEP (2005):

- Interaction: direct and indirect between visitors, host communities and their local environments
- Awareness: people become more conscious of environmental issues and differences between nations and cultures
- Dependency: on clean environments, natural areas, historical and cultural traditions and the relationship with the host

To achieve sustainable development, "a suitable balance must be established between these three dimensions to guarantee its long-term sustainability" (UNEP and WTO, 2005).

UNEP and WTO pointed out that tourism has a key position in the process towards sustainable development, focussed on environmental, socio-cultural and economic issues. Next to that, tourism has a special relationship in this process, concerning interaction, awareness and dependency.

Nevertheless, this commonly used description of the concept of sustainable tourism development also raises many questions and is often the subject of discussion. Sceptics claim that the term 'sustainability' remains 'fuzzy' and differs to the purpose of the actors which are involved. Still there no clear agreement on the definitions and conceptual and practical boundaries yet (Mowforth and Munt, 2009).

Instead of giving a definition, Mowforth and Munt (2009) set up a number of criteria, which are often used for sustainability

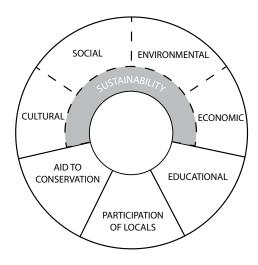


figure 2.1 Source: adapted from Mowforth and Munt (2009)

in tourism. They believe that there is not a correct or absolute version of the meaning of sustainability, so they want to point out that the notion has many ramifications. In this approach, they want to "examine and assess tourist activities according to whether they satisfy a number of criteria of sustainability" (Mowforth and Munt, 2009). Figure 2.1 shows the range of criteria they composed.

When having tried to frame the concept of sustainable tourism, it is clear that it can be interpreted in many ways. However, sustainability in tourism is not a concrete concept like Fordist or post-Fordist tourism. It is rather focused on making other forms of tourism sustainable in terms of energy, local participation and environmental issues. This can be done from an all-inclusive resort (Fordist) to a community ecolodge (post-Fordist, ecotourism), making the idea of sustainable tourism criteria quite difficult (Font, 2013).

With the acknowledgement that the term is still in its infancy, it is time to place the concept within the horizon of this thesis. In the next paragraph, the development of sustainable tourism will be determined from our perspective as landscape architects.

2.2 The horizon of this thesis

As shown in the previous paragraphs, sustainability seems to be a contested concept, which is not reducible to a series of absolute principles or one definition (Mowforth and Munt, 2009). The position of tourism in the search for sustainable development is however very significant. Because of the dynamism and growth of the sector, but also because of the special relationship between customers, the industry, the environment and local communities (UNEP and WTO, 2005).

Sustainability in post-Fordist tourism is focussing on the interaction with the local community, social-cultural authenticity and a balanced system. In other words, the living local landscape including the inhabitants, their culture, local products, landscape characteristics and the spirit of the place (genius loci).

From our viewpoint as landscape architects, we acknowledge the importance of the landscape in the development of sustainability. The landscape offers many natural and cultural qualities, which historically used to serve as the base motives for tourist activities. But, as we saw before, the popularity of these landscape qualities also brings many problems. With popularity comes certain economic benefits, which attract large-scale developments and finally ends with

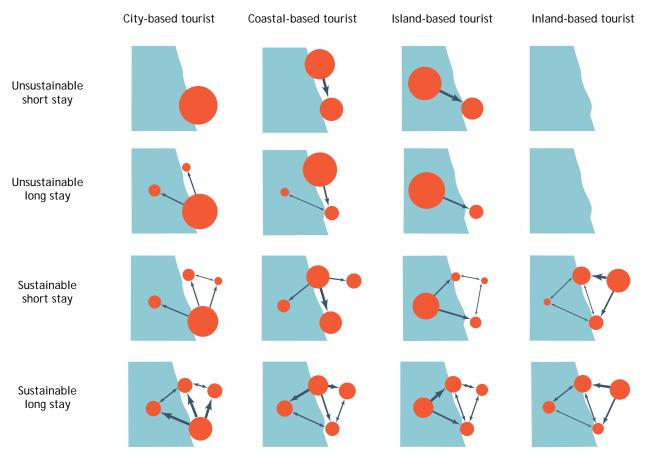


figure 2.2: tourist movement in different circumstances

the degradation of the landscape by overdevelopment and the overexploitation of natural resources (Koutoulas, 2008).

Although the importance of tourism is examined, the appearance of tourism can take many forms with different impacts on the surrounding environment. This differs according to the individuals or social groups which are involved in the tourism activities and in which spatial context they act. Related to this difference in appearance, it also differs in what way a certain form can be developed on a specific location with a specific social-cultural context and landscape.

Nevertheless, the landscape also offers many possible solutions which are embedded within the landscape as well. The recognition of those landscape qualities, problems and possible solutions is an important starting point for a landscape-based design approach. As we see the importance of the landscape as a base for sustainable development, it can also contribute to the development of sustainable tourism as well.

The challenge for us as landscape architects is therefore to show how the landscape qualities and characteristics can serve as potential starting points for tourism development on multiple scale levels. When the variety of the landscape can be linked to the needs of the different tourism forms, diversification of the total tourist product can be achieved. This can be done by using the landscape approach of Koh (2008), which uses the landscape as a foundation for future design and planning, in order to achieve sustainable new developments. This landscape approach will be further explained in the next chapter. The landscape approach contributes to the development of sustainable tourism, throughout multiple scale levels. This thesis focusses on the relation between scales and the way it effects the development of sustainable tourism.

2.3 Research motives

Research from our horizon as landscape architects can be done on two different topics, as mentioned in the previous paragraph. One possible topic is to restructure the Fordist coastal villages and landscapes by using the principles of sustainable tourism. These coastal areas are characterized by the focus on sun, sea & sand and their dependency on the climate. Locations where this topic can be done are the Spanish' Costas and islands, Turkish Riviera, Côte d'Azur, parts of Italy and Greece.

The other possible topic is to implement sustainable tourism on a bigger, landscape-based scale by using the principles post-Fordism. These coastal areas are characterized by the absence of large coastal resorts and the presence of interesting cultural and natural qualities. The coasts

of these areas are relatively unspoiled, due to an isolated location (Gozo, Menorca), good political laws on tourism development (Lanzarote), not the best climate (La Gomera, Aeolian Islands), political instability (Albania) or the effects of war (Croatia, Montenegro).

These two possible topics both deal with sustainable tourism development, but have a lot of differences between the approach to sustainability and spatial design. Where the first topic is focusing on restructuring tourist areas, the second one is focusing on developing a tourist area. Therefore both topics can function as a whole thesis, but the differences are too big to combine them in one thesis project.

As stated in our horizon we as landscape architects consider the landscape qualities and characteristics as starting points for tourism development. When using the landscape-based design approach not only environmental sustainability (energy, use of water) is encountered, but also the local community, social-cultural authenticity and the landscape as a system are important. This can therefore best be combined using the principles of post-Fordist tourism. Because of these extra issues we will focus in this thesis on the second topic, sustainable post-Fordist tourism.

In the search for a specific location for the research the choice has to be made between the previously described locations. The location was chosen with the help and request of Marlies Brinkhuijsen (assistant-professor of the Landscape Architecture chair group, WUR) and Irena Ateljevic (visiting professor of the Cultural Geography chair group and the Croatian Institute for Tourism IZTZG). They supervised a previous master thesis research about the implementation of sustainable tourism on the island of Murter, Croatia. This resulted in interesting outcomes for sustainable tourism and landscape architecture and they decided to do a request for further research, on which we continued.

In the next paragraph the history, current situation and future trends of Croatia as a tourist destination will be described to understand the context and the current status of tourism in Croatia and to discover why Croatia is a good location for the development of sustainable post-Fordist tourism.

2.4 Test case Croatia: a tourism history

2.4.1 pre-war tourism

In Croatia tourism started at the late 19th century with the construction of seaside health resorts at Opatija, Kvarner. Those spa-resorts were hosting the European aristocracy of the time (Ateljevic and Corak, 2006). It was initially a health retreat and winter destination for wealthy aristocracy who wanted to escape the cold mid-European winters (Butler, 2006). During the first half of the 20th century mainly small

hotels and second houses were built to host mainly Italian and Austrian tourists. Concentration of those tourism developments mainly took place on the Istria peninsula and to a lesser extent on the coastal area and islands of Dalmatia. In general tourism in Croatia was growing slowly until the second world war and stayed in a exploration phase of the TALC-model. The only exception is the Opatija Riviera, where in that period a lot of accommodations and facilities were built (Butler, 2006).

The big change started after the second world war in which Croatia became part of the new country of Yugoslavia, led by Tito, a communist (Bousfield, 2010). In the years after the war the international need for 'sun, sea & sand' tourism was developing quickly and the good relation of Yugoslavia with the west European countries caused a rapid growth of tourists from those countries, mainly from Italy, Austria and West Germany. To meet the growing demand of tourists the communistic government was actively involved in the tourism sector by planning large public owned hotels and resorts (Ateljevic and Corak, 2006). The first big tourism resorts were built in the late fifties around the bigger coastal cities like Split, Pula and Dubrovnik. Because tourism was growing so rapidly the capacity of the state owned hotel resorts was not meeting the demands. To make some extra money from tourism local people started to offer rooms in their own houses for tourists (Ateljevic and Corak, 2006). The government realized the pressing situation of the capacity shortage and allowed locals to set up family 'bed and breakfast' accommodations, because they realized the economic and political benefits of tourism (Jordan, 2000). However the public sector stayed dominant and favoured; the private sector was tolerated but restricted (Allcock, 1991). To give the tourism sector an extra boost the Yugoslavian government decided to build a new highway along the coast, the Adriatic highway (D8, Jadranska Magistrala), with the intention to open the borders to the west.

The opening of the highway in 1965 marked a new era in Croatian tourism and was the start of rapid, uncontrolled and unplanned construction of apartments and resorts. In the years after the opening (1967-1971) tourism was regarded as economic priority and in some years received more than 5% of all public investments (Jordan, 2000). This led to a large focus on Fordist tourism and therefore on the Adriatic littoral. In the top year of 1988 96% of all Croatian accommodation capacity and 97% of all foreign overnight stays were concentrated in this littoral (Jordan, 2000). Attempts to integrate the hinterland in the tourism product generally had little success.

Croatia's attractions were largely summer recreation and bathing at the sea combined with relatively low prices. Visitors were mainly families for whom western Mediterranean holidays were too expensive. Spend per tourist was much lower in Croatia than in Spain or Italy, which resulted in an average low quality tourism product. The nature of this market and its travel motivations led to a shortness of season. In 1988, 59% of all overnight stays in Croatia were concentrated in July and August (Jordan, 2000). Because of these problems the Croatian tourism market entered the consolidation phase of the TALC-model, the top was reached in 1988 and Croatia was stuck with a saturated and homogeneous tourism product.

2.4.2 Croatia and the civil war

The late 1980s were overshadowed by a crisis in tourism, mainly caused by the deteriorating political and economic situation in former Yugoslavia, extensively reflected by the international mass media, but also caused by the changing market in European tourism. Political insecurity and conflict



figure 2. 3 Traditional health resorts in Opatija before WWII (source: jebeetjes.nl)



figure 2.4 Croatia after the war: the ruined Grand Hotel in Kupari

[intermezzo]

Lanzarote: saved by C

César Manrique (Arrecife, Lanzarote Lanzarote, 25 september 1992) sculptor and architect. His most imp beloved island, Lanzarote, one of t opinion Lanzarote should never be tourism like it did on Tenerife or Gr stay a special, original place with a

When Manrique was studying at Ter with fellow students who considered of furze and goat manure. But, as it was the most beautiful place or if they were capable of seeing the then they would think like me. Since show Lanzarote to the world" (Cesa

Upon his return from the USA i campaign of awareness with the respect the style of the Traditional A to his people that they shouldn't de parts of them that were in bad shap expand using aluminum instead of the Government of the Island to bar the highways and landscape (Cesa

Next to that he convinced the Gove had a maximum of four stories, white or in a very bright colour and should be painted brown, green or buildings should look like he buil Lanzarote style to be used as mode del Campesino.

Due to his work the island is mainl of mass-tourism, the few exception during his stay in the USA. But, ν

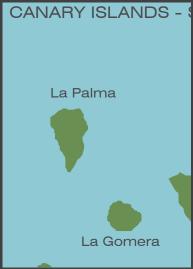


figure 2.5: Location of Lanzarote



figure 2.7: His former house (source: galaiconejera)



figure 2.9: Traditional village on Lanzarote: Arrecife (source: inzumi)



figure 2.8: Jamos del Agua pool, one of Manrique's artworks and main tourist attractions (source: wikipedia)

in and around Croatia lasted from 1990 to 1995. During this six-year period a total reduction of 252 million overnight stays was experienced compared to projected 1989 figures (Mikacic and Hitrec, 1998). The homeland war destroyed or closed down tourism facilities and delayed a transformation of the Croatian tourism industry by half a decade (Jordan, 2000). This was a huge loss for the Croatian tourism market, as many hotels and tourist facilities were destroyed and the markets of the more distant countries like Germany, The Netherlands, France and Great Britain were most negatively influenced by the political crisis. They immediately avoided Croatia as they did not discern between jeopardised and secure regions (Jordan, 2000). Notably in this is the position of Istria where tourism recovered quickly after the start of the civil war in comparison with the rest of the country. This is because the war never really reached Istria and it was close to politically stable countries like Slovenia and Austria (Mikacic and Hitrec, 1998).

At the end of the civil war, when Croatia became an independent, socialist country again, it was burdened with a ruined tourism market and infrastructure. Especially Dalmatia, because of its' position close to the border of Bosnia-Hercegovina was heavily damaged. Therefore it missed a critical phase in the transformation to modern mass tourism like the Spanish costa's and Turkey. Tourism almost had to start over again, in facilities and accommodations, but also in regaining of the lost tourist markets from west Europe.

In desperation of attracting more tourists Croatia decided to reduce the prices significantly in the mid-90s. This attracted mainly east European tourists from the Czech republic, Hungary and Poland, which are considered as the lower ends of the tourism market (Ateljevic and Corak, 2006). These new markets compensated quite some in numerical terms. However, in qualitative and income terms the growing

preponderance of low-budget central European tourists has produced diminished revenues per guest, and their presence tends to inhibit new developments (Jordan, 2000).

2.4.3 Croatian tourism after the war

The authorities of the new independent Croatia have taken energetic steps to renovate tourism, which they regard as the highest economic priority alongside agriculture, and as a powerful potential motor for the Croatian economy. The main goals of the first years were to liberate legislation from Communist constraints and to adapt it to west European norms, to better co-ordinate the tourism industry by creating more centralised structures, and to improve the system of tourism education and training (Jordan, 2000).

However, despite clear views of what was to be achieved, official strategies paid little attention to the key issues of a lack of capital, low levels of privatisation, divergent regional potentials, a weak demographic and economic basis of tourism, and an inherited and often ineffective management structure. As a result, official strategies and policies have not been successful (Jordan, 2000).

Because of this struggle to regain a significant position on the international tourist market the recovery of tourism in Croatia took place very slowly at the second half of the 1990s. In 1999 only half of the pre-war volume had been achieved (Jordan, 2000). To recover Croatia got back on the old successful concept of mass 'sun, sea & sand' tourism and nautical tourism. During that period they believed it was the best way to focus on those types of tourism and they saw a big future for it. Jordan (2000) states: "it is also obvious that beach holidays will remain by far the most important tourism market for the foreseeable future. The future of tourism in Croatia depends, therefore, mainly on the adaptation



figure 2.10 Croatia after the war: slow privatisation causing vacancy



figure 2.11 Croatia after the war: new Fordist resorts (Radisson Blu Resort in Orašac)

of this segment to modern trends and to the principle of sustainability".

2.4.4 The future of Croatian tourism

In the mid-2000s the Croatian tourism market recovered to almost the same level as before the homeland war (TZ Dubrovnik, 2006). However in the first years of the 2000s the question arose whether focusing on mass tourism for 'sun, sea & sand' and nautical tourism was the right way to develop Croatia as tourist destination. Roland Berger Strategy Consultants (2007) stated in their report about the future of tourism in Croatia that especially 'beach and fun' holidays will decrease in the coming years, while Croatia was planning to focus on it (Roland Berger Strategy Consultants, 2007). Because of the homeland war the tourism market missed a critical stage of Fordist tourism, making Croatia the perfect place to implement sustainable post-Fordist tourism, because it already had to start again. Jordan (2000) already mentions the potential of alternative sustainable tourism like health tourism, nature tourism, cultural tourism and rural tourism. He also argues for the incorporation of the hinterland in the touristic system.

Jordan (2000) states: "Growing domestic and regional political and social stability, are laying the conditions for a more favourable climate in which to pursue ideals of sustainability in tourism and in other dimensions of the Croatia's development. These require, however, societal change that may take several years to realise. Such change will necessarily include:

- comprehensive and environmental education and the creation of respect for the environment, on the part of both hosts and guests;
- an appreciation of the value of cultural heritage and contemporary social structures and characteristics;

- the diffusion of democratic principles into commercial as well as political life, thereby opening the door for:
- local community participation in rural development processes;
- the development of local networks, private-public and private-private partnerships;
- an appreciation of the need for social inclusion in tourism development processes at all levels."

But, as side note he remarks that "Sustainable tourism in Croatia may have potential and promise, but it remains a faroff goal" (Jordan, 2000).

In the 2000s the shift towards sustainable tourism became increasingly concrete. In 2003 the Croatian ministry of tourism launched the strategy report "Croatian tourism development by 2010". In this report a shift from focus on mass tourism to sustainable tourism is made (Croatian Ministry of tourism, 2003). In this strategy report they conclude: "In recent years, on the demand side of the market, there has been a growing trend of tourists seeking specific types of tourism. Historical heritage, natural beauty and pleasant climate make up the framework which, together with the development of high quality accommodation, the rich supply of activities and entertainment, and particularly good service, shall enable Croatia to attract the modern-day tourist.

Croatia boasts exceptionally diverse and preserved natural and cultural tourism potentials. This is a valuable asset that must be maintained and protected so that in the long term it may contribute to the development of tourism. Tourism needs to become one of the basic generators of development, even in those areas where it was grossly marginalized in the past.

The aim of this strategy is to create a framework designed for the development of high quality, modern, and innovative



figure 2.12: Fordist tourism in Croatia (source: royalyacht)



figure 2.13: post-Fordist tourism in Croatia (source: AOL)

tourism supply that will increase the competitiveness of Croatian tourism in markets where there is demand and have capital waiting to be invested. Its ultimate goal is to put Croatia on the tourist map as one of the market leaders in the Mediterranean.

With this strategy report and this statement Croatia defines its' desire to change from a Fordist tourism-based into a (sustainable) post-Fordist tourism country.

In addition to this strategy report Roland Berger Strategy Consultants (2005 and 2007) did two studies about the Croatian tourism market, tourism trends and perspectives for Croatian tourism. In the first, more exploring study, they stated that there are several reasons for the slow tourism recovery (Roland Berger Strategy Consultants, 2005):

- insufficient target group focused marketing
- extreme seasonality in the summer and insufficient tourism offering in the side season
- low quality tourist accommodations (lack of 4- and 5-star accommodations)
- only small parts of the tourism demands are covered, especially alternative forms of sustainable tourism aren't integrated while they have a big potential demand

Next to that they mention the trend of more but shorter vacations instead of one long vacation (Roland Berger Strategy Consultants, 2005). This trend means that the importance of the side season is increasing. In addition to this they mention that "beach and fun don't cut it any more, market trends have shifted to sport vacations and cultural trips." This is also stressing the importance of the side season, as sport vacations and cultural trips mainly take place in the side season. They conclude that Croatia needs to implement an integrated tourism concept that reacts on

these market trends.

In their second study (2007) they conclude that the top strategic goals according to stakeholders are to develop a spatial plan, creating an integral tourism offer and focus on ecological and sustainable development. Next to that the need to improve the infrastructure is very important according to the stakeholders. However the importance of branding (of destination) and the development of regional tourism master plans are rated "surprisingly low" (Roland Berger Strategy Consultants, 2007).

When asking the stakeholders about the importance of several tourism types the position of 'beach and fun' is remarkable. In 2006 beach and fun is considered as the most important type of tourism, while in 2011 they believe it will be one of the least important types of tourism. In fact beach and fun is the only tourism type that is decreasing, while other types like adventure, cultural and ecotourism and mountain holidays are increasing rapidly (Roland Berger Strategy Consultants, 2007).

To conclude those trends from the last decade it's clear that Croatia has shifted its' view from a beach-summer destination into an integral sustainable post-Fordist tourism destination. Croatia is because of the damages caused by the civil war an ideal destination to start developing post-Fordist tourism in a sustainable way and the opportunity to do it is there. In this sustainable tourism development it is extremely important to introduce a diverse and well branded tourism offer and to develop regional tourism master plans to guide the development from a higher level with a top-down approach. Only then it is possible to create a diverse integral sustainable tourism concept with a bottom-up approach by working together with the local community, as we stated in our horizon. How this combined top-down and bottom-up

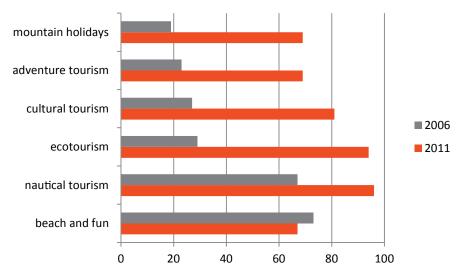


figure 2.14 Tourism trends for Croatia according to stakeholders in 2006 and 2011 (source: Roland Berger Strategy Consultants (2007))

approach functions will be further explained in chapter 3 and tested in the case study.

2.5 Croatia in relation to the TALC

When comparing the historical development of tourism in Croatia with the Tourism Area Life Cycle (TALC) of Butler (see paragraph 1.4), some remarkable notes can be extracted. From the start of modern tourism in the late 1960s until 1990, Croatia was "almost a textbook example of trends in a life cycle curve" (Ateljevic and Corak, 2006). The orange line representing Croatia is almost exactly parallel to the black trend line of the TALC-model, which is representative for most comparable countries in the Mediterranean. This results in that the Croatian tourism market was almost the same as in Spain or Italy, with large focus on the coast and mass tourism.

The big change came shortly after the top year of 1988, in which Croatia attracted the most tourists in history. The political instability caused a decline, which was followed by a large decline due to the civil war from 1991-1995 (Jordan, 2000). This is also the point where the TALC-line of Croatia starts to be different in comparison with the normal trend line. This big change from a textbook example into a big difference happened in only four years and had even a larger impact afterwards.

Due to the damaged tourism infrastructure and market Croatia had to start over again, in a reorientation phase which resulted in a slow recovery. In the last decade the Croatian tourism market has almost returned to the pre-war volume, but further growth of the market is not sure. This is because the type of tourism on which Croatia focused before and directly after the war, mass Fordist tourism, is globally in a consolidation stage at the moment, which will also affect

the Croatian tourism market.

In a search for reorientation the Croatian government has decided to focus on the development of sustainable post-Fordist tourism (Croatian Ministry of tourism, 2003). Predictions and current trends suggest that this will be a good direction for reorientation, which will result in a growing amount of tourists that visit Croatia (Roland Berger Strategy Consultants, 2005).

Summary:

- Sustainable tourism is not a form of tourism on itself, it's rather an aim to implement sustainability into other forms of tourism like Fordist and post-Fordist tourism.
- Sustainable tourism is based on economic, social and environmental impacts
- Our horizon: the landscape is important in the development of sustainable tourism, it should work as a base for tourism development.
- Our horizon: sustainability in tourism is not reached by just local injections, but it should be handled as a bigger sustainable tourism system in order to make sense as sustainable tourism destination.
- Focus on post-Fordist tourism in this thesis, test case Croatia
- In Croatia used to be the same type
 of Fordist tourism as in Spain or Turkey, but
 the war destroyed most and caused a
 delayed or cancelled transformation into a
 modern Fordist tourism market.
- Due to that Croatia had to start over and is now focusing on a change into a sustainable, post-Fordist tourism market.

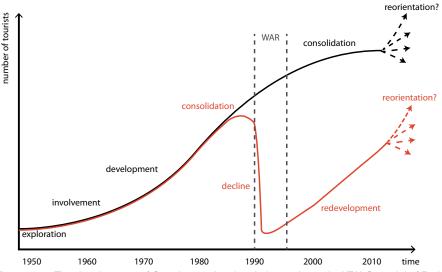


figure 2.15: The development of Croatian tourism in relation to the typical TALC-model of Butler



Chapter 3

Theoretical context



3. Theoretical context

The complexity of sustainable tourism development lies not only in the notion itself. The context in which the term is located is highly complicated as well. The better understanding of this context is strongly depending on a clear conception of the processes which are composing the phenomenon.

In order to get this understanding, this chapter provides a further examination of the complexity of sustainable tourism development and the role of landscape architecture in this development in the form of a theoretical framework The chapter highlights a range of theories concerning landscape architecture, tourism and (sustainable) tourism development as a source of insight.

By the means of this theoretical exploration, the chapter concludes with the research gap which is identified to stress the need of this research project.

3.1.1 The role of landscape architecture

Landscape architecture is a relatively young profession. It dates back about one and a half century ago. The term emerged slightly earlier within a of a group interdependent professions called 'the architectures' (Waterman, 2009). This group included architects, landscape architects, urban planners, urban designers and interior designers as well (Waterman, 2009). This formation reflects the overlap of the professions and the difficulty in the understanding of the career paths. According to Waterman(2009), it is the simplest to say that "landscape architects create places for people to live, work and enjoy, and places for plants and animals to thrive" (p.11).

Accordingly, landscape architecture consists of the combination between science and art. Science includes the required knowledge and understanding of the natural environment, like soil, geology, hydrology, vegetation and climate, but also technical knowledge of building structures like roads and bridges (Waterman, 2009).

This twofold in science is also noticeable in the way landscape architecture schools emphasis on the profession. Some schools "pursue design with a close relationship to architecture and urban design, while others pursue rural, regional planning or natural resources planning" (Koh, 2008, p.2)

Next to science, landscape architecture also includes art. Design elements are used in a creative process of 'giving shape and evoking an emotional response' (Makhzoumi and Pungetti, 1999). Drawings, lines, textures, shapes and models are used to create images which visualize the designers vision and imagination (Waterman, 2009). These visualizations offers the designer opportunities to communicate with its audience. It allows the landscape architect to start up a discussion, convince the audience

or invite people to participate in the design process. The product of the landscape architect, the actual design, is the result of the creative process and the concrete translation of the designers vision.

A new place, space, or landscape is the outcome of this synergy in the profession. The combination of science and art allows the landscape architect to come up with a concrete design product, based on both components.

Therefore, the primary societal role of the profession of landscape architecture can be conceived as "the synergism of art and science for the management, planning, and design of the entire physical and cultural landscape, including its vestal wilderness and its growing urbanness" (Motloch in (Makhzoumi and Pungetti, 1999, p.182).

3.1.2 Ecology in landscape architecture

Previously, landscape architecture is explained as the synergy of art and science. The latter is associated with ecology, which has a long and continuing history with the profession (Makhzoumi and Pungetti, 1999). In landscape architecture, the ecological emphasis lies on the natural processes and the interrelatedness of the landscape components, resulting in an ecological approach of design (Makhzoumi and Pungetti, 1999).

This ecological approach in landscape architecture is often used as a method to set up a landscape analysis. Ecology has the potential to "emancipate landscape architects from the static scenic images of ornamental horticulture by steering them away from arbitrary and capricious designs" (McHarg, 1967 in (Makhzoumi and Pungetti, 1999, p.187). This potential can result in adaptive designs when these are closely linked to the natural potentials and limitations of an area.

One of the pioneers which contributed to establishing the necessity of a healthy relationship between man and nature is the from origin ecological planner, lan McHarg. In the book 'Design with Nature' he emphasises on the need to use the fullest potentialities and the restrictive conditions that nature offers (McHarg, 1969). When working in line with nature's driving forces, it is possible to adapt the natural potentials successfully, without harming the environment. "Successful adaptation of the natural resources requires people creatively using the opportunities offered by the natural environment while respecting its restrictions" (Duchhart, 2000, p.40). When doing so, creative networks of areas could arise which are not randomly chosen, but closely linked to the area's suitability (Duchhart, 2000). To achieve successful adaptation, a further understanding of the landscape is required.

The study of landscape ecology contributes to this

understanding by providing a conceptual and theoretical basis about how these networks are set-up and function. From this ecological perspective, the landscape is an area of land, containing a mosaic of habitat patches, or landscape elements (McGarigal and Marks, 1994).

These landscape elements are interlinked and compose an interacting, dynamic landscape system. Important is that these relationships within the mosaic can be both horizontal and vertical. The vertical relationships are resulting from the inter-linkages among flora, fauna, air, water and soil within a certain landscape element, while horizontal relationships are focussed on the links among the different landscape elements (Troll in Duchhart, 2000).

Another issue that shows the interconnectedness of the landscape dynamics as system is scale. As McGarigal and Marks indicated: "a landscape is not necessarily defined by its size; rather, it is defined by an interacting mosaic of patches relevant to the phenomenon under consideration, at any scale level"(McGarigal and Marks, 1994, p.4). The scale of landscape perception is therefore relying on the perspective of the considered phenomenon. A single habitat patch for one may constitute an entire landscape for one other. This multi-scale landscape view contains therefore not a single mosaic of elements, but a hierarchy across a range of scales (McGarigal and Marks, 1994). This acknowledgement is the "essential first step in any landscape-level research or management endeavour is to define landscape"(McGarigal and Marks, 1994, p.4).

When understanding the ecological processes in the landscape and the characteristics of the landscape elements are identified, it is possible to get an insight in the vertical and horizontal linkages. In this search for linkages, the dominant factors in the network will become clear. These key-factors or driving forces can influence the functioning of the landscape

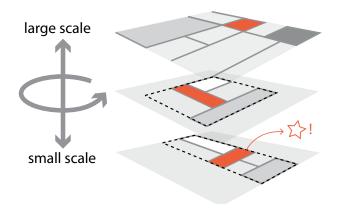


figure 3.1: with a mulit-scale landscape inventory, suitable locations can be determined

system. The identification of these key-factors is helpful to explore and test the possible causes and effects. The driving forces of the landscape, together with the characteristics of the landscape elements are important facets to determine spatial distribution.

3.1.3 The landscape approach

Since the existence of the discourse of landscape architecture, it is struggling to define and redefine the core practise of the discipline of landscape architecture and planning (Koh, 2008). The last few decades, the profession benefitted from diverse discourses on landscapes, expanding the concept and meaning of the landscape (Koh, 2008).

Koh (2008), positioned the concept in connection with that of form. "A key and unifying concept of 19th century science and art was 'form' in connection to function and structure." (p.4) The focus on form in concept of landscape changed over time to 'space', 'environment' and later on to 'place' (Koh, 2008, p.4).

"As the 'European Landscape Convention', a multidisciplinary gathering, addresses the identity of place and biodiversity, the concept of landscape has replaced place (with experience orientation) and ecology (with process orientation). It is thus continuing the past replacements of environment, space and form as key concepts of science and art. This shift from ecology and environment to landscape reflects an increasing attitude of seeing landscape as a cultural construct, and recognition that the very concept of nature is a cultural construct" (Koh, 2008, p.6)

Instead of perceiving landscape as separate parts (experience orientated or process orientated), the landscape is recognized as an integrative, dynamic and evolutionary concept (Koh, 2008). The application of this concept of landscape is further elaborated in the landscape approach, which require both a scientific as an aesthetic approach. "It is an integrative, dynamic, evolutionary approach that seeks field immersion for its understanding, experience and design of landscape" (Koh, 2008, p.7). The emphasize in this approach to design lies in the combination of process design (ecological approach) and experience design (aesthetical approach).

To imply the landscape approach in the field of design, Koh(2008) listed six implications which can be used for design practices:

- Landscape is not just a system/process but also a experiential phenomenon;
- The landscape approach' implication contains both theoretical and operational aspects, organized in a hierarchy: "what happens at the small scale of landscape impacts the large scale, and vice versa" (p.8.);
- The landscape approach provides an alternative

- to a compositional and a typological approach to the study of design;
- The landscape approach is descriptive and prescriptive: more responsive to change, context, culture than an architectural approach;
- The landscape approach focuses on land, horizontal spread, street level experience of everyday landscape and the interrelation of inside and outside;
- The landscape approach means seeing architecture and city in the context of landscape and conceiving architecture and city themselves as landscapes as well. (p.8-9)

The six implications of the landscape approach can be explained in terms of various domains of design, like architecture, landscape architecture, urban design and planning, and civil/infra-engineering.

In the field of landscape architecture and in this thesis, the landscape approach is useful for the development of sustainable tourism. In the approach, the landscape is used as a foundation for future design and planning, in order to achieve sustainable new developments. It uses an inclusive conception of the ordinary and everyday landscape(specific natural and cultural characteristics) to identify place specific characteristics and qualities (Koh, 2008). The acknowledgement and awareness of local characteristics and qualities is strengthening the local identity and coherence of a tourist destination. A destinations identity is not only based on local identities, landscape as a regional entity is contributing to the identity of place as well (Koh, 2008).

LANDSCAPE as unifying and integrative concept of art and science Form analogue, representational, visual Space abstract, homogeneous, infinite Environment ecological Place phenomenological Landscape biophysical/cultural

figure 3.2: The landscape as unifying and integrative concept of art and science. source: adapted from Koh (2008)

3.1.4 Landscape architecture in the Mediterranean landscape

Perhaps because of the relatively short history of landscape architecture, the profession is often unknown in many Mediterranean countries nowadays (Makhzoumi and Pungetti, 1999).

Historically seen, the Mediterranean landscape has gone through a radically transformation. The traditional landscape is characterized by the limitation of scale and extent of public open space in settlements (Makhzoumi and Pungetti, 1999). With the introduction of western architecture, the traditional Mediterranean landscape pattern changed and transformed into an accumulation of urban open spaces with disregard to its local context and identity (Makhzoumi and Pungetti, 1999).

The consequences of this shift is shown in the spatial appearance of the contemporary landscape. The contemporary landscape is now characterized by detached modern buildings, manicured lawns and gardens and commercial landscapes of tourist projects (Makhzoumi and Pungetti, 1999).

According to Makhzoumi and Pungetti (1999), this contemporary landscape "destroys the regional landscape identity, erodes local distinctiveness and alters local values and aesthetic priorities" (Makhzoumi and Pungetti, 1999, p.189). As they continue: "Given the absence of a well-established professional body and the extremely limited research into landscape issues, the development of alternative approaches to current landscape problems poses a difficult undertaking" (p.189). The authors argue that this search for sustainable alternatives is hindered by the absence of local awareness of environmental resources and landscape issues in general.

Landscape architecture can contribute to this search for solutions in order to solve the current landscape problems. Not only to this Mediterranean example, but on may other places. A landscape architect has the ability to discover the landscape characteristics by the analysis of geomorphology, history, ecology and human occupation, to guide future development in a sustainable way. This analysis gives insight in the local identity of a place. The landscape in all its versatility serves as a foundation for future development plans and design. "Landscape architects study, plan, design and manage spaces, which are both sustainable and visual pleasing" (Waterman, 2009) The strength of the profession lies in the combination of social, economic, environmental and cultural perspectives, without losing the balance and overall perspective (Waterman, 2009).

"They shape the face of the Earth and also help the shape the face of the future" (Waterman, 2009, p.11)

3.2 Tourism theory: exploring the scales

3.2.1 The global-local nexus

One of the features of tourism is that it is present on different scale levels. According to (Hall and Lew, 1998), one of the reasons that sustainability in tourism development must be studied at different geographical scales is that it takes on different forms at various scale levels. The reason behind that change are the dominating goals of stakeholders and constrains that differ on each level (Hall and Lew, 1998). The interactions between stakeholders not only occur within, but also between these different scale levels, which creates a high interconnectedness. As Taylor and Stanley (1992 in (Hall and Lew, 1998) argued: "We need to look carefully at the global-local process that influence tourism, and to create a clearer conception of how different scales of analysis and various stakeholders articulate with each other"(p.38).

This interconnectedness has increased rapidly over the last two decades. This expansion can be clarified in a twofold explanation, called the global-local nexus. As shown in chapter 1, global transformations are often influencing the development of tourism. Tourism therefore develops as a consequence of the globalisation processes.

On the other hand, tourism is also seen as an important cause of global transformations which accelerates the globalisation process (van der Duim, 2005). This duality is further explained by Van der Duim(2005) in his work about Tourismscapes: "Tourism as a cause is supposed to induce global flows of people, ideas, images and capital. Tourism as an effect results from an increasing global interconnectedness of economic, technological and sociocultural transformations" (van der Duim, 2005, p.76). Van der Duim warns that in this dualism, it doesn't directly mean that

the global is dominating the local, or vice versa.

In the search for what is holding those to scales together, his research aims at the common space that binds them together. This network space what connects the global and the local is further explained in what is mentioned as the actor-network theory.

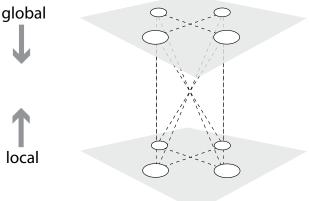
3.2.2 Holding the scales together: the actornetwork theory

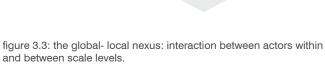
Without going much into detail, the main idea of the actornetwork theory is that "the concept of actor and network are concatenated and one cannot be defined without the other." (van der Duim, 2005) Both concepts are catched in the notion of 'collectif', a term that Callon and Law (1995 in Duim, 2005) denote as:

"The notion of 'collectif' differs from that of a 'collective' or 'collectivity', in that a collectif is not an assembly of people who have decided to join some form of common organization; rather, 'a collectif is an emergent effect created by the interaction of the heterogeneous parts that make it up'(p.92). This interaction determines the form of the heterogeneous entities which are composing the collectif.

As a result of a relational effect, called 'punctualization', collectifs can transform towards a more uniform network after time. Verschoor (1997a:30, in van der Duim, 2005) continues: "The entities making up a collectif may converge or diverge, be more or less standardized, and their relationships may be long- or short-lived to different degrees. Convergence implies that the activities of actors in the networks can easily be linked to one another, as actors have sufficiently finetuned their activities so as to make them compatible with those of others from the same collectif" (p.93).

In the context of tourism, destinations communities and regions are relying on this process of network formation,





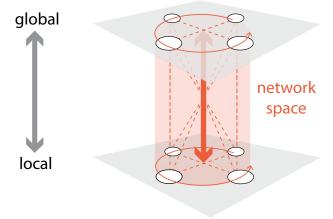


figure 3.4: the actor- network theory: the network space consists of actors and networks which are interconnected throughout scale levels

towards a competitive and sustainable tourism product (Hall and Lew, 1998). The cooperation between the present stakeholders/actors like the local community, governmental organisations, private investors, etc., can result in the finetuning of touristic activities which makes the tourism product more compatible. The common aim of the stakeholders implies collaboration instead of competition between them. The convergence of the activities of actors in the tourism network can strengthen the destinations personality, which helps to create a favourable tourism image (Hosany et al., 2006).

When the actor-networks grow, their influence and reach extends towards other systems and networks. The scale on which the networks are operating is difficult to determine, because the interlinked connections are tied together in sets of complex associations (van der Duim, 2005). Latham(2002: 132, in van der Duim, 2005) even argues that "we cannot assume that we know the scale (global or local) or size (small or large) of an actor-network, but must attempt to trace out its various patterns of association through which it obtains certain effects of size or scale" (p.94).

In short, the exploring of the scales in the context of tourism shows that the interconnectedness of actors not only occurs within, but also between the different scale levels. The space that is holding the large and small scale together is the network space in which many actors are concatenated with each other. This 'collectif' of heterogeneous entities can transform towards a more uniform network over time, which results in a cooperation of actors which fine-tune their touristic activities, creating a compatible tourism product. In the search for sustainability, which is often linked with the notion of diversification, this strengthening of the destinations identity can contribute to the achievement of sustainable tourism development.

3.2.3 Top-down versus Bottom-up: the lack of interconnectedness

As the previous paragraph is stressing, the essence of a significant tourism product lies in the interconnectedness of actors throughout different scale levels. However, the importance this integral approach is not so obvious as it looks like. In many current attempts to achieve sustainable development, the spatial interventions are not operating integrally.

In general, the distinction can be made between top-down planning strategies on a large scale level and bottom-up spatial applications which are largely carried out on an adhoc basis.

Large scale solutions, visions or strategies are mostly directed by governmental organisations, which are dealing with broad spatial issues of tourism development, like the overall position and direction for tourism (UNEP and WTO, 2005).

At the large scale level, tourism development is tended to be executed through rigid top-down strategies, which conducts the development based on physical attributes of the land and location (UNEP and WTO, 2005). The consequences of this top-down approach is that it lacks connection with the local community, which is crucial from a 'sustainable' point of view.

Sustainability principles are aiming for a more strategic, flexible bottom-up approach (UNEP and WTO, 2005). Contemporary bottom-up approaches are nevertheless taking into account the economic, social and environmental factors as based on local consultation and participation (UNEP and WTO, 2005), however, the relationship with higher scales is often lacking and vice versa. Small scale solutions are frequently implemented on an ad-hoc basis

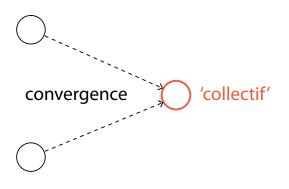


figure 3.5: cooperation between actors results in linked activities which form a 'collectif'.

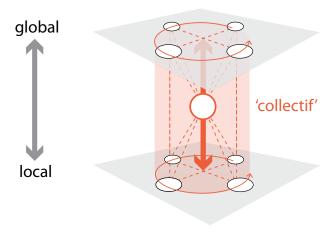


figure 3.6: the 'collectif' creates a compatible tourism product which strenghtens a destinations identity.

as a result of local tourism strategies. Local level objectives and priorities are pursued, without taking into account the national or regional context in which they exist.

According to UNEP and WTO, this interrelated process can be achieved by building on participation.

"Tourism strategies built on participatory structures and inclusive processes should provide the basis for tourism planning" (UNEP and WTO, 2005, p.84) Participation and local consultation can serve as a base for the creation of connections throughout scale levels, to build up a sustainable tourism product.

The intermezzo of Çirali (Chapter 1) showed that local movements can contribute to ad-hoc small scale solutions that have the image of sustainable tourism, but the connection with the surrounding tourism environment is still lacking. On a larger scale, many examples that contribute to regional 'sustainable development' are occurring within instead of between the different scale levels. Examples of student projects in the book 'Greetings from Europe' (Hazendonk et al., 2008), are confirming this observation. Regional development strategies are proposed without defining the local objectives and small scale design solutions.

In addition, Bramwell (2004) noticed in his book on Coastal Mass Tourism that in many European Mediterranean countries the local government, and thereby also the spatial operations, are often quite weak. Besides that, the governmental efforts to apply sustainability polities to tourism are hindered by institutional weaknesses (Bramwell, 2004). Of course it is recognized that the policies concerning sustainable development must be implemented on both national and local levels and that it is important that these scales have to be complementary (UNEP and WTO, 2005), but the thing that is missing in this conception is the

acknowledgement of the interlinkage and space inbetween those scale levels. An integral strategy is needed to cover the whole process of sustainable development.

"It is increasingly recognized that the most successful route to sustainable tourism is an integrated approach to the development and management of tourism within local destinations" (UNEP and WTO, 2005, p.56).

3.2.4 Integral development

Many book and articles determine the importance of such integral approach, but concrete frameworks or applications are lacking. Attempts to make it more operational in the actual planning and management of tourism, especially pointed out which issues and challenges become increasingly apparent when doing so (Weaver, 2006). Terms like policy instruments, development strategies, principles, tools and indicators for sustainable development are commonly used.

Related to coastal development, the most known planning approach for sustainable tourism is the Integrated Coastal Zone Management (ICZM). As described in the report of the UNEP (2009), this is "an adaptive, multisectoral governance approach, which strives to a balanced development, use and protection of coastal environments" (UNEP, 2009, p.3).

The approach acknowledges that planning is a major instrument for integration.

Next to that, ad-hoc and incompatible developments will be prevented when adopting an integrated management approach (UNEP, 2009).

In order to apply the ICZM, UNESCAP (1996, in UNEP, 2009)

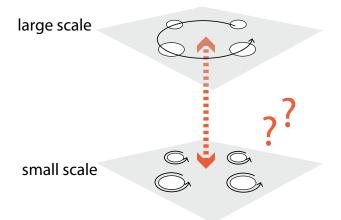


figure 3.7: the lack of an integral approach

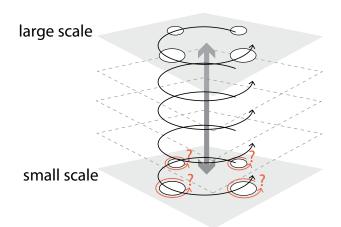


figure 3.8: the lack of an concrete spatial applications in current integral approaches

distinguished five territorial levels on which the tourism planning can operate:

- The individual site: examples include a beach, a heritage site, a park or a theme park;
- The destination: in some cases, the site and the destination may be the same, but usually it refers to the larger geographical setting where the site is situated:
- A region within a country: this can be a geographic or political boundary or it can be based on tourism attraction factors;
- The nation: especially true in the case of smaller island countries;
- Several countries: a good example is the area around the Mekong River that is being presented as a theme-related destination involving several countries. (p.32)

The five levels should be integrated with and across each other to balance the development towards sustainability. The UNEP argues that the fusion of these levels can be achieved through the preparation of an 'integrated tourism policy and plan' (UNEP, 2009).

The ICZM cloud be a very useful instrument for the implementation of sustainability in the planning of tourism,

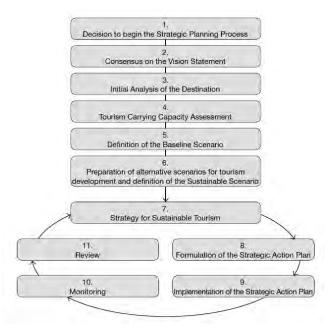


figure 3.9: The iterative process of Strategic Planning for Sustainable Tourism Development in coastal areas. source: UNEP (2009)

because it explains how the different scale levels can be integrated in which planners can operate. The approach is one of the few that tries to set out the network space, as described in the actor-network theory. Although the methodological approach could be easy to use, there is still a strong need for a procedure for the implementation of the approach (UNEP, 2009). Probably because the iterative method is highly descriptive and runs through an 11-step long-term process which is shown in figure 3.9.

What is still lacking in this planning approach and what can be addressed as a problem when looking from the viewpoint of a landscape architect, is that it still do not have concrete spatial solutions for sustainable tourism development.

3.3 Tourism in landscape design

An example of the importance of the landscape in the development of leisure, tourism and recreation is shown in the PhD thesis of Marlies Brinkhuijsen, 2008.

The landscape, in particular the landscape setting, is recognized as an important and relevant spatial component of leisure (Brinkhuijsen, 2008).

Brinkhuijsen developed a typology of four spatial components which are relevant for landscape design. The components are: attractions, facilities, routes and (landscape) setting. Brinkhuijsen(2008) describes them as follows:

Attractions are defined in this study as locations with special features that attract visitors. Attractions are not scale-bound; they may be small sites like a giant tree, a hill, a historical element or an observation post and they may cover larger areas like woods, water sports centres, a coastal area or a National Landscape. Attractions may be specially constructed for leisure purposes or they be already present in a landscape. An existing, attractive site usually doesn't become an attraction just like that. Conditional facilities like parking lots, benches, information signs and toilets guide visitors and provide them comfort. Other facilities like playgrounds and visitor centres can also be interpreted as attractions; they can turn any location into a leisure site. Routes are not scale bound either. They provide access, both external (the way to get to a destination) and internal (the way to move around). A route doesn't necessarily need a constructed road or path; a route may also be a spontaneously chosen track in an area with free access. Like attractions, routes are often furnished with facilities like signs, car parks and benches. The setting is defined as the overall environment - the landscape- in which leisure takes place. It determines the realm and

atmosphere, the scenery and the stage for leisure. The setting may be just a backdrop setting; it may also have strong symbolic meaning or be the very subject of leisure (see also Potteiger and Purinton 1998). Attractions, facilities, routes and setting are interconnected and may overlap. One cannot function without the other. (pp. 56)

This typology can be a valuable addition in the search for concrete design solutions in tourism development. Next to the emphasis on the importance of the landscape in tourism development, it provides handles to give structure to the spatial relation between tourism and landscape. The typology bridges the gap between theory and concrete design elements. The components can be used for the analysis of the current tourism conditions of an area, as well as a manner to build-up a landscape design.

3.4 Research gap

As the previous paragraphs demonstrated, the complexity of tourism lies in the notion of scale. Theories about tourism showed that tourism takes on different forms at various scale levels, according to the stakeholders which are involved. Interactions between stakeholders do not only occur within, but also between different scale levels, which creates a high interconnectedness. The network space which consists of actors and networks, can converge into a 'collectif' as a result of cooperating actors with linked activities. This convergence strengthens the destinations personality, which helps to create a compatible tourism product, which contributes to the search for sustainable development.

In current tourism development, this 'collectif' is however missing as a result of mono-scale development. Large scale top-down approaches are not suitable with local bottomup initiatives and vice versa. To make this connection, an integral development approach is needed. According to UNEP and WTO, this interrelated process can be achieved by building on participation. "Participatory structures and inclusive processes should provide the basis for tourism planning" (UNEP and WTO, 2005, p.84)

Current attempts to integral development, like the ICZM, are useful as spatial planning approaches, but lack concrete spatial design solutions. These design solutions are needed in order to control the effects of tourism development on its social and physical environment spatially, in terms of "urban sprawl, linear urbanisation, pressure on sensitive areas, the production of waste and the fragmentation of habitats, . . . the loss of social and cultural identity and values." (UNEP, 2009, p.3).

Landscape architecture can contribute to this search for

sustainable tourism development. The synergy of art and science provides the landscape architect the ability to complement the gap that tourism theories are illustrating above.

As described in the first paragraphs of this chapter, landscape architects have the ability to discover the characteristics of the landscape while using the ecological approach on design. This analysis of natural processes and the interrelatedness of landscape components is used for the guidance of future development in a sustainable way. It helps to define landscape with an integral approach, through the conception of the landscape as a multi-scale system. The creative use of opportunities offered by the natural environment, while respecting its limitations and restrictions, results in adaptive spatial designs. This approach is very useful for creating a base for future tourism development in a sustainable way, solving the clash of the scales and the lack of interconnectedness as described before, by using the landscape as foundation.

In addition to this ecological approach on design, which is seen as process design (Koh, 2008), the landscape approach is emphasizing on experience design as well. It uses an inclusive conception of the ordinary landscape to identify place specific characteristics and qualities which are strengthening the local identity and coherence of a tourist destination. According to UNEP and WTO(2005), tourism strategies for sustainable development should be based on such inclusive processes, which provide the basis for future tourism planning. Important in the contribution of the landscape approach is that it provides implications which can be used for design practices.

Design practices are an important part of the profession of landscape architecture. The creative process of giving shape and creating a vision for a landscape are expressed with images which visualizes the designers vision and imagination. These visualizations are very important in communication processes in which the landscape architect can take the role of intermediator between different groups of stakeholders, integrating top-down and bottom-up approaches by design.

One of the major strengths of the profession of landscape architecture and its primary societal role is the ability to combine social, economic, environmental and cultural perspectives, without losing the balance and overall perspective (Waterman, 2009). This creation of balance and the combination of different perspectives are perfectly matching the description of sustainable tourism development of the UNEP and WTO (2005).

Summary chapter 3

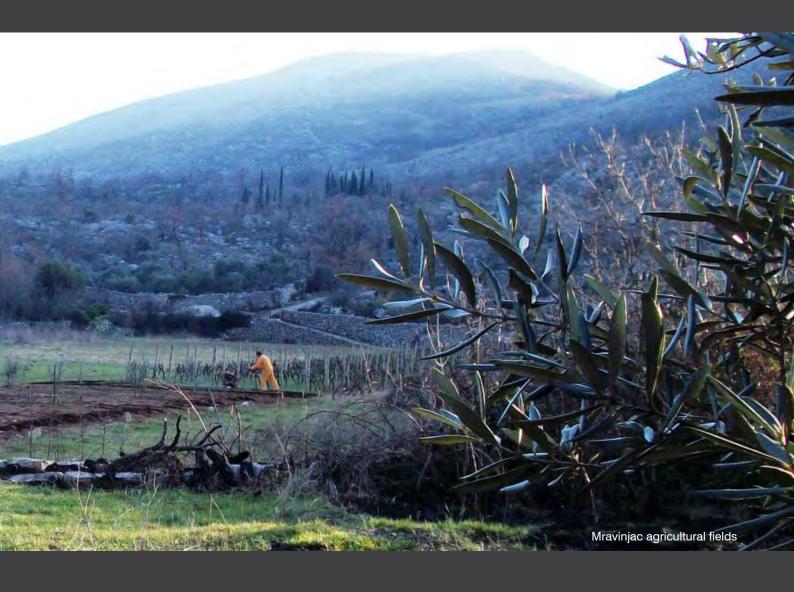
- Landscape architecture is the synergism of art and science. Science includes the required knowledge and understanding of the natural environment, art provides a vision for a landscape by using elements of design in a creative process.
- In landscape architecture, the ecological emphasis lies on the natural processes and the interrelatedness of the landscape components, resulting in an ecological approach of design.
- Instead of perceiving landscape as separate parts (experience orientated or process orientated), the landscape is recognized as an integrative, dynamic and evolutionary concept (Koh, 2008). The application of this concept of landscape is further elaborated in the landscape approach, which require both a scientific as an aesthetic approach. To imply the landscape approach in the field of design, six implications are mentioned which can be used for design practices.
- The profession is currently new in Mediterranean countries, however it can contribute in the search for sustainable development and provide solutions for current landscape problems.
- Global- local nexus: Tourism takes on different forms at various scale levels. The reason behind that change are the dominating goals of stakeholders and constrains that differ on each level. The interactions between stakeholders not only occur within, but also between these different scale levels, which creates a high interconnectedness.
- The actor-network theory: The common space between scale levels consists of actors and networks which cannot be defined without each other. The process of convergence can occur as a result of cooperating actors. A more uniform network, the 'collectif' is important for the creation of a compatible tourism product.
- In many current attempts to achieve sustainable development, spatial interventions are not operating integrally. The missing link between top-down and bottom-up approaches can be made by participatory structures and inclusive processes which should provide the basis for tourism planning.
- Next to that, current attempts to integral development are lacking concrete spatial design solutions.
- There are methods to make a concrete connection between landscape and tourism development. A
- typology of four spatial components (Attractions, Facilities, Routes and Landscape setting) can be

- used as guideline to create concrete design solutions.
- The research gap shows the contribution of landscape architecture in the search for sustainable tourism development.



Chapter 4

Methodology



4. Methodology

4.1 Research aim

The aim of this research was therefore to develop an integral design strategy for the sustainable development of coastal tourism landscapes.

To reach this aim the different scales for sustainable tourism development (regional and local) have to be studied in detail to determine their characteristics. After being studied they have to be compared and observed in relation to each other to detect the influence of one scale on the other scale. By doing so the interactions between the scales in a multi-scale design approach should become clear. From the outcomes of that an integral design strategy for sustainable tourism development can be developed.

By doing a case study (see chapters 5-7) to test and adapt the integral design strategy an example will be generated of the possible results of working with the design strategy. Also the working of workshops and participation in this design strategy will be tested. This example can raise the awareness of local stakeholders and governmental organizations about the use of a multi-scale design approach for the development of sustainable tourism.

4.2 Research questions

As following from the research aim we formulate the main research question:

"In what way can an integral design strategy add value to sustainable tourism development in coastal landscapes?"

To answer this research question, two components require further examination. Firstly, the significance of an integral design strategy. Secondly, the way it adds value to sustainable tourism development in coastal landscapes.

4.3 Methods

In this part the three main methods which we used in our thesis will be explained to understand the basis of this thesis.

4.3.1 Participatory processes

In this thesis participatory processes are encountered as very important, as the local community functions as the base for sustainable tourism development. As derived from the actor-network theory of van der Duim it is important that local stakeholders are working together in a 'collectif' of heterogeneous entities that can transform towards a more uniform network, which results in a cooperation of actors

which fine-tune their touristic activities, creating a compatible tourism product.

To reach this it is important to use participation to guide and steer the different developments into this direction, but also work together on different scales, in a single village, but also on a bigger level, because the space that is holding the large and small scale together is the network space in which many actors are concatenated with each other.

To understand the meaning of participation, it is useful to know what can be achieved by using this method. Cruijsen (2009) asks; 'What happens in an interaction between landscape architects and inhabitants? They both have a lot of knowledge of the landscape at stake, but this knowledge is not equal to each other. By using a participation process both parties will learn from each other'. So, both landscape architects and inhabitants can make use of each other's knowledge and help each other in achieving the common goal.

Duchhart (2000) states about these common goals that they are divided in two parts, which are linked to time. On the short-term it should come up with creative solutions, fulfilling the social and economic needs of the community. On the long-term the ecological strategy (or in this case the sustainable tourism network strategy) should be reached, as a final goal. This is because local communities want to see some progress on short-term, otherwise they may lose their believe in reaching the bigger goal.

But, participation can exist at many different levels. Pretty et al. (1995) mentioned seven levels of participation, from a top-down approach in which the participants hardly have no influence on the process, to a bottom-up approach in which participants themselves are the initiators to change something in a system.

To know which of these seven levels of participation could be useful in landscape architecture and sustainable tourism development, the role of the landscape architects should be clear. Cruijsen (2009) states about that; 'The task of the landscape architects in a design process can vary because of these different organisational structures, but often one can recognize the designing task of the landscape architect in the middle of these groups. In the design the designer weighs the inputs of the participants and chooses whether he wants to incorporate the ideas. Because of the fact that a designing process is such a complex entity and there are many interests to take into account, the creative aspect in the design will be important'.

Cruijsen (2009) names participation by consultation as the most suitable level of participation, because she remarks that the landscape architect should make the final decision out of the input of the participation. This also keeps the creativity of the landscape architect intact.

Participation by consultation is described as follow: People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views (Pretty et al., 1995).

We also recognise this level of participation as the start of participation in sustainable tourism development, but a result of participation on this level may be that the local stakeholders are activated and start joint action groups to start something in their own community, in cooperation with the government. This requests a different level of participation, as it is more bottom-up and the initiative lies at the joint action groups.

For this Interactive Participation seems the most suitable level, which is described as follow: People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple objectives and make use of systematic and structured learning processes. These groups take control over local decisions, and so people have a stake in maintaining structures or practices (Pretty et al., 1995).

4.3.2 Layer approach

The layer approach is a Dutch landscape design and planning approach developed between 1996 and 1998 by Maurits De Hoog, Dirk Sijmons and San Verschuuren when they were asked to create a base for the strategic choices that had to be made regarding the future spatial development of the Netherlands in the light of climate change, water management, the economic position of the Netherlands in international networks, urban dynamics in relation to the values and attractiveness of the landscape and the need for integral planning.

The layer approach is based on the principle that the landscape can be divided in three main layers; the substratum, networks and occupation layer (van Schaick and Klaasen, 2011). Each of these layers have a direct influence on the landscape by shaping it. Their main assumption was that the substratum physically transforms slower than the networks, which in turn transform at a lower rate than the physical structures on the occupation layer. This assumption led to the idea that the layers from bottom to top set priorities and conditions for spatial planning tasks on the other layers (van Schaick and Klaasen, 2011). Making a change in one of the

layers will directly influence the landscape and thereby also the other layers. To get grip on the landscape characteristics the different layers have to be separated, so the structure of the landscape becomes clear. It gives an understanding of the landscape processes that influence its appearance (Vrijlandt, 2006).

However, since the layers approach was introduced it was often amended, adjusted and reinterpret, although the main three layers stayed the same. In this thesis we will use the original model with some adaptions, which is the most useful because it is a working philosophy, a strategic model. It is 'an agreement between the here and now, without pretensions of universality and eternal value. At another time or at another scale other priorities will fit' (Sijmons, 2002).

It is clear that the landscape does not consists of just the three layers put on top of each other. Landscape is changing trough time, the current landscape is just a snapshot within a continuous changing process. Landscape design means not thinking in final images, but shaping the direction of the processes that act within the landscape (Vrijlandt, 2006).

This is also applicable for designing with (sustainable) tourism, as that is also a process which is changing and developing continuously, not working into one final image. During the research the layer approach will be used to discover and analyse the different layers apart and see the interactions. Sustainable tourism can be seen as a perpendicular layer, because it is dependent of the characteristics of each single layer and the three layers together, linking them into one system. The substratum layer (the landscape) serves as the base for sustainable post-Fordist tourism development and is therefore the leading layer, the networks layer is important to create a complex, small-scaled tourism network-system in which the region works as a whole linking the interesting

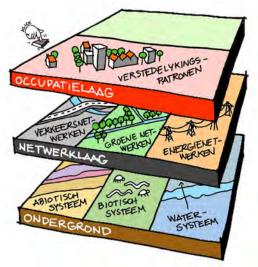


figure 4.1 The layer approach by De Hoog, Sijmons and Verschuuren (source: Dauvellier)

parts and the occupation layer is important for the sociocultural basis on which some tourism parts are based and is an important asset of sustainability. Also the position of the villages is important in this layer. By combining the three layers together a working, landscape/social-cultural based tourism plan can be made out of it. This method can be used on the regional, local and site scale and will be used in the case study.

4.3.3 Research by design

During the project, we integrate design in several parts as part of the research. In this design is the leading feature for our way of doing research. This is done by sketches, drawing of models and figures, maps, and principal drawings. The method of research by design is chosen, because it opens options and possibilities for new concepts or inventions which are not possible by using traditional academic research methods. Therefore it is experimental and innovative, because as Rocco (2009) states; 'research must result in something original, something that was not known or interpreted in this way before'.

The main idea of research by design is the combination between practice and theory. It is the domain of design research that are pertinent for inquiry in the interdisciplinary approaches and frameworks that are often central to research in design (Rust et al., 2007). Developing the concept of research by design is also about situating such research in a wider system and communication oriented views on designing as knowledge production (Morrison and Sevaldson, 2010). This is in line with this project, which is about interdisciplinary (landscape architecture and sustainable tourism) design approaches in a wider system and with the focus on new knowledge production.

However, the demonstration of practice based inquiry and the potential research practices are still far from settled and are in full development. Such inquiry is often time consuming and risky especially because both designing as practice and researching within an academic format has to be simultaneously developed (Morrison and Sevaldson, 2010). And, as Rocco (2009) questions; 'Can the product of spatial design (the design itself) be considered as knowledge following basic criteria used in traditional academic research?'

Biggs and Büchler (2008) take the view that research by design should not be set apart from traditional concepts of academic research. They argue that rather than being a distinct type of research that should be guided by special concepts, research by design is a subcategory of traditional academic research that can and should attend to and observe conventional research criteria. Some of these criteria may

need to be rearticulated so that the terminology is recognized as meaningful to the areas of design practice. However, it is their belief that academic research communities would benefit from such clarification of the criteria that frame their discipline-specific methods and outcomes in more cross-disciplinary and transferable ways.

It is not clear, for example, what contribution from practice to academic research would characterize this research sub-group. If research by design is a subset of academic research, then certain elements of academic research need to be reframed in a way that accounts for specificities of design practice, without losing their original purpose. Even academic research that is developed within the traditional scientific disciplines contains practical elements such as experimentation, data collection, observation and interviewing. Maintaining the link between design research and traditional academic research is necessary because it will enable design to show that it conducts high quality, rigorous academic research (Biggs and Büchler, 2008).

The contribution of design practice to academic research can best be described as a spectrum that is composed of two extreme poles with a long and variable range of possible combinations between the two. For the sake of perspicuity, three ways in which design practice can contribute to academic research will be described here: the two extreme poles of:

- exploratory practice within the traditional model of academic research
- practice as a generator of relevant questions that are explored within the structure provided by the traditional model of academic research
- Problematic view that claims that design practice is academic research (Biggs and Büchler, 2008, Rocco, 2009)

The first relationship between design practice and academic research exists within the traditional, scientific model of academic research, where the role of practice is exploratory. Within this model, design practice contributes to academic research as a means of testing the applicability of theories to real-world situations. The other pole of the practice/research relationship exists within design practice. At this pole the practitioner surrounds himself during the creative process, with information that is deemed relevant for the specific design problem in the hopes of reaching an insightful solution. Within this model, design practice is a means of identifying questions that are considered important to the applied context (Biggs and Büchler, 2008).

The problematic relationship between design practice and academic research appears when the original knowledge and understanding that results from design practice per se, claims to contribute to the advancement of that community,

i.e. position 3 above. The definitions of academic research that are offered by research funding bodies highlight the contribution of the new knowledge to the community as being a defining characteristic of academic research. It therefore seems to be a logical conclusion that design practice that contributes to the area in this way would be academic research (Biggs and Büchler, 2008).

4.4 The design process in six steps

When coming to the design part, it has to be clear how a landscape design with a focus on sustainable tourism development can be developed in steps. These steps are devised during the design process in order to come up with a design that combines the design area with the wider context and the local landscape characteristics (including problems and qualities). After that it can be combined with sustainable tourism development, in order to make the connection between the most important input (the local landscape and cultural qualities) and the tourism product. Out of this combination design challenges for the spatial development and a concept can be derived, which are also based on the outcomes of the participation moments with local stakeholders. It is important to phase the spatial development in order to guide the development over time, so the structuring becomes clear and realistic to implement. Out of this phasing the ideal future situation can be derived, which is flexible for changes of trends or other unknown impacts.

The six steps will be explained separately now:

- 1. the wider context: an area always has a spatial context, which influences the area and has a special relation with it. It is important to know the wider context and to implement the input from that as a base for the plan of the area.
- 2. Landscape/site analysis: After knowing the context, the site analysis can be done. This analysis consist of four parts exploring the current status of the site, based on tourism, landscape characteristics, natural and cultural qualities and spatial problems. An important input for the analysis is participation, as the local stakeholders have a lot of knowledge about their own living environment and can come up with things researchers or landscape architects overlook. The outcome of these analyses provide a backbone for the possible connections with tourism target groups, based on current tourism, landscape and natural and cultural qualities.
 - 2.1 Tourism analysis: the current status of tourism in the area will be analysed, focusing on the attractions, facilities, routes and landscape setting.
 - 2.2 Landscape characteristics analysis: the landscape will be analysed in order to understand the working of the landscape and the natural processes which are present

- in the area. As the landscape forms the base for (tourism) development, it is important to characterize the different landscape units on each scale and know their position in the overall landscape. The terrain or land relief is an important aspect of the landscape analysis, because it sets out natural zones and barriers.
- 2.3 Natural and cultural qualities analysis: sustainable post-Fordist tourism is focused not only on the landscape, but also on the special natural and cultural qualities in a certain area. These qualities should be listed and analysed. After the analyse they can be grouped into different types of qualities (for example nature reserves or castles), so they can be matched with tourism later on. Also a spatial dispersion map can be created, to show where the qualities are located in the area, so it can be used for the spatial development of tourism later on.
- 2.4 Spatial problems analysis: next to qualities each area also has to deal with some (spatial) problems, which are important to encounter and understand, in order to deal with them or (better) come up with a solution. It is important to make local people aware of problems, especially if they are caused by their own behaviour. The spatial problems should be listed and projected on a spatial dispersion map, in order to spot structural problems or to link them in a system.
- 3. Connection with tourism: when the landscape analysis is finished and the landscape characteristics, qualities and problems are listed and analysed, it is time to connect them (especially the landscape characteristics and qualities) with the tourism potential for a certain tourism target group. By doing this the potential areas for each tourism target (sub)-group can be defined and rated, so they can be used in the concept and design.
- 4. Design challenges and concept: out of the potential areas for each tourism target group design challenges can be set for the spatial development of an area. Potential areas of tourism target groups can be combined or spread, linked or segregated and used as priority or as background. To do this the concept of zoning can be used to create different zones with different focuses or specializations. These challenges and zones lead to an overall strategic concept for the area.
- 5. Phased spatial development: it is very hard to implement the concept of step 4 directly into practice, because it will happen over time, so it isn't a plan which can be implemented in a short period of time. Therefore the spatial development should be done in several phases, which will steer the developments and use the current situation as a starting point to guide the developments in the area to the desired future situation. By doing so the plan becomes more realistic and easier to implement because it sets short-term goals and focus points. Next to that the developments are still flexible for changes and uncertainties.

6. Ideal future situation: when finalizing the phased spatial development, an ideal future situation can be distinguished. This is the target situation to which the area should work if the trends will stay the same. The ideal future situation consists of a balanced flexible plan, which should be able to handle uncertainties and changes. By doing so the basis will stay the same, which results in the fact that decrease for a certain target group will not result in a situation in which the whole development becomes useless.

After finishing the six steps, a design is produced which uses the local landscape characteristics and natural and cultural qualities as the base for tourism development. These are strategic designs, flexible for possible changes or uncertainties, but still imbedded in the local landscape structures. When the design on the local scale is finalized sites for detailed concrete designs can be derived from it. These detailed site designs form the base of the development of the plans in practice and can be projects like a harbour, town square, park, public space or other facilities.



Chapter 5

Case study



5. Case study

5.1 Test case Dubrovnik Riviera

In order to find answers to the research questions a case study is introduced, because of the research by design approach of this thesis. This case study is located in Croatia, because of the connections with Irena Ateljevic and the fact that it is a very interesting country to work in, because it is on the threshold of two major changes, from Fordist masstourism to sustainable post-Fordist tourism and towards the EU-membership in July 2013.

In the search for a good case study area some criteria are needed to define the characteristics of the study area and make it easier to search for a suitable area. Firstly, the area should be consist out of several villages and preferably a city because of the regional approach of this thesis. In order to not over scale the project the study area should be between 100-200 km² and for practical reasons it is recommended to work in one or two municipalities. In order to provide a suitable test case area for more cases around the Adriatic coast it will be an advantage to choose an area which has a lot of different landscapes, like islands, coast, bays, hinterland and mountains. The study area should be relatively unspoiled by big Fordist resorts, as that doesn't rhyme with the focus on post-Fordist tourism. An extra added criteria is that it should be near an attractive city to see the influence of that on the area.

Out of these criteria we ended up with our case study area: the Dubrovnik Riviera. An area of about 170 km², with a great landscape diversity and just 3810 inhabitants, spread over 17 villages. It contains three inhabited islands, two main bays, a very authentic hinterland with valleys and rough mountains and it is very close to the city of Dubrovnik, which is one of the main tourist attractions of the country. For example the island of Lopud is mentioned often as one of the most beautiful, undiscovered or pristine islands of the world, for example by the Observer and Reizen Magazine (Turner, 2009, Reizen Magazine, 2012). The AutoRoute Magistrala between Dubrovnik and Split (which forms the backbone of the study area) is named the best alternative travel road of the world by Lonely Planet (Lonely Planet, 2012). They also listed the city of Dubrovnik as one of the ten 'essential stops for Europefirst timers', next to cities like Rome, Paris and Barcelona (Lonely Planet, 2012). Next to that Dubrovnik is listed on the Rough Guide's Travel Hot List 2013 (Rough Guide, 2012) and is UNESCO world heritage since 1979 (UNESCO, 2012). So to say, Dubrovnik and the Dubrovnik Riviera have a lot of qualities and potentials for tourism development and the area is booming.

5.2 The national and regional tourism position

Now the case study area is known, it is time to discover the

national and regional tourism position of the study area, to know the context and the focus points of the area.

5.2.1 Position of Croatia

As stated in chapter 2, Croatia is one of the countries which is, together with France, Spain and Italy, part of the western part of the Mediterranean littoral. This means that is has a long tradition in seaside tourism and is easily reachable by car from the other parts of Western Europe. The main landscape difference between Croatia and the surrounding countries is the rough coastline with numerous islands, while the others have a smooth coastline with almost no islands. Due to the impact and aftermath of the civil war Croatia had to start over and has due to that now a different focus on

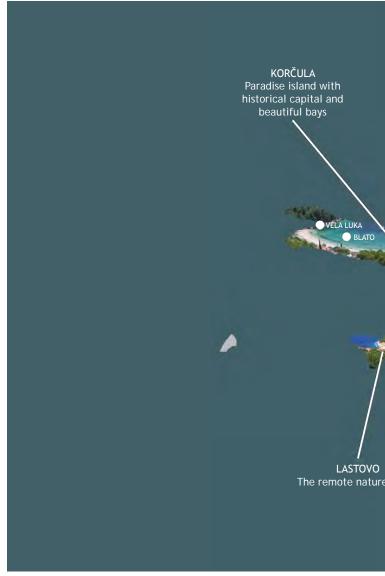


figure 5.1: Case study area in the Dubrovnik-Neretva County context based on t

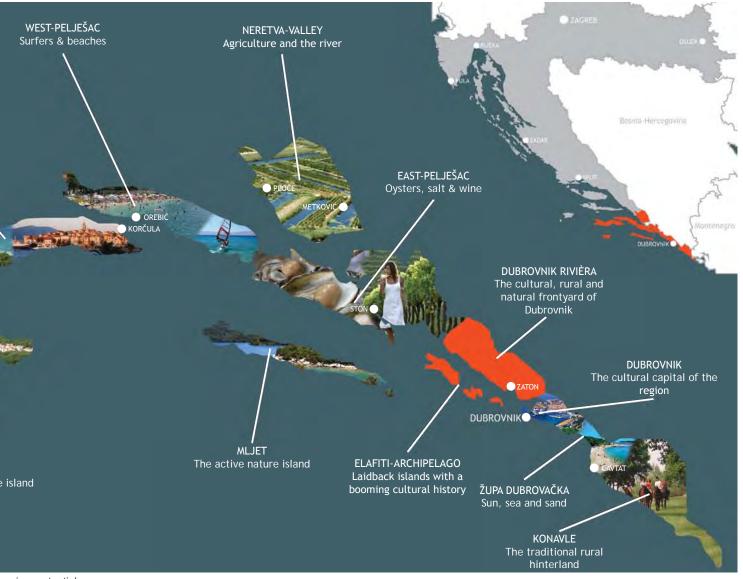
tourism, which is on sustainable tourism development, and mainly on post-Fordist tourism.

5.2.2 Dubrovnik-Neretva County

Within the country of Croatia the study area is located in the Dubrovnik-Neretva County, which is the most southern county of Croatia. It is a long, narrow coastal area with many islands and mountains and in the north the delta of the Neretva river. This delta is separated from the rest of the county by a 8 km coastal enclave of Bosnia-Hercegovina. Because of its' position in the country it is far from the Slovenian border, about 500 km. This means that it is the worst part of Croatia to travel to by car, which results in the fact that the county is more dependent on airplanes and

ferries in comparison with the rest of the country. The county is next to that not reachable by train anymore, as the old railroad from Sarajevo closed down after the civil war. The capital and central hub of the county is Dubrovnik, which is considered as one of the main tourist hotspots of Croatia.

Within the country the Dubrovnik-Neretva County should have a focus on Elite tourism, golf, nautical tourism and congresses, according to Roland Berger Strategy Consultants (2005). In fact, the county is according to them the only coastal county that shouldn't focus on mass tourism. According to their strategy report the county should focus on the higher end of the market as an all-year round destination with an emphasis on art and cultural tourism. As a slogan for that they use "Dubrovnik as the cradle of Croatian art & culture" (Roland Berger Strategy Consultants, 2005). This



ourism potential

focus on an all-year round destination and cultural tourism immediately stresses the importance of the development of sustainable post-Fordist tourism in the county, as that is the key to solve the seasonality problem and diversification of the tourism product to reach that.

5.2.3 Dubrovnik Riviera

Within the Dubrovnik-Neretva County the Dubrovnik Riviera holds a central place. It is the area directly north of the capital Dubrovnik and is connected with the rest of the county by road (Magistrala) and ferry. Because of its' location near Dubrovnik it is strongly connected with the city, the study area functions as Dubrovnik's backyard.

Within the county each region should offer a special tourism product or focus point. These focus points should be strongly related to the current status of the regions and their natural and cultural qualities. Due to this for example Mljet can be pointed out as an island with a focus on active tourism and nature, while the Konavle has a great opportunity for rural tourism, because of its' traditional hinterland and the fact that rural tourism is already in the involvement stage. East-Pelješac has a long tradition in the production of oysters and wine, so it can focus on that image, using the traditional local culture as a base.

Around the capital Dubrovnik the regions are smaller and more interlinked. The central region is the city of Dubrovnik (the cultural capital of the region), surrounded by Župa Dubrovačka in the east (with a focus on traditional sun, sea & sand tourism), the Elafiti-archipelago in the west and the Dubrovnik Riviera in the north. These last two regions together form our study area, named 'the Dubrovnik Riviera'. This area is characterized by the fact that it has a great

landscape diversity and almost all different landscapes that can be found in the county are present in a small area. Due to the strong connection with the city, which is the main tourist destination of the county, and the great landscape diversity, the area has the potential to function as a sneak-preview area for the rest of the county. It has the potential to be easily reached by a relatively large number of tourists, who are not searching for a specific type of tourism, but looking for the diverse image of Croatia, the Dubrovnik-Neretva County or the historic Republic of Ragusa. When these tourists become very attracted to a specific type of tourism, they can travel to an other region in the county which is more specialized in it. This function strengthens the role of Dubrovnik as hub of the county.

By offering a wide range of different activities and facilities that are easily reachable by public transport from the city and vice versa the study area can offer the role of cultural, rural and natural frontyard of the city. When this happens the Dubrovnik Riviera and the city of Dubrovnik become one integral tourist system instead of several small tourist systems in the current situation. By working together they complement eachother and as a result they will both function optimal.

This also solves some of the main problems of the city of Dubrovnik today. A main problem of today is that except of the medieval city there aren't many tourist attractions, which results in short stays (3,1 nights (TZ Dubrovnik, 2006)) in comparison with the rest of Croatia (5,9 nights (Hall, 2003)). This also affects the accomodations in the coastal part of the Dubrovnik Neretva today, as they are functioning as extra capacity for the city. A broader and more diverse offer of attractions and activities can fullfill this potential and give a real function to the riviera. Next to that the city is searching for more types of tourists and activities/attractions that



figure 5.2 The Jadranska Magistrala: the best alternaturive travel road of the world according to the Lonely Planet (source: guru.sk)



figure 5.3 Dubrovnik: UNESCO world-heritage, hot-listed by the Rough Guide for 2013 and by the Lonely Planet in 2012 (source: sailpoint.nl)

will broaden the season in order to become a year-round destination (Vicelic, 2012). While in the old city most options for activities/attractions are already explored and developed, the Dubrovnik Riviera has many options for possible activities/attractions to develop, which will help them to attract a broader audience and becoming an all-year round destination.

5.3 Tourism analysis

5.3.1 Tourism target groups

In order to broaden the season and the tourism offer it has to be clear on which types of tourists the focus should be and what these types are characterizing. About specific tourism target groups or alternative types of tourism no clear outline can be extracted. This is because every author comes up with different forms of tourism and different assessment criteria. For example Buswell (2011) names conferences, cruise tourism, golf, urban tourism, rural tourism, sailing, hiking, walking and cycling as alternative types of tourism. Holden and Fennell (2013) list in the Routledge handbook on tourism and environment ecotourism, nature-based tourism, wildlife tourism, agri-tourism, slow travel and responsible tourism. Roland Berger Strategy Consultants (2007) names as main tourism target groups for Croatia Nautical tourism, Ecotourism, Cruises, Cultural tourism, Adventure tourism, Mountain holidays, Beach and fun, Special interest tourism, City tourism, All-inclusive tourism and skiing. These different target groups have a lot of overlap with each other, therefore it is necessary to make the tourism target groups clear for this case study. By doing this the wide range of different activities and facilities have to be taken into account, all based on the qualities of the local landscape, culture and history. Due to this focus on the local qualities and post-



figure 5.4: Authentical hinterland: valley of Kliševo (source: panoramio)

Fordist tourism, target groups like golf tourism are excluded as they don't match with the landscape and the ideas of post-Fordist tourism.

For the case study area the Dubrovnik Riviera the following eight main tourism target groups (TTGs) are established:

- Active & adventure tourism
- Cultural & historical heritage
- Gastronomy & local products
- Nature tourism
- Nautical tourism
- Rural tourism
- Sun, sea & sand tourism
- Wellness tourism

On the following pages each main tourism target group will be described in detail, using the with the typology of four spatial components which are relevant for landscape design of Brinkhuijsen (2008); the attractions, facilities, routes and (landscape) setting; as a base for the tourism target group.

Most tourism target groups are divided in several sub-target groups, so the spatial preconditions each subgroup can be more precisely described. However, in general the main target group covers the sub-target groups good enough, except for active & adventure tourism. Within this TTG the differences between the sub-target groups are too big to be covered by the main TTG, so it is necessary to describe the sub-target groups in detail also on the following pages. These sub-target groups of active & adventure tourism are:

- Biking
- Climbing
- Diving
- Hiking
- Horseback riding

5.3.2 The attractions, facilities, routes and landscape setting

When linking the tourism target groups and their sub-target groups with the typology of four spatial components which are relevant for landscape design of Brinkhuijsen (2008) for each tourism (sub-)target group a list can be extracted of landscape design preconditions. This list functions as an encyclopaedia or checklist for the spatial implementation of the specific TTG for spatial landscape design. It contains all spatial preconditions which are important to take into account while designing or planning for a specific TTG.

Biking

Biking is one of the main forms of active & adventure tourism and can be done the whole year round. The subtheme biking can be roughly divided for our study area in two main types: mountainbiking and cycling.

Cycling is the mainstream part of the subtheme, it is accessible for almost everyone and doesn't have strict preconditions for the physical state of the tourists. Cycling is done on paved or gravel roads or paths which are relatively flat, no big hight differences are present in cycling. Therefore cycling will mainly take place on the relatively flat plateaus of the inland valleys and the coastal plane. To guide the cyclists marked routes have to be present to show them the nice spots during the trip and to provide them with resting points along the route or at interresting places. Mountainbiking is the more extreme variant of biking, for which the tourists have to be in a good physical condition. Mountainbiking is done on gravel and mainly off-road tracks, which offer variation in slopes and an attractive landscape. Therefore mountainbiking will mainly take place in the hilly natural landscape of the mountains and the archipelago.

To guide the mountainbikers, marked routes have to be provided which offer variation in distance and degree of difficulty. Along those routes a few resting points have to be provided, but not as much as for cycling. In mountainbiking are two main types: round trips and downhill. The main difference is that downhill is based on a starting point on a hill with not much climbing, while round trips are based on the same amount of climbing and descending.

Hiking

Hiking is one of the main forms of active & adventure tourism and can be done the whole year round. The subtheme hiking can be rougly divided by two characteristics of the tourists: one type is called walking, which is done by tourists who like to have strictly marked and guided tours with a lot of facilities and/or attractions like resting points, information panels and restaurants. For this kind of hiking the slope shouldn't be to steep and the paths should be in a good condition and not too big distances (3-10 kilometers).

The other type is called hiking and is based on the landscape values and the wild nature experience. In this type the experience of loneliness and being united with the nature is very important, the tourists doing hiking like to be in unspoiled nature areas, where not much human influence is visible. Therefore facilities or attractions like information panels, resting points with picnic banches and big restaurants are not appreciated, a rock to rest on and a shelter with a water source are more the type of facilities that are needed for hiking.

In hiking are three main durations of the activity; short distance trails for a few hours (5-10 kilometers), medium distance trails for a whole day of hiking (10-25 kilometers) and long distance trails for several days of hiking (>25 kilometers), which also needs some overnight facilities like small campsites or refuges. Those refuges can be placed on tactical points where short, medium and long distance trails meet, so the capacity will be enough to make it profitable.

Hiking can conflict with other users of the paths and roads (biking, horseback riding, cars)























figure 5.5: Mountainbiking (source: Ischgl.com)











figure 5.6: Hiking in the mountains (source: vi-hotels.com)

Horseback riding

Horseback riding is niche-part of active & adventure tourism and can be split in two groups, horses and donkeys. The main difference between the two groups are speed (horses are faster) and slope (donkeys can handle steeper slopes).

Horseback riding typically takes place in the inland, in the valleys and the mountains and needs two main facilities. The first one is a horse back riding school or a farm where horses and donkeys can be rent. This is because of the fact that it's almost impossible to bring your own horse with you on holiday. This allowes a good starting point to concentrate the horseback riding in some parts of the area and adapt the route system to those farms.

Those routes are the second facilities horseback riding needs, because it can conflict with other users of the paths in the inland (hiking, biking) and some good resting points with special facilities (stabling, fresh drinking water and shade) are needed for this type of active tourism.

Climbing

Climbing is a niche-part of active & adventure tourism and takes in a special place in the landscape, which makes it easy to combine with other types of tourism. With the term climbing the wide range of sports along big rocks and steep hills is defined, like climbing, abseiling and canyoing.

Climbing typically takes place on (very) steep hilltops and cliffs, which in the case area can be found in the mountains and on the cliffcoast of the archipelago. Climbing is in fact the only type of tourism that takes place on this special part of the landscape, making it easy to place. The main criteria for a good climbing area are a good connection with a starting point and an attractive serie of rocks to climb on,























figure 5.7: Horseback riding (source: jeka.be)







figure 5.8: Climbing on cliffs (source: alpinist.com)

Diving

Diving is the last subtype of active & adventure tourism and is directly linked with the sea, as the sea is the natural attraction on which diving is based. Also diving can be split in two groups; snorkling and scubadiving.

Snorkling is the mainstream part of diving, it can be done easily with cheap and basic equipment and doesn't need special facilities. It can be done directly from the beaches or other places where people can enter the water easily and needs a shallow underwater landscape, which can be found directly around the archipelago and coastal plane. It is also possible to go by boat trip to a bit more remote or special places to snorkle.

Scubadiving has more preconditions and requirements for the equipment. Because scubadiving is mainly done in a bit deeper waters a boat to transfer the tourists to the best places for scubadiving is needed. Next to that places where those trips can be booked and equipment can be rented are needed, just as some professional guides. For beginners some lectures and practices at a diving school are needed.

Diving is good combinable with all other types of tourism, except for fishing trips, as divers can get entangled in nets.

Cultural & historical heritage

With cultural and historical heritage cultural tourism is meant, which is defined by Richards (1996) as; 'the movement of persons to cultural attractions away from their normal place of residence, with the intention to gather new information and experiences to satisfy their cultural needs'. In other words, it's about exploring a new (different) culture.

Dubrovnik and the Dubrovnik Rivièra are one of the main cultural historical sites of Croatia, because of the rich history of the city and its' former republic. The government sees Dubrovnik as 'the cradle of Croatian art and culture', which indicates the important role of cultural tourism.

Cultural & historical heritage are mainly attractions on itselve and can be found in different forms over the whole area. In the mountains are ruins of former villages, paths and cultivated dolines the main heritage, while the valleys are full of historical villages, traditional farming systems, churches and ruins. The coastal plane and islands are full of relicts of the Ragusan Republic, which is a very strong part of historical heritage. In this things like villas, palaces, arboretums, warehouses, monasteries and docks are present in the area, but also historical villages and fortresses.

These cultural and historical elements can be used as routes (old pathsystems) or as special nodes on routes as attractions. The history and culture of a village plays an important role in the image and structure of the village nowadays, it serves as a base for new developments. Therefore it's bad combinable with mass-tourism developments.























figure 5.9: Scuba diving (source: allscubadivingsites.com)





Gastronomy & local products

Gastronomy & local products covers a wide range of kinds of tourism, with one general element: local traditional products; food, drinks, art, souvenirs etc. Therefore it is closely connected to the activities of the local inhabitants.

The main part of gastronomy is restaurants, where tourists can enjoy the typical local gastronomy and taste the local products. To get a better idea and connection with this food, excursions on farms where the food is produced can be a part of understanding and experiencing the local products and the gastronomy, which is also stronly related to rural tourism. Another subtype which is strongly related with rural tourism is harvesting, which can be done on different scales. One scale is for example an orchard where tourists can pick their own fruits, like apples or oranges, which brings a nice experience for tourists and a higher profit for local farmers. A bigger scale in harvesting is when tourists are coming for the harvest time to help the local farmers to harvest their products, which is already a big success in France.

But not all food is coming from the land, the strong connection with the Adriatic sea means also a lot of seafood like fish and shells, which can be experienced by joining a fishing trip.

All these local products can be sold to tourists and local inhabitants at markets on tactical points, like village squares or harbours. In this way the tourists have direct interaction with the local people and can also be informed by the other parts that gastronomy & local products, but also rural tourism, has to offer.

Nature tourism

The natural beauty is next to the rich cultural history one of the main attractions of Dalmatia as a holiday destination. The Dubrovnik Rivièra offers in a relatively small area a wide range of nature types, from a cristal clear sea, to lush forest vegetation on the plateaus, green oases around small streams and beautiful bays to a rocky and dry mountain landscape with steep slopes, fertile dolines and stunning panoramas over the Adriatic, the archipelago and the city of Dubrovnik.

All theses different kinds of nature have different kinds of use, even within one type it can vary. The dry mountains are perfect for long distance walks or mountainbiking, but can also be used for a themed educational trail for families. And it offers one of the biggest attractions in the area: the Gromaca-cave.

The lush forests on the plateaus function as buffer between the coastal villages and offer a nice connection between the villages with shady hike- and bikepaths. But also on the hikeand bikepaths between the coastal village and the inland villages and on the archipelago can be supported by nature areas to make them more attractive.

In nature areas there are two main types; nature areas and nature reserves. The main difference is that nature reserves are protected areas with more restrictions to the use and maintenance.

Nature tourism, if well combined, is almost combinable with all other types of tourism. Only the combination with cultural and historical heritage can conflict, as nature has taken over some old relicts.























figure 5.11: Local products and gastronomy (source: korculainfo)



figure 5.12: Lush nature areas

Nautical tourism

Nautical tourism is today already one of the main types of tourism that Croatia offers, which is not strange because the Adriatic sea is one of the best places in Europe to do nautical tourism.

The study area is especially good for small-sized nautical tourism, because of the short distances between the city, the islands and the coastal plane with natural bays. This makes it a very suitable area for sea kayaking, island hopping and daytrips on sailboats. But also organized boat trips on local fishing boats, a combination with local products.

For this type of tourism good harbour facilities are needed where boats can be rent, tours can be booked and boats can dock to visit the villages or bays and offer overnight facilities. Nautical tourism is purely based on the water and because of that it is good combinable with almost all other types of tourism.

Rural tourism is based on the traditional agricultural lifestyle in the valleys and on the archipelago. It is in fact strongly related to gastronomy and local products, but also has some differences.

Rural tourism

Rural tourism is not purely based on food, but also on the feeling of being in a different, peaceful world; the farm. It's a place where tourists can get reconnected with their nature and enjoying the traditional lifestyle (in a comfortable way).

Within agritourism activities on farms like excursions, harvesting, tasting the local products and small restaurants are encounted. But also a museum or exhibition about the local farming systems can be part of agrotourism. They offer those facilities in traditional buildings (old farmhouses,

Next to these day-trip activities agritourism also offers overnight stays on local farms or rural hotels.

Because rural tourism is based on the authentic feeling of the countryside it is not good combinable with big urban infrastructures and modern housing like big hotel resorts or crowded beaches.























figure 5.13: Sailing is very popular (source: Facebook)







figure 5.14: Tourists picking fruits (source: crossroadsmag.eu)

Sun, sea & sand tourism

Sun, sea & sand tourism (also known as 3-S tourism) is the main form on which mass tourism nowadays is based and still is the main form of tourism in Croatia today.

The importance of sun, sea & sand tourism is already shrinking in Croatia and that trend will continue in this project. However, it's still an important part of tourism and makes use of the landscape characteristics and qualities (a lot of sun, natural bays and beaches, cristal clear sea etc.). Therefore it's inconceivable that it will disappear, but that's also not a problem.

The problem with sun, sea & sand tourism, in combination with mass tourism, is that it's (over)focusing on a very small part of the area (the coast), where it neglects the rest of the hinterland. Tourists tend to stay only inside their hotel/resort and the private beach, making no notice of all the other attractions of the area.

When placing sun, sea & sand tourism in the model of (regional) sustainable tourism, it can offer very good combinations when the relation with other forms of tourism is balanced. Tourists can combine a beach-holiday with an active or cultural holiday, spending some time at the beach and making daytrips to the city, the valleys, historical villages and/or the mountains.

Wellness tourism

Wellness is a niche tourism in the total tourist market. but according to the strategy reports of Roland Berger consultants (2005) it's becoming more important and a focus point for the Dubrovnik-area.

Wellness is placed in the landscape on very special, spectacular points, like in caves, on the edge of a ridge, on places with sublime vistas or on very remote places, to create an exclusive atmosphere. It makes use of the extremes in the landscape like water sources, bays or viewpoints. Due to this special place in the landscape it is hard to define special preconditions for it.

Because of the special place of wellness tourism in the landscape it is hardly conflicting with other types of tourism.























figure 5.15: Prisine pebble beaches in Brsecine (source: asiarooms.com)







figure 5.16: Luxurious cave houses (source: syrabites.com)

5.3.3 Sustainable Transportation

Within sustainable tourism sustainable transport plays an important role. This is because of two types of impact, environmental impact and spatial impact (Rössler, 2006). Environmental impact is about the impact of exhaust gasses and the use of fossil fuels on the environment and climate (smog, more extreme weather), while spatial impact is about under capacity of roads, parking lots causing traffic jams, dangerous roads and visual pollution.

To solve the problems of the impact, sustainable transportation is needed to develop. The environmental impact can be solved by using renewable energy instead of fossil fuels in transportation, which is possible in the study area because there is a large hydro-power plant. The spatial

impact can be solved by developing an extensive public transportation network, connecting all important tourist attractions and facilitations.

An extensive public transportation network is well applicable on the study area because of two issues. The first issue is the fact that the Dubrovnik region is in a remote part of Croatia and therefore not easily reachable by car from Western Europe. This results in the fact that most tourists arrive by airplane, which is increasing rapidly by the introduction of low-cost airlines (The Dubrovnik Times, 2012). Most of these tourists don't rent a private car and are therefore dependent on public transportation. The second issue is that the Dubrovnik Riviera will become one tourist region together with the city of Dubrovnik, resulting in a relatively small tourist region without big distances. As a result of this small scale

Type of tourism	Subtype	Attractions	Facilities	Routes	Landscape setting	М	V	C	Α
Active & adventure tourism	Biking	Off-road cross track, nature areas	Bike rental, maps, resting points	Various in length and type of biking (hilly or flat, paved or off-road), marked routes	Attractive landscape with variation in slopes	0	0	0	0
	Climbing	Big rock or hill	Outdoor centre, rental, guided excursions	Hilltop or cliff climbing routes	Steep, rocky landscape or cliffs	0			0
	Diving	Natural	Diving centre with rental	-	(Shallow) underwater landscape				0
	Hiking	Viewpoints, cultural & historical heritage, nature	Maps, resting points, information panels	Various in length and degree of facilities, marked routes	Attractive varied landscape	0	0	0	0
	Horseback riding	The landscape	Horse riding school	Riding trails (marked)	Relatively flat landscape with interesting nature	0	0		
Cultural & historical heritage	Arboretum	Museum, exhibition of rare species	Information panels	From central place in village to the entrance	Villa-structure, semi-flat, presence of water			0	0
	Churches and monasteries	Churches, paintings	-	-	-		0	0	0
	Dolines	Ruins of old settlements, former agricultural fields	Small catering, information panels	From doline to doline	Sinkholes in mountains	0			
	Historical villages	Old houses, museum, squares	Information panels, catering, shops	Between villages, system inside the old village	Traditional landscape, narrow streets		0	0	0
	Ruins	Ruins, relicts of the republic	Information panels	Connecting the ruins: special interest tourism	-	0	0	0	0
	Villas	Museum, exhibition	Catering, overnight stays	-	Villa-structure, semi-flat, presence of water			0	0
Gastronomy & local products	Fishing trips	Fishing (with commercial ship or own rod)	Harbour, ships (rental)	-	Sea			0	0
	Harvesting	Picking the fruits	Harvesting products, overnight stays	-	Agricultural landscape		0		0
	Markets	-	Market stands, square	-	Square or boulevard		0	0	0
	Restaurants	Tasting local food and drinks	Outdoor open-air terrace	Could be used as resting point on routes	Open-air terrace with nice view over the landscape, sea or square	0	0	0	0

Type of tourism	Subtype	Attractions	Facilities	Routes	Landscape setting	М	٧	С	Α
Nature tourism	Caves	Guided tours in the karst caves	Expedition/visitor centre, museum, transport to the entrance	From expedition centre to the entrance of the cave	Karst caves	0			
	Nature areas	Beautiful nature, but not protected	Resting points, hiking tracks	(marked) routes through the area	Nature areas	0	0	0	0
	Nature reserves	Pristine nature with protected species and/or ecosystems	Resting points, hiking tracks, information panels, visitor centre	Marked routes through the nature reserve	Protected nature reserves	0		0	0
	Viewpoints	The view	Resting points, information panels	Could be used as resting point or attraction on routes	Natural viewpoint	0		0	0
Nautical tourism	Boat trips	Natural bays, scenic villages, cliffs	Combination tours, harbours	Day trip routes	Sea, harbour			0	0
	Kayaking	Natural bays, caves	Harbours, rental, guided tours	Guided tours, daytrips	Sea, coast			0	0
	Sailing	Natural bays	Harbours, rental, sailing schools	-	Sea, islands			0	0
	Windsurfing	-	Rental centre, surfing school	-	Windy sea			0	0
Rural tourism	Agritourism	The authentic inland- experience	Restaurants, overnight stays, fruit picking, local products	-	Scenic traditional agricultural landscape		0		0
	Excursions on farms	Experiencing the agricultural land and farming systems	Guided tours, visitor centre	Could be used as attractions on routes	Agricultural landscape		0		0
Sun, sea & sand tourism	Beach & swimming	Sun, sea and beach	Restaurants, sunbeds, bars, sports area	Main infrastructure along the coast	Natural bays with beach, harbour or swimming pool			0	0
Wellness tourism	Wellness	Spa, relaxation, swimming, experiencing the landscape	Overnight stays, restaurant, spa, saunas, swimming pool	-	Sublime landscape	0		0	0

figure 5.17: Checklist of preconditions per (sub-) tourism target group

the dependency on the car as transportation is relatively low, if the public transportation is sufficient.

This means that a good connection of public transport is necessary, not only from the city of Dubrovnik to the attractions in the Riviera, but also between all attractions inside the Riviera.

5.4 Landscape analysis

5.4.1 The natural landscape

The natural landscape of the Croatian littoral is an attractive diverse karst landscape with 5835km dramatic coastlines, plenty of natural bays and caves and 1158 islands. These islands and coast are covered with lush Mediterranean vegetation and are placed around a crystal clear turquoise sea, one of the cleanest seas in the world. Of this coast only 15% is developed, which is very low in comparison with other countries in the Mediterranean and can be seen as a major quality in general (Deranja, 2008), especially in combination with the nice Mediterranean climate.

This coastal karst landscape can be roughly divided in two main areas, the Istria peninsula in the north with almost no islands and a hilly hinterland, and the Dalmatian coast with a lot of islands and a small littoral with a mountainous hinterland. Especially southwards around Makarska and Dubrovnik the hills getting steep slopes and are higher. The only big river in the coastal area is the Neretva, which has created a very flat and wet delta around Ploče and Metković. The islands among the Dalmatian coast are in fact mountain tops which stick above sea level since the sea level raise in the post-glacial period (Kovačević, 2000).

The natural landscape can be roughly divided in three main

chapters: the karst landscape, the water system and flora and fauna.

The karst landscape

The karst landscape is largely formed by the dissolution processes of water on the soluble karst rocks. These karst rocks are mainly limestone, marble and dolomite. They appear in individual beds, but even entire rock formations can consist of one single type of rock (Ford and Williams, 2011). Karst rocks are highly soluble, what result in a divers, fragile, fragmentized landscape which is very vulnerable for external influences. Karst landscapes offer a high variety in flora and fauna, because of the diverse conditions that are present.

When looking at the karst landscape, several elements can be distinguished which all together form the characteristic image of the landscape.

- Karren: general term for pits, grooves and runnel forms that are formed on the surface of the soluble rock due to the water erosion. (Ford and Williams, 2011)
- Epikarst: The uppermost weathered zone of carbonated rocks with a high, homogeneously distributed porosity. (Klimchouk, 2004)
- Dolines/Sinkholes: Within the epikarst, enclosed depressions are located, which may occur as individuals, but also in groups, determined by local geological or hydrological conditions. (Ford and Williams, 2011)
- Poljes: Large flat depression plains of depositional origin that discharge water underground. (Ford and Williams, 2011)
- Caves: natural subsurface void in rocks. It represents the connected conduits which drain water through the bedrocks. (Bonacci, 2009)



figure 5.18: Sustainable transport: mountain trains (source: designyoutrust.com)



figure 5.19: Epikarst on Srd-mountain, Dubrovnik

 Streams and springs: Water that flows through the limestone, on surface but mostly underground.
 Surface drainage is often flowing in sinkholes, what is called: 'the disappearing stream'. When popping up on surface again, the stream is called 'spring'.

Water

In the karst landscape water has a leading role in how the landscape reached its' current shape. The hydrographical networks that are formed by water circulation and the chemical reaction of acid rain on the soluble karst rocks, created an unique system which contains many fresh water wells and aquifers, accompanied with a high biodiversity (Bonacci, 2009). The beauty and mystery of these networks is that they are changing constantly in space and time. This is at the same time the weakness and vulnerability of the karst. Because of the fact that the water networks are highly interconnected, pollution can affect a large area in no time.

In the cross-section below, the working of the landscape system is illustrated. The limestone layers are located on a base of igneous (volcanic) rocks. Water is the leading element in the processes that are shaping the landscape. Precipitation provides a large part of the surface and subsurface run off. Through the epikarst with dolines and poljes, the water infiltrates into the porous limestone rock formations. Here the acid water is sinking as far as it reaches an impermeable layer. A horizontal flow continues till it drains to another layer of limestone which it penetrates again. It is possible that the stream follows the aquifer and pops up on surface again as a spring. This process continues till the water reaches the sea.

Flora and fauna

According to Alegro (2000) the southern strip of the Croatian coast is covered with oak forests. These forests are the most stable ecosystems of the Mediterranean. Because of their leathery leaves, the oaks are well adapted to arid conditions. The oak forests are very dense and dark, what ensures that the microclimate is wetter and cooler than the surrounded open spaces. As a result, the ground layer of vegetation is poorly developed. The most common species in these evergreen forests are the holm oak (Quercus Ilex) and the black ash (Fraxinus Ornus) (Alegro, 2000). Typical for the Dalmatic coast is the appearance of the Pinus nigra ssp. dalmatica, the only native pine specie (Beug, 1966). Next to these ancient species, other plant species are very common in the area like Cypress trees, Olive trees, Aleppo pine (Pinus halepensis) ,walnut tree (Juglans), Carob tree (Ceratonia siliqua), Chestnut (Castanea) and grapes (Punica). The higher parts of the landscape in the mountains consist of low vegetation with herbs, bushes and orchids. This flowery grasslands are very attractive and have a big ecological diversity.

However, human impacts caused damage to the forests which resulted in different stages of degradation which are noticeable nowadays. Due to the cutting of underbrush, deforestation, grazing and similar activities, soil erosion can occur. Erosion is stimulating the degradation, because it prevents the recovery and succession of the oak trees. Together with the frequent occasional fires, the forest can end up in the final stage of degradation: rocky forests of oaks. These rocky areas are developed on many places along the coast and on the islands. The soil on these rocks is very calcareous and contains many movable and immovable rocks. The typical red or brown color of this calcareous soil is characteristic for the Mediterranean region (Gams, 1993).

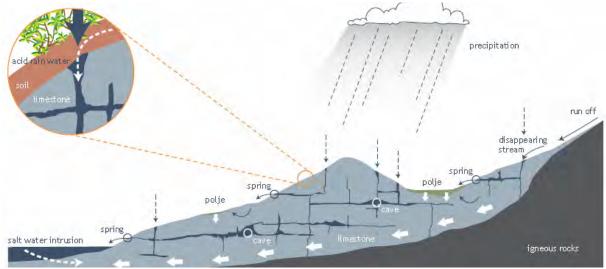


figure 5.20: Section of the karst landscape with water flows

Climate

The climate in the Mediterranean basin is characterized by hot, dry summers and mild, wet winters (Jurkovič, 2010). The Dubrovnik Riviera has a typical Mediterranean climate. The average summer temperatures in July rise to 38C and in wintertime the temperature generally remains above zero (Dubrovnik Online, 2012).

The winds along the Adriatic coast have a major impact on the weather conditions. Four different kind of winds are influencing the climate in our study area.

- Bora (Bura): the strongest wind along the Adriatic coast, blows mainly in north-northeast to east-northeast direction. It is a cold and dry downward wind, which strength is caused by the interaction between the warm air over the sea surface and a cold layer that is streaming form the mountains (Dubrovnik Online, 2012). The bora is mostly blowing in wintertime.
- Sirocco (Jugo): warm and moist wind, blows from a east-southeast to south-southwest direction and causes high waves and rainy periods. Rising temperature and moisture, together with a calm sea and changeable winds are signs for an upcoming sirocco. The sirocco winds are mainly present during spring and autumn and last from half a day up till several days (Dubrovnik Online, 2012).
- Mistral (landward breeze): The mistral is a daily thermic wind, blowing from the northwest, as a consequence of the difference in the speed in which the land and sea are warming up. It is present from spring to authum, and the direction of blowing often changes (Dubrovnik Online, 2012).
- Burin (stiff breeze): Contrary to the Mistral, this wind is blowing during the night from north-northeast to southeast (Dubrovnik Online, 2012).



figure 5.22: Indegenous vegetation in the mountains



figure 5.23: Spring on the main square of Trsteno

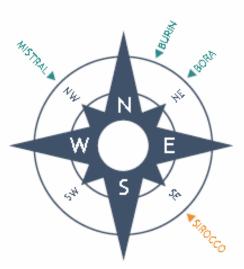


figure 5.21: Wind directions in Dalmatia



figure 5.24: Large polje in the valleys, near Mravinjac

5.4.2 The cultural landscape

Next to the natural landscape the Croatian littoral has a rich cultural landscape, formed by many centuries of human occupation. In this cultural landscape a combination of typical Croatian culture and culture of former rulers is clearly visible.

The cultural landscape can be roughly divided in three main chapters: the agricultural landscape, the villages and cultural, natural and historical heritage.

Agricultural landscape

The most visible impact of human activity are the terraces of dry stone walls that are forming the distinction with the natural landscape. Because of their wide distribution and recognisability, the walls are often considered as the structural elements in the karst landscape.

The stone walls are built to prevent erosion of the fertile soil and by doing this, create arable plots for agricultural activities. Next to that, the stone walls are also used to enclose small or large karst depressions (dolines and poljes) for land reclamation and the storage of water (Gams, 1993). The walls are constantly changing in parallel with the cultivation activities (Anicic and Perica, 2003). It is clear that the human activities are thus linked to the existing relief pattern, what creates more diversity of the landscape with new spatial structures and forms (Anicic and Perica, 2003).

Aničič and Perica (2003) divided the cultural karst landscape in several types: pasture landscape, sinkholes and karst valleys, karst field with arable land, hollows on steep slopes and terraced dry stone walls. In all these landscape types, the walls have different functions. They can serve as border or fence, provide shelter for cattle and building up the terraces in two spatial shapes: symmetrical and asymmetrical.

The asymmetrical shapes are found on moderate hills, which are suitable for growing fruit trees (Anicic and Perica, 2003). This is because they do not necessarily have to grow in rows, like grapes for example. Hills with steep slopes were cultivated with symmetrical terraces. This type of terraces is nowadays often overgrown and abandoned, because of the relatively small plot size they provide. Still these stone wall structures are considered as cultural heritage and present in the landscape.

Aničič and Perica (2003) are stating that spreading of new residential development around old settlements is already changing the traditional balanced karst agricultural landscape. They say that this development is influencing the traditional karst landscape in two ways: the original structures are changing into urban ones, and on the other hand, traditional structures and activities are abandoned and left to natural succession and erosion.

Intensive human occupation has caused noticeable impacts on the karst. The natural vegetation, soil and water resources are subject to influences that change the environment. According to Gams (1993), the following themes are influencing the karst landscape and cause environmental change: agricultural activities, urbanisation and tourism development. New is the influence of tourism, what has spread underground and putted extra pressure on the natural resources of this vulnerable landscape.

Consequences of the agricultural activities are extensive deforestation and severe soil loss, what led to land degradation and erosion of the thin karst soil. Next to that, agricultural pollution can rapidly infiltrate the open surface of the karst, what effects the natural groundwater reservoirs. Pumping up the groundwater for irrigation makes the groundwater level fall, what means that the natural water



figure 5.25: Agricultural terraces of dry stone walls with olive grove



figure 5.26: Cultivated doline for agriculture

supplies are reduced. Depleted water quality and quantity is the result, what effects the unique ecosystems on surface and subsurface rapidly and directly.

Villages

Typical Croatian villages consist of houses made from local dry stones with a roof of red/orange tiles. Some houses are plastered and painted in bright colors; white, yellow or pink. Houses are typically two- or three stories high and have white or green window shutters to protect the house for the sun and heat in the summer (Deranja, 2008).

These houses are in general clustered in dense villages or cities, creating a nice micro-climate and easily defensible village. Historically these villages are built around a fresh water source. Deranja (2008) states that the mixed-use in the clustered villages is originally very sustainable and still present in the Croatian city planning, which is of great importance for creating a sustainable tourist village, where tourism, local inhabitants and business is combined. This clustered and mixed-use form of building creates lively and diverse villages with a strong sense of community and great walkability. In these villages social gathering places in the center are very important (Tombari, 2005).

Bigger or more important villages and cities are strengthened with defense structures, like city walls, fortresses, castles, fortified monasteries or watchtowers. The city wall of the village Ston in South-Dalmatia is the second longest wall in the world, after the Chinese wall.

Cultural and natural heritage

Croatia has because of its' rich and long history a very rich and diverse cultural/historical heritage to offer. Cultural and natural heritage are very important for tourist destinations as they define the character and identity of the place. Like UNWTO states 'Culture is the lifeblood of tourism', this is especially the case for sustainable tourism and for Croatia in reaching the image of 'the Mediterranean as it once was'. In general the historical villages and cities can be pointed out as cultural heritage, but more specific types of cultural heritage will be explicated.

Natural heritage:

- Nature reserves, national parks (Mljet, Krka, Plitviče)
- Nature areas
- Caves, cliffs and ridges
- Karst landscape with dolines and poljes
- Beaches and natural bays
- The Adriatic sea



figure 5.28: On the seaside the houses are focused on the sea



figure 5.27: Clustered small villages in the inland



figure 5.29: Typical Dubrovnik: old villas along the coast

Historical heritage:

- From the Greek period (archeological sites)
- From the Roman period (Pula arena, inner city of Split, Cavtat)
- From the Venetian period (old harbor cities like Korčula, Krk, Zadar)
- From the Ragusan period (villas, city of Dubrovnik, Rectors' palace)
- From other foreign powers (forts, castles, archeological sites)
- From Yugoslavia and the war (ruined hotels, bunkers)

Cultural heritage:

- Cultivated agricultural land with dry stone walls and terraces
- Churches, monasteries and chapels
- Historical villages
- Historical roads and paths
- Local traditions and food
- Costumes, events and festivals

But, as the Fordist tourists (and the Yugoslavian government) didn't care about heritage for a long period most of the cultural and natural heritage has been neglected or not well preserved. A report from the former Ministry of Development and Reconstruction of Croatia from 1997, called Island Development Plan, summarized the state of cultural heritage on the islands: "Over the past few decades the natural and cultural heritage has been increasingly neglected, it disintegrated and became forgotten instead of maintained, and the harmony between natural and the architectural complex is seriously off balance." (Ministry of Environmental Protection Physical Planning and Construction, 1997).



figure 5.30: Relicts of the homeland war on Lopud



figure 5.31: Relicts from the Ragusan period: Rector's palace



figure 5.32: Christian heritage: chapels



figure 5.33: Natural heritage: karst caves (source: Hotelclub.com)

5.5 Participation

During the research on site in Croatia a lot of input for the research and design has been added by the local stakeholders. This input is very valuable for us as foreign researchers, because it gave us a good insight in the current status of tourism (development), their wishes, problems and future plans.

During the first site visit in march 2012 we spoke to many people on the six test case villages (Lopud, Koločep, Trsteno, Slano, Mravinjac, and Osojnik), except for the inland villages as there was a language barrier.

During the second site visit in june 2012 we did an interview with the director of the local tourism board (TZ Dubrovnik), spoke to several local people and did two workshops with local stakeholders in our two main test sites; Lopud and Trsteno. These interviews and workshops delivered us a lot of material and input for the regional, local and site designs and delivered a lot of new knowledge and awareness of sustainable tourism for the local stakeholders.

The two workshops were held in the local primary schools and had both the same structure. Due to time limitations the workshops lasted two hours including a small break. At the start we and our supervisor Irena Ateljevic were introduced and the local participants were asked to mention one or two ideas for local future tourism development, to directly stimulate the participants to think about it and know their ideas before influencing their thoughts by giving our views on the future of tourism.

After the inventory of the first ideas a possible future scenario was presented, based on the principles of Fordist tourism. This scenario was projected first on the local village where

the workshop was held and after that on the regional scale, to show the bigger impact. To make it more livable Photoshop impressions were used to show the impact in pictures. This future scenario was used to create a shock reaction and to make the local people understand what might happen if things continue like business as usual. By doing this we showed them which impact it might have on their normal everyday life and their relation with the tourists. To make them more aware pictures and aerial photographs were shown, starting far away in Turkey and Italy, but ending in their neighboring village (Orašac), to make them aware that this truth is arriving in their own living environment. After this presentation a discussion with the participants followed about this possible future situation. During those discussions also the todays' problems were often mentioned by the

After the discussion the tourism trends of Roland Berger Strategy Consultants (2007) were introduced, showing the shift of the market from the focus on the beaches to more sustainable ways and forms of tourism (cultural tourism, active and adventure tourism etc.). As a conclusion about it it was stated that Croatia has so much more to offer than just a nice climate and beaches, so according to the trends it is the right time to use also the other natural and cultural qualities as a base for tourism (development).

participants.

After a small break the workshop continued with quality mapping. The group was devided in two groups to map and compile all the natural and cultural qualities which they can imagine. Both groups had to make two lists of those qualities, one from the viewpoint of the local inhabitants and one from the viewpoint of the tourists. The difference between the two groups was that one group had to focus on the local qualities in and around the village of the workshop (so their own living environment), while the other group had to focus on the



figure 5.34: Workshop in Trsteno: plenary session



figure 5.35: Group discussions

regional qualities. After the groups had made the lists they had to present their results to the others. After the groups presented their resluts we presented to them our findings of what we experienced as the best qualities, both local and regional, so they could be combined into one final list.

After that we explained how these qualities can be used by them in order to develop sustainable post-Fordist tourism and what the advantages are for them as local entrepreneurs to develop this instead of doing it in the Fordist 'business as usual'-way. This has to deal with season prolongation, make profit for the local entrepreneurs and controlling the developments in their own living environment. A short discussion about this followed. After the discussion we showed the participants some ideas about what sort of new forms of tourism could be developed in the village and region, using the landscape qualities. After that we showed them our concept of spatial sustainable tourism development, which could be compared with the 'business as usual' concept and showing some Photoshop images how it can look inside their own village. The input of the workshop ended by showing some inspiring projects of sustainable post-Fordist tourism in other countries, like wine picking excursions in France.

The workshop ended by concluding the content and results of the workshop and ended with the question for the participants 'What do you think of this workshop and what are you taking home as an idea for tourism development?'. Every participant had to answer the question and after a short discussion the workshop finally was finished.

Participation and doing these kind of workshops is an essential element for reaching the goal to develop the region into a sustainable tourist destination by a coalition of the local entrepreneurs and the local government. This enables our view on sustainability to work with the local economy and strengthen both the physical environment, local economy and the traditional cultural and historical heritage. It makes it possible for the local inhabitants to make profit out of their everyday environment without adapting the environment into a generic tourismscape. Big investors are never able to work as precisely as the indigenous people and will destroy the balance in the landscape and the lives of the locals. In sustainable post-Fordist tourism tourists travel to see and absorb the local landscape, culture and history. Big coastal resorts aren't attracting this kind of tourists and the over focus on Fordist tourism in the last centuries caused a mind change in the motives for tourists to travel to Croatia. As a local hotel owner, Toni Bokun, describes the situation: 'tourists use to come for the local culture and landscape. But today tourists don't absorb the local culture anymore, the local culture has to change "to them". The local inhabitants are horrified by these changes, as they want to get back in contact with the tourists and develop tourism sustainable instead of continuing the development of big coastal resorts

of multinationals. The same hotel owner described the meaning of almost all inhabitants perfectly: 'In ten to twenty years it will be the same as in Spain, we don't want that!' A girl from Lopud, Vanda Karamehmedovic, also mentioned the change: 'Lopud used to be a family island, where the locals and tourists had a lot of contact with each other and were forming a sort of one big family. They even cared for each other's children on the beach, chat with each other and had dinners together. We would love to go back to that situation.' Quotes like these about the relation between tourists and locals were also often mentioned during the two workshops and conversations with locals. The owner of a campsite in Trsteno described the problems for the Dubrovnik Riviera very well: 'Tourists used to come for the nice landscape and culture of Trsteno and the Dubrovnik Riviera. But today tourists don't come for this area, but they stay here only to visit the city of Dubrovnik. They show no interest in the countryside anymore.'



figure 5.36: Workshop in Trsteno



figure 5.37: Poster for the workshop on the school door



Svi dobro znamo kako ovisimo o turizmu kao glavnom izvoru prihoda za naše življenje i često se tužimo na veliku sezonalnost. Ali da li dovoljno razmišljamo kako će se turizam razvijati u budućnosti, da li je ovaj turizam koji imamo održiv i kakav u stvari oblik turizma želimo? I kako taj razvoj utječe na naš prostor i naše resurse? Kakve mogućnosti otvaramo i ostavljamo našim mladima? Kako možemo riješiti današnje probleme i kakve su točno prirode ti problemi?

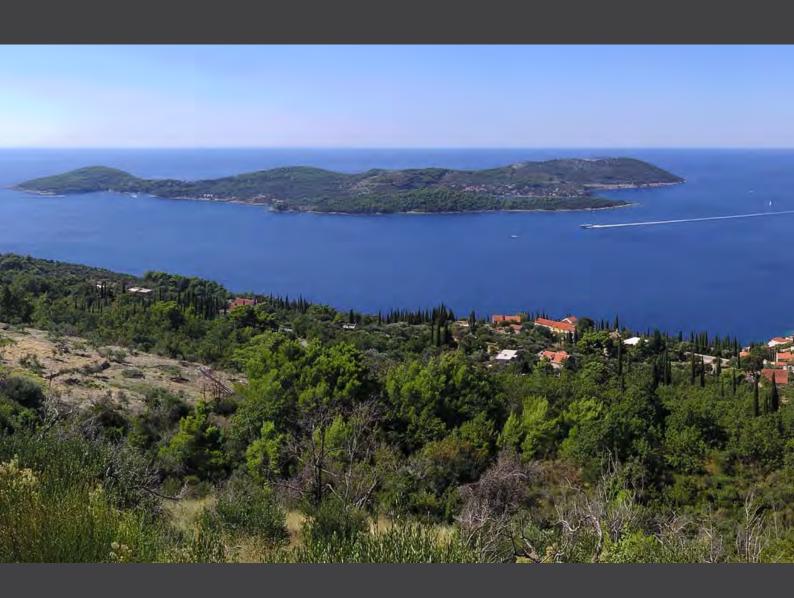
U ovoj radionici uz pomoć svjetskih i domaćih stručnjaka ćemo zajedno promišljati o ovoj bitnoj tematici i interaktivno ćemo pokušati donijeti glavne zaključke koje imaju za cilj da kreiraju viziju vašeg mjesta u onom pravcu kojeg vi vidite i želite. Pozivaju se svi koji vole svoje misto i koji žele da se njihov glas čuje (dakle svi iz ove zajednice), a plus ćete čuti o dobrim i lošim primjerima po svijetu i kako to drugi rade.

GDJE: U prostoriji područne škole "Antun Masle", Trsteno- Na Vodi 34. **KADA:** Četvrtak, 14. lipnja 2012. Od 18 do 20h.

TKO: Institut za Turizam, Zagreb; Sveučilište Wageningen iz Nizozemske (uz podršku Turističkog Ureda Grada Dubrovnika i Upravnog odjela za Komunalne Djelatnosti i Mjesnu Samoupravu- Mjesni odbor Trsteno)



figure 5.38: Poster for the workshop in Trsteno



Chapter 6

Regional design



6. Regional design

In this chapter the regional design for the case study area, the Dubrovnik Riviera. To come to the regional design the six steps will be followed as explained in chapter 4.4.

6.1 Dubrovnik Riviera in the bigger context

As already mentioned in the previous chapter the Dubrovnik Riviera is located in the centre of the Dubrovnik-Neretva County, the southernmost county of Croatia and strongly linked with the Adriatic Sea. The Dubrovnik Riviera is one of the three regions within the county which are strongly linked with the capital, Dubrovnik. In this three regions the Dubrovnik Riviera is according to our plan functioning as the cultural, rural and natural front yard of the city, offering landscape based tourism activities as counterpart on the (medieval) city of Dubrovnik.

6.2 Site analysis

6.2.1 Tourism analysis

The tourism analysis analyses the current existing situation of tourism in the region. This is done by dividing the analysis in four parts; the attractions, facilities, routes and landscape setting according to Brinkhuijsen (2008). By analysing them separately a complete image of the current situation of tourism can be extracted.



figure 6.1: Case study area

The attractions

Almost all attractions in the region are located in the coastal area of the mainland or on the islands. They can be characterized by their strong connection to the Adriatic Sea, like the beaches and harbours. Also the old villages and historical relicts are strongly connected to the sea, as they are located near the harbours, because it used to be the main transport point for centuries. Most local products however come from the hinterland valleys, but in the current situation the only two villages who use these local products as attraction are Ljubač and Gromača and still at a very small extent. The viewpoints are located all over the region, on the higher parts of the land. They are located next to the main road (Jadranska Magistrala), on the cliffs of the islands and on mountain tops. Most are accessible by foothpaths only and at remote parts of the region, because of that they aren't hadly ever used.

In the region Dubrovnik holds a special place for the attractions, as the city offers a lot of cultural and nautical attractions like museums, the city walls and viewpoints. They are all located in the historical inner-city.



figure 6.3: The attractions are strongly connected to the sea

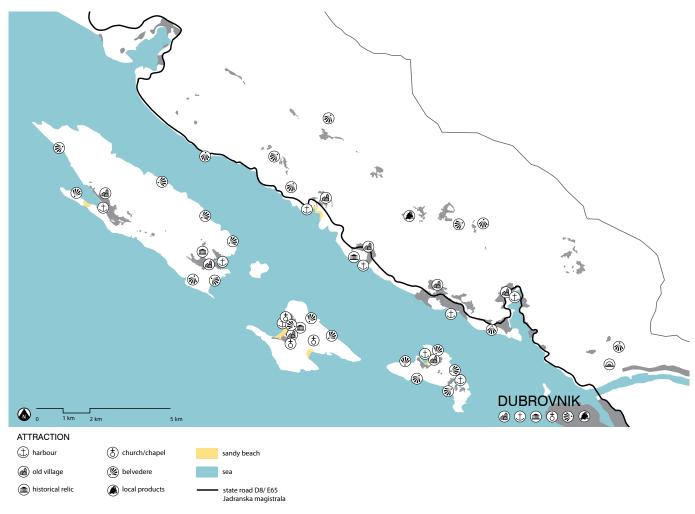


figure 6.2: Attractions map

The facilities

Just like the attractions the facilities are also strongly connected with the Adriatic Sea, in fact none of the facilities is located in the hinterland. Each coastal village has a harbour and most villages also have a post office. Tourist information offices are located in Lopud, Slano, Veliki Zaton and the main office is in Dubrovnik. There are three campsites in the region, in Trsteno, Slano and Dubrovnik. The resorts are large hotels which are located directly to the coast, in general there is just one per village, only Dubrovnik and Slano have two or more resorts. Some of these resorts offer also a sports centre.

The main facilities are located in or around the city of Dubrovnik, like the airport, cruise terminal, bus station, gas stations, hospital etc.



figure 6.4: Market stands in the harbour of Lopud

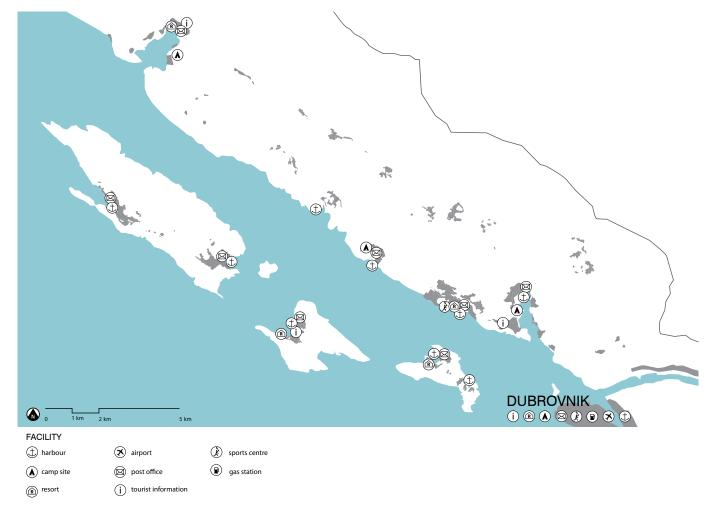


figure 6.5: Facilities map

The routes

Just like the attractions and facilities most routes are directly linked to the Adriatic Sea. Most routes therefore are parallel to the coast, which is also caused by the landscape characteristics (location of poljes). All transport uses the city of Dubrovnik as hub, while the connection with the hinterland valleys is just one road between Orašac and Gromača. Between the parallel routes used to be connections linking them in a bigger system, but they aren't used anymore and therefore overgrown or dissapeared in the landscape. There is also almost no connection from the region crossing the Bosnian border.

Bigger parking lots are connected to the resorts, transportation hubs (ferry harbours, airport) or main attractions, but aren't present on other parts of the region.



figure 6.6: The current ferry, not linking the islands with the coastal

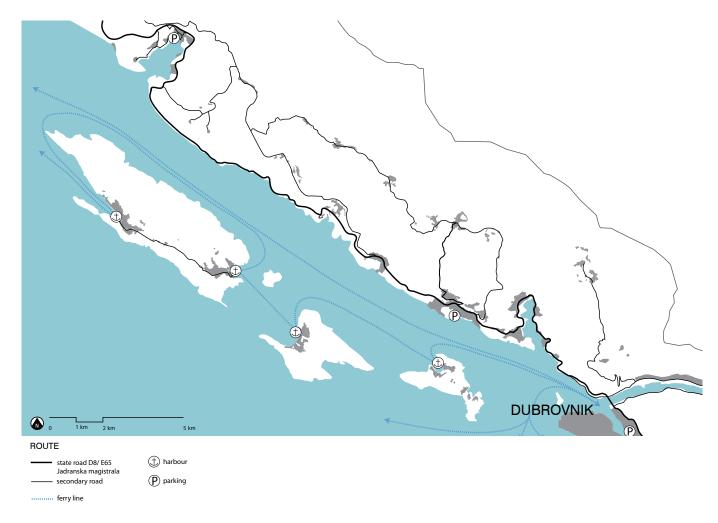


figure 6.7: Routes map

The landscape setting

Of the landscape setting only three landscape types are used, the Adriatic Sea, the bays including (sandy) beaches and the coastal plain. Just like the other three these are completely focused on the coastal part of the region.



figure 6.8: The sandy Šunj-bay on Lopud, used for tourism

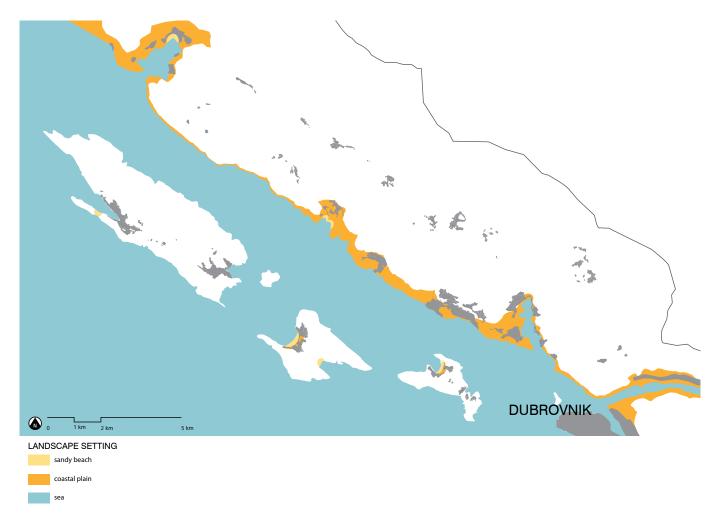


figure 6.10: Landscape setting map

6.2.2 Landscape analysis

The landscape of the Dubrovnik Riviera consists out of four landscape zones, the mountains, the valleys, the coastal plain and the archipelago. Each landscape zone has unique landscape characteristics and land use systems.

The mountains

The mountain zone is located parallel to the coast, between the coastal plain and the valleys and on the other side of the valleys. They consist out of steep ridges, bare mountain tops, highland plateaus, dolines and caves.

The steep ridges are functioning as a hard border between the mountain zone and the surrounding landscape zones, and have slopes between 30-70%. Due to this high angle on most of the ridges plants aren't able to grow, only on the more shallow slopes there are some small bushes able to grow. Paths are not often located on these landscape elements as the slope is too steep to handle for humans and animals, but where the paths are necessary they are placed parallel to the slope in order to create manageable slopes. These paths often offer magnificent views over the lower landscape.

The bare mountain tops are located on top of the ridges or as peaks on the highland plateaus. They consist out of a mixture of mostly lime stone. Because of the lack of fertile soil (due to erosion) almost no plants are able to grow under these very harsh conditions and this results in bare mountain tops.

The highland plateaus are located between the ridges and the bare mountain tops and a relatively flat. Because of the layer of fertile soil is not thick and not much water is present the highland plateaus are not covered by forests but by low vegetation and bushes. On the highland plateaus

goats and other animals are living, the goats are from the local inhabitants who use them for the milk and meat. The succession stage of the highland plateaus consists of attractive flowery meadows with orchids.

The dolines are sinkholes and depressions in the highlands and are therefore positioned lower in the landscape than the highland plateau. Dolines are formed by the influence of acid rain on bare limestone on the plateaus and because of their lower position in the landscape they collect rain water. Because of this fertile sediment (mostly clay) collects in the dolines creating fertile soil and a good irrigation. Due to this dolines form a special place in the mountain zone. Historically dolines are the places in the mountains where a rich vegetation of forests are present. Also humans reclaimed the dolines and used them for agriculture or meadows for



figure 6.12: Doline



figure 6.11: Location of the mountains



figure 6.13: Mountains with bush vegetation

cattle. Dolines vary in size from ten till a couple of hundred meters. Bigger dolines sometimes are inhabited or contain abandoned houses.

The caves are located underground in the karst mountains and are formed by underground water streams dissolving the limestone and creating cavities, a combination of several of those cavities form bigger caves with several levels and may include underground lakes, rivers, waterfalls and stalagmites and stalactites. In the region are two bigger caves: the biggest is the Gromača cave and the other one is located near Pobrežje.

The valleys

The valley zone is located in the hinterland and is surrounded on all sites by the mountain zone. Only on a couple of points the valley zone is connected to the coastal plain. The valley zone consists out of polies, dolines and rangelands.

The poljes are large karst depressions and have the same origin as dolines. Poljes are the main element of the valleys and are usually between 5 till 400 km², so much bigger than dolines. Poljes are used for agriculture and small height differences are compensated by small dry stone wall terraces. To protect the crops and fruits from cattle and animals poljes are surrounded by dry stone walls. In order to not waste space there are seldom buildings built inside the polje, but houses are clustered at the edge of the polje. Poljes are often surrounded by some smaller dolines.

Dolines are the same ones as in the mountain zone, but may differ in usage. Dolines in the valley zone are located around poljes or randomly in the rangelands. Just like the dolines in the mountain zone they can be used for agriculture or meadows, but next to that they have some extra functions. They can be used for the gathering of cattle, they are fenced

with dry stone walls to protect the cattle for predators or bad weather. Smaller dolines can also be used for water catchment, in which they will function as water source for local inhabitants, drinking water for cattle or irrigation.

The rangelands are by size the biggest element of the valleys and cover for about 60 till 80% of the surface. The specific type of rangeland in Croatia is called woodland. They are located on the higher parts of the valleys and are relatively flat to hilly plateaus, covered by mainly bushy vegetation with scattered trees. The rangelands are used by the locals for the cattle to graze, because it provides free food for them and shade for hot summer days. In order to guide the cattle droveways of dry stone walls are built to guide the cattle from the rangelands to the village or fenced dolines. These same roads were used for transport to the coastal villages and their harbours.



figure 6.15: Polje with agriculture in Mravinjac



figure 6.14: Location of the valleys



figure 6.16: View on rangelands around Kliševo

The coastal plain

The coastal plain are the areas between the mountain zone and the Adriatic Sea and is therefore strongly connected and focused on the sea. The coastal plain consists out of large bays, small bays, ridges, plateaus and hillsides.

The large bays originate from bigger streams or rivers displacing the land and creating a connection with the sea. Because this is a fluvial process the sediment led to gentle slopes around the water and provides an easy access to the water and wide beaches. The place where the bay meets the sea is often narrower than the bay, because the water has to break to the limestone cliffs. In the region the large bays are about 2000 meters long and between 300 and 1500 meters wide.

The small bays originate from smaller streams (or dried up streams) that didn't had the force to displace enormous amounts of land. The water only eroded parts of the steeper slopes near the sea, creating cliffs and/or gentle sloped beaches. Because of the fact that only the slopes near the sea were eroded small bays are not as long as the large bays, but only 100 till 400 meters land inwards. Traditionally fishermen settlements were built on these small bays and more land inwards the normal villages were built, so they had a good connection with the sea. These bays were for them the ideal places to reach the sea and to build a harbour.

The ridges are strongly connected to the bays, as because of the fact that parts of the steeper slopes of the ridges are eroded. So the ridges consists in two forms, one is the normal ridge which has a steeper slope than the plateau, with an angle between 20 till 40%. Therefore it is still manageable for humans to walk, but unable to use for agriculture. Most of the slopes are overgrown by a lush bush vegetation with scattered trees or indigenous oak forests. The other form is

the cliff, which occurs as a side effect of the small bays. Cliffs are much steeper than the normal ridges and have angles of slope between 40 till 80%, and as a result of that slope hardly any plants are able to grow, only around the streams and in some niches with a micro ecosystem.

The plateaus are placed between the ridges near the sea and the hillsides near the mountain zone and form the central part of the coastal plain. Because of the gentle slopes this is the place where most human impact is visible in the landscape and it is or used to be used for agriculture. On the plateaus the houses are scattered in the landscape, but often located near the water streams and clustered villages. Small height differences are solved by creating large terraces with flat arable land, which are used for the production of vegetables, fruits and potatoes. On the plateaus between the villages is often a combination of scattered agricultural



figure 6.18: Bays are characteristic for the coastal plain (source: panoramio)

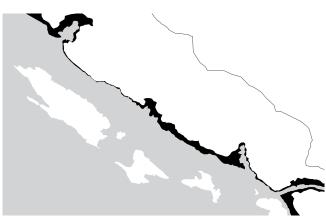


figure 6.17: Location of the coastal plain



figure 6.19: Cultural landscape: dry stone terraces and olive trees

fields and lush indigenous oak forests. In the times of the Republic of Ragusa wealthy families built on the plateaus their villas to live in the beautiful lush surroundings outside the city. Therefore a large amount of space in some villages (especially Trsteno and Orasač) is covered by (relicts of) the villas and their gardens.

The hillsides are located on the barrier between the plateaus and the mountain zone with ridges. The hillsides consists of land with a medium slope which is well drained and used as agricultural land. In order to create flat land terraces are built of dry stone walls. On the lowest parts crops and vegetables can be grown, while on the higher terraces olive trees are dominant. The highest terraces are generally not in use anymore and overgrown. Above the terraces is some part of the hillside where no terraces are built because it is not



figure 6.20: Natural harbours and lush vegetation, Trsteno



figure 6.21: Azure blue sea, the coastline and a small island in the Osmolis nature reserve (source: panoramio)

irrigable, these parts are overgrown with bushes and herbs. On the lowest parts of the hillsides, on the edge with the plateaus, the typical clustered villages are located, offering great views on the sea.

The archipelago

The archipelago is a series of islands of the Elaphiti archipelago. The main three islands are Koločep, Lopud and Šipan, these are all inhabited. Next to that there are some smaller inhabited islands like Jakljan, Ruda, Sveti Andrija and Daksa.

The islands of the archipelago are the rest of the region in a nutshell, containing a coastal plain, valleys and mountain zone in a small area. Each island is however quite different. To show the differences between the landscape units on the different islands and the main land, the differences on each inhabited island will be described shortly. All inhabited islands consist however of two mountain ridges with a central valley in between them. On both ends of the valley all



figure 6.22: Location of the archipelago



figure 6.23: Old villages in the natural bays, Suđurađ, Šipan

islands have a bay. The ridges end on the western side into limestone cliffs.

Koločep

Koločep is the smallest island and consists of one large ridge and one small ridge and a small wet polje in the middle. The main agricultural product of the island is olives as there are a lot of olive groves. The largest bay of the island is made of sand, which is quite unique in Croatia. Of all three islands Koločep is the most arid, but it has a great nature of dry forests and bushes. The big cliffs in the west contain several caves, including the famous blue cave.

Lopud

Lopud is the middle island as well in position as in size. Unlike the other two Lopud lacks a real polje and has instead of that an extra hill in the middle. Lopud is the most lush island of the archipelago and is therefore used to grow special citrus fruits. Both bays of Lopud are made of sand and especially the northern bay where the only village is located is relatively flat and therefore useful for agriculture. In the mountains are several dolines which are used for agriculture and most hillsides used to be used for the production of olives and grapes for making wine. The rest of the island is overgrown by a lush and dense indigenous forest.

Šipan

Šipan is by far the largest island and lacks unlike the other islands sandy beaches. The main element of the island is the large fertile polje in the centre of the island which stretches for four kilometres and is used for agriculture. On the northern ridge the highland plateau is covered by a dense lush indigenous forest containing some dolines.



figure 6.25: The limestone cliffs on Lopud



figure 6.26: Sandy bay on Lopud



figure 6.24: The large polje on Šipan



figure 6.29: Cactus vegetation on Koločep

6.2.3 Natural and cultural qualities

In order to list and map the natural and cultural qualities of the region, which can serve as a base for future tourism development, each landscape zone will be inventoried on base of those qualities

The mountains

Natural qualities

The main natural qualities in the mountain zone are the nature areas of bushes and scattered trees on the highland plateaus and in the dolines. Also the bare mountain tops can be seen as natural quality as they provide unique ecosystems and nice viewpoints. Also the ridges provide those viewpoints. One of the main natural qualities is the Gromača cave, which is one of the biggest caves of the country.

Cultural qualities

Cultural qualities are not much present in the mountain zone. The cultivated dolines can be pointed out, just like the relicts of old villages in some of those dolines. Also the historical paths linking the villages in the valley with their dolines in the mountains can be counted as cultural quality.



figure 6.31: Abandoned house in a cultivated doline, Kruške

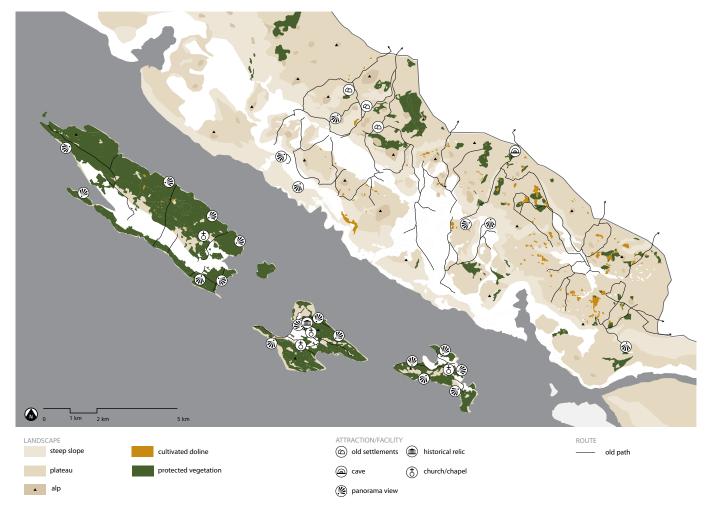


figure 6.30: Quality map of the mountains



figure 6.32: Great views over the valley and sea



figure 6.33: Dry stone terraces in cultivated doline



figure 6.34: Old cars on a traditional mountain path



figure 6.35: Historical mountain path near Mravinjac



figure 6.35: Combination of rocks and small bush vegetation



figure 6.36: Historical relicts, hilltop fortress Lopud

The valleys

Natural qualities

The natural qualities of the valleys consist mainly out of the natural rangelands with a nice forest out of bushes and scattered trees. Also the fertile dolines and poljes can be pointed out as natural quality, just like the lush forests around Kliševo and Osojnik. Another natural quality is the climate in the valleys, which is very stable due to the isolated position.

Cultural qualities

The valleys have a lot of cultural qualities to offer. The poljes are cultivated and show the traditional agriculture system of the Balkan, while also the many different uses of the dolines can be seen as cultural heritage. This is also for the system of droveways and fences made of local dry stone walls, which is very characteristic for the region and Dalmatian culture. Also the historical clustered villages can be pointed out as cultural quality, they include cosy village squares, churches, traditional houses and some special buildings like the old mill in Gromača. Also the old traditional path system linking the dolines and the villages with the coastal villages is a cultural quality.



figure 6.38: Clustered historical village Podvor, Mravinjac

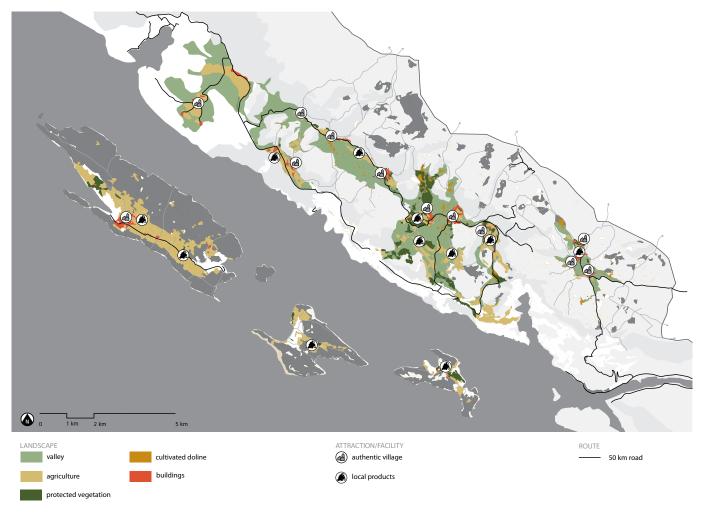


figure 6.37: Quality map of the valleys



figure 6.39: Small cultivated doline in Gromača



figure 6.40: Droveway, fenced by dry stone walls, Osojnik



figure 6.41: Traditional agricultural fields with terraces, Osojnik



figure 6.42: Scenic road connecting the villages



figure 6.43: Historical village, Gromača



figure 6.44: Grape orchard

The coastal plain

Natural qualities

The coastal plain offers a lot of natural qualities, one of the most important qualities are the bays with beaches and easy access to the sea. Also the lush forests between the villages can be encountered as quality, especially the nature reserve between Brsečine and Trsteno, Osmoliš nature reserve. This is directly connected to one of the other natural/cultural hotspots of the coastal plain, the Trsteno Arboretum. Also the agricultural fields and olive groves in and around the villages can be seen as a natural quality. Another quality are the numerous fresh water springs with lush vegetation around them.

Cultural qualities

The coastal plain has a lot of cultural qualities as it has a very rich and long history. The clustered villages on the plateaus are very authentic, just like the harbour villages in the bays. They contain churches, chapels, villas, fortresses, gardens and mills. In the coastal plain a lot of relicts from the Republic of Ragusa can be found, especially the old villas, palaces, agricultural systems, harbours and ship building sites. The



figure 6.45: Rocky coast with small bays and beaches

arboretum of Trsteno is maybe the best example just like the enormous historical Oriental plane trees (platanus orientalis) which are typical for village squares and are over 500 years old

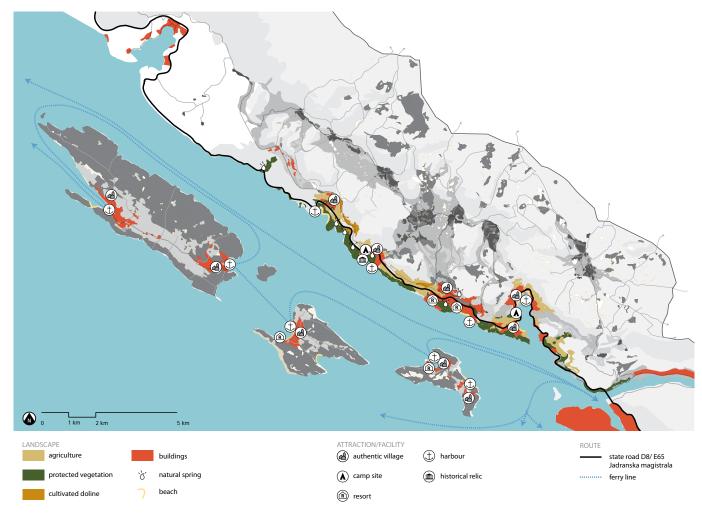


figure 6.44: Quality map coastal plain



figure 6.46: Traditional clustered village on slopes, Trsteno



figure 6.47: Neptune's fontain in Trsteno Arboretum



figure 6.48: The large bay of Zaton



figure 6.49: Big plane tree on village square, Trsteno



figure 6.50: Path in the forest, near Trsteno



figure 6.51: Cultural historical heritage: old villas and gardens, Trsteno Arboretum

The archipelago

Natural qualities

One of the main natural qualities of the archipelago are off course the sandy beaches in the bays. Also the lush nature on the islands is an important quality, just like the magnificent limestone cliffs with wide views. In these cliffs are many caves. The archipelago also offers a rich agriculture system producing special products like wine, olives and citrus fruits.

Cultural qualities

Also the islands have a very rich cultural history and provide therefore a lot of qualities. The islands played an important role in the Republic of Ragusa and have historical villages with dozens of monuments and relicts like churches, chapels, monasteries, palaces, villas, fortresses, a rectors' palace and harbours. Also the boulevards of Lopud and Šipanska Luka can be considered as cultural heritage, just like the central square of Suđurađ and its many towers. Due to the fact that the islands were densily populated some centuries ago a very well-developed agricultural is present on the islands, consisting out of dry stone wall terraces and irrigation systems.

Other qualities

Next to the four landscape zones the neighbouring historical city of Dubrovnik should not be forgotten, as it is at the border of the case study area. The fortified old medieval city is a booming cultural hotspot and offers many attractions, like churches, the city walls, palaces, monasteries, art, villas, squares and much more.



figure 6.52: Regional quality map



figure 6.53: Historical harbour: Suđurađ



figure 6.54: Agricultural fields: polje on Šipan



figure 6.55: Bays with sandy beach: U. Šunj on Lopud



figure 6.56: Olive groves and dry stone terraces on Koločep



figure 6.57: Historical heritage: monastery on Lopud



figure 6.58: Tropical park square in Šipanska Luka

[intermezzo]

The Republic of Ragusa

The study area has a very rich cultural history, which is mainly because it is positioned in the centre of what used to be the Republic of Ragusa (the old name of Dubrovnik). This rich seafaring nation existed officially from 1358 until 1808 and had its glory days during the 14th till 16th century (Goldstein, 1999).

In 1358 the Republic of Dubrovnik (Ragusa) declared independence from the Hungarian-Croatian. The small republic grew quickly by capturing more land and immigrants and refugees from the Ottomans in Bosnia. At the end of the 15th century it had about 90.000 inhabitants and became the leading power of the Balkan and the Mediterranean. The city-state was very prosperous and became rich of trade. The living standards were very high, in the 14th century the city had paved streets, sewerage and waterworks (Goldstein, 1999).

The Republic of Ragusa and Venice were enemies and Venice tried several times to overtake Ragusa, but never succeeded. In 1458 the republic of Ragusa switched sides from Hungarians to the Ottomans, gaining a big access to the eastern market and the Black sea (Goldstein, 1999). To avoid a land-attack from the Venetians Ragusa gave a narrow land plot to the Ottomans, Neum, which is today still visible

as a strange appendix of Bosnia in Croatia.

In the Republic of Ragusa Dubrovnik was the capital and main city, being defenced by building a fortified city wall. Rich merchantmen and the aristocracy built their houses, mainly villas and palaces, outside the city near the harbour of Gruž or on the coastal plain in mainly Trsteno and Orašac. But also the Elaphiti islands were a favourite location for the rich to live. Around these villas and palaces large ornamental gardens were created with great viewpoints over the Adriatic Sea or poljes. One of the best preserved villas and gardens are the Trsteno Arboretum, which also includes a arsenal harbour, and the arboretum garden of Lopud.

During the period of the Republic Lopud was functioning as the secondary capital, which leaded to a strong developed and densly populated island, it is estimated that once more than 10.000 inhabitants were living on the island (today about 300). Due to this the island made a strong development for agriculture, reclaiming each possible field for agriculture even on extremely remote places. During this wealthy period a lot of impressive buildings were erected on the island, like the fortified monastery, the main church and the old Rector's palace.

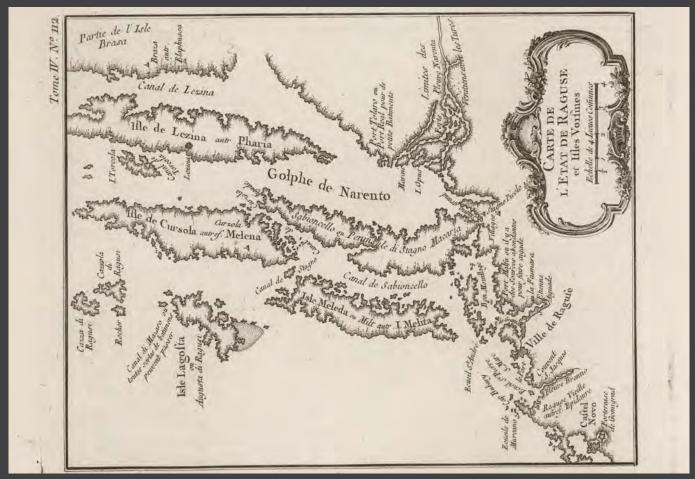


figure 6.59: Historical map of the Republic of Ragusa



figure 6.60: One of the numerous chapels on Lopud



igure 6.61: Neptune's fontain in Trsteno Arboretum



figure 6.62: The rector's palace of Lopud



figure 6.63: Big plane tree on village square, Trsteno



figure 6.64: The Rector's palace in Dubrovnik



figure 6.65: Cultural historical heritage: old villas and gardens, Trsteno Arboretum

6.2.4 Spatial problems

The region doesn't only offer qualities, but also have some serious problems, mostly caused by tourism. In this chapter the general regional problems will be discussed, the local problems will be discussed in the local designs in chapter 7. In these spatial problems the workshops and interviews are an important source of input.

The general problems

Most of the problems are not specific for a landscape zone, but occur in the whole region. Waste dump for example is a problem which is happening everywhere, locals just dump their trash next to the road or at empty plots. Also the maintenance in general of public space is bad, for example the town square of Trsteno is not even accessible anymore, the pavement of the roads is bad and many old paths are overgrown due to a lack of maintenance. Another problem are the bad connections between the different zones, all connections are focused on the city and parallel to the coast, but cross-sections are absent causing long travel distances. For example the distance between Sudurad and Brsečine is

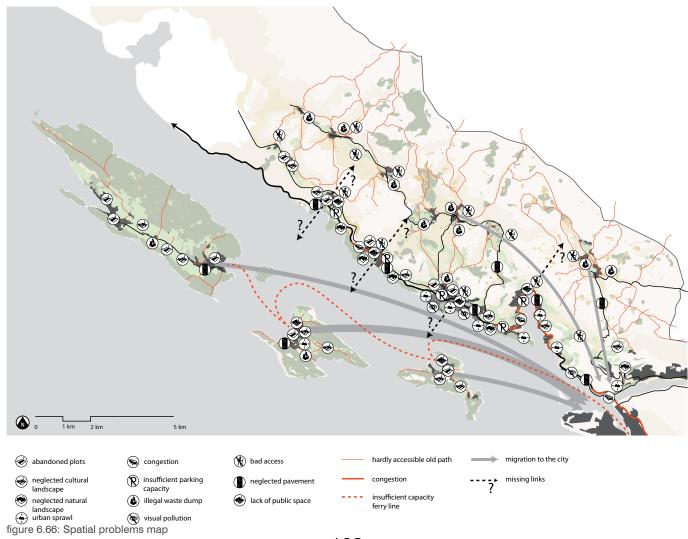
only four kilometres but takes about two hours in the current traffic system. Another problem is the neglect of cultural historical heritage, people seem to don't care about it and don't see the value and possibilities of the heritage.

The mountains

In the mountains only very little problems occur as not many people go there. Some villages are abandoned and most dolines are not in use anymore, but the main roads are surprisingly well maintained. Only a few roads are overgrown and connections between the roads are lacking, making it hard to make a round-trip.

The valleys

Also in the valleys not much problems occur. Most old paths are overgrown and not useful anymore, some houses are abandoned, but the main roads are in general in a fantastic condition, just like the agricultural poljes and dolines. The biggest problem in the valleys is the poverty and depopulation, which endangers the continuity. Especially the young generation is in search for a new future and moves to the city.



The coastal plain

The coastal plain is the zone where most problems occur. Because the main road (E8 Jadranska Magistrala) is heading through two villages (Trsteno and Mali Zaton) traffic congestions arise in the villages in the tourist season. This busy road also has a bad effect on the liveability of those villages, splitting them in two parts. Next to that there is a lack of parking facilities, in most villages there is no place to park the car so it is impossible to stop. Even for bigger attractions the parking facilities are very limited and people just park the car on the main road, causing even more congestions.

Because of the focus on tourism and jobs in the city the local agricultural landscape and old paths are neglected at most parts or even overgrown and as a side-effect of the decline of tourism in the villages a lot of buildings are empty. Depopulation also influences the area, leading together with the decline and high seasonality of tourism to the disappearance of facilities like supermarkets and restaurants. In the more successful villages urban sprawl of apartments and holiday homes is becoming a problem, just like the construction of big resorts causing visual pollution.

The archipelago

The archipelago has some problems, but not as much as the coastal plain. Just like in the coastal zone empty plots and buildings are a problem, but on the other hand urban sprawl of apartments is also occurring. During the summer season the ferry isn't able to handle the amount of passengers, causing long waiting times and therefore a bad connection, also because the ferry is very slow. Because of the focus on tourism and globalization the agricultural fields are often abandoned and overgrown, because no one wants to farm anymore.



figure 6.67: Visual pollution of big resorts: Radisson Blu



figure 6.68: Loss of public space due to bad maintenance



figure 6.69: Overgrown paths



figure 6.70: Fenced gated communities around hotels

6.3 Connection with tourism

As stated in chapter 3 the landscape approach is a very important concept in this thesis. It uses an inclusive conception of the ordinary landscape to identify place specific characteristics and qualities which are strengthening the local identity and coherence of a tourist destination. It means that the landscape and its qualities form the base for future developments. In the previous paragraph the landscape is analysed and split into several landscape elements and the cultural and natural qualities are discovered. When combining this with the tourism target groups for the region as stated in chapter 5 the connection between tourism and the landscape can be explored.

The mountains

The steep ridges can because of their steep rocky slopes used for climbing, but they also offer great views from the tops over the surrounding landscape, this tops can be easily reached from the highland plateaus.

The bare mountain tops can also be used for climbing, as a difference between the steep ridges they are less steep so they are more suitable for beginners. Some of the bare mountain tops can also be reached by foot to offer the hiker great views over the landscape.

The highland plateaus are because of the fact that they are relatively flat to slightly hilly suitable for hiking, biking and horseback riding. On the highland plateaus is a rich and diverse attractive ecosystem present or can be developed which can evolve into nature reserves to attract nature tourism. Also the animals on the highland plateaus are interesting for nature tourism, including species like wild goats, foxes, raptors, lizards and many other species.

The dolines can be used as resting points for active tourism or interesting points because of their cultural heritage. The abandoned houses can be used as shelter, information centre, exhibitions, catering, or even places for overnight stays. Because of the lower position in the landscape there is often fresh water available making it an ideal resting place because it provides also shade. For horseback riding dolines can be used to let the horses graze in a fenced area. For long distance hikers or bikers dolines can be used as campsites, providing some of the basic facilities.

The caves have a great potential for nature tourism and climbing (speleology or canyoning). Tourists can get guided tours in the caves to see the incredible underground world and learn about karst landscapes. Some specific parts or routes in the caves can be used for speleology or canyoning, offering an amazing activity using the landscape as attraction.

The valleys

The poljes are used by the locals for agriculture, which can form a perfect base for both rural tourism and gastronomy & local products. Tourists can get guided tours on the agricultural fields, taste the local products, buy them on the markets in the clustered villages or taste them in traditional restaurants. Next to that the poljes form a perfect setting for agritourism and rural hotels. Next to that the setting also offers a nice place for hiking and biking. The agricultural fields offer the possibility for harvesting tourism, where tourists come to help with the harvesting of the local products like olives or grapes.

Dolines can be used as resting points for hikers and bikers, because they offer shade and often fresh water. Because the path system in the valleys is based on the position of the dolines they are well connected to the general infrastructure.



figure 6.71: Dolines can be used as resting points



figure 6.72: Droveways can be used as hiking paths

The rangelands can be used for active & adventure tourism and nature tourism as it provides an attractive semi natural landscape. On the rangelands the traditional droveways and path system can be used as the base for hiking, biking and horseback riding. They can enjoy the complex system of dry stone walls, combined by the green environment and the agricultural dolines. Next to that they can see the cattle or go on a guided tour with a local shepherd.

The coastal plain

The large bays are because of their gentle wide beaches and easy access to the sea very suitable for sun, sea & sand tourism and nautical tourism. The pebble beaches can be used for sunbathing, swimming but also for snorkelling. In the deeper parts of the bay diving can be done. Nautical tourism can be done on the water and makes use of the gentle slopes to create facilities like a harbour from which boat trips can be made or sailboats can moor to visit the village or the beach. More individual parts of nautical tourism; kayaking and windsurfing can take place from the beach.

The small bays can be used for small-scaled sun, sea & sand tourism like sunbathing or swimming. They can also serve as resting place for kayakers or, when a small harbour is available, for sailboats. Also wellness is a possibility, because a small bay can be quite exclusive and remote.



figure 6.74: Agricultural poljes can be used for rural tourism

The ridges with lush indigenous oak forests and nature parks can be used for hiking or biking, because they offer an attractive environment with a pleasant microclimate due to the shade. These ridges can be used for nice tracks to connect the several villages among the coast. The cliffs offer a great view over the sea and the archipelago, which can be extra used on viewpoints, which can function as resting

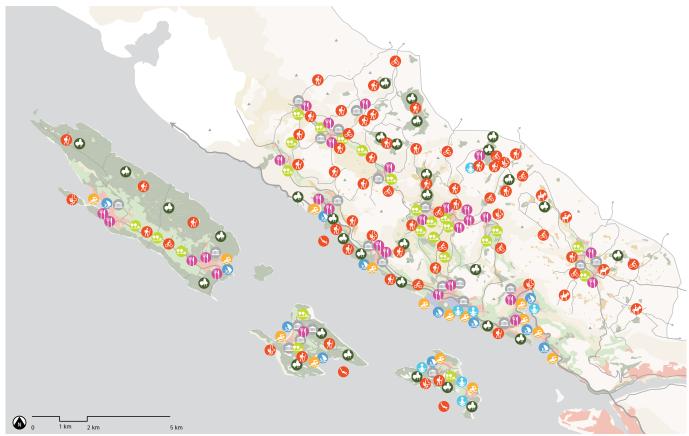


figure 6.73: Tourism target groups in the landscape

places or interesting points on routes.

The plateaus offer possibilities for a wide range of possible tourist target groups, but the precise possibilities differ per village. Cultural & historical heritage is present on the plateaus, there are a lot of (relicts of) villas, other ruins and churches located on the plateau. Also the Trsteno Arboretum is located here. The small agricultural fields can serve rural tourism with excursions on farms or agritourism, these products and the products of the inland can be sold on the historical village squares in shops or on a market. In the restaurants these local products can be served to the guests. These mixed zone of old villas, parks, agricultural fields and farms is an attractive environment for hiking or biking, which might be even better in the lush forests between the villages.

The hillsides containing historical clustered villages and terraces full of olive trees is mainly focused on cultural & historical heritage. Tourists can wander through the old streets of the village and discover secret gardens, small art shops, olive oil mills, traditional houses, chapels and small restaurants. From some of the narrow streets suddenly a spectacular view on the Adriatic Sea or the olive groves show up. Excursions can be done at the olive groves or tourists can help with the harvesting of the fruits. The villages also may function as interesting destination for a hike or a day

The archipelago

Koločep

Koločep is the smallest and most quite island of the archipelago, but offers many possibilities. The quietness can



figure 6.75: Old roads can provide majestic views



hub and place to stay



figure 6.76: Lush indegenous forests are great for nature tourism and hiking/biking



figure 6.78: Churches are cultural heritage and nice attractions

be seen as a main quality, which may attract more luxurious wellness tourism, which is also strengthened by the fact that most of the island is covered with nature areas and numerous small bays with several small settlements. This makes the island ideal for short hikes. Koločep can also be an interesting place for sailboats or kayaks to visit, especially because of the high cliffs with many caves on the southern side. These cliffs also offer interesting possibilities for diving and climbing.

Lopud

Lopud has the most historical heritage of all islands because it used to be the secondary capital of the Republic of Dubrovnik. This left the island with many monuments in the main village, but also with numerous chapels all over the island. Cultural and historical heritage is therefore the most promising tourism target group on Lopud. Next to that the island offers some nice agricultural zone where special citrus fruits, olives and grapes are produced, so rural tourism and



figure 6.80: Authentic harbour fronts are suitable for facilities



figure 6.79: Photo-potential map of the Dubrovnik Riviera

gastronomy & local products have a chance to develop. The island has also the most lush forest vegetation, offering nice options for hiking and biking, including a hilltop fortress and steep cliffs with stunning views. These cliffs can also be used for climbing. The Šunj bay is the second bay of the island and is often voted as one of the best beaches of Croatia (Bousfield, 2010). The sandy bay offers good circumstances for swimming, sunbathing, kayaking, sailing and diving.

Šipan

Šipan is charcaterized by three elements: historical villages, a large polje and lush forests. The historical villages have possibilities to develop cultural & historical heritage with monuments like the towers of Suđurađ and the old palaces of Šipanska Luka. Especially Šipanska Luka has an active fishing community, offering seafood as local products and the possibility to join fishing trips. The large polje is also offering a huge opportunity for gastronomy & local products, with a wide variety of products like their own wine. The old villas in the polje or in the villages can function as restaurants, agritourism or rural hotels. Because of the fact that the island is relatively flat it offers good opportunities for hiking and biking, which is extra stimulated by the presence of large indigenous oak forests with many small dolines, which can extra stimulate nature tourism.

When combining all these possible tourism potentials in one big map a complex and diverse potential map can be made, which clearly shows the diversity and the fact that almost all parts of the study area show potential for sustainable post-Fordist tourism development (figures 6.73 and 6.79).



figure 6.82: The natural bays provide easy access to the sea



figure 6.83: The cliffs can be used for bouldering and climbing



figure 6.81: Forts on mountain tops are cultural heritage and offer areat views



figure 6.84

6.4 Design challenges and concept

When all the tourism potentials are discovered and mapped it is time to set up design challenges and a concept in order to steer and guide the tourism potential map into a working spatial plan for tourism development. This spatial plan is based on an integral design strategy, which is working through the scales and provides interconnectedness. Because of that the plan should not only work on this regional scale, but also effects the local scale. Therefore the input from the local villages is very important to incorporate in the regional plan.

The city of Dubrovnik is in a search for expanding the tourism offer to broaden the season, but has within the city not much possibilities left. A great possibility for the city would be to use their traditional front yard, the Dubrovnik Riviera. This is an ideal location to develop new forms of tourism in order to broaden the season, because it has a huge potential and is very close to the city.

Within the target of Croatia of becoming a sustainable tourist destination with a focus on post-Fordist tourism there are a few snags. These snags are the starting conditions for sustainable post-Fordist tourism development in order to develop it in the best possible way.

For the design challenges the following starting conditions have to be taken into account:

- The development of tourism should be realized by a coalition of local entrepreneurs, local communities and local/regional governments.
- The villages should work together on a regional level to create a balanced, well thought and diverse tourist region in which each village adds something unique to the regional tourism product.
- The landscape including the natural and cultural qualities should serve as a base for tourism development.
- The Dubrovnik Riviera and Dubrovnik city should be linked in order to become one integrated tourist region.
- An extensive sustainable transport network should be developed in order to improve the accessibility and to stimulate other modes of transport instead of a focus on cars.

When taking into account these starting conditions some design challenges for the development of sustainable tourism in the Dubrovnik Riviera can be established. As a side note it is important to remark that the regional plan and concept can't be made without the input from the local scale of a village. On that scale the identity and qualities of a certain village can be detected and participation to create public support can be done.

The concept

To come to the final concept the design challenges have to be solved. This is possible by dividing the structure of the concept in four steps.

- 1. Use the outcomes of the landscape analysis, quality maps and the connection with tourism to detect the different landscape zones. When putting this on the concept map the four landscape zones (mountains, valleys, coastal plain and archipelago) come up, with each of them offer a specific identity and different possibilities for tourism development
- 2. Use the principle of zoning to separate different types and/ or intensities of tourism. This can be done using the physical geography of the landscape. When looking to the physical geography especially on the inland valleys and hinterland some natural zoning can be extracted from the landscape. The valley of Osojnik is a remote valley, it has no valleys in nearby and also path connections through the mountains to other zones are hardly present. The other inland valleys can be divided in three greater valleys, the valley around Mravinjac, the valley around Gromača and the small valley of Ljubač. The valley of Ljubač is too small to be a separate zone and can be placed as a special zone within the valley around Gromača.

The mountains are strongly linked to the villages in the valleys, because of that the connections and current path system is focused and based on these villages. It is therefore logical to use these connections in the zones.

The villages on the coastal plain can be linked to these valley zones by using the physical landscape corridors and valleys. The village of Brsečine has a physical connection with the valley around Mravinjac, while Trsteno and Orašac have a physical connection with the valley around Gromača. Trsteno



figure 6.85: Concept phase 1: landscaping

[intermezzo]

Cinque terre: a collaborating region

One of Europe's or perhaps world's best organized and successful sustainable tourism regions is the Cinque Terre in Liguria, Italy. The tourist region consists out of five villages; Monterosso al Mare, Vernazza, Corniglia, Manarola, and Riomaggiore, together with the coastline and the surrounding hills forming the national park Cinque Terre.

The big development started in the late 1980s when the five villages decided to work together to become one tourist region and was boosted by becoming UNESCO world heritage in 1997. Tourism grew quickly after that but it was all focused on sustainable post-Fordist tourism. The main attractions of the tourist region became the historical five villages between the steep hills with cultivated terraces of dry stone walls (Rössler, 2006). On these typical terraces the local farmers grow grapes, olives and other local products, which together with the sea food form the backbone of local traditional food. By doing this the traditional cultural landscape became very important and profitable again, saving it from modernization and abandonment. Since the region became a cultural national park in 1999 the profit of ticket sales were directly invested in the preservation and careful development of the region (Rössler, 2006). This has led to a charm because of the absence of visible pollution of generic buildings.

In the Cinque Terre each village got a focus on specific attractions based on their qualities. This created a diverse region where each village adds something to the general touristic product of the region, creating a diverse tourism offer in which the villages profit from each other. This created a strong micro-economy, led by the local population and government.

In order to develop the region sustainable a well thought transport system was developed to guide and move the tourists. Because of the remote position of the Cinque Terre on rough cliffs and narrow valleys it is hard to reach the villages by car and all villages are car free and pedestrianized. There are only a few parking lots a couple of hundred metres outside the villages. In order to develop a sustainable transportation network three routes are created, a panorama walking trail connecting the villages, a train transport system with stations in each village connecting them with each other and with La Spezia and Genoa and a ferry line linking four of the five villages (Corniglia is located on a high cliff) by sea having great panoramas on the villages and the mountains/ cliffs with the cultural landscape of terraces (Rössler, 2006). By creating this sustainable transport network most tourists are encouraged to travel by train (generally from La Spezia) or by ferry from Genoa to the region. Within the region tourists are forced to travel by public transport or by foot, stimulating the picturesque image of the region.



figure 6.86: Manarola, one of the five villages (source: mi9.com)



figure 6.87: Hiking path connecting the villages (source: custom-walks.com)



figure 6.88: Map of the Cinque Terre (source: thesorotreasures)



figure 6.90: Most villages can be reached by sea via the ferry (source: fourjandals.com)



figure 6.91: A railroad is connecting all villages on a sustainable way of transport (source: redbubble.net)



figure 6.88: Traditional agriculture system on the hills (source: flickr)

is linked to Kliševo while Orašac is linked to Gromača and the valley of Ljubač. The bay of Zaton has no connection with the hinterland and can therefore be pointed out as a special zone focused on the bay and the sea, which connects the village with Orašac.

The three inhabited islands of the archipelago can be seen as three independent zones, as they have all completely different identities and don't have a strong link with one of the zones on the main land.

The four zones on the mainland (Osojnik, Brsečine-Mravinjac, Trsteno-Orašac-Gromača and Orašac-Zaton) can be used for different target groups and uses. The remote zone of Osojnik is a good place to develop more extreme active tourism like mountain biking and horseback riding which may clash with easy active tourism like hiking or cycling.

The zone of Brsečine-Mravinjac contains the less developed tourism and is therefore assigned as extensive zone with a focus on nature, rural and active tourism. The target group for this zone is the more adventurous tourist seeking for unspoiled nature or cultural landscapes or wild mountains.

The zone of Trsteno-Orašac-Gromača is the most developed zone already today, with the Radisson resort in Orašac, the arboretum of Trsteno as biggest attraction in the Riviera, Gromača as pioneer for rural tourism and the great potential of the Gromača cave to be one of the top attractions. For this reason this zone can be assigned as the main tourism zone with the strongest focus on tourism and therefore the biggest capacity and intensity. The target group for this zone is the average tourist searching for the natural-cultural experience of Croatia's coast, inland valleys, mountains and caves.

The zone of Orašac-Zaton has a strong connection to the

water and unlike the other zones no connection with the hinterland. The main tourism focus of this zone is therefore on nautical and sun, sea & sand tourism, focusing on the beaches, seafood and watersports.

Because of the size of the islands of the archipelago no zoning is needed inside, the exact image can therefore be extracted directly in step four.

3. Use the different modes of (sustainable) transport and the hub-and-spoke concept to guide and control tourism tactically over the region and to watch over the capacity and intensity of a zone/area.

Sustainable transport as stated in chapter 5 can take several forms. The main infrastructure will be the new coastal ferry line connecting all zones except for Osojnik with each other and also with the city of Dubrovnik with the Gruž harbour (hub for busses and cruise ships) and the medieval centre. Next to the fact that a ferry is an effective way of travel it can also be a tourist attraction because of the nice views. The frequency of the ferry schedule can be adapted to the season.

A second main new infrastructure will be the mountain trains, which can bridge steep slopes. In the plan two of those mountain trains are planned, one from Gromača into the mountains near the cave and one from Brsečine to Mravinjac, which is connected to the coastal ferry. By using this kind of transport the stations can be used as hub to discover and serve the surrounding villages or landscape.

The third main new (or renewed) infrastructure contains an extensive network of hiking and biking trails, connecting the coastal villages with each other, with the valleys and open up the mountains. Because the distances are relatively short in



figure 6.92: Concept phase 2: zoning



figure 6.93: Concept phase 3: connecting

the area (about 2 kilometres between two villages) this is an interesting way of traveling and if the routes are well marked can be a very useful addition to the current network.

The hiking and biking trails can serve as spoke to connect the hubs with the surrounding villages and landscapes. The zones of Brsečine-Mravinjac and Trsteno-Orašac-Gromača use this concept of hub and spokes, in the Brsečine-Mravinjac zone Mravinjac functions as hub to serve Mrčevo, Riđica, Dubravica and Kruške and the rest of the mountains. In the zone of Trsteno-Orašac-Gromača Gromača functions as hub, serving the mountains and cave with the mountain train and Ljubač and Kliševo by hiking and biking trails.

4. Structuring the tourism offer of each single village and create a unique image or specialization. This specialization and image can be linked to the interaction between several villages within a zone.

Out of the landscape analysis, the natural and cultural qualities, the connection with tourism and the input of local inhabitants and participation a profile of each village can be made. This profile consists of a focus on one or several tourism target groups and can be influenced by the zone where the village is located. A good example of this influence by zoning is the difference between Mravinjac and Ljubač. Both villages are located in the same kind of environment and offer some cultural historical heritage. But the zone of Mravinjac has a focus on more adventurous and active tourism, while the zone of Ljubač is focused on more mainstream average tourists and therefore on rural tourism and gastronomy & local products. This is the reason why both villages have to be developed in a slightly different direction, in order to prevent uniformity and provide a wide tourism offer.



figure 6.94: Concept phase 4: local identity

6.5 Phased spatial development

By using the coalition between the locals and government as base for tourism development, this means that the speed of change is relatively low and not equally spread over the region. Because of this it is very hard to implement the complete concept at once, so the regional development plan should be split into several phases to reach the ideal future situation step by step.

These phases are based on the current status of the area, the desired development and the interactions between the developments. This results in the fact that the places where tourism is already a common issue are the first to be developed, because they are easily adaptable and can function as example for surrounding villages. For the more remote areas, which might be dependent on new public transportation lines, the bigger developments will start later in the process. In the phasing the desired development also plays a role, as more intensive zones need more time in order to develop everything and can develop from an extensive tourism zone into an intensive tourism zone.

These elements can be seen in phase one, where the main developments take place around the sea, the place where most tourism is clustered today. A new hop-on-hop-off ferry line is linking all villages connected to the sea into one system, making a strong link between the coastal plain, the islands of the Elaphiti archipelago and the city of Dubrovnik. By doing this the basis of the extensive transport network is created. Villages along these new ferry line can profit from it and start with their development according to the regional plan. Next to the ferry a path system linking the coastal villages will be constructed. Next to this coastal transportation the link to the intensive inland zone is strengthened, the road from Orašac to Gromača will be upgraded and the mountain train from Gromača to the mountains will be constructed, to connect the mountains and to develop the cave into an attraction. This branch into the inland is created to stimulate the tourism development in the valleys and mountains and form an example for the inhabitants of other inland villages and tourists to explore the tourism possibilities of the inland. In order to slowly start the tourism development in the other inland villages/zones the old mountain paths connecting them with the coastal plain will be made accessible, but not further developed.

In phase two the connection between the coastal plain and the valleys will be developed. The paths of phase one will be further developed and strengthened with facilities like resting points, marked routes, parking facilities and viewpoints. This will enable the villages in the valleys to expand or start their tourism development. In order to make Mravinjac functioning as hub the new mountain train from Brsečine will be constructed, but still in a low capacity. In this phase

also the first steps to develop the mountains will be taken, by making the old paths accessible for tourists.

In phase three the mountain zone will be further developed and expanded. The old paths will be upgraded, new paths will be constructed to connect the old paths or to open up new areas. Facilities will be constructed in some parts, like marked routes, resting points in dolines, small campsites and viewpoints. To increase the capacity of the valleys and mountains the mountain trains will be upgraded. Next to the developments in the mountains the valleys will be further developed by connecting the villages with a better path network with facilities and further development of the rural, active and gastronomy tourism offer. Of this improvements all villages in the region will profit and further develop their tourism product.

This leads to the desired ideal future situation, which cannot be seen as final situation as a region is always changing and developing further. But after all an extensive ramified network for sustainable tourism and transport is created which can function as the base for further development of the region. But, within this further development the capacity of the region and villages should be taken into account, as overdeveloping might have disastrous consequences.

6.6 Ideal future situation

On the next pages three maps will be shown to give an idea of the ideal future situation.

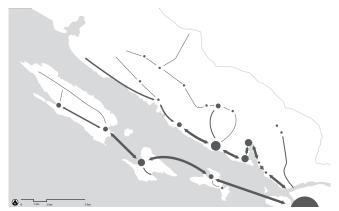


figure 6.95: Dubrovnik Riviera 2013

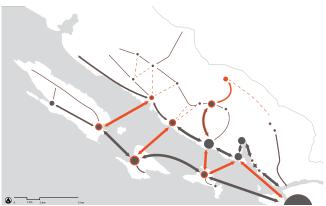


figure 6.96: Development phase 1

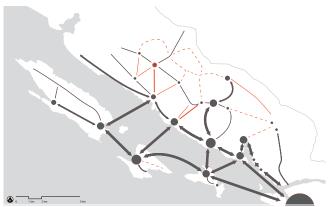


figure 6.97: Development phase 2

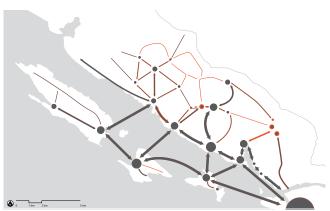


figure 6.98: Development phase 3

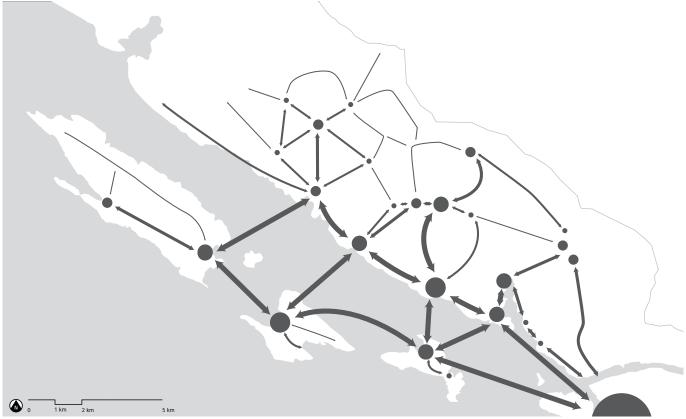
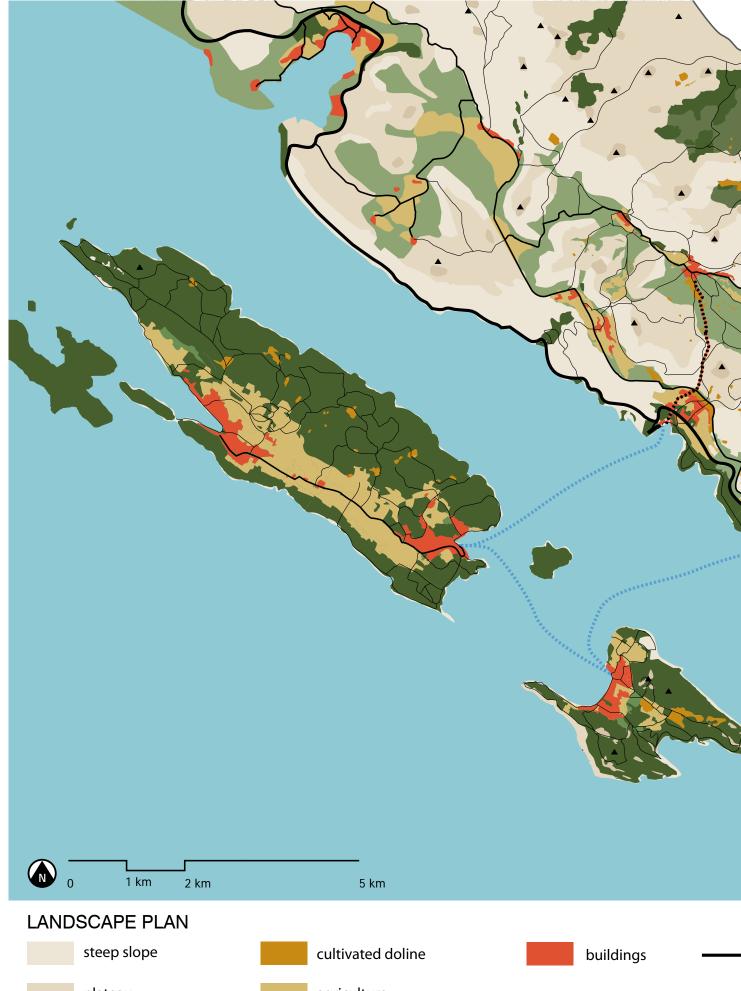


figure 6.99: Final development



agriculture plateau

protected vegetation alp

nature development valley



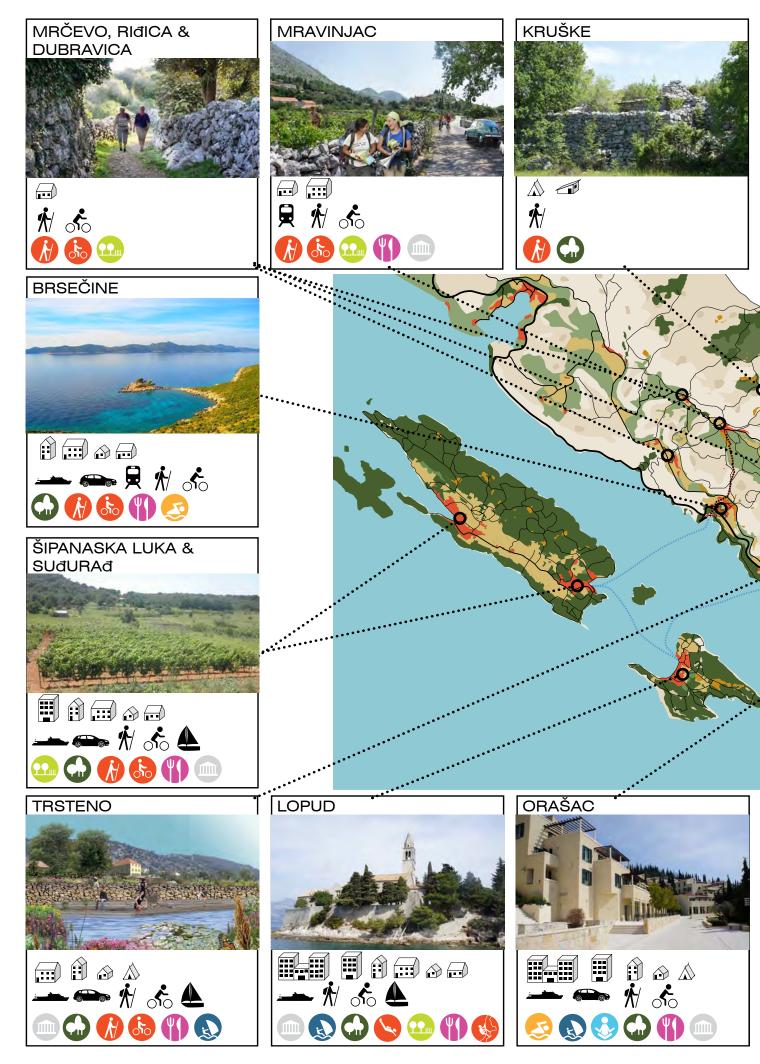
state road D8/ E65 Jadranska magistrala

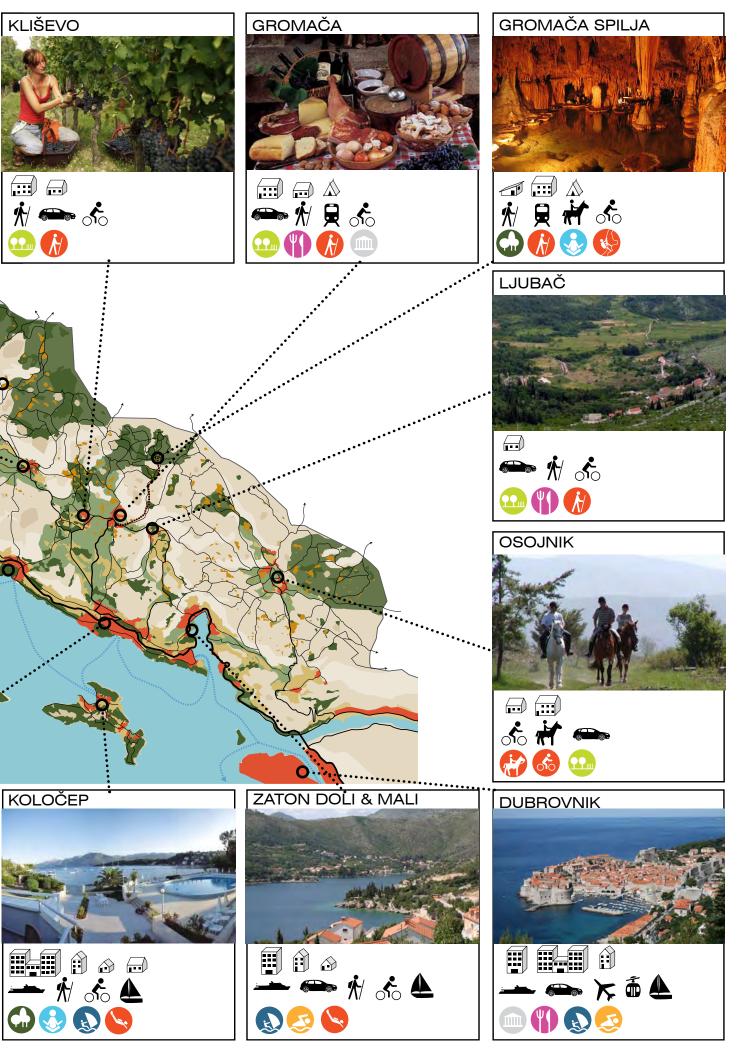
secondary road

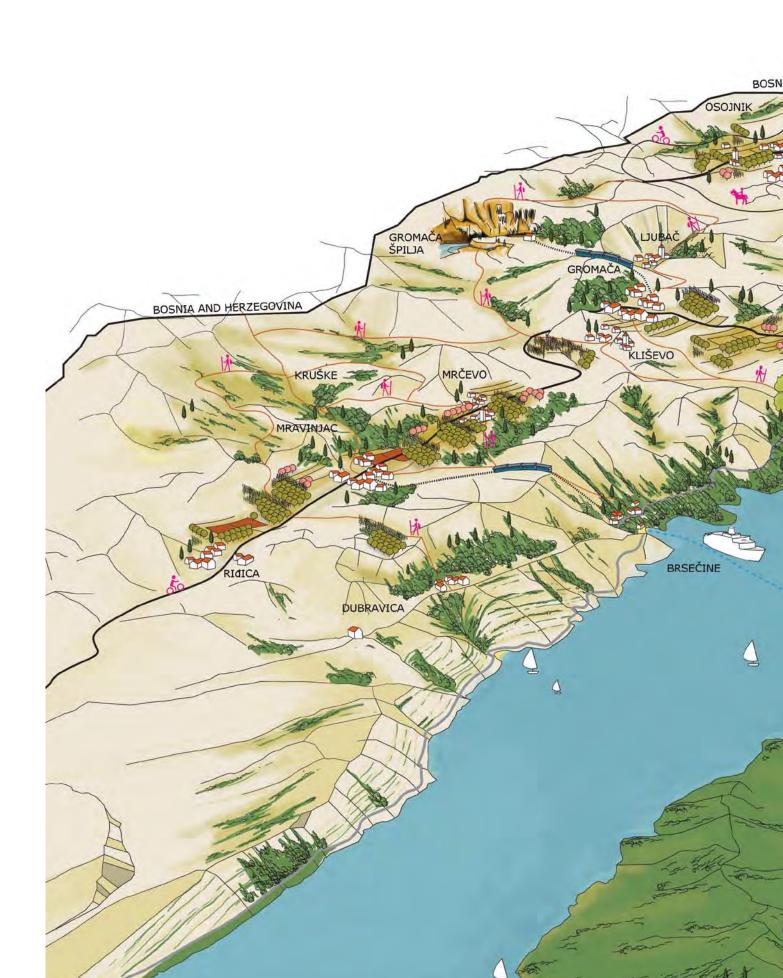
old path

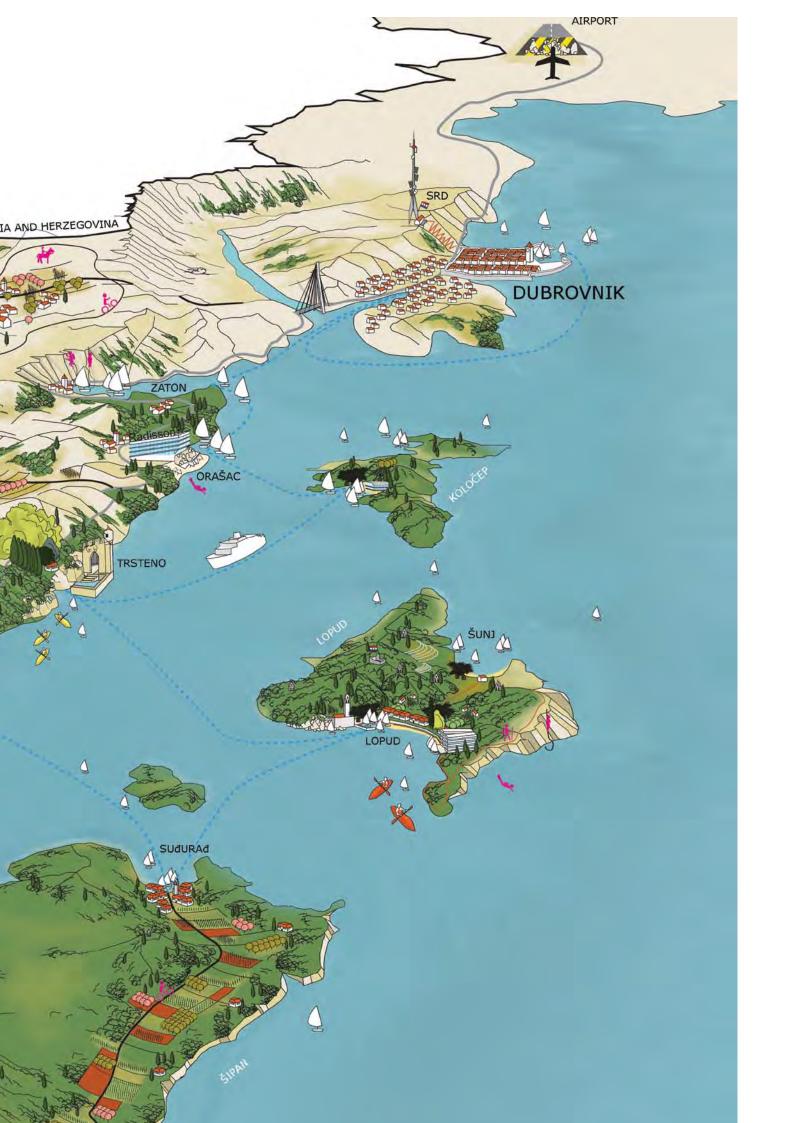
ferry line

mountain train











Chapter 7 Local designs



Chapter 7.1

Local design coastal plain Trsteno



7.1.1 Regional context

Trsteno is a small coastal village with 237 inhabitants, located among the main coastal strip between the bays of Zaton and Slano. Within this coastal strip Trsteno is the middle village, in position and in size. By road (the Jadranska Magistrala and old paths) among the coastline Trsteno is linked to Brsečine and Orašac and by a small pass Trsteno is/used to be linked to Kliševo and the higher agricultural fields of the village.

Because of the position on a lush coastal plain with nice vistas over the Adriatic Sea Trsteno became a very popular place during the Republic period for wealthy citizens and merchantmen to build their villas with lush gardens out of the dense city. At the peak about ten of those villas were erected in Trsteno, of which the villa of the family Gučetić-Gozze was the most impressive and biggest one. They were great fans of plants and on their trade voyages around the world they took many plants and seeds home which they planted in their garden. The result is still present in the Trsteno Arboretum, the oldest arboretum of Southern Europe. Also the two Oriental plane trees, that used to be the entrance to the villa, are very unique, as they are more than 500 years old and one of them is the biggest plane tree of Europe.

Within the regional plan for sustainable tourism development Trsteno is located in the most intensive tourism zone and has good accessible by the ferry, Jadranska Magistrala and paths connecting the village to other coastal villages and the inland valley of Gromača. Because of the rich history and lush green environment the village is focused on cultural & historical heritage and nature tourism. But also active & adventure tourism and nautical tourism play a significant role, as the village has a beautiful historical harbour and the relatively flat plain is ideal for hiking and biking. Because of the lack of a real beach sun, sea & sand tourism is not playing a significant role in the village.

7.1.2 Site analysis

7.1.2.1 Tourism analysis

In the pre-war period Trsteno used to be a village with a significant focus on tourism, but after the war and change of tourist types also Trsteno has changed. Today not much tourists are visiting the village and even less tourists are staying for several days, most of them just come here to visit Dubrovnik or the arboretum.



figure 7.1.1: Location of Trsteno in the regional plan

The attractions

Today, Trsteno doesn't have much attractions left. The main attraction of the village is and always will be the arboretum, but due to damages from the war and a forest fire in 2000 a large part of the garden was lost and these parts are still closed for visitors. Another attraction are the two enormous plane trees on the village square, but due to bad maintenance it isn't allowed any more to enter the square. The monumental chapel on the square is closed for tourists and the historical harbour, which used to be one of the main tourist sides is empty.

The facilities

As a reaction on the disappearance of attractions and tourists also many facilities disappeared. The village has today two restaurants, which according to local people used to be seven at the peak. All other shops, including the post office are closed. Next to that the village has a nice camp site with a small cafe and several private rooms and apartments spread over the village.

The routes

Trsteno is accessible only by the Jadranska Magistrala, which runs through the centre of the village. Next to the main road the village has two roads which are accessible by car, one to the church and one to the entrance of the arboretum and further to the coast and harbour. All other roads are pedestrian. In the upper village a network of small streets and stairs is present, while the roads in the lower village are wider and longer. The old paths connecting Trsteno with the hinterland are completely overgrown and the higher agricultural fields are only reachable by car via Orašac.

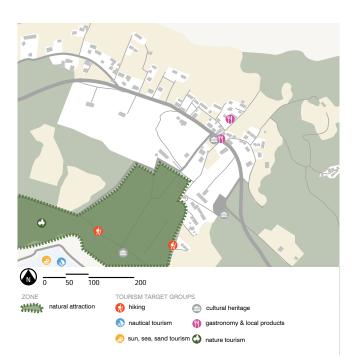


figure 7.1.2: Attractions map

The landscape setting

The (former) villas are located on the plateau and strongly related to the places where a fresh water spring is located, which can be used for watering the plants. The clustered mountain village is located on the cheaper and drier hillside while the harbour village is located on the ridge near the seaside bay and harbour. The cliffs between the harbour village and the plateau are used as viewpoints for the old villas.

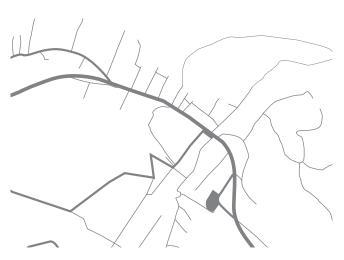


figure 7.1.3: Routes map



figure 7.1.4: Facilities map

7.1.2.2 Landscape analysis

The landscape of the coastal plain is formed by the influence of fresh water streams, which originate from springs where underground karst rivers appear on the surface, creating a fertile plateau with lush vegetation. At the end of the stream it eroded the limestone and formed natural bays and cliffs.

The plateaus within the villages are used as agricultural land, mostly planted with olive, fig and citrus trees but also other crops are grown in small yards. But, these fertile grounds are as mentioned before also very attractive for villas and gardens, so in Trsteno most grounds are used for them instead of agriculture.

The hillsides are cultivated by building terraces of local dry stone walls, which made it possible to grow crops and trees on them. On the lower parts, close to the natural springs, crops like vegetables, potatoes and fruits are grown, mostly on the private courtyards. On the higher and drier parts mainly olive trees are planted, but not all groves are still in use. The highest terraces are generally out of use and overgrown, but the terraces are still in a good condition. On this hillsides the mountain villages are built, consisting of clustered villages combined with small agricultural plots and gardens. A complex network of small roads is connecting the houses.

The bay of Trsteno is very narrow and surrounded by steep limestone cliffs. Because of these steep cliffs no pebble beach is present, but swimming and sunbathing can be done on the rocks (often concrete plateaus are constructed) or on the harbour. On the sides of the bay the ridges are less steep, so houses can be built in a lush forest. These are the places where the harbour/fisher villages are built. But because of the location close to the sea and the natural bay it is an interesting place for villas or hotels.

7.1.2.3 Natural and cultural qualities

In this paragraph the natural and cultural qualities will be explored and listed. These qualities are gathered out of the workshop and conversations/interviews with local stakeholders and out of our own experience and analysis of the village.

Natural qualities

The biggest natural attraction is the lush green vegetation, in the forests around Trsteno, in the arboretum, in the olive and citrus groves and especially in the Osmolis nature reserve. Also the cliffs with the bay and the Adriatic Sea can be noted as natural quality. One group of the workshop mentioned the sounds and smell of the nature areas, with several herbs and small animals like crickets. The old paths connecting the villages can be used to experience this nature, but also to have great views over the coastline and the Elaphiti archipelago. Next to that the mild climate can be seen as natural quality.

Cultural qualities

Because of the rich history Trsteno has a lot of cultural qualities. Regarding the historical culture several elements can be pointed out, like the villa (-structure), the arboretum,



figure 7.1.5: Lush forests cover most of the plateau

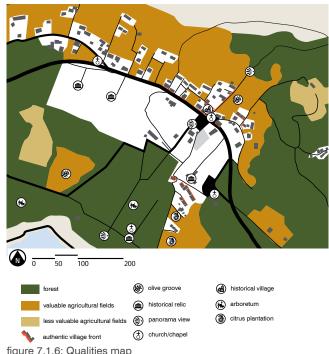


figure 7.1.6: Qualities map

the arsenal-harbour village and the big plane trees on the village square, all remaining from the Republic period. Next to that the four churches and chapels are interesting, the main church of Sv. Vid, the chapel of Sv. Mihajlo and the monumental paintings in the chapel on the village square. Also the old traditional clustered village, mainly concentrated around the village square is well preserved and is very authentic.

Next to these kind of cultural qualities also the agriculture can be pointed out as cultural quality, with the old dry stone wall terraces, old olive groves and cultural traditions like goat milking and the local way of live are characterized as main quality by the local stakeholders. This is also including the old trading and transport routes to the hinterland.

Other qualities

Next to the natural and cultural qualities the local stakeholders mainly point out that the interaction between the tourists and the local community can be seen as an important quality of Trsteno. They like to have a good relationship with the tourists and want to show them their village and land. Hospitality is the charm of the village and they like to include the tourists into their own local community. Also their gastronomy they encounter as a part of their culture.



figure 7.1.7: The Neptune fountain in the arboretum, a cultural and natural quality



figure 7.1.8: Historical village square with majestic plane trees



figure 7.1.9: One of the typical historical villas of Trsteno



figure 7.1.10: Path next to the stream, left the arboretum, right dense citrus orchards

7.1.2.4 (Spatial) problems

Also in the (spatial) problems the input of the workshop and conversations with local stakeholders are a very important source of input, next to our own observations.

In Trsteno there are many problems, which can generally be divided in three main problems: infrastructural problems, bad maintenance/neglecting and tourism.

Within the infrastructural problems several elements are encountered. The busy Jadranska Magistrala is running through the centre and splitting the village in two parts, also because there are no good sidewalks and traffic jams occur. Also the parking facilities are lacking, there is just a small parking lot next to the arboretum entrance, but it has a very limited capacity. Even for the local inhabitants it is hard to park their own car, for tourists it's almost impossible to park. Also the paths connecting Trsteno with the surrounding villages are generally completely overgrown and not accessible anymore and in the mountain village the crossroads are missing, so a round walk is impossible. Last but not least the area of the arboretum is placed in the middle of the village, but without a ticket it's not possible to cross the paths, so it forms a big obstacle splitting the village.

Within bad maintenance/neglecting also several elements can be distinguished. For example the big plane trees on the village square are not well maintained, and as a result of that they are dangerous and the whole square is not accessible anymore. This causes a loss of public space and the local community doesn't have a central meeting place

anymore. Also some agricultural fields are neglected, which causes visual pollution, also because these places are used for illegal waste dump. Also the most of the old villas and gardens are neglected, just like the complete old harbour.

The last main problem is tourism, as tourism used to be an important part of the local economy and lifestyle. After the war tourism decreased in Trsteno and seasonality became an important issue. Due to the decline many facilities like restaurants, cafes, the post office and a supermarket closed down, which has a big influence on the local community, as they have to do their grocery in Zaton, which has a great impact on the social life. On the other side tourism is causing problems, as big busses drop tourists for a visit to the arboretum, causing traffic congestions and overcrowded places.

Next to these problems a fourth problem occurs, namely the water problem. While Trsteno is located on the lush coastal plain the amount of water of the springs is not equal over the year. During autumn and winter most water is running through the streams, while in the hot summer months the stream sometimes even desiccates. This causes a water shortage in the summer, which is bad for the agriculture, the gardens and fire-safety.

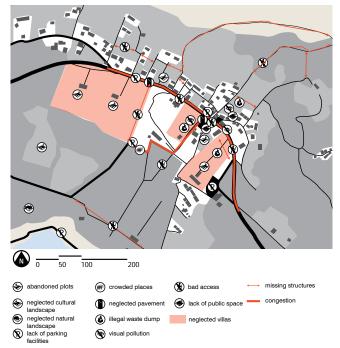


figure 7.1.11: Spatial problems map



figure 7.1.12: Spatial problems: the square is locked with a fence, car park is insufficient and the main road is a big barrier

7.1.3 Connection with tourism

The site analysis discovered the natural and cultural landscape qualities as well as the problems which are present in the area. When combining these with the tourism target groups, the connection between tourism and the landscape can be explored. The landscape serves as a base by providing potentials for tourism development.

The main attractions for Trsteno based on the landscape qualities will be the arboretum, old villas, village square, the clustered mountain village, the olive and citrus groves and the old harbour with the cliffs.

The cross-section shows the village of Trsteno, as analysed in the previous paragraph. The section from sea to mountain ridge is further explained by the determination of local landscape structures, in order to identify place specific characteristics and qualities.

The table below the section represents the potential presence of a tourism target group. These are one by one examined by their needs and demands for a certain location in the A.F.R.L.-scheme, as described in figure 7.1.13.

This is projected on site, while using the landscape characteristics as anchors for tourism potential. The grey

bars are indicating the expected suitable areas in which a certain potential tourism target group might occur.

Striking in the scheme is that some tourism target groups occur only in certain parts on the section (like restaurants), while others (in potential) can use the whole landscape profile for tourist activities. This can be used to develop hubs and spokes, in a hub the clustered tourism target groups are located, while the other tourism target groups can link the hubs into a system.

In Trsteno this means that the main cluster or hub will be around the village square under the plane trees, in the arboretum and in the harbour. Here will the facilities like cafes, restaurants, shops, tourist information and rentals and the main attractions like churches, historical heritage or museums be clustered. The tourism activities linking them include hiking, biking, sailing and boat trips.

7.1.4 Design challenges and concept

In order to make the previously mentioned intentions concrete, it is necessary to define preconditions and design challenges, before starting the creative design process. In the case of Trsteno mountain village, these design challenges are defined according to a vision for the whole

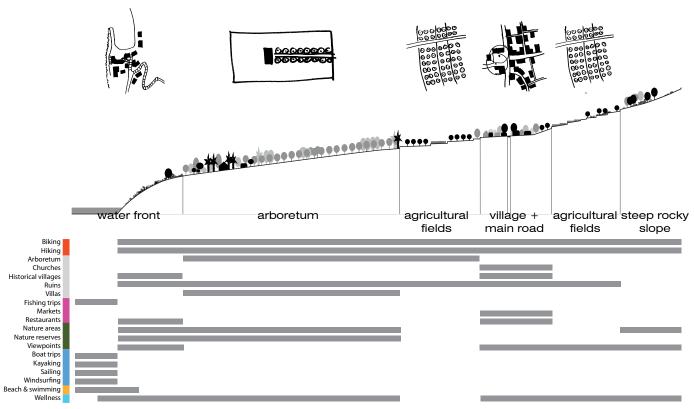


figure 7.1.13: Tourism in the landscape: section of Trsteno

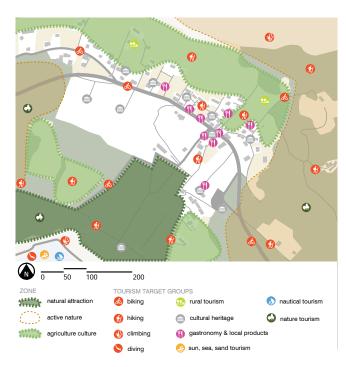


figure 7.1.14: TTG's potential spread over the village

village. Relating to the regional design (chapter 6), the proposed focus target group of the village is the cultural & historical heritage and nature tourism, because of the rich cultural legacy Trsteno has to offer. In an attempt to make this concrete, this design will use the cultural historical heritage and nature as base for the development and within that attempt to solve the (spatial) problems. Within this the wishes of the community, as extracted from the workshop and conversations is one of the leading principles.

These wishes are:

- A central meeting place where locals and tourists can meet and have social interaction
- Strengthen the interaction and relation with tourists
- More shops and facilities
- Solve the water shortage in summer
- Chances to start small own tourism businesses

Next to that our vision is to:

- Create an extensive network within and around the village using hubs and spokes
- Making the landscape and cultural (historical) heritage experienceable for tourists
- Facilitate the potential tourism target groups

By analysing the current status of Trsteno it becomes clear



figure 7.1.15: Concept map

that the village lacks a real centre and tourist facilities, but also lacks a concrete identity. All ingredients to become a successful tourist village are present, but not used optimal or not known at all.

Out of this the following concept is distinguished:

Reusing the historical shift between the clustered dense mountain village and the villa zone as spatial design principle and developing the village square around the spring and giant plane trees as hub and central meeting place linking all parts of the village and surrounding landscape together.

In this concept the secluded historical square with the neglected spring and the giant plane trees will become the central place of Trsteno again, linking all parts of the village together and serving as a hub for longer hiking/biking routes

to neighbouring villages. By developing the square new chances for tourism development arise, like market stands, events, space for terraces and shops.

The square will be directly linked with the entrance of the main attraction, the arboretum, by expanding a public part of the arboretum, combined with water storage to solve the water shortage problem. This water basins will also strengthen the lush and natural image of Trsteno.

The main infrastructural impact of the concept is the development of decent parking lots to facilitate tourists to stay in Trsteno and provide parking space for both inhabitants as tourists who are staying in the village. Also the main road will be upgraded with sidewalks to create a better sustainable situation.

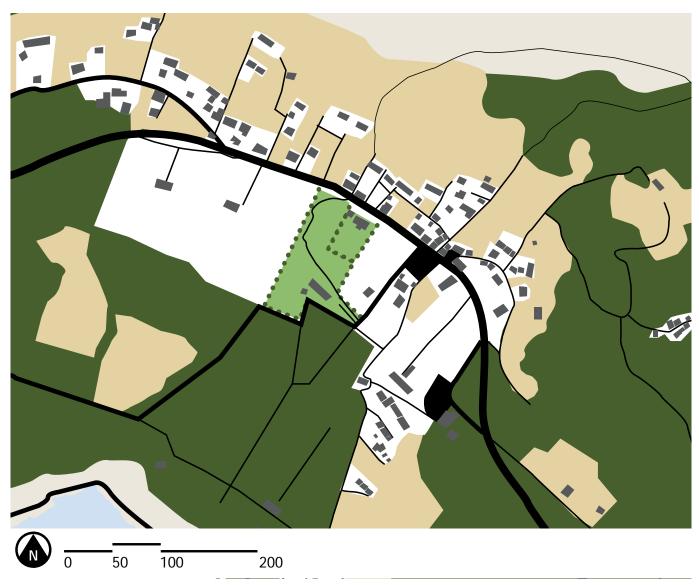


figure 7.1.16: Trsteno: current situation (2012)

7.1.5 Spatial phased development

In phase one a begin is made to develop Trsteno into the desired tourism village, based on mainly the cultural heritage and lush nature. In the first phase therefore the preconditions are developed in order to guide and steer the village in the next phases. By doing this the village square will be renovated and expanded, the new part of the arboretum and water storage will be constructed and the main road will be expanded with sidewalks. To facilitate the first tourists and current demand the first two parking lots will be constructed near the centre. This will be done by the local government. Local entrepreneurs will start by renovating the current empty houses in the village and the existing villas. This is relatively cheap and therefore achievable. In this phase only two new buildings are planned, on the village square. These buildings

can facilitate local businesses to start on the new central square. In order to start with the hubs and spokes concept the paths connecting Trsteno with Brsečine and Orašac will be constructed, while the old paths to the hinterland will be made accessible for hikers. Also the road to the harbour will be upgraded, as that will be the main connection to link the village to the new coastal ferry.



figure 7.1.17: Development phase I

In phase two the developments of phase one will be continued and further developed. The villa structure will be completed by building new traditional villas on the empty plots and planting trees on the main road, to create a better climate. In the mountain village the first phase of infill development will be started, starting with the places close to the main road and the village square. This uphill constructions will be stimulated by upgrading the mountain paths to the hinterland, connecting Trsteno with Kliševo and Gromača. Next to that the old olive grove close to the village will be redeveloped into a cultural park. In order to handle more tourists the parking lots will be expanded if the demand is high enough.



figure 7.1.19: One of the old neglected villas in the villa structure

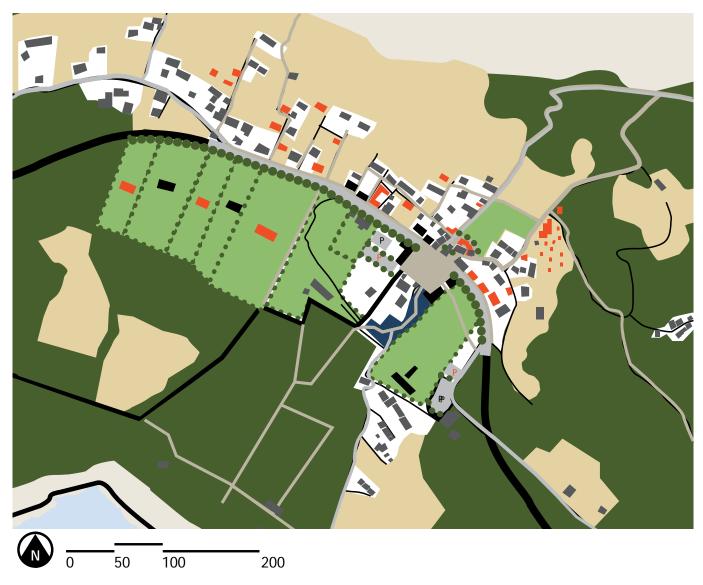


figure 7.1.18: Development phase II

In phase three the main interference is the construction of crossroads in the mountain village, by linking the parallel paths into a system it will be possible for tourists and locals to wander around in the clustered village, which turns dead end streets into passing routes, which is more feasible for restaurants, shops or other facilities or attractions. By developing this precondition the mountain village is prepared for the next phase of infill developments. In this phase also the middle village will be extra developed and the last phase of the parking facilities will be completed.

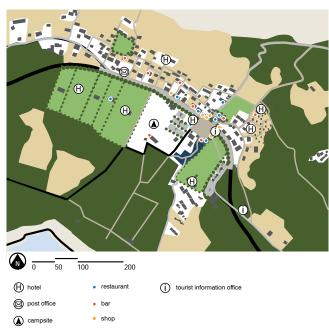


figure 7.1.21: Tourism facilities after phase III will be finished

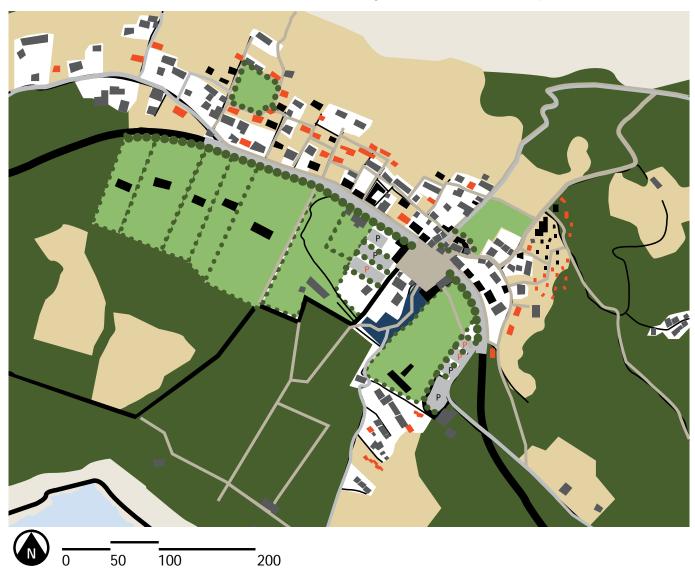


figure 7.1.20: Development phase III

7.1.6 Site design: Trsteno village square

Out of the village development plan and design a clear function came up for the (re)newed village square, which will function as the centre of Trsteno, a place where locals and tourists can meet eachother, activities can take place and facilities are located. Next to that the square will function as a hub connecting Trsteno into a sustainable transport network with hiking/biking paths to the other coastal villages and the valley of Gromača, but also to the Adriatic Sea.

Next to that the village square is becoming the main entrance of the arboretum, the main attraction, again, by developing a new wet part of the arboretum.

What is also interesting about the square is that it is a perfect example of how a coalition of local entrepreneurs, community and government can work together to create a place of which all stakeholders will profit.

The site design consists roughly of two parts, the village square and the water garden. For both parts some design challenges can be set.

For the village square the design challenges are:

- Provide a multifunctional square which can be used for markets, events, parties and cafes/restaurants
- Create new buildings which can be used for shops, restaurants, tourism facilities or hotels
- Connect both parts of the square which are now segregated by the main road
- Make a good connection with the 'spokes'
- Preserve the old monumental plane trees
- Make the spring visible and experienceable
- Keep the wide view over the coastline and archipelago

For the water garden the design challenges are:

- Make a visual connection with the main entrance of the arboretum
- Integrate water storage basins for the dry summers
- Create a large diversity of plants and waterecosystems
- Make the water gardens and the surroundings experienceable
- Retain the connection between the village square and the harbour

But, as both parts are strongly related and connected to each other the interaction between both is very important.

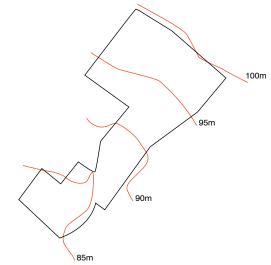


figure 7.1.22: Height map of the site design



figure 7.1.23: Infrastructural map of the site design

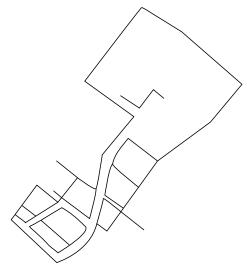


figure 7.1.24: Dry stone wall terraces map of the site design

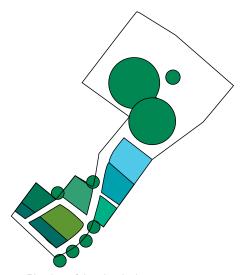


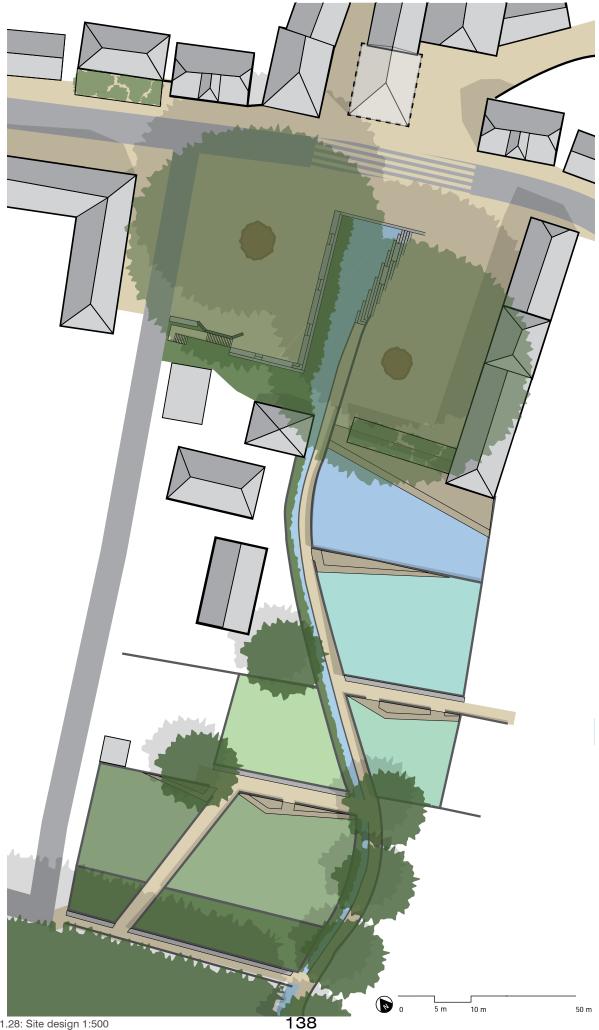
figure 7.1.25: Planting of the site design



figure 7.1.27: Main, but currently unused entrance of the arboretum



figure 7.1.26: Aerial photo of the site design and surroundings



On the plateau side the square and water garden are surrounded by villa gardens, while on the hillside the square is surrounded by the mountain village and the two main paths into the mountain village and further to the hinterland are directly connected to the square, on both sides of the monumental our-dear-lady chapel.

Because of the two big trees the surface of the square is relatively flat, the northern (and biggest) tree has a completely flat ground, while the southern tree is located on a gentle slope. The design for the square is very basic, using the two enormous trees, the spring and the wide view as attraction elements. To put a focus on these attractions the floor is semi-paved with small indigenous gravel, which gives a soft and natural feeling, but also provides good living circumstances for the monumental trees. The main road is narrowed and passable by a zebra crossing. On three sides of the square are buildings are located, while the side which is facing the coastline is left open. On this side small walls of local dry stones are functioning as seating unit to enjoy the views.

The spring is one of the most attracting elements and located in the middle of the square, between the trees. On two sides

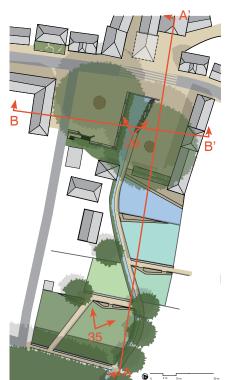
the spring is surrounded by dry stone walls with seating units to experience the water, on one side the spring and stream is made accessible by a few stairs, which also lead to the road connecting the square with the water garden and the harbour. The spring brings a nice micro climate and sounds to the square and the basin is filled with a lush, flowery vegetation attracting a lot of birds, butterflies and other animals.

The rest of the square is left open for other activities, this is depending on the kind of things that will develop by local entrepreneurs. But there are possibilities for shops, market stands, terraces for cafes, restaurants or hotels and cultural events. At the side of the water garden a large wooden terrace is designed, to have a visual interaction with the gardens and have a great view over the landscape. One part of the terrace is ideal for the side seasons, as it is very sunny, while the other part under the pergola is ideal for the hot summer season, providing enough shade.



figure 7.1.29: Visualisation of the village square with the spring and the chapel of Our-dear-lady of the snow (Gospa od Snegja)

The water garden is located on a gentle slope and has an eight meter elevation on 110 meters of land. To bridge this elevation the land is split in 5 levels of terraces, four of 150cm and two of 100cm. These forms are based on the existing shapes of the landscape and existing walls. The terraces are typically made out of local dry stone walls. Each terrace level has one or two basins with water and plants. To create a large diversity of plants the water levels differ per basin, from deep (300cm) to shallow marshland (15cm). To make the water gardens experienceable most have wooden terraces with seating elements on it, so the plants and ecosystems can be observed and experienced intensively. These terraces offer different views over the surrounding landscape, the water garden, the stream and the forest arboretum. The road connecting the entrance and the square leads through all eight basins, while the road connecting the square and the harbour is linked to the stream.





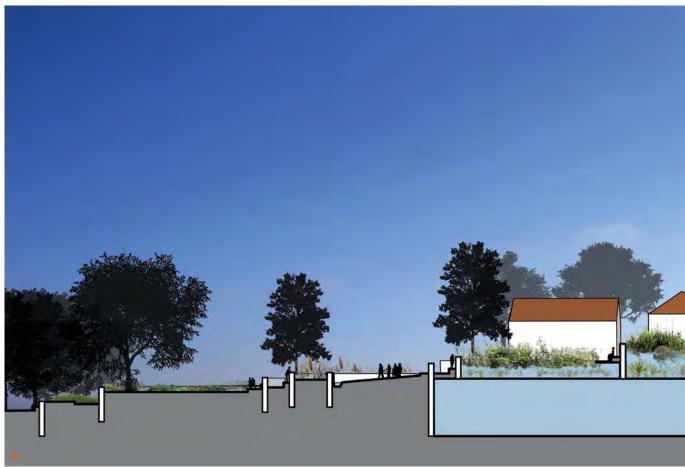


Figure 7.1.30 Section square-water garden basins 1:400



Figure 7.1.32 Section square-spring 1:300





figure 7.1.33: Visualisation of the olive grove park by day



figure 7.1.34: Visualisation of the olive grove park by night



figure 7.1.35: Visualisation of the water garden of the arboretum, with the village square on the background

Materials

For the design light, local materials are used. Most materials are natural and can be often found in Croatian villages, like typical local dry stones to build walls or terraces and local flag stones to pave roads.

The pavement of the square is made from grey gravel, which is a very natural and informal material, offering possibilities for many uses and provides good living circumstances for the two monumental plane trees.

The terraces in the water garden are made of wood, which gives a very natural and warm experience. It is also a nice combination with the dry stone walls.

The seating elements and stairs are made of light colored concrete, which is not expensive and matches good with the colors of the other materials.



figure 7.1.36: Local flag stone paved paths



figure 7.1.37: Local dry stone walls



figure 7.1.38: wood for the terraces in the water garden



figure 7.1.39: Gravel of local pebbles as pavement of the square



figure 7.1.40: Light concrete blocks for the benches and stairs

Chapter 7.2

Local design archipelago Lopud



7.2.1 Regional context

The island of Lopud has a strategic position within the Dubrovnik Riviera. It is one of the three inhabited islands of the Elaphiti archipelago, the middlemost island both in position and size(±2.5x3.5km).

Because of this position, the island functioned as secondary capital during the Republic period, as the outpost of the city of Dubrovnik. Nowadays, this legacy is recognized by the impressive harbour front of prominent buildings on the seaside of the village, and by the numerous chapels and churches which are scattered all over the island.

Lopud is the most lush island of the archipelago, containing two mountain ridges which are parallel to the littoral of the mainland, creating a relatively flat, lower zone in-between. However, this space wasn't enough to provide food for all the inhabitants in the Republic times, so most of the hillsides on the island are terraced for the production purposes of olives, grapes and citrus fruits. The rest of the island is overgrown by a lush and dense indigenous forest.

The mild microclimate of the island with a sandy soil which is rich in minerals, proved to be a perfect climate to grow citrus fruits, in particular the 'clementine' specie, which is considered as the tastiest one of the Adriatic coast. The other two islands are not possessing these unique circumstances, which makes it unable to grow citrus fruits over there. The mandarins of Lopud are therefore unique local products, which contribute to the local identity of the island.

The rich sandy soils are also present in the form of sandy beaches, which are very exceptional in the Croatian context. The northern and southern bays of Lopud are made of sand, but the Šunj-beaches in the south are the most pleasant,



figure 7.2.1: The island Lopud

often voted as one of the best beaches of Croatia (Bousfield, 2010). The sandy bay offers perfect conditions for swimming, sunbathing, kayaking, sailing and diving.

Despite of this favourable regional position and unique qualities, the island is only accessible by ferry. This emphasizes the sense of being and island: remote and poorly accessible, but it also affects the form of tourism. Largely tourists are visiting the island for the sun, sea and sand, not paying much attention to the other local qualities. In the regional concept, the island is better connected with the mainland, which lowers the threshold for other tourism target groups to enter the island. The main focus on the cultural & historical heritage tourist as determined on the regional scale, will then add more value to the overall tourism product.

For this local design, the village of Lopud is chosen as focus area, because the site analysis showed that most problems according to tourism development are located here.



figure 7.2.1: The island Lopud



figure 7.2.2: harbour front Lopud



figure 7.2.3: local 'clementine' citrus fruits



figure 7.2.4: terraced hillside



figure 7.2.5 : Šunj-beach

7.2.2 Site analysis

7.2.2.1Tourism analysis

The attractions

Attractions on the island are closely related to the water front. Most tourist are visiting the island for the unique sandy beaches and a walk on the boulevard. The harbour and the La Fodia resort are the main gathering points which are seen as attractions itself. Other cultural attractions are the arboretum and a local art exhibition, but they are often skipped by most tourists today.



figure 7.2.6: La Fodia resort



figure 7.2.7: the arboretum offers shade and unique vegetation



figure 7.2.8: view from Lopud to the mainland



figure 7.2.9 : Lopud boulevard

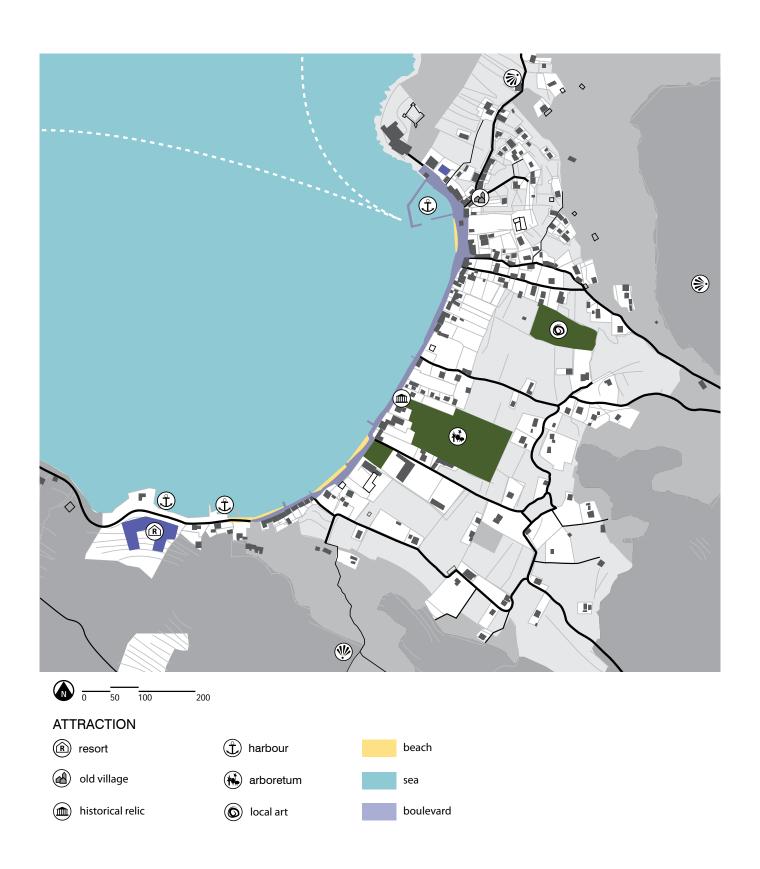


figure 7.2.10 : attraction map

The facilities

The facilities in the village are centred by the harbour and promenade on one side, the large La Fodia resort is providing facilities and services on the other side of the bay.

Like in traditional Fordist cases, most of the tourist facilities like bars, restaurants, shops and hotels are orientated on the waterfront and are highly depending on the summer season (see also chapter 1). In winter time, only a few bars are open, but all the shops and restaurants are closed. It is therefore obvious that next to tourists, villagers are leaving the island as well in this quiet period.



figure 7.2.11: local shops, only open during high season



figure 7.2.12: horeca facilities at the La Fodia resort



figure 7.2.13 : bikes and golf carts are two 'fast' ways of travelling on the island



figure 7.2.14: beach bars on the boulevard

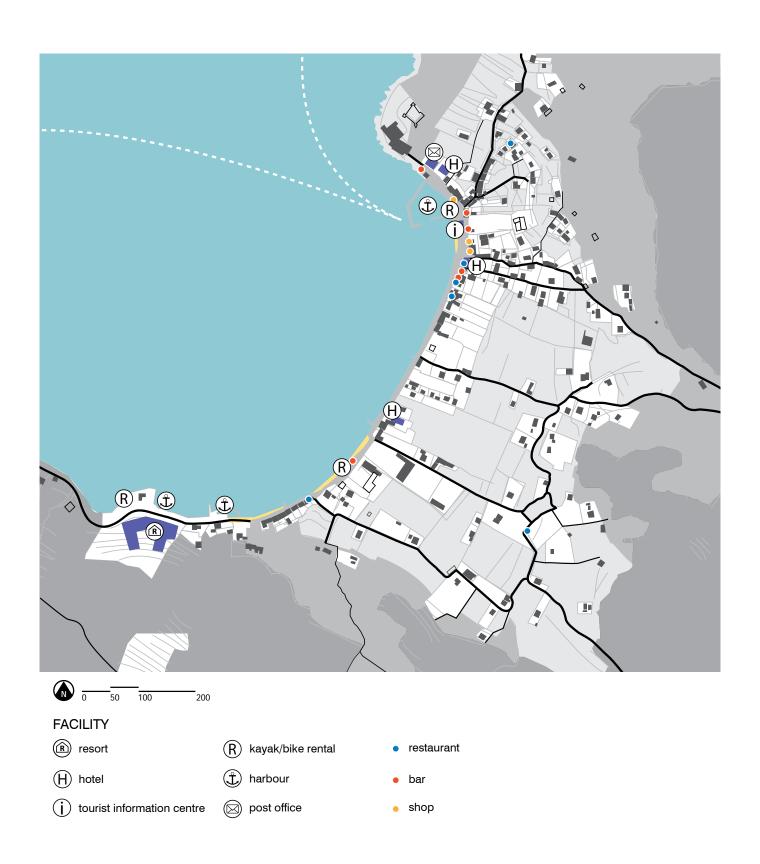


figure 7.2.15 : facility map

The routes

Qua routing system, the island of Lopud is very unique. There are no cars on the island, which mean that there are only pedestrians and cyclists using the infrastructure. A few small motorized vehicles like tractors and golf carts are present on the island, but they are only used for the transportation of goods from and to the harbour. The last few years, when the amount of tourists increased, the golf carts are used to transport tourists from and to the Šunj-beaches in the south. However, a small protest against those carts resulted in a limit on the number of carts on the island.



figure 7.2.16: paved, main route



figure 7.2.17: narrow streets in the build-up area



figure 7.2.18: unpaved route



figure 7.2.19: access to the mainland: the ferry line

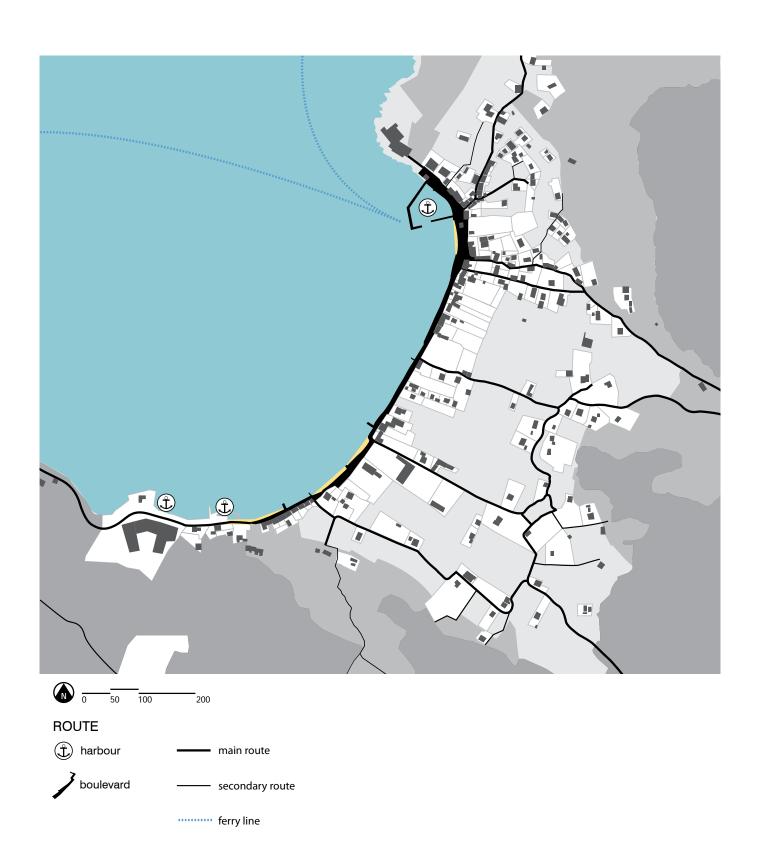


figure 7.2.20 : route map

The landscape setting

As said before, the sea and beaches are the most appreciated landscape settings by tourists nowadays.

Just like on the regional scale, the coastal plain is the most crowed location and in lesser extent, the mountain ridges. On the island of Lopud, the popular tourist landscape settings are limited by the sea, beaches and forests.

The valleys in the lower part of the island are not considered as tourist landscape settings.



figure 7.2.21: popular touristic hotspot: man-made pebble beaches near the La Fodia resort



figure 7.2.22: a walk through the forests offers beautiful views



figure 7.2.23: sandy beaches on the northern part of the island attract tourist as well as local people



figure 7.2.24: it is also possible to access the sea on more quiet



figure 7.2.25 : landscape setting map

7.2.2.2 Landscape analysis

The landscape zones as determined and described in the regional landscape analysis (chapter 6), are also present on the island of Lopud.

The two mountain ridges are representing the mountain zone on small scale. The same landscape elements are noticeable over here: steep ridges, bare mountain tops, highland plateaus, dolines and caves. In contrast with the mainland, the ridges on Lopud are more overgrown by a dense indigenous forest and lush vegetation.

The lower parts, the valleys, are all cultivated, mainly influenced by the change in inhabitants during history. In the wealthy times of the Republic, it is estimated that once more than 10.000 inhabitants were living on the island, instead of the 300 today. Because of this enormous spatial pressure on the island, agricultural fields are find even on extremely remote places of the island. First the lower parts were cultivated, but by the increasing need for food, forced them to move upwards. These hardly accessible cultivated fields uphill, which are characterised by the dry stone walls, were abandoned as soon as the population number dropped. Only the larger plots on the lower grounds are still in use today, however now the number of inhabitant is so low that even these agricultural fields are turning into barren wastelands.

The village originates on the seaside near the harbour and expanded organically from the bay towards the hinterland by using perpendicular streets. This bay is comparable with one on the coastal plains, as described in section 6.2.2 of this report.

The main promenade or boulevard near the waterfront is functioning as the main public space, accompanied with some green enclaves in the form of an arboretum, public garden and a playground. Just like agricultural fields, some buildings and private plots are empty today and represent vacancy in the village.

LOPUD TRAITS

- -Fresh water from wells . Every house on the waterfront owned a well, and there were 5 public wells
- -Delicios Lopud lamb(5-7 kg), cheese and milk used to be renowned in the area. Lambs were
- butchhered while very young and cheese was sold as a specialty to the Viennese court.
- -Due to sandy soil rich in minerals and milde climate citrus fruits thrive and tangerines of the "clementine"sort (aleksandrini) are considered to be the tastiest one on adriatic coast.
- "clemenune sorti dieksandrini) dre considered to de trie tasuest one on adriduc coast.
- -The Đorđić-Mayneri Park is the home of two pine-nut trees (pinus pinea) most probably the highest ones in Europe.
- -The Group of palms in front of the Grand Hotel, are the highest palm trees in South Eastern Europe.
- -During the WW2 Lopud was occupied as a strategic point by Italian armi (1941-1943) and German army (1943-1944. In 1942 and 1943, 450 Bosnian Jews, mostly from Sarajevo were captured in a collection camp in the Grand Hotel and Pracat Hotel Assistance and aid to the internees on the part of local population does credit to the island.
- -The regular Holly Mass is celebrated in different churches through the month: on the first Sunday, in the church Gospa od Šunja, on the following in the St Mary church and the last Sunday in St Nicholas church
- Sandy beaches on the east and west of the island provide a pleasant swimming in all weather conditions; with the north and west winds the beach of Šunj is quiet and peaceful, with a south wind the entire coastal beach in the village is protected.

The islander Miho Pracat, seaman and wealthy businessman, left all his wealth to the Republic of Dubrovnik, subsequently becoming the only person to whom a monument has ever been erected by the Republic (Rector's Palace, 1638.)

The greatest Lopud benefactor is doubtlessly Ivo Kuljevan. He left Lopud as a young man and settled down in Chiclayo, Peru, where, engaging in trade, he made a fortune. Even with a large family of seven children, at the old age he builds the school and post office building, municipal office with a reading—club, a waiting room and public toilet, butcher's and fishmonger's shop(now tourist office), the waterfront and the promenade with belvederes (1921-1927). His vision and services subsequently made Lopud an atractive touristic destination. In his gratitude and honor, the whole promenade bears his name; Obala Iva Kuljevana.

figure 7.2.26: information sign on the island describes the traits of Lopud

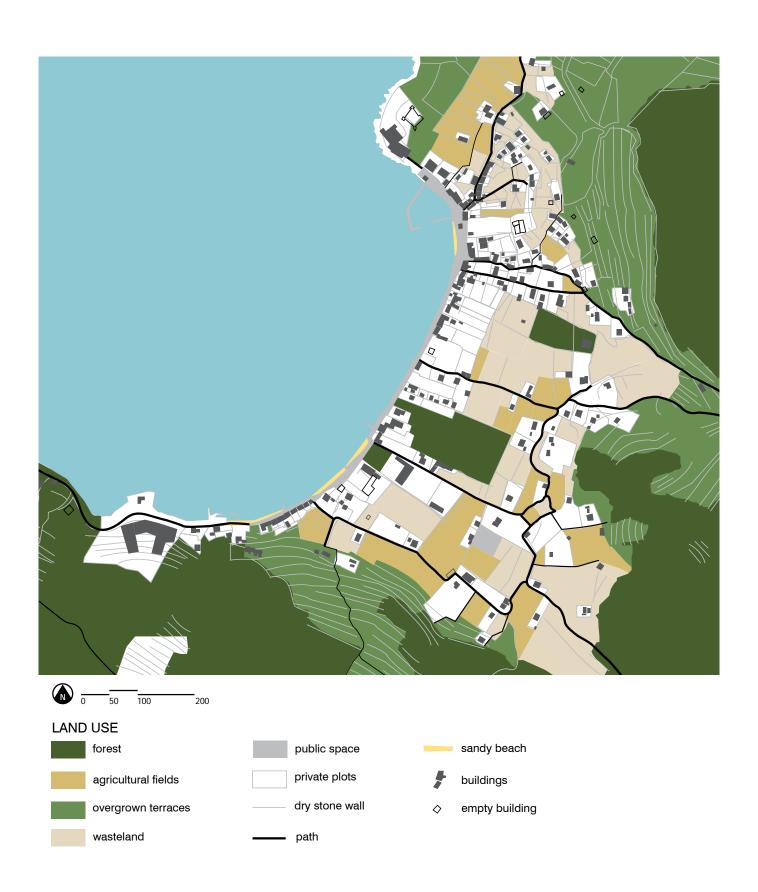


figure 7.2.27 : land use map

7.2.2.3 Natural and cultural qualities

As said before, the island of Lopud possess a various range of qualities, given by its natural conditions and rich history. The unique natural landscape of the island is characterized by the presence of sandy beaches, the mountain ridges, which are often covered by indigenous forest and offer magnificent belvederes. The islands geographical position means a pleasant climate, surrounded by the Adriatic sea in all directions.

The cultural history is expressed by the numerous cultural treasures on the island, but these are frequently overgrown, abandoned or partly broken down. Cultural relics can be found in religious buildings, like the fortified monastery near the harbour or chapels, but also in impressive buildings. The rector's palace, the Spanish fort on the hilltop and many

authentic villa's which are forming the old harbour front are all examples of the rich history. Attachments of these buildings like the famous arboretum which includes the two highest pine-nut trees(pinus pinea) and the public garden in front of the Grand Hotel with the highest palms of South Eastern Europe, are valuable cultural qualities of Lopud (according to the information sign on site, figure 7.2.26).

In the field of agriculture, there are the dry stone walls, which are creating a pattern of many kilometres stretched out over the whole island. Together with these walls, there are still some farm barns and sheds left which bear witness of former agricultural activities. Current local agricultural activities are present on the citrus plantations, which are still operating on three sites of the island and on a few olive groves which are still in production. Home-farming on small plots is taking place on several private gardens.





figure 7.2.29: the highest palms of South Eastern Europe?



figure 7.2.30: hidden cultural relic



figure 7.2.31: rich soils provide a perfect base for agricultural activities

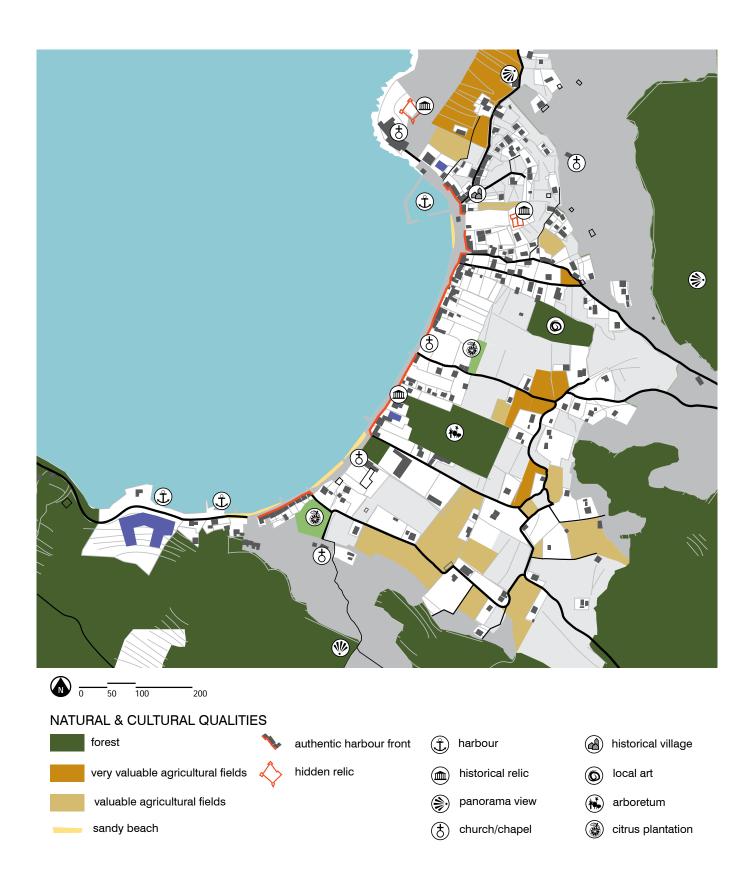


figure 7.2.32: natural and cultural quality map

7.2.2.4 Spatial problems

Problems are occurring in line with the tourist activities and the consequences of a decreasing number of full-time inhabitants.

Two main streams can be divided in this problem analysis: The first are the problems which come together with the spatial concentration of activities and facilities on the harbour and promenade. The capacity of the public space is insufficient for the large amount of visitors that the island attracts during high season. This leads to an overcrowded boulevard with congestion problems, strengthened by the lack of maintenance concerning pavement, waste dump and the lack of public space. The over focus on mass tourism causes visual pollution in the appearance of advertisement, billboards and no regulation exists for the integration of new

tourism developments, like the large-scale La Fodia resort. Next to the problems related to the water front, negative effects are also present in the hinterland. Urban sprawl, in the form of illegal settlements, appears everywhere in the hinterland. Former agricultural plots are sold to foreign investors which are building up second homes. No regulations or limitations for this expansion are causing a fragmented area in which illegal waste dump, visual pollution and the neglecting of the cultural and natural landscape are present and still increase.



figure 7.2.33: urban sprawl in the hinterland



figure 7.2.34: no full access to walking routes



figure 7.2.35: vacant property on the promenade



figure 7.2.36: bad maintainance off-season scares potential visitors

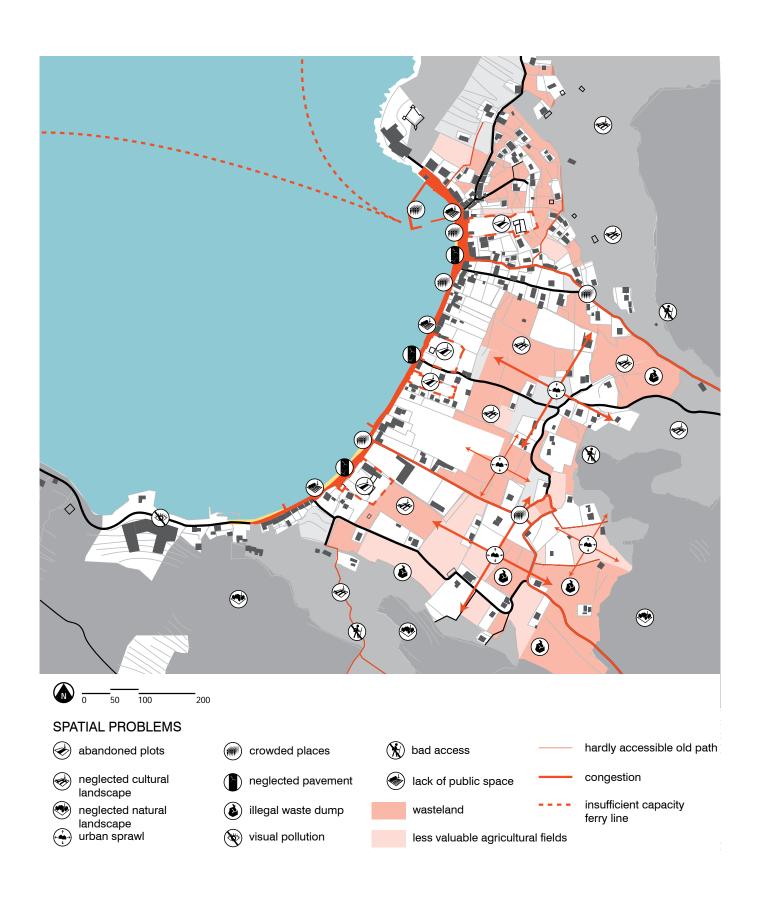


figure 7.2.37 : spatial problem map

7.2.3 Connection with tourism

The site analysis discovered the natural and cultural landscape qualities as well as the problems which are present in the area. When combining these with the tourism target groups, the connection between tourism and the landscape can be explored. The landscape serves as a base by providing potentials for tourism development.

The cross-section shows the village of Lopud, as analysed in the previous paragraph. The section from sea to mountain ridge is further explained by the determination of local landscape structures, in order to identify place specific characteristics and qualities.

The table below the section represents the potential presence of a tourism target group. These are one by one examined by their needs and demands for a certain location as described in the A.F.R.L.-scheme, see chapter 5.

This is projected on site, while using the landscape characteristics as anchors for tourism potential. The grey bars are indicating the expected suitable areas in which a certain potential tourism target group might occur.

Striking in the scheme is that some tourism target groups occur only in certain parts on the section(like nautical tourism), while others (in potential) can use the whole landscape profile for tourist activities.

This potential use for tourist activities can be compared with the present situation.

In figure 7.2.45, the current tourism focus of Lopud is shown, with the main orientation on sun, sea, sand tourism and nautical tourism. The tourism target groups of cultural heritage and hiking and biking are present, but in a certain way, underexposed.

With the eye on the potential which is explored in the scheme above, new tourism target groups can be added to the tourism product of the island. The valuable agricultural fields for example can be used to attract rural tourism. By making the ridges more accessible, forms of nature tourism and active tourism can be practiced. Revealing hidden cultural treasures like the Rector's palace can contribute to a more qualitative expansion of the cultural image of the island. Offering local products on markets or restaurants can add value to the local gastronomy and branding of the local products. The exploitation of the islands qualities in a sustainable way can result in a more divers, flexible, and evolutionary tourism products, which helps to revitalize the island and development in a sustainable way.



figure 7.2.38: old barns can function as clues for new (rural) tourism development



figure 7.2.39: local initiatives for renovation of cultural relics is noticed, this positive twist can boost a further development of 162 cultural and historical heritage tourism

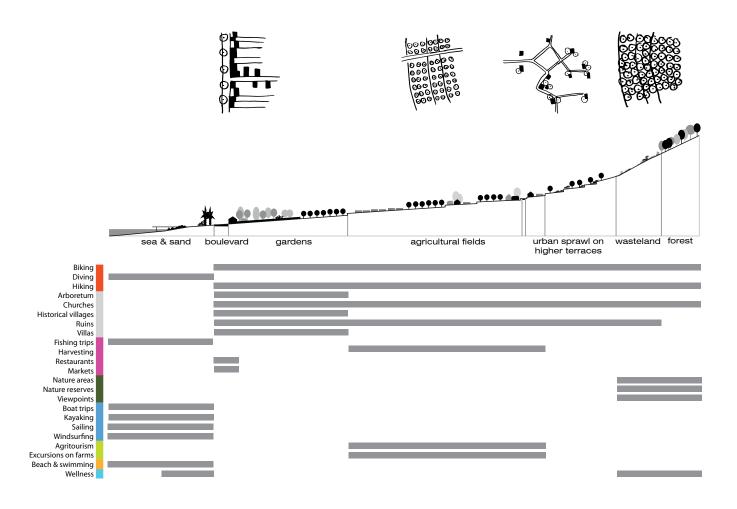


figure 7.2.40: the connection landscape-tourism potential, related to tourist target groups



figure 7.2.41: a lot of potential for rural tourism development



figure 7.2.42: the unexplored parts of the island: the upper wastelands and indigenous forests

The cultural landscape of the island offers great potentials for tourist activities, in particular for rural tourism and for the productions of local products, which contributes to the local gastronomy.

By using old abandoned farm barns or sheds, this new form of tourist development can take place in a characteristic accommodation. The reuse of the agricultural fields and the renovation of the old buildings are adding value to the current landscape setting and revealing and revitalizing the historical land use. A landscape which is full of activities is not only valuable in a productive way, it is also attractive for other tourist forms, which are using the site as well.

Figure 7.2.44 shows the current situation of a site on the valleys of Lopud, The abandoned farm can function as a tourist accommodation for rural tourism.

The possible future situation could include:

- the reuse of valuable agricultural fields
- the harvesting and promotion of local production and products
- a new source of income
- new tourist accommodations with are fitted into the existing landscape
- the revealance and use of forgotten landscape structures as the dry stone wall terraces
- the improvement of the path network
- the restaurantion of neglected elements and buildings



figure 7.2.43: possible future situation



figure 7.2.44: current situation









figure 7.2.45: current tourism focus Lopud

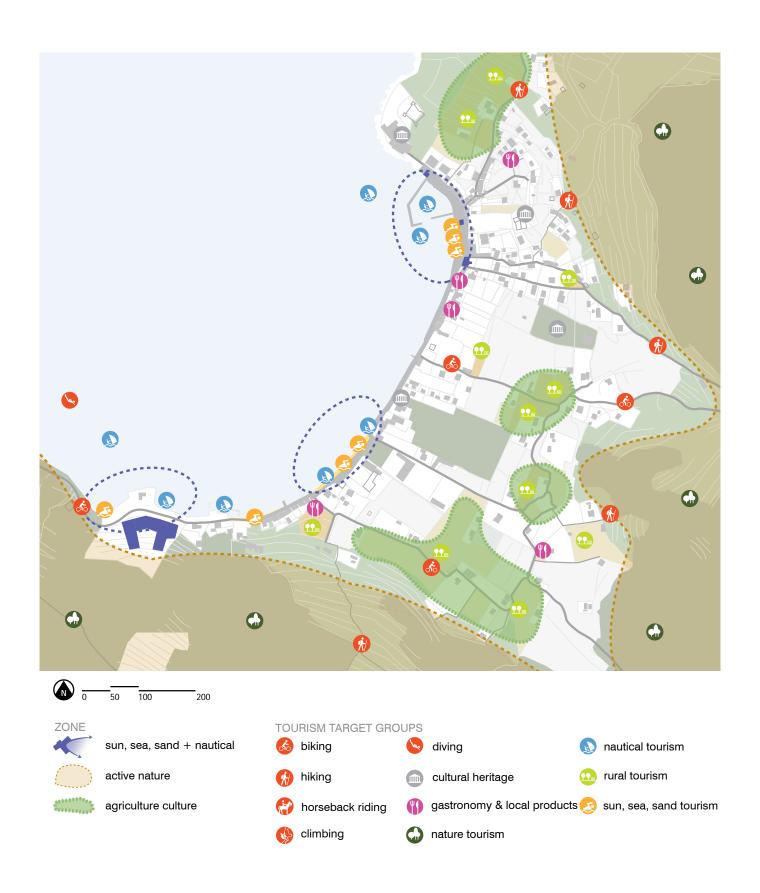


figure 7.2.46: potential tourism focus Lopud

7.2.4 Design challenges and concept

In order to make the previously mentioned intentions concrete, it is necessary to define preconditions and design challenges, before starting the creative design process.

In the case of Lopud village, these design challenges are defined according to a vision for the island. Relating to the regional design(chapter 6), the proposed main focus target group of the area is the cultural & historical heritage tourist, because of the rich cultural legacy the island has to offer. In an attempt to make this concrete, this design will reveal a hidden and abandoned cultural treasure and link it to the other facets of tourism on the island.

Concluded from the spatial analysis, problems that occur on Lopud are in twofold: related to the boulevard and related to the hinterland. However, landscape qualities are present on both locations. Important for the island is to strengthen its position in the regional context, with the use of local landscape qualities and identity as pull-factors for tourism development. This development has to support the overall cohesion of the area.

Extracted from the previous steps, the design challenges for the island of Lopud are:

- revitalize the valuable agricultural fields
- · reveal the hidden cultural treasures
- strengthen the destinations image: facelift authentic harbour front
- structure the unregulated urban sprawl
- facilitate potential tourism target groups: in particular
- cultural & historical heritage



figure 7.2.47: concept strategy Lopud

Concept

Within the creative process of intrinsic design, these design challenges are transformed into a concept strategy. This strategy includes the spatial problems which are, together with the local landscape qualities combined into a concept for future development.

In the concept for the island, new development doesn't necessarily have to be focused on the seaside. Hub farms in the hinterland are supposed to give structure to the urban sprawl and start up the revitalization of the agricultural fields which are able to facilitate potential rural tourism. These enclaves of farms can facilitate the new tourism form by reusing the valuable agricultural fields and wastelands.

By creating a green network which makes the hinterland accessible, the link boulevard-hinterland can be made. Next to this, the network provides a structure which gives the opportunity the set limits to urban sprawl and regulations for the optimal use of agricultural fields. This shifts the main focus on the boulevard towards the more open hinterland and divides spatial pressure and tourism flows more equally. An important side-effect of this network is that is can fit the (unrevealed)cultural elements together with the development of new public space.

Figure 7.2.48 shows the principle of hub farms, as described in Diedrich et al., (2012). This concept is used in Twente, the Netherlands, to structure the fragmented agricultural land. The strategy of hub farms creates clusters of farms and activities, connected by many small scale routes. Agriculture is no longer the main activity, new housing and workspaces are included in these new development (Diedrich et al., 2012). On one hand, it offers farmers the opportunity to restructure their agricultural fields and change or exchange plots and space, which contributes to the functionality and optimization of the agricultural operations. Besides that, alternative settlements are created which are combined with the quality of the rural landscape setting.

This strategy can be combined with the expansion of tourism, by adding new forms of tourism to agricultural development. The hub farms are the clusters in which different kind of accommodations are located. New housing, tourist accommodations and buildings for agricultural needs are concentrated on the hub farms, which are at the same time creating a small scale network by the mutual connection with each other. In this way, restructuring of the agricultural landscape can fit in new (touristic) developments and add value to the existing landscape.

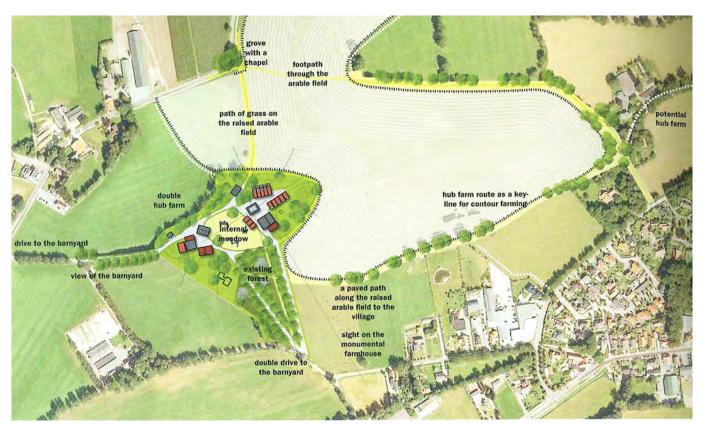
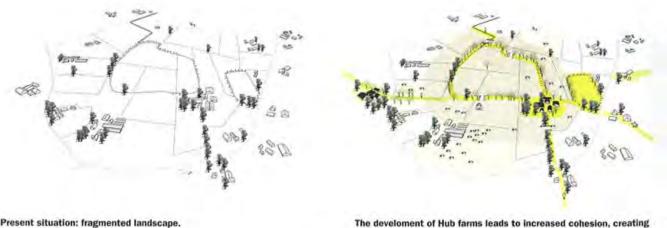


figure 7.2.48: Design for a hub farm near Tubbergen. (the Netherlands) source: reprinted from "IN TOUCH", by Diedrich, L., Hendriks, M., van Gessel, M., Moll, C. & Kandjee, T., 2012, p. 184, copyright by the Landscape Architecture Europe Foundation and Blauwdruk Publishers.



opportunities for large-scale farming in a small-scale landscape.

Present situation: fragmented landscape.

Previous pages: Example of a hub farm: Erve Oostermaat designed by Franz Ziegler. Photo Harry Harsema

figure 7.2.49: the development of hub farms source: reprinted from "IN TOUCH", by Diedrich, L., Hendriks, M., van Gessel, M., Moll, C. & Kandjee, T., 2012, p. 184, copyright by the Landscape Architecture Europe Foundation and Blaubers.

7.2.5 Spatial development

How this green network with hub farms can be developed is explained in three phases.

Phase one starts with the creation of two hub farms, located on current valuable agricultural fields. These hub farms are clusters of buildings, agricultural buildings together with tourist accommodations or family houses. They are responsible for a certain agricultural field. Infrastructure is connecting these fields and local qualities(see the quality map), which creates a network in the hinterland. The clustering of accommodations and infrastructural structure prevents further urban sprawl and starts to revitalize the local

food production.

At the same time, the problem of vacant property on the harbour front can be tackled by adding areas to public space, which is lacking capacity nowadays. It creates entrances to the hinterland on strategic positions of the boulevard. The Rector's palace and the abandoned southern church are suitable locations for such connection points. They are, next to their location, offering great opportunities to reveal the cultural treasures they possess. In this way, it is possible to kill two birds with one stone.



figure 7.2.50: phase one: creation of hub farms on strategic positions in the hinterland

Based on these first hubs, further expansion of agricultural fields is possible in number and size, which adds value to the current often neglected plots. Other hub farms can be established on strategic positions, expanding the capacity and diversity of the agricultural and overall tourism product. It also leads to an extended network, improving the inner accessibility of the island.

Further reuse of the vacant property on the boulevard restores the from origin closed harbour front. Besides a quantitative expansion of public space also a qualitative addition can be made by improving the microclimate on the boulevard by adding a green structure with indigenous trees. A public green structure is now missing, with the result of limited shade and a messy image. With a clear vegetation

plan, the promenade will be much more attractive and pleasant to stay.



figure 7.2.51: phase two: expansion of hub farms, together with the green network, connecting boulevard -hinterland

In the third phase, the hinterland network is further developed by occupying the wastelands for agricultural use. Even the higher grounds are taken into account, preventing urban sprawl and waste dump to move uphill. Urban development can take place on the other side of the main build-up strip. By doing so, the characteristic open fields in the agricultural area can be guaranteed.



figure 7.2.52: phase three: further development and finilizing of the hinterland network, including urban expansion

7.2.6 Detailed design

This concept strategy needs a further detailed exploration and elaboration, but to give an impression of how to implement the idea on a concrete site, an attempt is given by a local design.

The location of the design is the old Rector's palace, which serves as a key location within the green network.

As following from the spatial development, it is functioning as an entrance and connection between the boulevard and the hinterland.

Next to the defined design challenges for Lopud earlier, other input is coming from inside. During the workshop on the island, several opinions of how to develop in a sustainable way can be summarized into four community requests regarding this local design assignment:

Community request: (workshop results)

- develop local food production: make use of the local qualities
- family infrastructure and facilities: intermediate space/ gathering place
- lack of local art exhibition: fine art is an addition to the image of Lopud
- the need for inner public space

Taking these local requests into account, the design challenges for the local design of the Rector's palace are:

- reveal the hidden cultural treasure and make it accessible for tourist visits.
- create a physical link which connects the boulevard with the hinterland.
- create a semi-public space which functions as intermediate space/ gathering place.

- include local food production/distribution
- include local art

These challenges are given form in a design which consists of three parts: the boulevard square, the community gardens, and the Rector's palace.

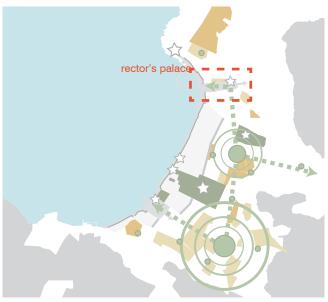


figure 7.2.54: location of the rector's palace in the concept strategy Lopud



figure 7.2.53: areal picture of the site

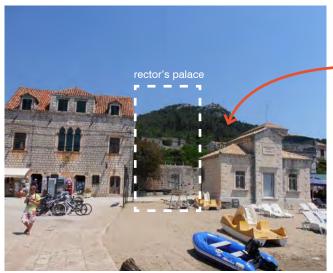


figure 7.2.55: location of the rector's palace seen from the boulevard



figure 7.2.56: remains Rector's palace



figure 7.2.57: example of a semi-public gathering place, Nîmes, France



figure 7.2.58: neighboring alley



figure 7.2.59: private gardens elsewhere on the island



figure 7.2.60: an example of local (street) art

The relief on site is very steep. To create a connection with the hinterland, this relief has to be bridged. By using the old principle of building terraces, the height differences can be overcome. In the design, these terraces are adapted to the regular size of dry stone terraces on other sites of the island. These sizes range between various dimensions, from 5x10m till 20x30m. In the design, these sizes are used as limits to the terrace sizes. By playing with these height differences and terraces, a various environment can be created which offers opportunities for several functions and land uses.

The stone walls which are constructing these terraces, are also bound to a certain height and width. Usually, the dry stone walls are 50cm wide and range between 0-2m height. In the designs, these variables are used as guidelines for the shaping and forming of the terraces which will be further explained in the second part of the design, the terraced community gardens.

The three parts of the design contain different land uses, which are related to the degree of accessibility: the boulevard square is public, the community gardens are semi-public, and the area of the Rector's palace is private property, in the sense that it can be closed for visitors and maintained by locals.

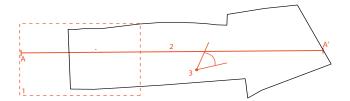


figure 7.2.60: the design consists of three parts:

- 1: boulevard square
- 2: terraced community gardens
- 3: Rector's palace

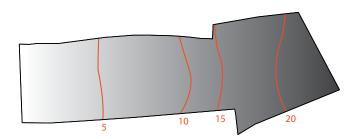


figure 7.2.61: relief



figure 7.2.62: local design Rector's palace

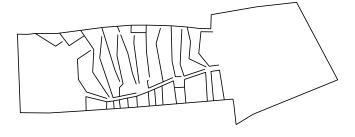


figure 7.2.63: terrace structure



figure 7.2.64: route system

figure 7.2.65: vegetation scheme

1. The boulevard square

The design for this area consists of a central square, which is providing extra public space attached to the boulevard. A wooden platform serves as a place for gathering and interaction, while enjoying the vista's to the sea and harbour in the shelter of trees or the pergola. Local products, which are grown and harvested on the community gardens above can be sold here, together with a drink of snack from the local pubs.

This area is in the first place creating the physical connection with the boulevard. It is located on a central position on the promenade, in front of the tourism information office. This position offers direct connections to the harbour and to the beach.

However, this is not the case today. A wall separates the area with the boulevard and makes it a remote entity in the build-up strip. By removing the wall , a more open space appears, which is broadening the narrow boulevard. It offers the opportunity to make the move land inwards, by inviting visitors to enter the area with a central square.

The square is including a central gathering place, marked with a wooden pavement and a pergola, which provides shade and a pleasant microclimate, creating an enjoyable place to stay. Also because of the vistas to the harbour on one side and the visual connection with the beach on the other. These vistas are also guiding the direction and orientation of the pergola, offering views on both crowed locations (harbour and beach). In contrast with these vistas, the walking routes are situated which are following the alignment of the surrounding buildings.

On the side where the square meets the terraced gardens, a playful area arises which is decorated with sitting elements and a place for playing jeux des boules.

The central square can function as a gathering place where the surrounding bars can receive their guests. In the current situation, these facilities lack space and are therefore putting extra pressure on the crowded narrow boulevard in front of the beach.



figure 7.2.66: view from the harbour



figure 7.2.67: view from the beach

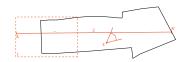




figure 7.2.68: current situation



figure 7.2.69: proposed situation

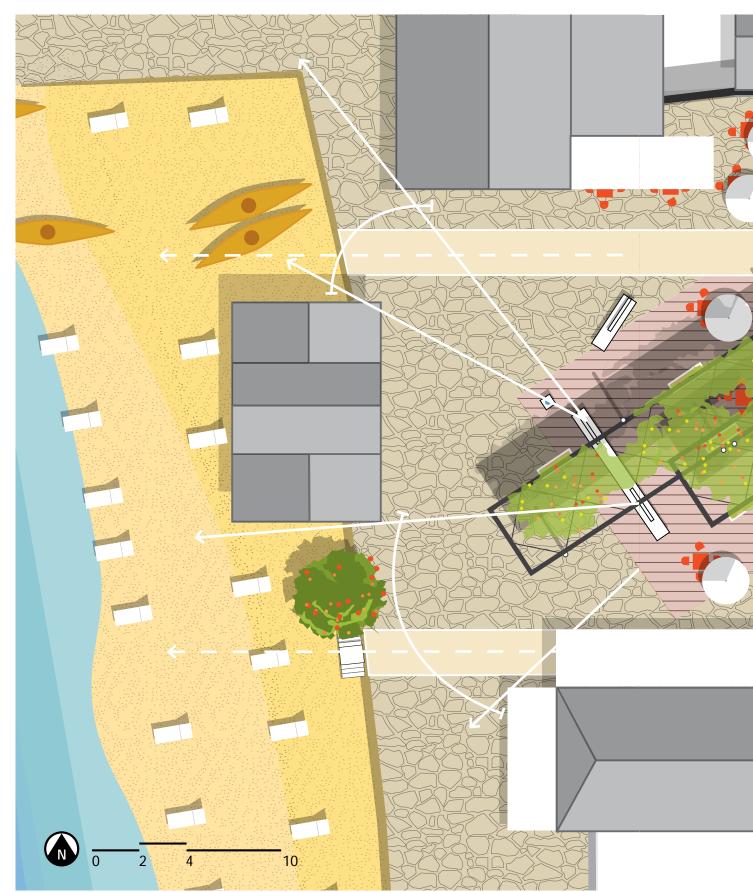


figure 7.2.70: boulevard square



2. Terraced community gardens

The terraces which are created to solve the location's relief are arranged as community gardens. Typical local products which are characteristic for the island are grown in these terraced gardens. It offers the opportunity to revitalize the local food production on small scale, which can be used as pioneers for further agricultural activities. Olives, grapes, figs, citrus fruit and cherries are examples of products which can be grown and harvest on these gardens.

This proposal suits the requests for the development of local food as they were asked during the workshop in June. The demand and local initiatives are showing that there is willingness to support this suggestion.

In order to make the area accessible, two routes are presented. The more direct path consists of so-called 'public stairs', which are more shallow in comparison with steeper 'private stairs'. On this path there are several resting points, which are connected with the other path. This more shallow, winding path is taking a constant gradient, which allows people in a wheelchair to experience the site as well. Those two main paths are paved, unlike the semi-paved route which is guiding through the upper part of the design, the gardens of the Rector's palace.

The gardens have a social function as well. Locals and tourists can work together on the agricultural fields, which strengthens the mutual relationship between guest and host.

The basic elements community garden:

- pergola or shelter
- paths and garden edges
- sheds for storage
- water harvest/storage
- windbreak trees
- shade trees
- screen planting
- compost bins
- seating
- signage



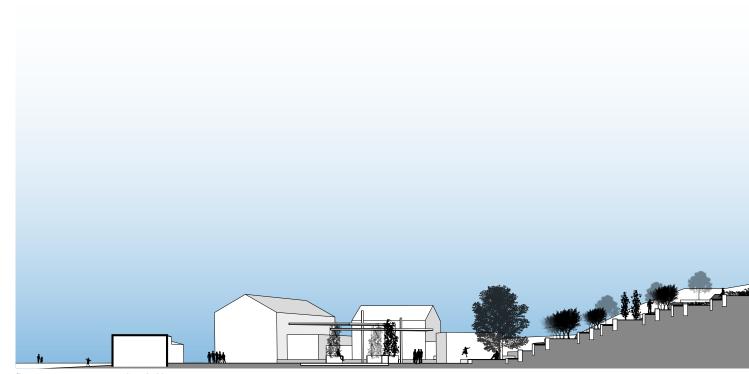
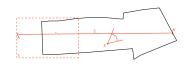


figure 7.2.71:cross section A-A' 1:500



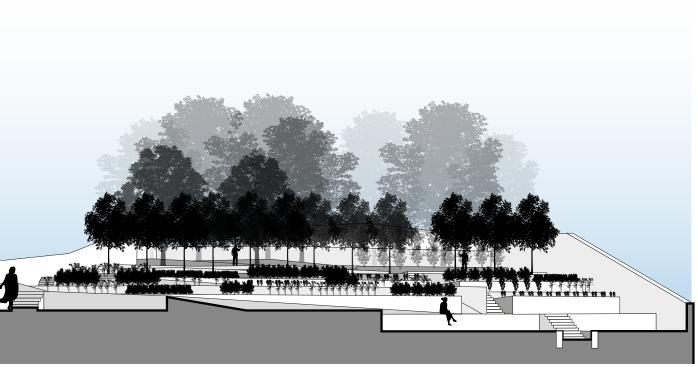
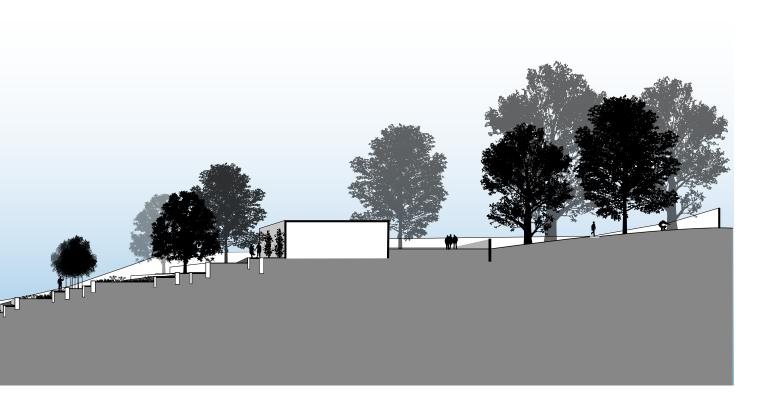


figure 7.2.72:cross section B-B' 1:200



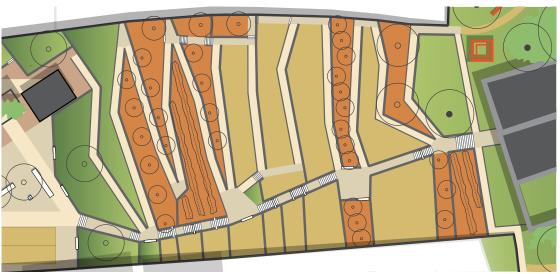


figure 7.2.73: land use community gardens

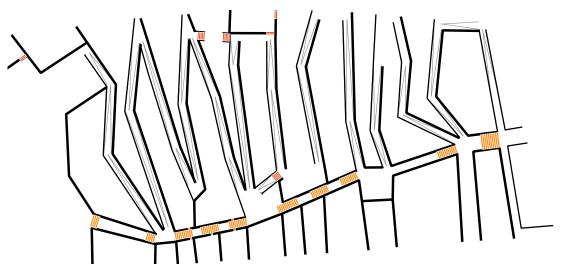


figure 7.2.74: slope gradients and stairs

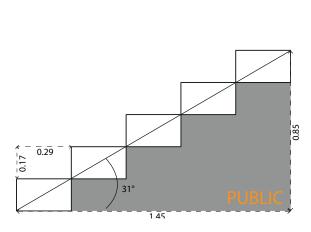
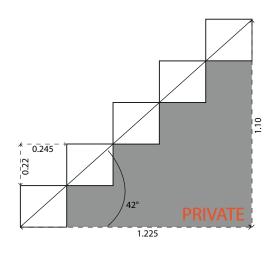


figure 7.2.75: public and private stairs 1:200



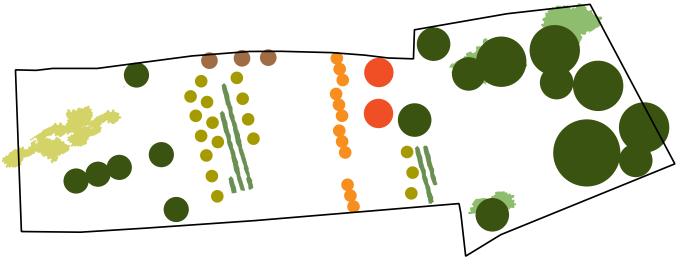
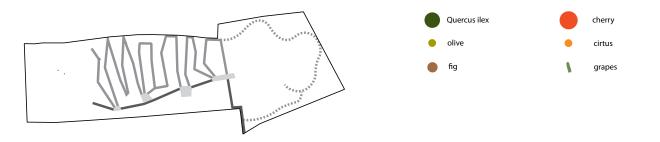


figure 7.2.76: vegetation scheme



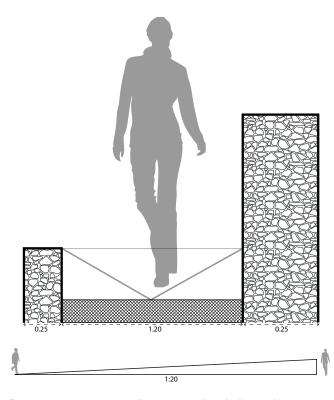


figure 7.2.77: constant gradient 1:20 on the winding path



figure 7.2.78: terraced gardens source: farm4.static.flickr.com

3. Rector's palace

The area around the former Rector's palace, including some very old indigenous trees, is an attraction itself. By putting little attention and afford to the old ruins, an inner space can be created which provides opportunities for tourist activities out of the season.

During the workshop, questions were asked about what to offer tourists in wintertime when it is raining or very windy. This covered area can serve as a place for indoor activities, varying from a museum to yoga sessions.

It also offers a perfect setting for the exhibition of local fine art. This new functions make use of the abandoned cultural relic and offers new opportunities for diversification of the islands tourism product. This design could therefore contribute to the on-going debate about the relationship between the historic fabric, existing place-bound values and the natural landscapes in contemporary spatial interventions on the island of Lopud, by making use of the local identity for future development (Ruby et al., 2007).



figure 7.2.80: impression of the Rector's palace seen from the community gardens



figure 7.2.79: artists atelier on Lopud



figure 7.2.81: local painters work

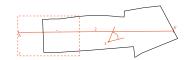






figure 7.2.82: recent art pavilion



figure 7.2.83: 'Your black horizon'- exposition in the pavilion

Chapter 7.3

Local design valleys Mravinjac



Introduction

7.3.1 Mravinjac in the regional context

Mravinjac is a small village in the hinterland valley and has about 80 inhabitants. It is located in the center of the most northern valley, between Mrčevo in the south and Riđica in the north. Via the mountains the village is connected with Brsečine.

In the regional plan Mravinjac is the hub of the extensive rural tourism zone. It is connected with Brsečine by a mountain train and hiking paths. From the arrival point of the train Mravinjac functions as main village in the Mravinjac-valley. From here the other two villages in the valley (Mrčevo and Riđica) can be reached, just like the higher polje of the village and the village of Dubravica. On the mountain side the wild nature of the mountain area can be reached via a small valley, leading to the abandoned villages of Kruške and Selišta, located in dolines. Via the road the valleys of Gromača and Majkovi can be reached.

The tourism focus of Mravinjac is based on extensive rural tourism, active & adventure tourism and gastronomy & local products. The biggest differences with the Gromača valley are that in Mravinjac the focus is on active tourism; hiking

and biking. This is stimulated by the extensive path network in the valley and mountains. Next to that the Mravinjac valley is hard to reach by car, but mainly accessible via the public transport. Due to this the village and valley are focused on small-scaled tourism, day trips and small overnight stay accommodations.

7.3.2 Site analysis

7.3.2.1 Tourism analysis

Tourism never reached the village of Mravinjac, this is one of the facts why the village is kept very authentic. The only tourists are some bikers or motorists who go for long-distance inland trips.

The attractions

In Mravinjac there are currently no attractions

The facilitities

Just like the attractions, Mravinjac has no tourist facilities, not even normal facilities



figure 7.3.1: Location of Mravinjac in the regional plan

The routes

The main route in Mravinjac is the road connecting the hinterland valleys and connects Mravinjac with Mrčevo and Riđica. This road is sometimes used for day-trip motorists or bikers, but quite narrow. During our visits we just saw three German motorists. The other route which is sometimes used by tourists is the old mountain path which leads to Kruške and the Bosnian border.

The landscape setting

Because of the absence of attractions and facilities the landscape setting is the only reason for tourists to visit Mravinjac. Tourists visit the village because of the authenticity, the well-functioning traditional agricultural system and cultural relicts. The landscape setting of the Mravinjac valley is stunning, but today visitors only experience the views from the main road.

7.3.2.2 Landscape analysis

As stated in the general landscape analysis the valley of Mravinjac contains three main landscape-units: the poljes, the dolines and the rangelands.

The poljes are the lowest landscape element and are large, flat agricultural fields. The village counts four poljes, one central polje (950x300m) around which the several small clusters of houses are located, a smaller polje in the direction of the coast (600x200m), a shared polje with Mrčevo (1600x300m) and a polje which is located in the hills out of the village in the direction of Dubravica (650x400m). The poljes are used for agriculture production, with a wide range of products like

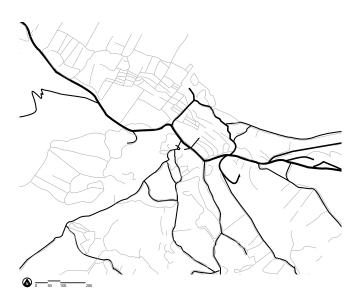


figure 7.3.2: Routes map



figure 7.3.3: The main road functions as main tourism infrastructure



figure 7.3.4: Polje with authentic agriculture, experienced from the main road



figure 7.3.5: Landscape setting map

olive groves, fruits, potatoes, herbs, vegetables and orchards. The agricultural system is very authentic and mixed use, so very diverse. Most of the poljes are surrounded by dry stone walls and linked by a genius system of paths and droveways. To even make the agricultural plots in the polje flatter on the sides dry stone wall terraces are built.

The dolines are smaller karst depressions and have more functions that the poljes. The dolines are scattered over the landscape of the rangelands and most of them are located near poljes. Just like poljes dolines can be used for agriculture, but they have more functions. The more remote dolines are used as shelter for cattle, drinking water reserve or meadow.

The rangelands are the rest of the landscape of the valley and consist out of woodlands. These woodlands are higher in the landscape and thus drier. The landscape consists out of bushes and scattered trees like holm oaks and cypresses. The underlying meadows are used for cattle to graze, like goats, sheep and cows. They are kept on the land of the owner by dry stone wall fences between them and can be transported to the village or to dolines by using the smart system of droveways, made out of local dry stone walls.

7.3.2.3 Natural and cultural qualities

In this paragraph the natural and cultural qualities of Mravinjac as we experienced them will be listed. Because we weren't able to do a workshop or conversations with local

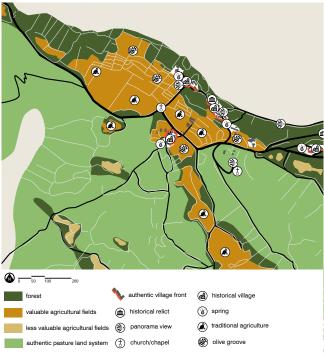


figure 7.3.6: Qualities map

stakeholder due to language barriers the input of locals is absent.

Natural qualities

The natural qualities of Mravinjac include the pristine nature and the balanced way of living. Because of the remoteness the valley has not been developed into a modern agricultural system. This means that the local inhabitants are still living in harmony with the nature and use the nature as source. The woodland rangelands are typical examples of how this harmony works, as it is a nice combination of nature and human occupancy. Also the diverse landscape with dolines, highlands and hills can be seen as a major natural quality.

Cultural qualities

Mravinjac is because of the remoteness and absence of tourism still a very authentic village and therefore the typical



figure 7.3.7: Traditional droveway from dry stone walls



figure 7.3.8: Authentic clustered village

indigenous farming system and lifestyle is still present in the area. This is visible in the way of cultivation, in the poljes a small-scaled agricultural system with great variety is present, focused on self-sufficiency. No big modernizations have taken place, they don't even have use a tractor. The villages are clustered on the edges of the polje and a couple of clusters together form a village. The churches are located in between the clusters, one in the polje and one on a hill overviewing the valley.

The landscape around the polje is typically developed in a traditional way with the use of local dry stone walls. The local inhabitants built with them a complex system of droveways, cultivated dolines, fences between meadows and trading paths to the coast. Because of the fact that this systems are still in use it is well maintained and in a good condition.



figure 7.3.11: Authentic mixed agriculture in the polje



figure 7.3.9: Wide views over the valley and rangelands



figure 7.3.12: Small droveway in rangeland



figure 7.3.10: Clustered village



figure 7.3.13: Cultivated doline

7.3.2.4 (Spatial) problems

The main problem of Mravinjac is the remoteness, the village lacks a good connection with the main infrastructure and suffers therefore from poverty and depopulation. This remote location also causes that tourism never reached the village. One of the main spatial problems is illegal waste dump, which causes visual pollution and has a bad influence on the authentic character. Next to that the connections with the mountains are getting worse as they are not used anymore in the everyday life. Due to this some paths start to be overgrown.

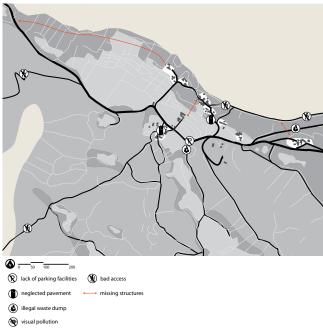


figure 7.3.14: Spatial problems map



figure 7.3.15: Depopulation: abandoned houses



figure 7.3.16: Overgrown path to the mountains



figure 7.3.17: Illegal waste dump next to the road



figure 7.3.18: Car graveyard: problem or cultural heritage?

[intermezzo]

Brixentaler Kochart: local products

In 2008 a group of local farmers, restaurant owners and tourism entrepreneurs in Brixental, Austria started to make a great idea becoming reality. They became sick of the idea that most food was imported and fast food was the general way of eating.

They were convinced that their own local products, which they grow with great precision and tratition were much healthier and better. Especially when combined with typical local cooking and traditional dishes. And so they started a project to start cooking traditional dishes, made from seasonal local specialities grown by local farmers.

Today nine restaurants in the Brixental are working with this local products and recipes, all receiving the Brixentaler KochArt label, which ensures the customers that their meals are made from local products. On the menu-card even the farm where the products are coming from are named.

By this the local farmers are promoted and stimulated to continue farming and making agriculture more profitable. Also the use of seasonal products like wild meat and mushrooms are promoted, just like the comeback of forgotten traditional recipes. Also local wines are included in the system.

The power of the concept is that several local entrepreneurs are working together to promote and stimulate the local

identity of the region and let the tourist experience the character of Brixental and Tirol not only by the normal elements, but also by tasting the region. By doing so the local economy is stimulated and extra tourists are attracted by the concept.

The project can be considered as a great success, not only because tourists can enjoy the taste of the Brixental. The restaurants are clearly more popular than other 'normal' restaurants and they even are located on the ski slopes of the ski resorts. Next to that the interest of tourists in the local products and cooking is increased rapildy, which led to the introduction of related activities like markets where local farmers sell their products, excursions on the farms and cooking workshops.

By working together on the local authentic image a complete new tourism market has opened up and the local economy is stimulated.



figure 7.3.19: A local farm in the Brixental (source: brixentaler-kochart.at)



figure 7.3.20: Reclam poster of the different activities (source: brixentaler-kochart.at)



figure 7.3.23: Some of the local farmers (source: kitzbuehel-alpen. com)



figure 7.3.21: Also local wine is included in the project (source: kitzalps.com)



figure 7.3.24: The Brixentaler KochArt-label (source: kitzalps.com)



figure 7.3.22: The cows of Staudachstub'n in Kirchberg i. Tirol: a combination of a farm, restaurand and 'gasthof'. They use the traditional almen-culture to let the cows graze (source: brixentaler-kochart.at)

7.3.3 Connection with tourism

The site analysis discovered the natural and cultural landscape qualities as well as the problems which are present in the area. When combining these with the tourism target groups, the connection between tourism and the landscape can be explored. The landscape serves as a base by providing potentials for tourism development.

The main attractions for Mravinjac based on the landscape qualities will be the authentic clustered villages, authentic cultural landscape, nature and traditional small-scaled agriculture.

The cross-section shows the valley of Mravinjac, as analysed in the previous paragraph. The section is further explained by the determination of local landscape structures, in order to identify place specific characteristics and qualities.

The table below the section represents the potential presence of a tourism target group. These are one by one examined by their needs and demands for a certain location in the A.F.R.L.-scheme, as described in figure 7.3.19.

This is projected on site, while using the landscape characteristics as anchors for tourism potential. The grey bars are indicating the expected suitable areas in which a certain potential tourism target group might occur.

Striking in the scheme is that some tourism target groups occur only in certain parts on the section (like restaurants), while others (in potential) can use the whole landscape profile for tourist activities. This can be used to develop hubs



figure 7.3.25: The polje can be used for rural tourism

and spokes, in a hub the clustered tourism target groups are located, while the other tourism target groups can link the hubs into a system.

The clustered villages can serve as hub for the rest of the valley. Because there are no houses outside the clusters, the clusters are the place where accommodations, restaurants, shops, exhibitions, rental facilities or excursions can be facilitated. The rest of the surrounding landscape can be used for active and rural activities like hiking, biking, guided tours, harvesting etc.

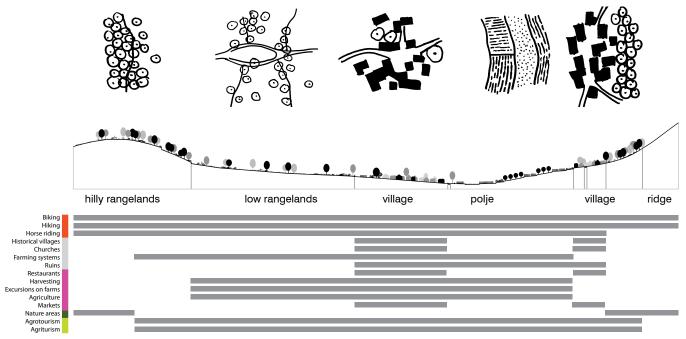


figure 7.3.24: Section of the Mravinjac valley with TTG's

7.3.4 Design challenges and concept

The biggest quality of Mravinjac is the authenticity and identity of the valley, just like the traditional lifestyle. Therefore it is very important to preserve these qualities and not overdevelop tourism in the area. Therefore the design challenges are to connect the tourism potential with the qualities of Mravinjac. For example integrate tourism in the traditional agricultural system or use the historic droveways for hiking paths. When this lifestyle can be integrated in the tourism product this becomes a priority to preserve the site identity. The pitfall is that it becomes a museum landscape, that should be avoided.

Therefore the design challenges are:

- Integrate the tourism in the local structure
- Use the clustered villages for facilitating tourism
- Preserve the typical authentic identity
- Make good connections with the surrounding villages

Because of the fact that we weren't able to do interviews or workshops we don't know the wishes of the local stakeholders. By doing a workshop it will be possible to test some concepts for the development of the valley and make the local stakeholders aware of the possibilities. Therefore this design will be different from the other two local designs. In order to prepare for a possible workshop and show how different concepts can be developed for a workshop two concepts will be elaborated and the differences between them will be shown. Because of this also no site design will be made.

Concept 1

The first concept is to cluster the tourism development like facilities, accommodations and attractions in two clusters, so two clusters are focused on tourism while the other won't be developed for tourism, saving the authentic image.

Concept 2

The second concept is to spread tourism over all clusters. In this there is less guidance in tourism development, but locals can start to develop tourism in each cluster. The side note in this that however it is called spreading, all developments should be done inside the current clusters to avoid sprawl.



figure 7.3.26: Concept 1: clusters



figure 7.3.27: Concept 2: spreading

7.3.5 Spatial phased development

In both concepts the arrival of the mountain train in phase two is the biggest development, phase one is used to start up the first tourism, while the second phase is focused on facilitating the biggest growth. The third phase is based on further development and an increase of capacity.

Concept 1

For the first concept the two biggest clusters are used, one with a good connection to the rangelands and Ridica, while the other has a good connection with the mountains, because the old path to that landscape zone is starting from there. In the first phase the current empty houses will be restored and used, in the later phases when all empty houses are restored new houses will be built in the typical clustered structure.



figure 7.3.28: Development phase I



figure 7.3.29: Development phase II



figure 7.3.30: Development phase III

Concept 2

For the second concept all clusters are used, so more houses can be used for restoring and redevelopment. This results in the fact that less new houses have to be built which has a lower impact on the authentic image of the clustered villages.



o ligure 7.3.31: Development phase I







figure 7.3.34: Visualisation of hiking paths in the authentic rangelands using the droveways

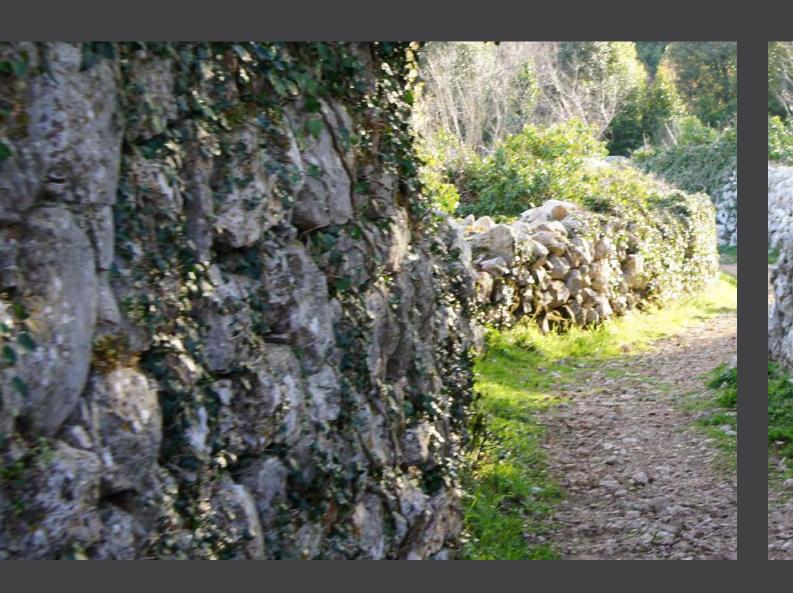


figure 7.3.35: Visualisation of the polje of Mravinjac



figure 7.3.36: Visualisation of tourism on the mountain plateau





Chapter 8

The regional-local nexus



8. The regional-local nexus

8.1 Reflecting the six steps of the integral design approach

After having finished the case study on the Dubrovnik Riviera it is possible to reflect on the test case and to set general outcomes. By doing the case study we tried to make the theoretical framework and the hypothesis concrete by testing the six steps to come to an integral design strategy for sustainable tourism development. In this chapter this test case will be evaluated in order to improve the six steps and participation processes and distinguish conclusions.

In the first step the relation with the wider context was tested. We noted that it is very important to investigate the wider context as it has a certain influence on the design for a region or local plan. In the case of the Dubrovnik Rivièra, the investigation showed that its geographical position in the south of Croatia, separated from the rest of the county by a 8 km coastal enclave of Bosnia-Hercegovina, means that it is difficult to reach by car. The majority of tourist arrivals is therefore depending on airplanes and ferries. The city of Dubrovnik therefore functions as the main distribution centre of the region, which has a strong influence on the transportation networks in the region. Also on the local level it is important to understand in which zone the village is located, what the relation is with the neighbouring villages and how the transport is organized.

Therefore we can state that it is important to investigate its wider spatial context and define which external effects are influencing the location. The nearby presence of an airport, harbour, large city, national border etc. can have major impact on the way the area is organized and functioning.

In the second step the complete area has been analysed to understand the current state of the landscape, tourism, the natural and cultural qualities and the problems. In this analysis we remarked the importance of participation and other input of local inhabitants. For a (foreign) researcher as outsider it might be hard to know what is exactly going on in a village and community. Therefore was the input that we got from the locals very useful to detect several problems, qualities, land use and social relations. Next to that our role as outsider was also very useful to be refreshing and unprejudiced, so we could detect some problems or qualities that locals didn't notice. This stimulates the locals to think about who they are and become aware of the problems, qualities and possibilities. The combination of experts and locals makes it able to make a complete picture. In this participation the landscape architect can play the role of intermediator between the different stakeholders. As in the village of Mravinjac we weren't able to do a workshop or interviews it was hard to make this complete picture, as we are sure that some parts are missing.

By doing the landscape analysis in the study area we discovered the great variety of the landscape. And in the

tourism analysis of the attractions, facilities, routes and landscape setting it was remarkable to see that almost everything was concentrated on the coastal plains, with the orientation on the seaside. This spatial clustering matches with the image of coastal mass tourism, which used to be the main focus of Croatia. In the qualities analysis we came up with mainly landscape and cultural qualities, while the local stakeholders added things like the good relation with the tourists, special local products and the smells of the nature. Also in the problem analysis we remarked that locals were worried about things that were going on, like the abandonment of the agricultural landscape, bad maintenance and the decrease of inhabitants and facilities like shops and restaurants.

Therefore we can state that it is important to get a clear picture of the current status of the landscape and tourism and to know the qualities and problems on each scale. Using the knowledge of local stakeholders by doing interviews and workshops is essential in this step.

In the third step these landscape characteristics, qualities and possibilities were linked to the tourism target groups. By doing this, the potential areas for each tourism target (sub)-group can be defined. The acknowledgement and awareness of local characteristics and qualities is strengthening the local identity and coherence of a tourist destination. In the case of the study area, the connection with tourism resulted in a large diversification. Not only spatially, also currently unknown target groups are introduced in the area, which may contribute to a more diverse, compatible tourism product of the region.

The concreteness of the tourism target groups on specific places differs within the scales, on the regional scale a whole village can be remarked as 'suitable', while on the local scale only some parts of the same village can be remarked as 'suitable'.

Therefore we can state that using the landscape characteristics and qualities as base for tourism potentials is a good and renewing way of exploring the tourism possibilities. The concreteness of this step depends on the scale.

In the fourth step design challenges can be set in order to create a concept for the development of an area. Potential areas of tourism target groups can be combined or spread out, linked or segregated and used as priority or as background. With the concept of zoning, various tourism zones can be created with different focuses, specializations and/or capacity. Instead of only containing of on one or two tourism zones as the case study area does today (on sun, sea & sand and nautical tourism), the overall tourism product can be supplemented by the valleys and mountains in the hinterland which have their own tourist focus or zone as well. But also the coastal villages can offer extra functions like gastronomy or cultural heritage. These specific design

challenges and zoning principle lead to an overall strategic concept for the area which is based on the specific natural and cultural qualities of the landscape. In this step we noticed the importance to use the workshops and other participatory input again in order to specify the image of a village or zone. But also to specify the design challenges and goals, especially for the local designs.

Therefore we can state that it is important to set design challenges as a target for the development of a village or region. Out of these design challenges a concept can be derived, using the principle of zoning, sustainable transport and providing a unique image for a village or zone. In this the participation of step two is essential to use again.

In the fifth step the spatial development over time is tested, as it is impossible to implement the concept of step four at the same time, as it will develop over time. In the case study we tested this by defining for each design concept three phases of development to come to the ideal future situation. Within these phases the first phase is based on where the most development is already located or where the biggest potential is. This development also includes the development of preconditions by the local community or government, so a good starting situation is created to start the new developments based on them. An example of that is that in the first phase of Trsteno the market square has to be built, in order to facilitate the entry of new shops, restaurants and a tourist information centre. Without the construction of the market square these new facilities can't develop. To develop the areas in the right way the local community and local government have to work in a coalition in order to help each other forward. By using phasing the plan also stays flexible and adaptable for changes.

Therefore we can conclude that phasing is a good way to guide a plan from idea to concrete implementation, while creating preconditions for future development and keeping it flexible for adaptations.

The last step of the design process presents the ideal future situation. When the spatial development is finalized, an ideal future situation can be distinguished. This is the target situation to which the area should work

if the trends will stay the same. The ideal future situation consists of a balanced flexible plan, which should be able to handle uncertainties and changes. By doing so the basis will stay the same, which results in the fact that decrease for a certain target group will not result in a situation in which the whole development becomes useless.

8.2 The relation between the scales

Now the six steps are tested and sharpened a spatial plan for sustainable tourism development can be created on each scale by using them. But, as stated in the research gap an integral design approach, which combines the regional and local scale in one integral plan for tourism development is lacking. Therefore it is important to understand the relation between the regional and local scale in order to know their interactions and being able to combine the two scales in one integral design strategy.

The function of a regional design is to provide an integrated, structural plan for a balanced development of the whole region. A regional design with a top-down approach provides a clear overview of the development of a region on local plans and interlinking networks. Within this integrated structural plan the diversity in the region can be guided and the concept of zoning can help in guiding the region into a sustainable tourism region. Zoning can be used to create intensive zones with a focus on tourism, extensive zones with less tourism impact and zones which are specialized for a special tourism target group. By using the concept of zoning the diversity of the touristic region can be secured and conflicting tourism target groups can be separated.

The local design can profit from this regional scale because it sets a number of preconditions for the local development, focus on tourism target groups and the place of the local design in the bigger network. By implementing these preconditions on a local scale the diversity and zoning of the regional plan can be implemented in practice.

The function of the local design is to provide concrete designs that can be developed and built. On the local scale it is easier to detect the genius loci of a certain place, because it needs an in-depth study. The local natural, cultural and historical qualities of a place, which are very important in sustainable tourism, are serving as the base for local development. Next to that the local scale is the scale where workshops could be held, in order to collect the local stakeholders' ideas, problems, viewpoints and last but not least create public support for the development and touristic plans. In a bottom-up approach of a liberal economy, the local stakeholders are the ones who are going to implement the plans in reality. Another issue on the local scale is the implementation of the attractions, facilities and routes derived from the regional design, which can be done more precise on the local scale.

The regional scale can profit from the local scale because of the more precise input of the local characteristics and participatory processes with local stakeholders. The local scale can provide input for specialization of a certain village, more precisely implementation of routes, facilities and attractions and generate public support and an overview of ideas, problems and viewpoints.

To conclude, both scales offer different elements to the integral design, which all together can form a comprehensive plan which works throughout the scales. Both scales have

elements which can be very useful to incorporate in the designs on the other scale, as it makes the link between them stronger and raises the quality of both scales and the practicability of the plan.

So to say, both scales are very important to incorporate in the final plan and can't function well without the input of the other scale. Therefore it isn't possible to state that one scale is more important than the other.

In practice this means that it isn't possible to first make a complete design on one scale and after finishing that, continue with one on the other scale level, which is based on the previous one. Because the interaction between both scales is so important, the designing has to be done at the same time, constantly shifting from one scale to the other by zooming in and out. However, the final regional design has to be finished first, before the final local design can be finished, as the regional design keeps the overview and balance on all local designs.

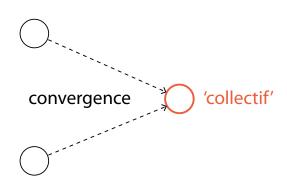


figure 8.1: cooperation between actors results in linked activities which form a 'collectif'.

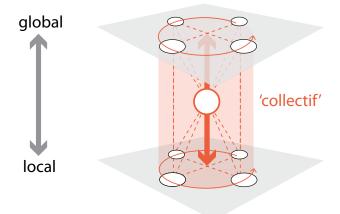


figure 8.2: the 'collectif' creates a compatible tourism product which strenghtens a destinations identity.

8.3 The regional-local nexus

So to state, the interaction between the scales is an important asset to solve the gap to an integral design strategy. Hall and Lew (1998) already stated that one of the reasons that sustainability in tourism development must be studied at different geographical scales is that it takes on different forms at various scale levels. The reason behind that change are the dominating goals of stakeholders and constrains that differ on each level (Hall and Lew, 1998). The interactions between stakeholders not only occur within, but also between these different scale levels, which creates a high interconnectedness. In tourism this is called the globallocal nexus. Global transformations are often influencing the development of tourism. Tourism therefore develops as a consequence of the globalisation processes. On the other hand, tourism is also seen as an important cause of global transformations which accelerates the globalisation process (van der Duim, 2005).

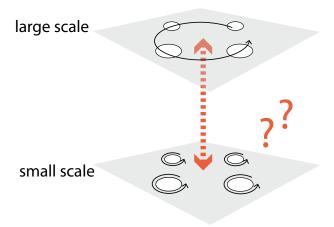


figure 8.3: the lack of an integral approach in current attempts to develop sustainable tourism

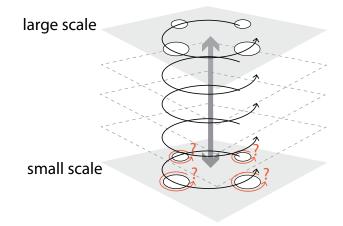


figure 8.4: the lack of an concrete spatial applications in current integral approaches

But, the interaction between the different scale levels not only occurs between the global and local scale. As proved in this thesis and in the case study the interaction between the local and regional scale is also a very important interaction to study.

In the regional-local nexus, the interaction between the scales is even more relevant than in the global-local nexus, because the network space between both scales is much smaller and thus has more influence on each other. Therefore the regional-local nexus is more concrete to work with and to study on.

In the network space, as defined in the actor-network theory of van der Duim (2005) the collectif is acting, not only within a scale but also between the different scale levels. The network space is holding the scales together in which many actors are concatenated with each other. This 'collectif' of heterogeneous entities can transform towards a more uniform network over time, which results in a cooperation of actors which fine-tune their touristic activities, creating a compatible tourism product. In the search for sustainability, which is often linked with the notion of diversification, this strengthening of the destinations identity can contribute to the achievement of sustainable tourism development.

In the regional-local nexus the cooperation or coalition of actors work together to achieve an optimized tourist region. This coalition consists in the regional-local nexus within sustainable tourism development of three parties, the local entrepreneurs, local communities and local/regional governments. By working together as a collectif on the regional scale, a region can be developed which offers a diverse tourism product in which all cooperating villages/local communities add something unique to the overall tourism product.

By doing this each single village can profit from the coalition on the regional scale, because it sets several advantages for tourism:

- by offering a diverse tourism product:
- tourists tend to stay longer in the region, which results in a higher efficiency of tourist arrivals
- the range of tourist types is wider, which results in a bigger market position and is able to handle changes in tourism
- seasonality can be solved due to the fact that the different types of tourism together are broadening the season to an all year-round destination

On the local scale, the coalition of local entrepreneurs, communities and government work together to transfer the outcomes of the regional cooperation in practice. By doing this, the coalition is responsible for the development and maintenance of their own living environment, which is one of the main pillars of sustainability.

These local coalitions can serve as input for the 'collectif' on a regional scale level. When the local coalitions are working together towards a regional coalition, a regional 'collectif can be created. This regional 'collectif is necessary for the construction of a significant regional tourism product. This process of working together on the local and regional scale is defined by us as the regional-local nexus.

The regional-local nexus also puts the attention on economic sustainability, as it focuses on the development of tourism by the coalition of local stakeholders, excluding large foreign multinationals. Due to this different base a micro-economy is developed which is run by the locals, resulting in the fact that the profit stays within the local economy and can be invested again to further develop the regional tourism product.

local 'collectif'

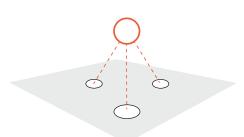


figure 8.5: on local scale level, a 'collectif' can be created by the coalition of local entrepreneurs, communities and government

regional 'collectif'

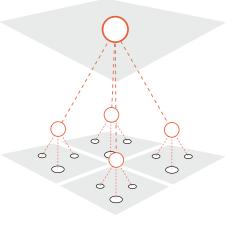


figure 8.6: the cooperation of local coalitions on a regional scale can create a regional 'collectif'

Eventually the money stays within the local community and provides therefore a better future for the region and provides chances for local entrepreneurs to join the tourism section and start their own businesses like giving excursions or selling their local products. This keeps the economy and the system in balance.

To come from the concept of regional-local nexus into practice, the integral design strategy to develop sustainable tourism can be used. This design strategy is combining the multi-scale levels and principles of the regional-local nexus into a concrete roadmap for the development and implementation of a sustainable tourism region in reality. It provides necessary elements to come from basic ideas to the concrete implementation of sustainable tourism.

Firstly it contains participatory processes like workshops, action groups and events. Participation is a strong and important method to use and to create the coalitions and stimulate communities to start working in a coalition with each other on the regional scale. It helps to create awareness of the problems and possibilities and create public support for the tourism development.

Secondly it provides spatial principles to guide and steer the whole region and its villages into the best possible development. This principles are zoning, transportation, genius loci, place-making, the landscape approach and the hub and spokes model. By using this spatial principles a balanced regional tourism plan can be made which is based on the local qualities and landscape setting and prevents the region of becoming homogeneous.

Thirdly it focuses on translating the plans into concrete development, by setting preconditions within the coalitions and phased development plans. Local or regional entrepreneurs and government can help each other in order to achieve the best possible future. They can do so by providing and creating preconditions for each other for further development. Government can do this by implementing public space and structural elements, like the construction of squares, path systems, parking lots, public transport etc. Entrepreneurs can do this by creating new attractions and facilities, which focus on new places or tourism target groups. By working together the entrepreneurs can develop a more balanced and meaningful tourism area.

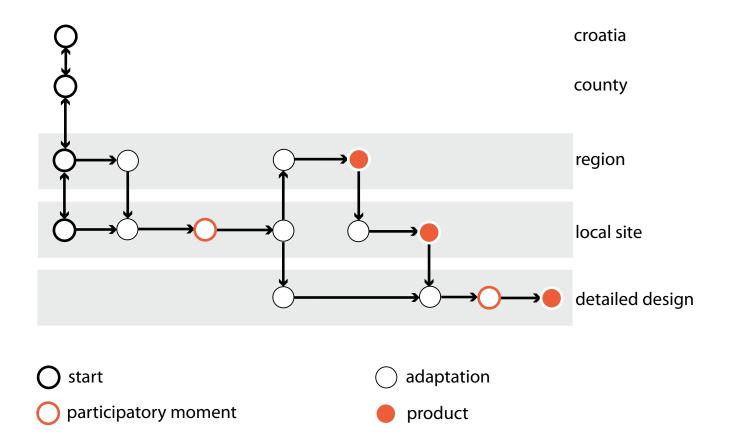
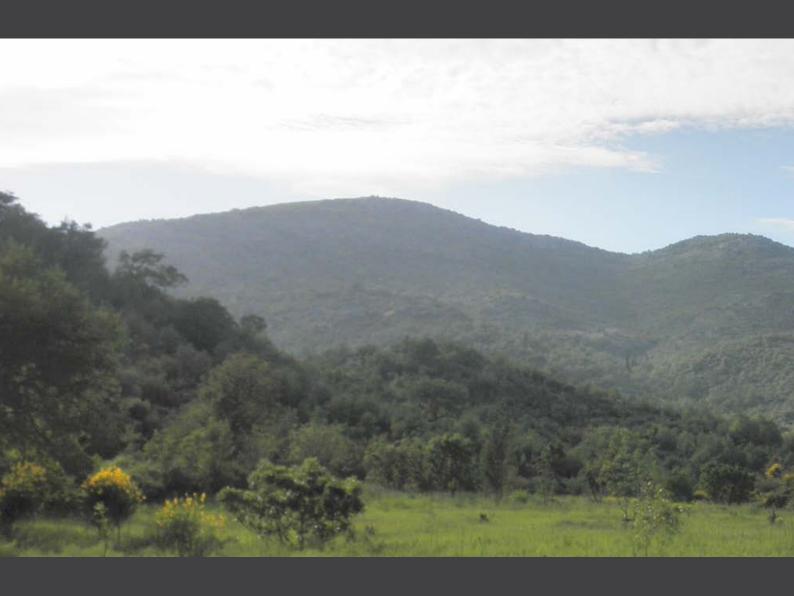


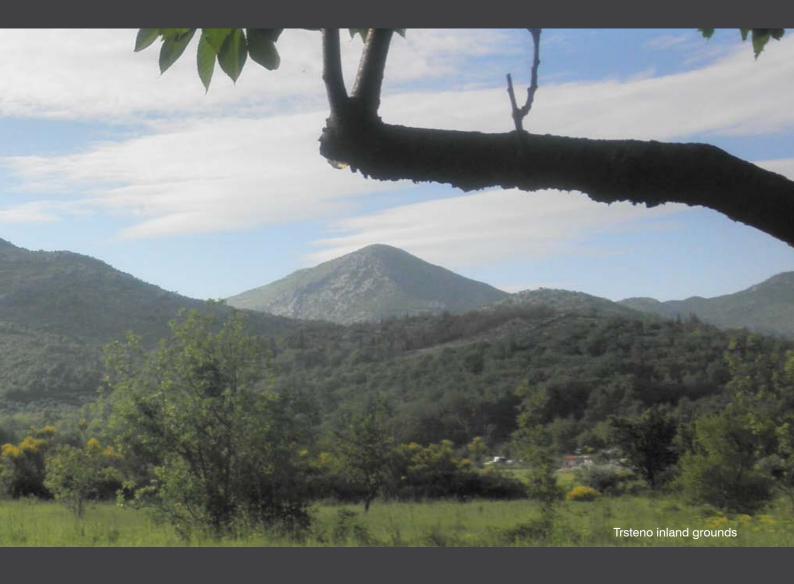
figure 8.7: the integral design strategy is combining the multi-scale levels and principles of the regional-local nexus into a concrete roadmap

These three elements of the integral design approach are combined in the six steps to a landscape-based design as tested in the case study and reflected earlier in this chapter. However, these six steps work on each scale, but not between the scales. Therefore the roadmap of the integral design strategy is developed, linking the scales into one system for regional sustainable tourism development, from analysis, via participatory processes to concrete designs into a phased plan for concrete implementation of all plans in reality. In this roadmap the interaction between the scales is used as a bouncing ball to shift from local to regional scale and vice versa constantly, in order to end with a flexible plan that works on regional scale and on each single village or zone on the local scale. Out of this roadmap concrete spatial designs are elaborated which can be constructed in reality.



Chapter 9

Conclusions



9. Conclusions

Coastal Mediterranean landscapes are subject to major impacts of tourism development for centuries. Literature provides many examples and explanations of how different tourism forms developed along the coastal landscapes throughout the years.

The rapid, uncontrolled expansion of Fordist, mass-tourism causes many problems concerning seasonality and spatial concentration in coastal landscapes. The rejection to this tourism form, post-Fordist tourism, emerged in the appearance of alternative tourism products, which have a greater attention to discover site-specific qualities of the natural and cultural landscape. Bramwell (2004) pointed out that it can be assumed that this latter tourism form appears much more in line with the principles of sustainability, as it is often characterized by its small scale and involvement of local inhabitants. However, it can be just as problematic as mass-tourism.

A theoretical exploration of literature provided insights concerning tourism and sustainable tourism development on one hand, and landscape architecture on the other. It became clear that in the search for sustainable tourism development an integral approach is lacking, as a result of mono-scale interactions. Integral, interrelated processes can be achieved by building on participation. According to the UNEP and WTO (2005), "participatory structures and inclusive processes should provide the basis for tourism planning".

Current attempts to integral development, based on an integral approach, like the ICZM are useful as spatial planning approaches, but lack concrete spatial design solutions. These design solutions are needed in order to control the effects of tourism development on its social and physical environment spatially.

The challenge of this thesis project was to make the combination between landscape architecture and tourism development, for bridging the theoretical gap as described above. Literature shows that landscape architecture possess the ability to cover the missing links in current tourism development, in order to contribute to sustainable tourism development. This contribution is on one hand focussing on the achievement of an integral approach, resulting from participatory processes and the acknowledgement of landscape as integrative, dynamic and evolutionary concept, which serves as a foundation for future development (Koh, 2008).

On the other hand, spatial design solutions are offered which can make sustainable tourism practically implementable.

The aim of this research was therefore to develop an integral design strategy for the sustainable development of coastal tourism landscapes. As following from this aim we formulated

the main research question:

"In what way can an integral design strategy add value to sustainable tourism development in coastal landscapes?"

To answer this research question, two components require further examination. Firstly, the significance of an integral design strategy. Secondly, the way it adds value to sustainable tourism development in coastal landscapes.

To reach this aim, the research focused on a particular case study area: The Dubrovnik Riviera in Southern Croatia. The case study allowed us to test and adapt the design strategy according to local influences and findings. By using the method of research by design, it was possible to make the connection between practice and theory and convert virtual theories into concrete drawings, models, maps and designs. In the case study, the integral approach is translated to a concrete inclusive design process which makes it possible to integrate participation by design. This six-step design process guides through different scale levels, linking the large scale context with local landscape characteristics, resulting in concrete detailed designs.

When talking about the significance of an integral design strategy for sustainable tourism development, it first has to be clear what sustainable tourism is in our horizon as landscape architects. Within the wider picture of (sustainable) tourism this thesis is focused on the development of post-Fordist sustainable tourism. In this post-Fordism the local landscape and culture should function as the base for tourism development. This is in line with the definition of sustainable tourism of Mowforth and Munt (2009), as they state that sustainable tourism exists of four main pillars; cultural, social, environmental and economic sustainability. In other words, sustainable post-Fordist tourism is focused on smallscaled landscape- and culture-based tourism, which can be developed therefore the best by local entrepreneurs and governments, instead of big foreign investors and multinationals.

By solving the problems of unsustainable tourism, like short stays, seasonality and a monotonous tourism offer, the solution which we bring in as landscape architects is to work together in a region, focussing on the local landscape and cultural qualities as base and developed by a coalition of local stakeholders. This mind-set can be named as the regional-local nexus, as a translation of the global-local nexus on our focus area.

Working together in a region offers the chance to develop a diverse, interlinked tourist system, which results in a diverse collaborating region in which each single village can profit from the regional tourist product. By offering a lot of different attractions a wide range of tourism target groups can be attracted, solving the seasonality problem. The widened tourism offer also offers more activities to do and may solve

the short stays problem. By using the local landscape and cultural qualities as base for tourism development, the tourists are attracted to visit the area because of its own qualities instead of for the climate only. By developing tourism by a coalition of local stakeholders; consisting of local entrepreneurs, community and government, tourism is brought back to the lives of the locals and can be implemented in the local culture. This combination of a top-down and bottom-up approach enables a balanced development system and helping each other in reaching the best possible future. These participatory processes are a very important method to use and to include and connect all stakeholders. In sustainable tourism, but also in sustainable development of a region/village it is important to keep a balance within the complex system of a regional community. By doing this the economy and community can function optimally.

When linking this into an integral design strategy for the development of sustainable tourism, the integral design strategy provides a concrete roadmap of how this can be reached and spatially developed. It sets a schedule for designing on the different scales, the input and time for participatory processes and controls the interconnectedness between the scales. This strategy is an important method to guide and steer the design and development processes of sustainable tourism on all scales. Within the different scales the six steps for designing a landscape-based plan for sustainable tourism development as mentioned earlier can be used to come to concrete design solutions and elaborate the outcomes of the integral design strategy in practice. After this regional-local nexus and integral design strategy was tested and sharpened during the case study, it is time to discover if it is matching all four main aspects of sustainable tourism.

Cultural sustainability: In the integral design strategy the landscape approach plays a leading role. This approach uses the local landscape and cultural identity as the base for tourism development. It states that tourists should travel in order to experience a culture. Thus, the typical local culture should function as the base for tourism experience. It denies the idea that culture has to adapt to tourism, but tourism had to adapt to the local culture. Because of this focus, the local culture and cultural landscape functions as base for tourism development and puts attention on preservation of the cultural identity.

Social sustainability: In small villages as in many places, the local communities are considered as very important. They have a leading role in how a village is working and are proud of their environment, which they would like to show visitors. A strong community which includes tourism, can lead to great hospitality and a strong connection between the hosts and guests In this, the locals and tourists together form a community.

In Fordist mass tourism this relation between the locals and tourists is damaged as it separated both groups into two separate entities. The integral design strategy and regional-local nexus reject this separation and use the local community as base for tourism development. Because of this the small scaled developments and the connection between the local community and tourists and the connection between local entrepreneurs and the local community, the collaboration or 'collectif', will become an important pillar for sustainability in tourism.

Environmental sustainability: The integral design strategy includes the landscape approach by using the complete landscape as base for tourism development. Because of this, the environment/landscape forms the absolute base for tourism development and the type of attractions. Due to this focus the role of the environment becomes critical, which means that it should be carefully maintained. Tourists won't visit the area when the landscape is neglected, badly maintained or visual pollution is present like waste dumps.

Economic sustainability: The integral design strategy and regional-local nexus focuses on development is based on a coalition between the local entrepreneurs, community and government and thus on the whole local economy. If the tourism is developed by a local coalition, all the profit stays in the local economy instead of flowing to foreign multinationals. This creates a strong micro-economy and stimulates local entrepreneurs to start small businesses to make money out of tourism, like starting a shop or restaurant, sell local products or organize excursions, guided tours etc. Because of this, the local economy is stimulated and the profit of the coalition can be reinvested to further development of the local or regional tourism product.

Out of this we can conclude that the regional-local nexus including the integral design strategy offers solutions for all aspects of sustainable tourism. Our approach towards sustainable tourism development has proved to be essential in solving the gap in current sustainable tourism development. Therefore this thesis proves that landscape architects can play a significant role implementing sustainability in tourism developments. We hope that the disciplines of landscape architecture and tourism will meet each other in the future more often, because together they can develop tourism landscapes in a sustainable way.



Chapter 10

Recommendations



10. Recommendations

The landscape architectural approach on tourism development fills the gap between ideas about sustainable tourism and the practical applicability of it. This thesis proved that the contribution of landscape architecture in sustainable tourism development is new, but very interesting and promising to the current research and concrete development. By using the local landscape identity as a base for sustainable tourism development, a working, integral tourism system can be created which includes local communities by participation processes.

We discovered that participation is very important component in the achievement of sustainable development, so further in-depth research about participation in tourism development is recommended. This can be combined with further research on the balance between bottom up and top down tourism planning.

During our site visits, we had an interview with the director of the local tourist board (TZ Dubrovnik), spoke to several local people and did two workshops with local stakeholders in our two main test sites; Lopud and Trsteno. These interviews and workshops provided us with a lot of material and input for the regional, local and site designs and delivered us a lot of new knowledge and awareness of sustainable tourism for the local stakeholders.

However, consequent research on the social impact of tourism development by the use of questionnaires or more interviews was not possible, because of our limited time during our

stays. This means that we didn't had any chance to gain more knowledge about the opinions and ideas of local people and tourists.

Secondly, the moment of the workshops and the available timeframe forced us to shorten up the original programme and fit it in a (only) two hour session. Probably, it is better to do more extensive workshops, and on other moments in the design process as well to let it function more optimal. Workshops can add value to the process not only in the analysis phase, but also during the creation of concrete design solutions. Our recommendation is therefore that further research should be done on the role of participatory processes in the development of sustainable tourism. Study to local and tourist opinions and ideas can add more value to tourism development, together with the more frequently execution of workshops on tactical moments of the process.

Ourrecommendations to the locals and government of the Dubrovnik Rivièra should improve their cooperation in the future by developing ideas for future tourism development. What we noticed in the field trips is that both parties have great ideas about the future of the area, but they have no idea of what the others are doing. This fail in communication causes many misunderstandings between the two, however both their intentions are good.

Working together has many positive effects for both stakeholders. Local people are feeling much more appreciated when they are involved in the decision making process. The goodwill to new



figure 10.1: Restructuring Fordist coastal resorts is a different subject. Picture: Salou (source: trajectreizen.nl)

projects is therefore earlier created then when plans are imposed from above. On the other hand, policy and decision makers can benefit from this cooperation by the fact that new developments are realised sooner than when locals are protesting against it. With the right way of participation, it cuts both ways.

This thesis is based on creating post-Fordist sustainable tourism, but as we stated in chapter 2.3 another possible topic for sustainable tourism is to focus on restructuring Fordist tourism into sustainable tourism. This uses the same principles of sustainability, but is a very different subject. In order to research the possible added value or role of landscape architecture in this part of sustainable tourism further research is necessary.

Finally, this project is done on a coastal study area in Croatia, but we suspect that our method and approach can function also in other landscape types and in other countries/cultures. Further research is necessary to test our expectations.



Chapter 11

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Chapter 12

Appendices



12. Appendices

This chapter contains extra information about our research, which wasn't possible to integrate in the report.

The DVD in the book contains extra information about our research, which wasn't possible to integrate in the report.

- digital version of the report
- poster presentation
- thesis flyer
- extensive description of the history of Croatia
- the regional system: flows of resources, tourism and economics

12.1 Political and historical context

The (political) history of Croatia is a serious and very complex issue to address. It's necessary to understand this complex history to understand the current situation and background of the current Croatian culture. Croatia has been controlled by foreign powers for most of its' history. The result is a big cultural mixture within the boundaries of Croatia today. Because of this history Croatia is strongly interlinked to the history of the previous foreign powers; Hungary, Austria, Venice, Rome and Yugoslavia (Bousfield, 2010).

12.1.1 Pre-Yugoslavia

Historically the Balkan including Croatia always has been the boundary between west and east Europe, a very stable frontier which stayed unchanged in 1500 years (Goldstein, 1999).

In general the current land of Croatia can be divided in two parts: the inland and the littoral. Because of the focus of this thesis on coastal tourism this chapter is also mainly focusing on the Croatian littoral. The sea holds a special place in Croatian history. In prehistoric times it was the route that brought the first seeds of European and Mediterranean influence. It brought many immigrants from several places, and took even more Croats away on their voyages of immigration. Goods came by sea, and so did the most diverse influences (Goldstein, 1999).

Before the 4th century BC the littoral was inhabited by small maritime powers of Illyrian tribes. But in the 4th century BC two main new foreign powers arrived to colonize the land of the Illyrians. The Celts arrived from the north-west while the Greeks came from the south. Later the Romans arrived in 229 BC in the area (Goldstein, 1999). From the Roman period which lasted until the 7th century many relicts are still present in today's Croatia: old roads, the amphitheatre of Pula, the city structure of Split and many more relicts.

The big change came when two Slavic folks arrived in the area from the Carpathians; the Croats and the Serbs. Encouraged by the Romans the Croats were invited to settle in Dalmatia, Istria and Slavonia, the current Croatia (Bousfield, 2010).

In the 9th century the conversion to Christianity took place, leading to an intensive development of the Croatian state and (international) trade became important. These changes were controlled by the powers of Byzantium.

But new enemies were on its' way; Hungarians, Bulgarians and Venetians wanted to conquer the land. At first king Tomislav resisted those attacks, but after his death Croatia became part of Hungary in 1102 (Goldstein, 1999). During this period Croatia had one of its' best periods, concluding with a rapid growth of the coastal cities like Zadar and Split

because of trade and Christian crusades to Jerusalem. The Hungarian period lasted until the 15th century.

During the 14th century Venice started to gain parts of Dalmatia, but Hungary kicked them out in 1358. However, the new king Ladislav of Naples sold Dalmatia in 1409 to Venice, to which it'd belong for 357 years. The Venetians overwhelmed Istria and Dalmatia with art and architecture full of Italian influences, which are still a big part of the culture and heritage (Bousfield, 2010).

Dubrovnik held a special place among Croatian cities and developed itself into an independent republic in the 12th and 13th century. In 1358 the republic of Dubrovnik (Ragusa) declared independence from the Hungarian-Croatian king (Goldstein, 1999). The small republic grew quickly by capturing more land and immigrants and refugees from the Ottomans in Bosnia. At the end of the 15th century it had about 90.000 inhabitants and became the leading power of the Balkan and the Mediterranean. The city-state was very prosperous and became rich of trade. The living standards were very high, in the 14th century the city had paved streets, sewerage and waterworks (Goldstein, 1999).

The republic of Ragusa and Venice were enemies and Venice tried several times to overtake Ragusa, but never succeeded. In 1458 the republic of Ragusa switched sides from Hungarians to the Ottomans, gaining a big access to the eastern market and the Black sea (Goldstein, 1999). To avoid a land-attack from the Venetians Ragusa gave a narrow land plot to the Ottomans, Neum, which is today still visible as a strange appendix of Bosnia in Croatia.

In 1797 Napoleon conquered Dalmatia and in 1808 Dubrovnik, ending a long stable era (Bousfield, 2010). But after a revolution in Paris in 1848 Dalmatia joined the Habsburg empire (later: Austria-Hungary).

When in 1914 the WWI started, Croatia started at the side of Austria-Hungary but considering that they were losing the war they shifted sides to Yugoslavia, an union of Serbs, Slovenes and Croats. They did so because they believed that an independent Croatia would be easily attackable for predatory neighbours like Italy, Hungary and Serbia (Bousfield, 2010). On 1 December 1918 the war ended and the kingdom of Serbs, Croats and Slovenes was erected. This new country also encountered Macedonia and Montenegro. In fact this was the birth of the later Yugoslavia, which was established in 1929 (Bousfield, 2010).

During the WWII Croatia became an independent state, apart from the rest of Yugoslavia. This state lasted from 1941 till 1945 and encountered most of today's Croatia and Bosnia. However it wasn't a real state, it was a so-called puppet-state of Italy and Germany (United States Holocaust Memorial

Museum).

12.1.2 Communistic Yugoslavia

During the WWII the biggest opposition movement were the partisans, a communistic multi-ethnic group led by Josip Broz Tito, operated from the isolated island Vis. In 1944 they were recognized by the Brittish and in May 1945 they conquered Zagreb (Bousfield, 2010). After elections in November the People's Liberation Front (KPJ) of Tito won and on 29 November 1945 the Republic of Yugoslavia was erected. This was a federation of six federal republics: Slovenia, Croatia, Bosnia-Hercegovina, Serbia, Montenegro and Macedonia. The discipline of the Communistic Party of Tito had the power to control this federation (Bousfield, 2010).

The need for a fast reconstruction of the country was used by the new government to start with a revolutionary change. Country estates and companies became state-owned and a five-year plan was established with a focus on heavy industry, just like the USSR (Bousfield, 2010). In 1948 Stalin tried to get rid of Tito to appoint a more tractable leader, but Yugoslavia rejected and discontinued all relations with the USSR. This led to a more free type of communism; market socialism, sometimes called 'Titoism'. During the 1950s Yugoslavia began a number of fundamental reforms, bringing about change in three major directions: rapid liberalization and decentralization of the country's political system, the institution of a new, unique economic system and a diplomatic policy of non-alignment (Ramet, 2006). The economic control was delegated to the individual republics with an overview organization in Belgrade to control it. Not only the economy liberalized, also the politics did.

Because of this 'free' market Croatia was able to renew its' spiritual and cultural ties with the west. Because of this Croatia was able to benefit from the economic boom in the 1960s (Bousfield, 2010). The good relations with the west and the fact that tourists didn't need a visa anymore to enter the country, tourism in SR Croatia was revived, expanded and transformed into a major source of income (Ramet, 2006). The government encouraged this by developing infrastructure and building public-owned hotels, resorts and camp sites. Next to that they allowed local people to start bed and breakfast in their own house to reach more capacity (Ateljevic and Corak, 2006). However, the public sector was still playing a dominat role in tourism.

With these successful measures, the Yugoslav economy achieved relative self-sufficiency and traded extensively with both the West and the East. By the early 1960s, foreign observers noticed that the country was 'booming', and that Yugoslav citizens enjoyed far greater liberties than the Soviet Union and Eastern Bloc states (Ramet, 2006).

In 1974 a new federal constitution was introduced that gave more autonomy to the individual republics and gave the same status of republic to Kosovo and Vojvodina, which the Serbs didn't like (Ramet, 2006). After Tito's death in 1980 the federation of Yugoslavia lost its' central leader and was changed to a rotating presidency of the eight republics, which was a weak system. (Bousfield, 2010). In 1987 Slobodan Milosevic became the head of the SKJ, the Bond of Serbian Communist and his ideology was to make Yugoslavia into one federal country again, with the Serbs as ruler. In 1989 a new constitution ended the independency of Kosovo and Vojvodina and Milosevic gained the power in Montenegro. While the rest of eastern Europe became more and more liberal, Milosevic and Yugoslavia wanted to get back to the strict communism (Bousfield, 2010).

These developments were viewed with suspicion by the more western and liberal Slovenia and Croatia. In 1989 Slovenia held its' first liberal elections and asked for changes in the constitution about autonomy of the Yugoslavian republics. The Serbs rejected it and the Croats had to choose a side to support. In January 1990, at the last congress of the KPJ, Slovenia asked for total independency and left the congress, followed by Croatia. In 1991 both Slovenia and Croatia declared themselves independent states and on that bombshell the war started between Croatia, Bosnia and Serbia (Bousfield, 2010). The EU tried to end the war by making a pact, which was established in Geneva and ended in a truce, which was controlled by the United Nations: UNPROFOR. On 15 January 1992 the sovereignty of Croatia was recognized by all EU-countries (Bousfield, 2010).

12.1.3 Croatia towards the European Union

After the homeland war ended and Croatia became an independent state things were going to change rapidly. The communism of the last era and the market socialism system of Tito were exchanged for capitalism. However the first president of Croatia, Tudjman, was still not convinced about the democratic system of west Europe. This resulted in the fact that the parliament had no power, corruption was high and democratic elections were not possible. This resulted into the fact that Croatia was held at a distance by the EU. But after Tudjman's death in 2000 Croatia finally got to the democratic system and capitalism (Bousfield, 2010).

On the way to develop Croatia from a communistic country with a strong top-down approach into a capitalist country with a more bottom-up approach it became clear that there's a long way to go. There were three main problems: privatisation, a mind change and conflicts.

During the communistic period of Yugoslavia a lot of big

state-owned hotels and resorts were built. These were controlled by the state-owned corporations, so there were no external investors in the Croatian tourism market. After the shift to capitalism those big corporations had to be sold to private parties for further development and innovations. But the former large self-administered corporations were simply given another organisational name (as holdings) rather than being demerged into smaller independent economic units before privatisation. In this way competition and personal responsibility did not evolve (Jordan, 2000).

A second legislative obstacle to true privatisation was the fear of foreign penetration that is evident in Croatian legislation and in official strategies. This fear reflects negative experiences from the past, during the inter-war period when Italian enterprises had bought hotels at Istria and in the Kvarner just to let them run down and eventually close them. Due to this fear foreign capital was prevented from dominating the hotel industry and for a long period foreign investors were not allowed to possess land (Jordan, 2000). Also corruption still was a major problem for foreign investors to start in Croatia. These things have changed now, but are still marking the current status of Croatian tourism and privatisation. According to the strategy report of the Croatian Ministry of Tourism (2003) the privatisation process should've been finished in 2004, but today, 2012, it's only finished half.

Another important issue to address is the mind change which is necessary for the change from communism to capitalism. During the communistic period of Yugoslavia everything was planned and controlled by the state (Ramet, 2006). Therefore the inhabitants didn't had to think for themselves, the state provided them with a job and no individual entrepreneurs or creative new ideas from locals were asked or could take place. This way of thinking was dramatic for the minds of the people, they didn't had to think for themselves and therefore never learned to start something new or innovative. This is especially present at the older generations, which are still much in charge and are very conservative. The young generation has less problems with this mind-change to a free market system, so this problem will be solved when the younger generation gets more power.

The last problem are the conflicts of Croatia with neighbouring countries and the aftermath of the homeland war. In relation with the EU, of which Croatia want to be part of now, several difficulties about joining the EU took place. Tudjman was not in favour of the EU or NATO and tried to infringe on the Pact of Dayton in Bosnia by supporting the Bosnian Croats morally.

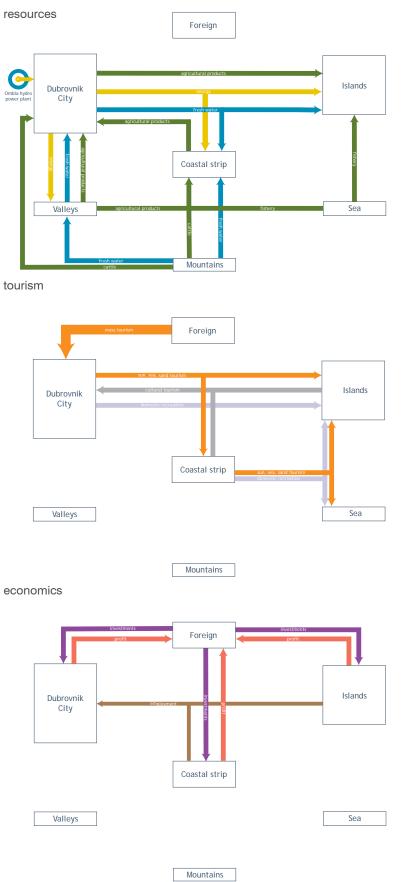
Next to that Croatia resisted to extradite suspicious war criminals to the International Criminal Court in The Hague (Bousfield, 2010). Croatia also had a conflict with Slovenia about territorial waters, on which Slovenia wanted to use

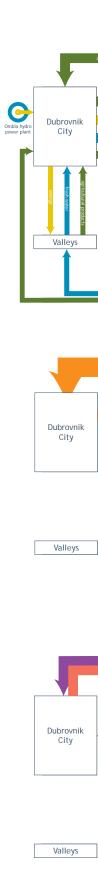
their veto to keep Croatia out of the EU. This problem caused a very late entrance in the EU in July 2013. Another problem is that there are still some properties in Croatia, like former hotels, which are owned by other states like Bosnia, which impedes the reconstruction of the country.

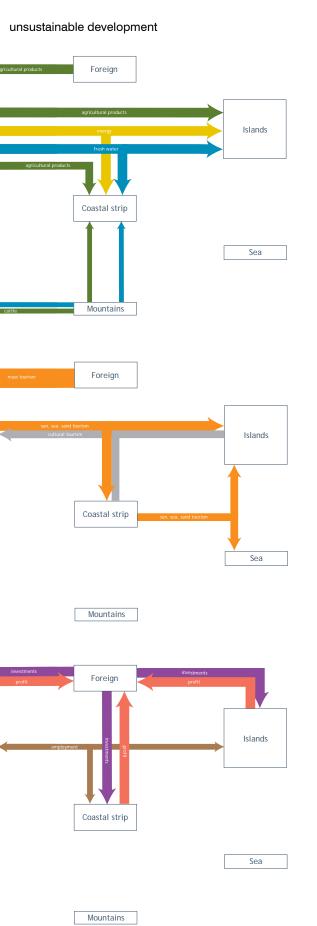
With the membership of the EU in sight Croatia stands for a big change in its' structure and future position. It must get rid of the communistic top-down and state controlled way of leading a country and focus on the free market bottom-up approach and act in a mix of local-national. This is a huge change for Croatia and therefore it needs guidelines and help to reach these new ways of leading a country.

12.2 The regional system

current situation







sustainable development

