

## **The bird hide redesigned. Merging architecture and nature into build objects in natural environments**

A case study towards Bird Observatory 'Tij' in Stellendam, Goeree-Overflakkee, and its potential for tourism destination development and management



**Bird Observatory Tij, Stellendam, Haringvliet delta, Zuid-Holland (Natuurmonumenten, 2019)**

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## Abstract

### Background

An ever increasing number of nature areas is disclosed for tourism and recreational purposes in order to attain visitor attention, offer unique experiences, stimulate future funding for preservation of nature and landscape and to attain local/regional spin-off effects. Nature organisations' way of thinking increasingly shift from keeping nature areas closed for maintaining nature protection and area qualities to disclosing areas for the public in order to raise nature and landscape awareness and to reconnect people with nature. Through the implementation of architectural objects in nature areas, these effects might be encouraged. Bird Observatory Tij, situated in the Haringvliet delta area, in the municipality of Goeree-Overflakkee, is such an architectural object.

### Results

By means of qualitative case studying, the intentions of stakeholders that were involved in the creation of Tij were unraveled. Furthermore, Tij's (potential) role in tourism destination development and management was studied. The results showed that, in view of stakeholders' intentions, Tij is meant to disclose a 'forgotten' piece of land without purpose to an area with purpose by exhibiting the area's demonstrable nature, landscape, cultural and historical qualities to a range of target groups found in birdwatching (tourism), nature and landscape enthusiasts and visitors that are interested in architecture. Furthermore, Tij functions in both local and regional contexts of tourism development and management. Basically every aspect of Tij, which not only involves the object, but the footpath and the tunnel towards Tij also, is created in a nature responsible and experiential way. For example, potential disturbance to birds and the environment is limited by creating the footpath in such a dense and narrow area of shrubs, trees and partly wetland, that not only visitors follow the beaten path, but also that they get in touch with the birds and the environment immediately from the start. From a broader point of view, Tij should act as a gateway, a first touchpoint in their physical customer journey to the remaining Haringvliet delta area. With the creation of Tij, stakeholders aim to raise awareness about nature and landscape which might potentially lead to public support in the form of funding and eventually efforts of nature organisations in nature conservation and development.

### Conclusions

Architectural objects in nature environments could stimulate a wide range of target groups to (re)connect with nature and become aware of natural values. Furthermore, such objects might raise public support for preserving nature. In addition, facilities might lead to maturing the tourism sector by offering a variety of tourism products to visitors and, as a result, lengthen their stay and increase spending.

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## 1. Introduction

### 1.1. Definition of birdwatching tourism

In the last decades, the niche sector of birdwatching, avi-tourism or ornithological tourism has increased in popularity (Kronenberg, 2014; CBI, 2017). It entails the observation of and the listening to birds and their behaviour in natural environments and bird territories (Steven et al, 2014; Vas, 2017) outside people's living environment (CBI, 2017) for the purposes of leisure, valuing wildlife, gaining new knowledge and performing photography (Vas, 2017). Birdwatching is regarded as a soft adventure activity covered under the umbrella of ecotourism (Steven et al, 2014), nature-based tourism (CBI, 2017), sustainable tourism (United Nations, 2012) or wildlife tourism (Connell, 2009), and gains considerable economic benefit in a variety of countries. The United States is seen as one of the most important markets for birdwatching in terms of the number of birders and their quest for birdwatching (trips). Birders contributed for almost \$41 billion on trips and equipment to the US economy in 2011. Moreover, local US economies benefitted with \$14.9 billion (U.S. Fish & Wildlife Service, 2011). Closer by home, the United Kingdom is known as a significant market for birdwatching (CBI, 2017) and it is considered that birdwatching is a market with potential growth in the years to come. Ecotourism as an industry sector is accountable for between 5% and 10% of the global tourism market (Hultman et al, 2015) and is one of the sectors that grows rapidly with about an increase of 5% each year. In order to enable birdwatchers to effectively approach and view birds from a short distance, bird hides (known as blinds in the United States) and/or observation towers are constructed in/nearby important bird areas and birding hotspots. Functionality of hides, however, used to be the prime attribute in the past, reflected in enabling target groups to generate improved access in specific nature areas, safety measures, visitor management and commercial revenue (Rewilding Europe, 2012). For future efforts, "imaginative and well-designed hides can help to generate significant finance for rewilding efforts and can help to engage a variety of local stakeholders" (Rewilding Europe, 2012, p.3).

### 1.2. Prominent bird hides

A vast majority of bird hides worldwide tend to be classic and basic constructions similar to a garden shed consisting of small openings, shutters and/or windows, strictly acting as a functional space. They serve the basic needs of birdwatchers and, to a lesser extent, nature enthusiasts only, however, globally, a variety of hides that are constructed or are planned to be constructed might be perceived as prominent, distinct, iconic, eye-catching, visually and emotionally aesthetical and architectural objects in terms of their design values, construction and appeal and built with varying intentions and functions that are not yet studied in-depth. More specifically, those bird hides might be interesting to other target groups than birdwatchers also, such as the general public, nature enthusiasts, nature photography enthusiasts and/or professionals,

high-end tourists and/or those interested in architecture. This might stimulate (tourism) destination development and management and desirably raise awareness and interest for, and drive interaction with, nature. From an experiential and economical point of view, constructions might function as a storytelling tool, evoke a sense of place and/or act as a gateway to the rest of the nature area in which the object is situated. Moreover, objects could function and as a catalyst for further attempts in tourism and leisure and perhaps other domains as a result of local pride. Furthermore, some constructions tend to have deep social, cultural, historical connections with their surroundings and integrate nature and landscape as most important component into design values. In addition, objects are merged and blended with nature and have little impact on the environment, which is reflected in the shape, form, size and use of materials.

Examples of iconic, eye-catching bird hide structures that (partly) adhere to those mentioned principles are, amongst others, Pape Bird Observation Tower in Pape Nature Park in Latvia (Beebreeders.com, n.d.), the RSPB (Royal Society for the Protection of Birds) bird hide on the coast of Norfolk (Architects' Journal, 2011), Humberto Conde bird observatory in Sintra-Cascais Natural Park in Portugal (Humbertoconde.com, 2019), the CAT Bird Hide in Coed Gwern in Wales (CAT.org, 2019), the Giants Castle Vulture Hide in the Giants Castle Nature Reserve at Ukhahlamba Drakensberg Park in South Africa (Giants-castle.co, n.d.), the combined bird tower and outdoor amphitheatre in Ørland, central Norway designed by Biotope architects (Biotope.cloud, n.d.) as well as the Pico dos Bodes Birdwatching Tower, at the island of São Miguel, Azores, Portugal (Waymarking.com, 2019). The respective bird hides could be perceived as constructions following the principles of nature and may have a wide variety of intentions for different stakeholders that are directly or indirectly involved in the construction process and thereafter, or by other means committed such as, the architects themselves, policymakers and destination development experts, amongst others. Although birdwatchers' main aim is to observe (rare) birds in natural habitats, whereby the specific bird hide spot and its construction might be regarded as less important or appealing to them, it is seen that a variety of architects and nature organisations increasingly focus on building architectural constructions in natural environments, in particular in constructing architectural and worth seeing bird hides (such as Biotope – <https://www.biotope.org.uk/> - and PLANT Architect – <https://branchplant.com/>, amongst others). Those bird hides, for convenience's sake covered under the general term 'birding architecture' and belonging to ecotourism architecture and/or sustainable architecture, are unique, iconic and generally fitting in the

landscape structures that are built in a sustainable way<sup>1</sup>. However, creating such constructions in natural environments raise specific questions and or presumptions, such as:

- What are the intentions of stakeholders that are directly or indirectly involved in the development, application and management of natural areas for constructing architectural bird hides? (e.g. as an art object, for stimulating (birdwatching) tourism, functional reasons, etc.);
- What function(s) should such structures fulfil for the development and management of natural areas?;
- Does the construction of architectural bird hides aim to stimulate general tourists to visit a specific natural area and increase its popularity, or do those bird hides focus on birdwatchers specifically?; And/or:
- Is the construction of architectural bird hides meant as a regulatory measure in order to manage a natural area in such a way that disturbance to surrounding vulnerable flora and fauna is carefully taken care of? (e.g. increase the popularity of a natural area by constructing a distinct bird hide that should immediately grab the attention and control/manage visits to specific locations in the area only, instead of people visiting the most vulnerable parts of the same natural area (tourism zoning system)).

### 1.3. Bird Observatory 'Tij'

In April 2019, Bird Observatory 'Tij' was opened at the edges of the Haringvliet delta area, close to Stellendam, in the most southwestern located part of the province of Zuid-Holland. The hide has the shape of an egg of a Sandwich Tern bird, is eight meter in height and 11 meter in length and enables visitors to view a wide variety of birds in bird sanctuary Scheelhoek, the neighbouring Haringvliet and its sluice complex (Natuurmonumenten.nl, 2019). The bird observatory is designed by RAU and RO&AD architects and is part of a series of icons in and around the Haringvliet delta area (De architect.nl, 2019). Financially, the construction is realised with the help of the Droomfondsproject (hereafter mentioned as Dream Fund Project) Haringvliet which was a joint effort of six nature organisations that joined forces in 2015<sup>2</sup>, and supported by Dutch lottery association Nationale Postcode Loterij, the province of Zuid Holland, BPD Cultuurfonds and a growing number of regional partners in order to carry out a nature recovery program in combination with stimulating recreation and tourism in the Haringvliet area. The reason for this large-

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<sup>1</sup> Such as through the use of sustainable building materials, formation of specific shapes fitting in the landscape and colours, amongst others.

<sup>2</sup> ARK Natuurontwikkeling (ARK Nature Development), Natuurmonumenten (*Dutch Association for the Conservation of Natural Monuments*), Staatsbosbeheer (National Forestry Agency), Sportvisserij Nederland (Sport Fishing Association the Netherlands), Vogelbescherming Nederland (Society for the Protection of Birds), Wereldnatuurfonds (World Wide Fund for Nature)

scale initiative, of which the bird hide is part of, is the slightly opening up of the Haringvliet locks complex (Kierbesluit, Rijksoverheid, 2018), which ensures that the salty water from the North sea slowly flows again into the fresh water of the Haringvliet estuary and vice versa. This measure should stimulate and partly restore a traditionally tidal flow that is so distinctive to delta areas and the mingling of salt and fresh water in order to drive nature to develop, which on its turn functions as a catalyst for stimulating nature and associated bird life, among other things. The overall Dream Fund Project aims to boost the natural values in the Haringvliet, stimulate bird populations, enable visitors to enjoy those natural values, offer citizens an enjoyable living environment and support the local economy (Vogelbescherming Nederland, 2019).

#### 1.4. Problem statement and aims and objectives of the study

The main aim of the study is to construct an understanding of stakeholders' intentions in creating Bird Observatory Tij and its potential role/function in tourism destination development and management. The following problem statement has been set up:

**“What were the intentions of stakeholders for constructing Bird Observatory ‘Tij’ and what roles/functions should the object play in tourism destination development and management?”**

The project has been entirely scrutinized from its preconstruction phase to its completion phase in order to explore what (potential) role/function the hide plays in different contexts. In terms of its societal relevance, this study is relevant to a wide variety of practitioner stakeholders involved in nature tourism policy, nature tourism destination development and management, specifically in ecotourism, nature development, conservation and birdwatching tourism, that are aiming for planning and developing specific architectural objects in natural environments. Moreover, it wishes to outline the meaning of such objects in different contexts, among which are, for example, the societal, cultural and economic. Herein, bird hide ‘Tij’ sets an example of how a specific architectural construction might function as a catalyst for tourism destination development and management. In terms of its academic relevance, the case study wishes to strengthen and elaborate on the understanding of the role/function of nature architecture in tourism destination development and management, since empirical research in this specific field is not available. The objectives are more of a practical nature and include:

- To formulate an overview of interests and aims of multiple stakeholders in constructing architectural bird hides in natural environments;
- To present in what way such structures (should) work in practice in terms of its values, purposes and functions for nature tourism destination development and management.

### 1.5. Research method

Qualitative case study research, specifically semi-structured interviewing, was carried out with a range of experts in architecture and their principals (nature destination development experts) that are involved in the construction of architectural bird hides in order to obtain a general impression of their intentions for developing such structures and its associated values, purposes and functions for nature tourism destination development and management. Moreover, key informants that were directly and indirectly involved in the construction of bird hide 'Tij' were questioned with regard to their intentions and what role/function 'Tij' should play in nature tourism destination development and management in the Haringvliet delta area. Key informants were of the following organisations: Natuurmonumenten (*Hereafter: Dutch Association for the Conservation of Natural Monuments*) and Vogelbescherming Nederland (*Hereafter: Dutch Society for the Protection of Birds*). Lastly, the snowball sampling method was applied in order to find other parties that were involved in the construction process. In this way, a firm interviewee-base was constructed. Specific information concerning the applied methods can be found in chapter 3.

### 1.6. Structure of the thesis

The structure of this thesis adheres to the following chapters: Chapter 2 will elaborate on literature in the field of the study at issue. Since there is no specific literature available in relation to the role of architectural bird hides in natural environments, the literature review will firstly shed light on the role of architecture in tourism destination development and management in urban contexts. Subsequently, common concepts in architecture building on integrating natural features into design principles will be described. Following, chapter 3 discusses the research questions that are set up in order to accurately elaborate on the problem statement and what methods, and their principles, played a role in obtaining the primary data required for answering the research questions. Chapter 4 discusses the findings that were gathered throughout the primary research phase and seeks to answer the research questions. The conclusion will be discussed in chapter 5, by giving a critical interpretation of the findings and the future consequences and purposes of architectural objects in nature areas and for nature organisations.



## 2. Literature review

Tourism is one of the fastest growing industries worldwide and was traditionally and primarily seen as a positive contributor to economic and cultural development. Increasingly, what has already started in the 1970s, the industry receives negative attention reflected in the impacts of tourism and tourists on environmental qualities of place, pressure on local facilities and modifications within the lifestyles of hosts (Doganer, 2017). The concept of overtourism (Koens et al, 2018) probably best captures the negativism that tourism entails for local communities in a variety of destinations worldwide. As a result of the growing attention for the negative side of tourism, more sustainable and special interest forms of tourism are increasingly being pursued such as, ecotourism, rural tourism, health and wellness tourism and cultural heritage tourism, amongst others, among which a wide variety of niche sectors are to be found. Roughly, these industries are aiming for contributing in different ways to regional and local economies and host communities by avoiding the destruction of a place's qualities seen in historical, natural and cultural attributes and local communities (Boyne, 2003).

One of the niche industries that receives increasing attention, both in tourism interest as well as for research purposes, is birdwatching tourism. In birdwatching research, a variety of research contexts is touched upon, such as the economic, social and environmental effects of the subsector (Jones & Neelson, 2005; Kronenberg, 2014; Şekercioğlu, 2002; Steven et al, 2014). Steven et al (2014) outline that research into birdwatching is a relatively new, however, emerging topic in nature related tourism research, especially when compared to research in the field of wildlife tourism. Performed research focuses generally on studies that study avitourists or birdwatchers, the economic impact of the sector, motivations of birdwatchers as well as the birdwatching tourism market in general. Moreover, research subjects such as the quest of birdwatchers for specific bird species and organised events in relation to birdwatching (such as World Migratory Bird Day or very localized bird festivals and events mainly organised in the United States) as well as the negative effects of birdwatching tourism on birds are researched to a lesser extent.

Studies on tourism destination development and management, on the other hand, have proved to be very valuable to contemporary available literature in the field of tourism. It is probably one of the most utilized concepts that have been addressed by a variety of scholars in different fields of knowledge, highlighting subjects such as, the role of small tourism business networks in destination development (Tinsley & Lynch, 2001), transport infrastructure and tourism development (Khadaroo & Seetanah, 2007), the development of tourism destinations and its integrated multilevel perspective (Haugland et al, 2011), the shift of destination management organisations to sustainable practices in tourism development

(Klimek, 2013) and innovation and tourism destination development (Halkier et al, 2014). Many other scholars preceded and followed those that have been mentioned, however, the variety of topics that were addressed previously shows that tourism destination development and management is a complex system including countless direct and indirect resources, actors and effects often, if not always, crossing the boundaries of the tourism domain.

In the context of the role of architecture in tourism development and management purposes, the number of scholars that addressed the subject is limited. If it is employed, the concept and its significance for tourism development and management is mostly written in connection with urban environments. Herein, the attention is still on the tangible value of architecture, containing the practical costs involved in constructing architectural objects (Scerri et al, 2019), instead of paying attention also to the intangible value of architecture for localities, reflected in, for example, aesthetics and its potential catalyst role for tourism development and management. However, referring back to the interest of scholars that address the topic of architecture and its importance for urban environments and urban tourism, it should be admitted that urban spaces are simply the places where numerous architectural objects are to be found, which makes them interesting places for research purposes, and not so much the pristine nature environments. In this way, the concept of architectural objects in nature environments is just too niche, which ensures that specific literature in the field of architectural objects and their role in natural environments is unavailable.

Narrowing even further down to the role of birding architecture (in the sense of architectural bird hides that are created to facilitate birdwatchers and other interested parties to effectively view and listen to the birds and their behaviour in natural environments) in nature tourism development and management, it appears that, to my knowledge, no academic scholar have ever addressed the topic at issue. There are, however, a few circulating industry reports that discuss for example the users of hides, the types of hides, its planning and construction as well as ownership and maintenance (e.g.: Rewilding Europe, 2012). In these reports, there is given some attention to design-like and imaginative constructions and its potential. Nevertheless, most bird hides still tend to be solely functional constructions that are used for one purpose, and focus on one target group, only: birdwatching and nature-oriented visitors. Given the nature of birding architecture expecting getting beyond the functional value, the topic is therefore important and interesting to focus upon, as it might lead to an understanding of the reason(s) for constructing such constructions and the different values, purposes, roles and functions they might represent to, and/or fulfil for, a variety of stakeholders and natural environments.

Since academic literature in this very specific field is unavailable, the literature review firstly sheds light upon the role of architecture in tourism destination development and management in urban contexts, as architecture is one of the resources that is of fundamental importance for attaining tourism in urban areas. Secondly, common concepts in architecture that build on integrating natural features in different ways in their design principles will be outlined, as Bird Observatory Tij adheres to the principles of nature and landscape reflected in its current form, shape, function, use of materials as well as its place in the environment.

### 2.1. The role of architecture in tourism destination development and management

Historically, architecture is to be found somewhere “between the arts and the sciences” (Scerri et al, 2019, 697) and is contributing to the built environment, but to a wide variety of other domains also such as amongst others, health and environmental, cultural and economic sustainability (Scerri et al, 2019). Architecture is seen as something that is belonging to the build industry (Chia, 2015, amongst others) and is perceived as a phenomenon that might drive new experiences and perceptions resulting in economic evolvment, progress in technology and social change (Klingsmann, 2007). With regard to experiences and perceptions, societies’ needs and demands are increasingly being dominated by desires, whereby the need for basic commodities is subordinated by the desire for emotional fulfilment, especially in Western countries (Muratovski, 2012). From an architectural point of view, Gobé (2001, xxviii, cited in Klingsmann, 2007, 312) clarifies this quite distinct in: “Buildings fulfill needs, but architecture fulfills desires”.

Architecture may be classified according to its values, purposes and functions. Values are seen as both tangible (use of materials) and intangible (aesthetics, image and cultural value). Aesthetically, characteristics such as, identity, vision and reputation that are given by individuals, institutional entities and cities through ideas, ambitions and intentions are important (Scerri et al, 2019). Culturally, architecture may create a sense of place among both locals and visitors. Edwards et al (2008) add that architecture gives aesthetic meaning to a place through the use of remarkable and tangible objects that stimulate to create a specific sense of place, pull visitors to particular places and function as the main focus for visitor interest (Krolikowski & Brown, 2008). Moreover, architecture may stimulate pride and let local communities feel they belong to a place (Scerri et al, 2019).

Architecture may contribute positively to a persons’ identity and ambitions and meet their values that are constructed by economic and social processes (Klingsmann, 2007). From a place-based notion, architecture may be used as a tool for creating and/or enhancing territorial identity (Muratovski, 2012), whereas Rahman et al (2018) add that architecture helps places to construct their own identity. On the

other hand, architectural objects might display the identity of a specific area in which the object is situated reflected in shape, form and use of materials, and may be used as a management and/or conservation tool. Moreover, architectural objects are often utilized for pursuing marketing efforts (Glendinning, 2004). In that sense, the term iconic architecture was conceptualized, which is best described as famous, recognizable and distinctive buildings and spaces that are tremendously visited by the public and which entail special symbolic and aesthetic value to a wide variety of people (Sklair, 2005). Shifting to the value of architecture for tourism, certain distinctive architectural objects may instigate increasing interest among the public (Muratovski, 2012).

For centuries, the built environment in destinations has attracted visitors from far and wide in order to enjoy the “qualities of place and culture” reflected in “architecture, people, food, culture and diversity” (Maitland & Newman, 2008, 232). Basically, one could argue that the functioning of tourism heavily depends on the presence of distinguishing and iconic architecture. Manhas et al (2016) sees architecture as a primary resource for a specific destination and Parkerson and Saunders (2005) add that the main distinguishing components for a city are of a socio-culturally constructed and by human made nature. The distinctiveness and uniqueness of specific city features reflected in architecture provides a city competitive advantage over others and creates a corporate identity and brand value. As a result, especially this uniqueness is prominent and remains in people’s minds.

Iconic architecture is constructed in order to transcend cultural, traditional and local difference, to create city and/or corporate identity (Muratovski, 2011) and is utilized as a tool for stimulating tourism placemaking in urban environments (Rahman et al, 2018). Guetzkow (2002) argues that good architecture stimulates economic prosperity and progress, and tourism in a certain area and displays an areas’ cultural capital (Judd, 2006) to the outside world. The tourism industry utilizes the built environment, reflected in present heritage and modern buildings, in promotion very often (Scerri et al, 2019). Rahman et al (2018) adds that the symbolic and aesthetic value of architecture found in monuments, sculpture, park, scenery, public spaces and landmarks are often used in city branding, and creates a certain place brand (Muratovski, 2011). Moreover, architecture might help places to become better known among the public alluring both visitors and locals as it gives specific significance to place (Ashworth, 2008) that may not be found somewhere else. This makes a place unique and incomparable. Scerri et al (2016) add that places can be better identified among the public as a result of its typical architectural objects. Tourism placemaking as a destination development and management concept, such as carried out by developing certain physical features, changes spaces into places on the basis of a space its features, identities and meanings in order

to give certain meaning to a place in the interest of both locals' and tourists' needs and experiences, so that both groups spend time and money there (Rahman et al, 2018) and enjoy its qualities.

Iconic architecture is often used for supporting and encouraging urban regeneration projects (Scerri et al, 2018; Alaily-Mattar et al, 2018) and may provide a city urban competitiveness, as can be seen in the Guggenheim Museum, that symbolizes the refurbishment of the city of Bilbao in Spain (Plaza et al, 2009) from a deteriorating towards a glorious state and which is often mentioned as the Bilbao effect (Masbounji, 2008). The Guggenheim museum achieved great success in terms of increasing tourism and, as a result, economic benefits by generating millions of US dollars in economic activity in the years after its opening (Rybczynski, 2002). Moreover, as a result of Guggenheim's success, a number of destinations globally strive for constructing their own iconic architecture with the aim to achieve comparable economic benefits (Edwards et al, 2008). Nevertheless, Guggenheim's shapes and forms strictly follow natural patterns as main design principles.

## 2.2. Common concepts in architecture building on integrating natural features into design principles

In ancient times, societies' connection with nature was profound, providing (basic) components for human existence and for surviving everyday life. Nature provided the basic needs for people mainly reflected in food and raw materials, and for constructing shelters in order to hide for climatic conditions. Those shelters were, from an architectural point of view, based on the principles of nature using raw materials, nature's curved forms and shapes. Gradually, society lost connection with nature as a result of technical developments and architectural design changed dramatically in straight lines and forms, being as functionally as possible to serve the needs and wants of society. In contemporary societies, however, there is an increasing need for returning to inner self and a quest for reconnecting with nature for increasing sustainable efforts (Ives et al, 2018). Architecture as a tool could stimulate this process.

Ukabi (2015) based on Lera (1980), lists architecture from a historical point of view showing a variety of design values that shaped architecture and their associated intentions over the years. Design values and their conforming intentions vary between specific movements and ways of thinking in architecture as well as between architects, but whereby the relationship amongst architects and principals is considerably important. Askland et al (2014) add that architecture follows the cultural, social, political and financial changes in society. One of the movements and ways of thinking in architecture that is of growing interest among a wide variety of architects in the past years and the years to come is working (again) with natural shapes and materials in design principles. There is an increasing shift from static, straight and rectangle structures to structures in which natural shapes and forms prevail, following the principles of nature and

landscape in the design process. This way of exercising architecture is, amongst others, an important concept in pursuing and retaining mental health and wellbeing (Coburn et al, 2019) and is framed as naturalness.

Experiencing natural environments is seen as a factor that overcomes negative health issues and stimulates well-being (Cox et al, 2017), not only from a medical point of view, but from a self-reported notion also. Psychologically, the state of mind, attention and cognitive functions (Berman et al, 2008, 2012; Bratman et al, 2015; Berto, 2005) as reflected in reducing stress levels, higher self-esteem, improved energy and vitality levels and perceived health (Coburn, et al, 2019) is considered to be improved by (in)direct contact with nature. From a different point of view, perceiving nature reduces criminal behaviour (Kuo & Sullivan, 2001) and is seen as a factor that improves recovery from surgeries (Ulrich, 1984).

From a tourism point of view, interacting with nature is conceptualized by the term nature-based tourism and may be broadly described as visiting a natural destination in order to carry out recreational activities (Wolf et al, 2019). An et al (2019) argues that a great number of nature tourism destinations are considered to be areas with a protected status. However, perspectives of stakeholders involved in nature conservation and protection increasingly shift from preservation through closing nature areas towards preservation through disclosing nature areas for tourism and recreational purposes in order to encourage support for nature among society, goodwill as well as potential financial returns as a result of visitors' direct experiences with nature, which might ultimately stimulate visitor intention for nature conservation (Stamatiou et al, 2007). Moreover, positive encounters with nature might lead to recurring visitation and word of mouth to other potential visitors (Wolf et al, 2019). The negative side of allowing visitors to visit nature areas for tourism purposes might, however, potentially overshadow the positive benefits, such as inappropriate behavior by visitors that might lead to the destruction of natural resources and increasing disturbance to different species in foraging areas and breeding grounds (Liddle, 1997). This might ultimately reduce visitor experience and result in dissatisfaction (Wolf et al, 2019).

Architectural objects in natural environments might be used as a driving tool to increase visitor attention and experience in nature areas and may potentially lead to nature conservation. However, this is a thin line and architectural objects may lead to too much tourism in a specific nature area. As a result, visitor management should be consciously applied in order to prevent the negative aspects of nature-based tourism. If one would consider building architectural objects in nature areas, there is an increasing tendency noticeable in working with organic designs that are based upon natural and landscape systems, however, being still only a small number of build constructions (Kellert, 2003). Especially in the Western world, forms

and shapes have been based upon idealized shapes, which mainly started from the Second World War onwards. Perceiving organically formed structures, nevertheless, have comparable psychological effects as sensing nature (Coburn et al, 2019). Organic design is best described as building shapes and forms that are based upon natural elements (Kellert, 2005). Gil-Mastalerczyk (2016) describes the combination between build environment integrating natural aspects as “harmonious relationships between created environment and the nature” (p. 1), between man and nature (Lan, 2011), whereby the interconnection between materials and nature is apparent (Gil-Mastalerczyk, 2016).

Organic architecture, a term inspired by the work of Viollet le Duc and John Ruskin (focusing on architectural theory and specific design, Zbasnik-Senegacnik & Kuzman, 2014), invented by architect Frank Lloyd Wright, is probably one the most famous concepts that adheres to the principles of nature and landscape. Other (partly) comparable but differently named concepts are, amongst others, nature-integrated architecture, eco-logical architecture (Maltseva, 2018; Setiawan, 2018; Lan, 2011), green architecture (Ragheb et al, 2016; Lan, 2011)), eco-design architecture (Maltseva, 2018), sustainable architecture (Owen & Dovey, 2008) and biomimicry architecture (Benyoucef & Razin, 2018). Most important aspects what they have in common are the carefully dealing with resources, reducing energy consumption and pollution, integrating nature and landscape, merging with landscape and nature, enhancing environmental qualities (Han, 2011) for the benefit of both man and nature and to create multifunctional landscapes (Yang et al, 2013).

Organic architecture is in contemporary societies best defined and described as a sustainable “relation of parts to the whole” (Alsukkar, 2018, 25), representing a complete object of which each aspect is significant and relates to each other (Alsukkar, 2018) and whereby specific design is applied in order to organise the built environment with respect for (Maltseva, 2018), and inspired by, nature (Benyoucef & Razin, 2018) However, Sullivan firstly defined the organic concept as interacting with concepts such as organism, structure, function, growth, development and form, proclaiming that organic concepts consisting of a variety of functioning parts should display the same qualities as the function of the totality. Therefore, the key concept of organic design is derived from Sullivan’s form follows function dogma (Zbasnik-Senegacnik & Kuzman, 2014). Basically, organic architecture is striving for achieving a balanced relation with its close (natural) surroundings by having minimal negative impact. From an historical point of view, organic architecture is perceived as architecture that to a large extent employs its shapes from nature (Maltseva et al, 2018). The overall aim of organic architecture is to restore society’s connection with nature (Owen & Dovey, 2008).

From a practical point of view, organic architecture generally consists of three elements: materials, forms, laws, expressing that the initial element utilizes (minimal) unprocessed resources such as wood, stone, soil and water. The form of the object should ideally conform with the surrounding landscape and its belonging features the object is constructed in. Laws as the complementary element is the alignment of the structure with nature and its rigid elements. A fundamental way of thinking in organic architecture ignores the expression that architecture imitates the forms of nature, though respects the features of the used materials, and a fluid combination between form and function of a specific object.

### **3. Research questions & methodology**

Following chapter outlines the research questions that have been set up and that should lead to a firm base for answering the problem statement. A brief explanation will be given for the choice of the research questions and what each specific question intends to produce in terms of response in subsection 3.1. Furthermore, background information with regard to the selected case will be presented in subsection 3.2. The methodological aspects, including in what way access to participants and their informed consent has been obtained, how the acquired data was used for research purposes and subsequently analysed, and what sampling method was applied will be described in subsection 3.3 and its associated subchapters. Furthermore, this subsection entails the procedures in which participants have been involved, the procedures and time frame for storing personal information and other data maintaining confidentiality of personal information as well as ethical and legal issues that is adhered to.

#### **3.1. Research questions**

In the development of Bird Observatory 'Tij', a number of parties such as, RAU and RO&AD architects, the Dutch Association for the Conservation of Natural Monuments, the Dutch Society for the Protection of Birds and other parties joint forces with the aim to work on an architectural object. The project was supported by Dutch lottery association Nationale Postcode Loterij, the province of Zuid Holland, BPD Cultuurfonds and a growing number of regional partners. However, what are stakeholders' underlying reasons for constructing such an object in a vulnerable and dynamic area? Following sub-question is aiming for unravelling the key intentions and aims of stakeholders to create bird hide 'Tij':

- What were the intentions of stakeholders that were directly or indirectly involved in designing and implementing Bird Observatory Tij?

In subsequent sub-question, the focus will be on what values, purposes and roles/functions Bird Observatory Tij should represent/fulfil for the Haringvliet delta area (e.g.: as a gateway to the natural environment the hide is located in?; for birdwatching only?; for educational purposes?; For its aesthetic



value?; as a regulation measure?; as a catalyst for further efforts in leisure and tourism in the area?; for increasing sense of place and/or local pride?) This research question furthermore focuses on what practical factors have been taken into consideration and eventually undertaken in order to construct a responsible and experiential architectural object:

- What role/function does, or should, Tij bird hide play in developing and managing the Haringvliet delta area as a tourism destination?

In the final sub-question, a brief focus will be on the visitors that make use of bird hide 'Tij'. The aim of this sub-question will be to familiarize with the values and experiences of end users. In what way do the target groups perceive bird hide 'Tij' and its surroundings? Is it what they had expected of the object? Are there improvements to be made? Visitors' values and experiences with regard to Tij have been gathered indirectly via the direct partners that were involved in the construction of Tij and that became aware of visitors' experiences during field visits.

- In what way do visitors value and experience birdwatching at bird hide 'Tij'?

### 3.2. Background information of the selected case

#### **The Haringvliet delta area**

Bird Hide 'Tij' is situated in the Haringvliet delta area, north of the island Goeree-Overflakkee in the southwestern delta of the Dutch coast (figure 1). Here, the rivers Scheldt, Rhine and Meuse gather and flow into the North Sea after passing by the Haringvliet. Before the delta works were constructed, the three mingled rivers flew directly into the North Sea, however, as a result of the flood disaster in 1953, whereby the surrounding land became flooded and almost 2.000 people died, the urge for a water management system in order to protect the inland for flooding became apparent. The Haringvliet Dam was built in 1970 (Eelkema et al, 2012) and made that the Haringvliet delta turned into an area completely closed off from the North Sea. The dam, which is built at the beginning of the Haringvliet, at the seaside (De Winter, 2014), connects the islands of Goeree Overflakkee and Voorne-Putten (Hannema, 2019) and is completely closed off in the north, whereas the southern part consists of a sluice complex, which enables the inlet of fresh water from the Haringvliet into the North Sea in times of high water levels in inland waters (De Winter, 2014). Nevertheless, constructing the building complex resulted in a largely elimination of ebb and flow and the destruction of plants and animals in the Haringvliet delta area (Hannema, 2019), although the Haringvliet delta area became enlisted as a Natura-2000 area in 2015 (Ministerie van Landbouw, Natuur en Voedselkwaliteit, n.d.).

Next to the safety the Haringvliet sluice complex brought about, the aim was to create fresh water basins facilitating agricultural efforts (Alonso, 2018). Agriculture has been a traditionally important sector for the region. From the beginning of 2019, however, the Haringvliet locks complex will be regularly put ajar in order to restore the gradual transition of the salty water flowing in from the North sea with the fresh water of the inland rivers, which ensures that parts of the Haringvliet will be brackish. The slightly opening up of the sluices should in the most ideal situation facilitate the creation of a long stretch of marshy natural areas along Haringvliets' coastline (Staatsbosbeheer, 2018), including (mud) flats (ARK Natuurontwikkeling, z.d.) and the creation of new nature. This new situation would gradually become an attractive area for waders such as the avocet, oystercatcher, curlew, for ducks such as, the shoveler, tufted duck, common merganser and for bird of prey such as the osprey and the sea eagle (Staatsbosbeheer, 2018), among other birds. In the past years and the years to come, the area has been, and will be, improved in terms of nature development and stimulating human experience by making a variety of areas more suitable and accessible for leisure purposes. To do so, a wide range of recreational facilities such as, waterways, bicycle and walking paths, viewing towers and other facilities (Haringvliet.nu, 2018a) will be created. All investments are partly made possible by the Dream Fund project, an organisational board that is financially supported by Dutch lottery association Nationale Postcode Loterij (ARK Natuurontwikkeling, z.d.) as well as regional and local investors. Recreational development should lead to an economic stimulus for Goeree-Overflakkee and form a catalyst for further investments and developments by (local) entrepreneurs (Haringvliet.nu, 2018b).



Figure 1. Overview map of the Haringvliet delta area (adapted from Synbiosys Alterra, 2019)

### **Bird Observatory Tij and its surroundings**

Bird Observatory Tij is situated in Stellendam, one of the villages that makes up the municipality of Goeree-Overflakkee, in the province of South-Holland. The object is located on an peninsula in front of one of the bird's richest areas in the Haringvliet delta area. It is one of the recreational facilities that is constructed as part of the overall Dream Fund project and utilized as a tool to disclose the area for both nature and recreational development and meant to transform the Haringvliet delta into an area of experiential natural and cultural significance for citizens and visitors. 'Tij' is shaped as an egg of the Sandwich Tern, covered with reed, eight meters in height and 11 meters in length and the object lies in a bed of sand overlooking the Rhine-Meuse-Scheldt delta area, the Scheelhoek nature reserve and the Haringvliet locks (Natuurmonumenten, 2019). From the inside, visitors are enabled to view the surroundings in a 360-degree way. The hide is located nearby the breeding and foraging grounds of the Sandwich Tern colony and a variety of other species.

The initiative perfectly fits Goeree-Overflakkee's position as being a region that is known for its richness of birds and Stellendam living up to becoming the place to be for ecotourism purposes (Gemeente Goeree-Overflakkee, 2017). Currently, however, Stellendam and its close surroundings is insignificant in terms of

its touristic appeal (Gemeente Goeree-Overflakkee, 2016). Tourism mostly takes place in villages that are located further seawards, in villages such as Ouddorp and Goedereede. In figure 2, the exact location of bird hide 'Tij' is made visible.

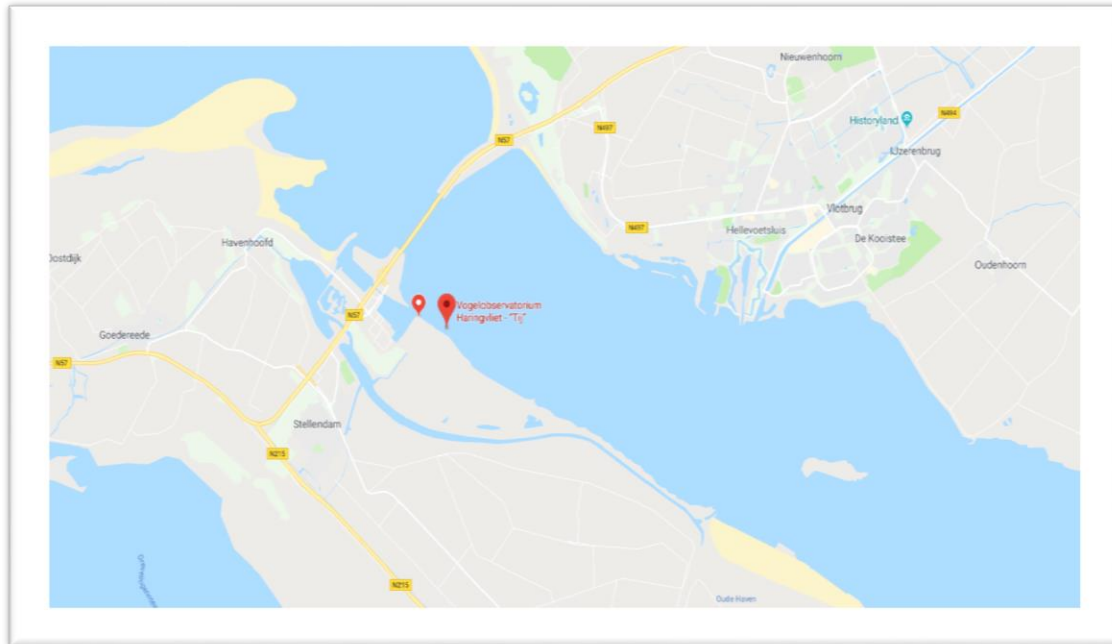


Figure 2: Location of the 'Tij' bird hide (adapted from Google Maps)

Tij might be viewed as an object that is adjusted on, and merged into, its environment, from both a natural understanding as well as from an experiential point of view (plate 1 & 2). In view of the latter:

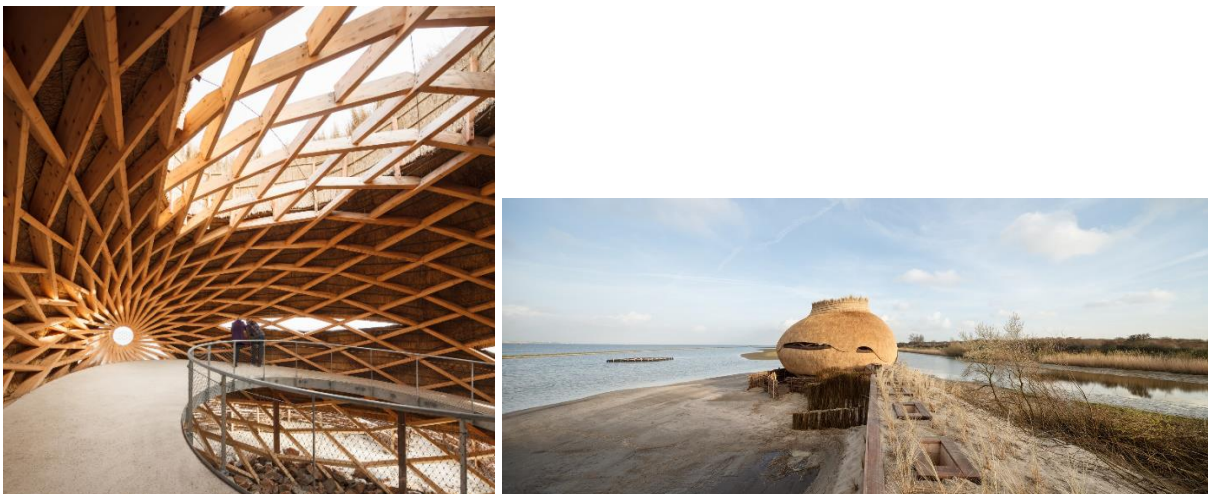


Plate 1 & 2. Interior and exterior and surroundings of Bird Observatory Tij (© Katja Efting Fotografie)

Visitors start their journey as soon as they access the first steps of the footpath from the parking spot by following a semi-sandy and woodchips path surrounded by small trees, shrubs and other vegetation that is so unique for delta areas, and welcomed by a range of songbirds. Here, the first contact between humans and birds is settled. The path is facilitated with signage showing the directions to accessing Tij and the neighbouring nature reserve as well as an information panel about the features of Tij and the area surrounding Tij. After climbing and descending a small stairs, visitors continue their journey and access a range of small plank bridges that span the wet and low-lying part of the route. Following, the area shortly opens up and visitors follow a small curving foot path that is surrounded by shelter in the form of small trees, shrubs and reed. Subsequently, a sort of transition area starts consisting of circular wooden poles and partitioning walls with, rising above, sea buckthorn and reed. From here, visitors get their first glimpse of Tij. Penultimate, visitors approach and walk through a small tunnel in which at the waterside small holes are created in order to enable sand-martin to nestle. In addition, the tunnel is covered with sand and reed and small openings were created in order to enable visitors to sense and listen to the whistling of the birds and the wind that constantly blows. Ultimately, visitors reach the two-story Bird Observatory Tij, an unprecedented parametric Zollinger construction that is almost completely made of sustainable and responsible materials such as, small pieces of pinewood from Finland and local reed as most used materials. In the interior of the construction, the parametric wooden structure is made visible as it is perceived to being visually attractive to visitors. Between the connected wooden parts, different viewing slots are created in order to enable visitors to view the birds and the surroundings from a semi-concrete platform. A binoculars has been installed to enhance visitor experience. The exterior is covered with reed and heathland (right beneath the viewing slots). Outside, the object is surrounded by a small fence made from willow rods.

### 3.3. Case study

Hay (2016) describes that the aim of case study research contains the carrying out of a complete and profound exploration and explanation of a single unit or a small number of units in order to see what underlying processes play a crucial role in the contextual environment of the unit(s) and in what way certain processes influence its development and adjustment. Case studying is considered as a method that is carried out for the most part in qualitative research, although quantitative researchers apply case studying as well, albeit less often. From a practical point of view, examples of case studies might include researching an event (e.g. a disaster), a process (e.g. deforestation) or a specific place (e.g. a neighbourhood). Case studies are researched separately, which means that the findings found in a single unit or multiple units are not a representation of, or generalizable to, other unstudied units in the same research field and cannot

be automatically transferred. For the context of this study, bird hide 'Tij' will be researched as a single case unit. There will be looked at the intentions of a variety of stakeholders for constructing such a structure, its values, purposes as well as functions, and its potential for tourism destination development and management.

### 3.3.1. Processes prior to the interviews were carried out

In this research, one unit/case was studied in order to observe what the involved partners' intentions were in the creation of Bird Observatory 'Tij' and what role 'Tij' should play in tourism destination development and management. Since specific literature in this field was hardly available, the type of case study is a cross-sectional theory generating instead of theory testing (Hay, 2016). Cross-sectional in the sense of carrying out the research once in a particular timeframe (Bryman, 2006) Moreover, one case was selected since this would provide a more complementary and profound exploration of the topic in the specific studied unit. Semi-structured interviewing was seen as the best suitable method, as this method aims to deepen out specific meanings, opinions as well as insights in relation to a specific field of study, but also permits to be creative and flexible during the interview process (Hay, 2016).

### 3.3.2. Processes in carrying out the interviews

The first step in the process was to gather first contacts through scanning the internet on architectural bird hides and stakeholders that were involved in the design of such constructions. The aim of this approach was to become familiar with the topic and to construct a firm knowledge base for future interviews with stakeholders that were directly or indirectly and partly or completely involved in the building process around Bird Observatory Tij. Simultaneously, newspaper articles that specifically dealt with Bird Observatory 'Tij' and the general webpage of Haringvliet (Haringvliet.nu), that showed the efforts that were undertaken in the past years and the years to come, were consulted in order to search for stakeholders, and preferably some contact details, that were involved in the construction process and that could be regarded as potential interview candidates. In this way, a first participant base was set up, including partners that were involved in the Dream Fund Project as well as in Tij's construction process. Initiating contact took place via email, generally by stating the following topics to them, following the general structure of introduction, body, closure:

- Short introduction by the interviewer and his credentials (e.g. name, study, master thesis University of Groningen, in what way the participants' personal information was obtained);
- Aim of the e-mail (e.g. mentioning the topic of study and the importance of the interviewees' position in the context of the study);

- The nature of the interview;
  - Setting of the interview;
  - What (type of) questions to be expected;
  - Duration of the interview

If necessary and where possible, telephone calls were performed when e-mail contact proved to be insufficient. In some cases, a consulted contact forwarded contact details of (a) colleague(s), since he/she was not directly involved in Tij. At the moment a participant agreed for an interview, follow-up e-mail contact was carried out, firstly by thanking the participant for his/her willingness to cooperate in the study and by proposing, and later determining, a date and time on which the interview would be carried out. Moreover, a participant was notified that a concise letter of consent would be created including statements on the nature of the study at hand as well as the nature of the interview, and the rights of the participant in relation to the following subjects:

- Recording the interview (pausing or discontinuing the interview was allowed);
- Confidentiality/anonymity (pseudonyms/anonymity was allowed and is employed in the thesis);
- Usage of the data;
- Checking procedures in regard to the transcript and the concept version of the thesis in the end stage of the process (in order to fill missed/inaudible parts, adjust and/or delete and/or add certain statements)

The letters were sent by e-mail, including the interview questions, ideally a week before the interview was scheduled in order to enable the participant to prepare for the interview. This was especially necessary in case of specific questions and/or issues whereby the participant required consulting policy documents, reports, or speaking with superiors or assistants. Ultimately, the informed consent form was provided with a signature of the interviewee and the interviewer. Signed informed consent letters were returned by e-mail. The letters that were received were stored in a digital secured environment.

Interviews were created on the basis of an amalgamation of both an interview guide and schedule, which permitted to be flexible and natural throughout the interview. A range of questions were listed in the guide as well as key words and/or concepts (Hay, 2016). Moreover, the type of interviewing, semi-structured, generally gave room for stating questions on the spot and enabled to explore specific themes and/or issues more in-depth, which was beneficial to the topic of study. Nevertheless, before the interviews with direct involved stakeholders in the construction of Tij took place, the interview schedule and guide

was adjusted on the basis of performed exploratory interviews with experts from the field of architectural bird hides in nature environments. Those Interviews took place via telephone due to practical reasons.

The exploratory interviews were, furthermore, carried out in order to construct a firm understanding of the studied topic. Participants such as architects and principals (destination development managers) that have dealt, or are dealing, with the creation and/or implementation of architectural bird hides were consulted. In this way, a general impression of a variety of intentions, aims, values, purposes and functions that usually go along with the development and management of architectural hides were obtained. Experts were from the following organisations:

- **Architect, Biotope Architecture & Nature, based in York, United Kingdom and Vardø (Arctic Norway):** *Specifically focusing on designing architectural nature constructions, such as bird hides, nature shelters, outdoor amphitheatres and nature cabins;*
- **Architect, Ulf Mejergren Architects (UMA):** *An adventurous architecture practice based in Stockholm, Sweden, that is partly focusing on designing constructions in nature, such as the Trunk Tower and the Lookout Loop, amongst others;*
- **Projects Development Manager, Royal Society for the Protection of Birds (RSPB), based in United Kingdom;** *The country's largest nature conservation charity and client of bird hide construction organisations such as Biotope, amongst others;*
- **Architect, PLANT Architecture & Landscape, based in Toronto, Canada:** *Architecture and landscape architecture firm creating projects "with a strong cultural-historical grounding, a sensitivity to the nature of individual sites, and a deep interest in how people live in and experience space" (Branchplant, 2019). The name PLANT is derived from plant, since the firm establishes a deep connection with the surroundings for which they are designing an object.*

Following, (key) informants that were (in)directly involved in designing bird hide 'Tij' and its later construction were questioned in regard to their intentions in developing such a structure and what role/function in their opinion 'Tij' should play in tourism destination development and management. The collaborative process in which Tij is created could be regarded as a multi-stakeholder, multidisciplinary approach, as multiple stakeholders with a variety of backgrounds and professions were involved, ranging from project leaders to reed thatchers, architects and birdwatching specialists. A range of stakeholders were involved in the whole process, from the idea to the implementation phase. A small number of stakeholders were collaterally and/or for a specific part of the process involved, such as for example those in the making of an artificial ring dike in order to protect the construction workers, the construction site



and the object for flooding, and/or those that determined the viewing slots in the object in order to facilitate the effective as well as non-disturbing viewing of birds and Tij's surroundings. The stakeholders were part of a project subgroup that was specifically formed with regard to designing and Bird Observatory 'Tij'. Generally, it can be said that a number of the consulted interviewees were involved in the writing of project and development plans and/or policy (directions) and who possessed, and had access to, profound information in relation to the topic of study. Moreover, they possessed an overarching view of the topic at hand, which benefitted the study. Others mainly dealt with the implementation and execution phase at site.

Participant selection by making use of snowball sampling has enabled to identify all participants that were in one way or another involved in the selected unit, but also in the general view of architectural bird hides and its role in tourism destination development and management. Mainly in the end of an interview, the interviewee was asked if he or she would know other partners, including their contact details, in the subproject and that would like to talk to me in relation to the topic at hand. This approach worked out very well. An initially defined number of interviews was not applicable, since it could not be determined in advance how many interviewees needed to be consulted in order to obtain sufficient and thorough information on the topic of research. The saturation point, the point in which no new themes or information in data collection is gathered (Saunders et al, 2018) was, however, carefully considered in order to observe when this point was attained. However, since this is a case study that specifically focuses on presenting a complete and profound overview of a process and a place, the interviewer decided to interview all parties that were involved in the building process in order to give each party a saying and to approach the object from a variety of directions that make up the overall context. During the interview process, a logbook was kept up including the name of the (potential) interviewee, the organisation he/she at the time of the study was working for, contact details (telephone number and/or e-mailaddress), contact history and remarks, expressing what specific events had taken place in the contact between the interviewer and the interviewee. The consulted interviewees were from the following organisations and had the following professions:

- Dutch Association for the Conservation of Natural Monuments – Project leader;
- Dutch Society for the Protection of Birds – Project leader;
- RO&AD Architects – Architect;
- RAU Architects – Architect;
- Geometria Architects Finland – Architect;

- ELG Rietdekkers – Reed thatcher;
- Van Hese Infra – Contractor
- Dutch Society for the Protection of Birds – Specialist birdwatcher and involved in policy and strategy;
- Dutch Association for the Conservation of Natural Monuments – Forest ranger;
- Municipality of Goeree-Overflakkee – Alderman

One of the aims of the overarching Dream Fund Project and the range of belonging subprojects that were (and are still) carried out as part of this large project, such as Tij, was to increase tourism numbers to the area and stimulate local society to further invest in – and develop – the Haringvliet delta area in terms of nature and meaningful recreational facilities. In order to examine the first effects of Bird Observatory ‘Tij’ on society, two stakeholders that were geographically situated nearby the architectural object and that could (potentially) benefit from the hide were questioned in order to learn if, and what, ‘Tij’ at the time of writing contributed to local entrepreneurs involved in the leisure industry. Those stakeholders were:

- Restaurant Loef, Stellendam;
- Marina Stellendam

At the moment interviews started, the interviewer firstly introduced himself and the interviewee was invited to do so also. After the short introduction round, the interviewer once again stated the subject of study, its aim, and the importance of the interviewee in light of the topic. Moreover, the targeted duration of the interview was outlined and the interviewee was again asked for permission to recording the interview by using a voice recorder. Moreover, it was mentioned that the interviewee was able to pause or discontinue the recording at any moment and the interviewee was once again informed that anonymity in the final thesis and other supporting documents was possible. For all interviewees recording the interview was permitted. Anonymity in this thesis was in most cases not necessary. The interviews took-off with easy to answer questions that were meant to establish rapport between the interviewer and the interviewee, and elaborated as soon as the interview continued by asking primary (opening questions focusing on specific topics) and secondary questions (prompts to stimulate the participant to talk further about, and/or to elaborate on, a specific topic). The secondary questions were not listed in the interview schedule and guide, but were formulated on the spot, by common sense, depending on the input of the interviewee. Interviews were closed by expressing the further research process to the interviewee, mainly in regard to asking the interviewee to check the transcript of the recording as soon as this was finished.

### 3.3.3. After the interviews were carried out: transcribing, coding and analysing the data

After the interviews were carried out, the data that was retrieved was verbatim transcribed in Microsoft Word and send to the interviewee for approval. Moreover, in this process, the interviewee was enabled to delete or strengthen specific phrases and/or add new information what he or she would think of to be valuable to the research. Checking was done in most cases and no fundamental viewpoints were deleted or added. After the approved transcript was send back to the interviewer, the data was analysed and coded by using qualitative data analysis software program NVivo.

Coding consisted of searching the data for textual fragments and themes that related to the overall objective of the research. Those textual fragments were firstly interpreted in the open coding process by giving each fragment a tentative label according to its meaning. Following, axial coding was applied in order to identify and cluster themes that were interconnected. The last step in the coding process comprised the designation of overarching core themes (selective themes) to not only comparable axial codes but also to integrate and strengthen specific axial codes into one theme. Consequently, axial codes were combined and an overarching core theme was chosen that matched the selected axial themes. On the basis of the coding process, a coherent analysis is carried out, whereby themes, patterns and relationships were identified. In the results & analysis chapter, the primary data is linked to the research aims and objectives. Phrases and words are used to strengthen specific paragraphs. In light of quotes, interviewees are stated according to their profession.

## 4. Results & analysis

This chapter is build up according to the following components: Subchapter 4.1 starts with discussing the origins of the object. The location-specific intentions with which the object is created for tourism destination development and management purposes and what background processes played a substantial role in getting the construction eventually implemented at the spot is presented in subchapter 4.2. Following, Tij's role in regional tourism destination development and management is outlined in subchapter 4.3. Lastly, subsection 4.4 presents the way in which end users (visitors) value and experience Tij during their visit.

### 4.1. Origins of Tij

In April 2019, Bird Observatory Tij was opened in the Haringvliet delta area, at the edges of bird sanctuary Scheelhoek, and designed, planned and implemented by a multi-actor network that worked together in an interdisciplinary way of working. Tij, initially named as Birds' Eye, finds its origin in the overarching Dream Fund Organisation, an organisation that was set up in response to the by the national government, nature

organisations and other stakeholders intended occasional putting ajar of the Haringvliet sluice complex. This effort slightly ensures the mingling of sweet and salt water and therefore leads to a partly restored dynamics and nature recovery within the Haringvliet delta area. The Dream Fund Organisation's aim is to restore the Haringvliet's natural values (both flora and fauna) in combination with stimulating tourism and recreation by means of establishing six subprojects, among which a range of activities have already been carried out. The Dream Fund Organisation was financially supported by the Dutch National Lottery (Nationale Postcodeloterij), the province of Zuid Holland, BPD Cultuurfonds and a growing number of regional partners. In the subproject recreation, a network of public facilities such as, bird hides/observatories, foot- and bike paths, among other things, were created or are still planned to be implemented in order to make the nature area accessible for the public. Tij was one of those facilities.

Tij derived its name from a public contest (with the aim to raise awareness and public support for the build object) and its meaning is seen as a plural combination referring to the partly restored tides (Tij in Dutch) in the Haringvliet delta area as a result of the occasionally and slightly opening up of the Haringvliet locks, as well as the shape and form of the object, an egg ('t ei in Dutch), of the Sandwich Tern that lays its eggs on the bare sand. When one quickly pronounces 't ei' in Dutch, it listens to 'Tij'. Moreover, the Sandwich Tern is the most important bird that forages, rests and broods on the man-made peninsulas and islands that are situated in front of Tij and further away. In this way, the bird that is characteristic and typical for the area has been chosen to be expressed in a build object. Landscape integration and merging nature into build objects is applied as the features of the build object (e.g. seen in the use of materials and the object's shape and form) as well as how it is placed in the environment (on the bare sand just as the Sandwich Tern lays its eggs) is represented as an identical version of the egg of the Sandwich Tern.

#### 4.2. From idea to implementation, what has happened?

Stakeholders' intentions with the creation of Tij is manifest in location-object specific context (functioning solely for that specific destination and close surroundings), however, in a broader sense of (tourism) destination development and management in the Haringvliet delta area also (functioning in a broader regional scope). The latter will be outlined in section 4.3. This section discusses stakeholders' intentions with regard to location/object specific (tourism) destination development and management and specifically outlines what factors have been considered in designing and implementing an architectural building construction for the benefit of accomplishing a responsible tourism destination. Overall, stakeholders' intentions correspond unambiguously for the most part with each other, except of some differences in understanding in relation to the objects' height and use of sustainable materials. Where architects initially

thought to construct a larger object, other direct stakeholders were in favour of reducing the size of Tij in order to concur with the core values of the organisation. This is expressed by the following quotes:

*“At the moment Tij was in the design process, Nature Monuments was running the campaign ‘Bescherm de Kust’ (‘Protect the Coast’), ..... since a few years ago the minister made the building regulations for coastal regions more flexible which potentially gave room for investors to build holiday parks and so on. We fought against this. However, in designing Tij, we should give a good example. In that way, we looked very carefully to the use of materials and the size of the object. We had several discussions about this in the early stages of the project” (Project leader).*

*“We from Nature Monuments are against coastal development, or high-rise, and then we would implement an enormous egg, so that clashed with our vision” (Forester).*

Moreover, the initial design of Tij consisted of too much steel, which ensured that the natural outlook of the object diminished and that the costs of creating the object became above budget. This led to the decision made by the multi-actor network to replace the design of the initial structural engineer by a redesign of the architectural company from Finland. They made use of mostly natural materials.

*“From the beginning, we had structural engineers from the Netherlands and they took their time in designing the platform and the pillars and connections, but in the end they ended up with a lot of steel in the structure. Every joined was made out of steel, the platform was made out of steel, the pillars were made out of steel and it ended up costing too much, plus it wasn’t visually very nice” (Architect)*

The idea for creating an architectural bird hide came from the Dream Fund Organisation, in which the Dutch Society for the Protection of Birds, the main initiator of the Dream Fund Organisation, issued a contest, including strict guidelines principally with regard to the form, shape, use of sustainable materials, responsible dealing with nature (e.g. preventing destruction and disturbance to flora and fauna, but also designing an object in such a distinct way that visitors are automatically and immediately drawn to the object instead of wandering from the beaten path so that protection to birds and nature is achieved), the design of Tij’s surroundings (e.g. footpath and tunnel) and involved costs to which tenderers should adhere to, for six architectural offices in order to *“realize a remarkable birdwatching facility”, a “spot aiming for pulling audience to the nature area” (Project leader ) an “icon”, a “hotspot” (Birdwatching specialist), “a magnet”, an “eye-catcher” (Reed thatcher,) a “must-visit place”, a “multifunctional object” (Architect), “a nature outing” (Project leader) a “natural artwork” (Anonymous) with respect for nature that suits the needs and wants of different target groups with varying reasons for visiting the area such as, birdwatchers,*

visitors aiming for experiencing “*nature and landscape*” (Project leader) and would like to enjoy “*new thrilling activities*” (Project leader), visitors that are interested in “*culture and architecture*” (Birdwatching specialist) as well as visitors that are willing to learn about the history of the Haringvliet delta area, amongst others, spanning different age categories. In this way, a range of visitors with different intentions and motivations (also visitors that are initially not interested in nature) might become interested in and aware of nature through an architectural object. That the object is meant to fulfil the needs of different target groups might be seen in the position of the object, as normally, *the best way to position a bird hide is with its viewing slots on the North side so that visitors are prevented from light sensitivity/scattering* (Birdwatching specialist). In this case, Tij’s contemporary position has been chosen in order to give the best overview and experience to visitors and to exclude (potential) disturbance as much as possible.

The function of Tij and its belonging components such as the foot-path and tunnel on the peninsula in tourism destination development and management was meant to transform the nature area, which was traditionally without a use value (i.e. fallow land not meeting the criteria’s for Natura-2000) and inaccessible, to an area with purpose and experience value by visually opening up to visitors (physical access in the remaining nature area is still prohibited), as certain natural, cultural and historical values are apparent (such as birds, wildlife, man-made premises, history of flooding), and to create astonishment, awareness, appreciation, public support and respect for nature in all its facets through an architectural object. This might potentially lead to bonding (or place attachment), a sense of place, local pride, evoke feelings for nature protection and, eventually, possibilities for further nature recovery and nature development by nature organisations. Moreover, Tij can be regarded as a catalyst factor that should trigger visitors to visit the remaining Haringvliet area. In this way, Tij should function as a gateway or starting point from which other nature and experience facilities and activities in the Haringvliet delta area can be explored.

Returning to the initial idea, however, the tendered architectural offices were invited for a pitch and eventually RAU Architects from Amsterdam and RO&AD Architects from Bergen op Zoom were selected on account of their sketch they had made and its design and belonging features, the connection with nature (sustainable suitability and attractive to landscape and birds) and visitors (distinct and appealing).

*“Initially, we made sketches for the tender, so we were asked to deliver a first idea, and what we carried out in this was that we performed not only a sketch of the bird observatory, but a landscape sketch also, including: how to access the bird observatory, what are the core qualities of the area, in what way are these*

*qualities visible. From a system level point of view you try to visualize the position of the object, its function, the behaviour of people at the moment the object is constructed, in what way do birds react” (Architect).*

*“On the one hand you try to connect the object with nature and, on the other hand, with humans as well, so that humans take note of it, so in the form and the way in which it is approached, you try to make it interesting to humans, but on the other hand, to make it attractive for the landscape and the birds that are living in the area” (Architect).*

Stakeholders intended to almost completely design the object with respect for, and to tie up with, the surrounding nature and landscape (the expression: human is subordinate compared to nature was used frequently by them), which is not only found in its underlying meaning but in the characteristics of the object and the area in which the bird hide is established also. The natural and asymmetric form, shape and the use of mostly natural, dismountable and partly circular materials have ensured that the object has merged with its environment, but also to exert as little influence as possible on the nature area. The following quotes ideally express the function of the object and its place in the natural environment and vice versa:

*“Every building is part of a system, this can be a social system, an economic system, so we try, in the task, to disentangle the most important systems. As a result, we focus on the role of our intervention on that system, and how can that building, at the moment it will be build, help to improve that system, and how can the system help to improve the building, because: the building is never the aim, the building is always a means for something different” (Architect).*

*“We have the possibility to do it completely in wood, so it fits the area, its location, it fits the sustainability factor that you don’t pour concrete onto that, something that is ecological and then, when it comes to the end of its lifecycle, it can be taken apart” (Architect).*

Basically every aspect that was thought of in the idea, design and implementation phase has been assessed and readjusted again and again by a range of stakeholders that were involved in (a part of) the process and that were able to view the construction and its surroundings from various angles. Involving a range of stakeholders with different professions from a variety of domains is not only a necessity in implementing constructions in vulnerable nature areas and difficult terrain, simply because an architect has a professional understanding of design making and less of construction work or disturbance distances to birds in most cases, but strengthens the quality of the object also, since every aspect is weighed according to its suitability for the area and the recreational and responsible intentions with which the object

is situated. Location assessments by specialists from Nature Monuments, National Forestry Agency, architects, responsible forester of that specific area, constructor, specialist birdwatchers was firstly carried out on the basis of several site visits, know-how and bird and environmental research in order to assess the qualities and vulnerabilities of potential locations.

The following conditions for determining the most suitable location for Tij have been taken into consideration by the different direct stakeholders bearing in mind the overall role and aim of the architectural object in (tourism) destination development and management: responsible dealing with nature and enhancing meaningful experiences of visitors as a result of enjoying nature's splendour and the build object in order to create public support for nature:

- Inland or seawards: in order to distribute tourism from traditional tourism areas seawards to non-tourism areas inland located, or to extend the offer in traditional tourism areas. The inland location was eventually perceived more beneficial since accessibility from different parts of the Netherlands is made easier, but also because of the potential drawing of visitors that visit the Biesbosch to the Haringvliet area (from the east – Biesbosch, to the west - Haringvliet) in order to enable storytelling for marketing purposes and offer visitors a complete experience of the NL Delta area (National Park Biesbosch-Haringvliet);
- The type of soil and subsurface: so to prevent that the object sinks, e.g. in wetland, and that the object is easily accessible to visitors;
- Uniqueness of the area in terms of:
  - Flora and fauna
  - Expressing a variety of (sub)ecosystems, biotopes and landscape features (such as differences in vegetation, balance between wet-/dry land. This ensures a rich biodiversity);
- Bird richness: based on bird count data and expert knowledge;
- Accessibility and presence of nearby parking spots: by different modes of transportation and suitable area to access for maintenance work;
- Nearby recreational/tourism/catering facilities: in order to stimulate catalyst economic spin-off effects in local facilities;
- Governmental land use planning: suitable for the type of object to be established;
- Required permits: e.g. environmental permit;



- Sensitivity to the area: based on expert knowledge, presence of living species in certain areas, specific species that hinder any development (e.g. Tundra vole), consulting reports on disturbance distances to birds;
- (Potential) disturbance: as a result of restructuring the area for the benefit of constructing the object (e.g. building the object with large construction cranes on the spot) as well as at the moment the build object is constructed and thereafter;
- Specific place of the potential object at location;
  - Nature in all its facets should be superior to human, which means that, for example, at times of high tide due to rainfall, the object and the surrounding area might be overflowed with water which makes accessibility rather difficult
  - The object is not only meant for viewing a variety of birds in the most effective way, but also the notion, educational role and becoming aware of: being in the delta area, mingling of salt and sweet water, observing the mighty river Rhine and its catchment area from Switzerland to the North Sea, underwater life, (partly restored) dynamics, water systems, regularly overflowed islands, the Haringvliet sluice complex and its connection to the region's history of flood disaster; named as 'Haringvliet impression'

At the time the location assessment was completed, the full design and implementation phase was carried out including several stakeholders from different professions and domains. Several site visits to other bird hides in the Netherlands (best practice method) were carried out by specialist birdwatchers and other stakeholders in order to learn about the attractiveness of bird hides entrances, disturbance to birds along the way to bird hides, positions of viewing slots, overall impression and feeling when bird hides were visited, among other things. Moreover, local interest/action groups were taken to the definitive location in order to raise awareness and support for the project.

In this process, the overall aim and role of the object in (tourism) destination development and management was once again taken into consideration: responsible dealing with nature and enhancing meaningful experiences of visitors as a result of enjoying nature's splendour and the build object in order to create public support for nature. The following aspects played a fundamental role in the final design and implementation process:

- Form and shape: type of construction (egg or nest), merging the object with nature, attractive exterior and interior to stimulate visitor experience, but also to create it in such an attractive way so that visitors do not depart from the footpath towards Tij;

- Height;
  - Prominent and eye-catching, but merged into nature
  - Not disturbing the birds
  - Based upon maximum height of surrounding trees, but also complying with the internal core values of e.g. Nature Monuments who is against high-rise buildings in coastal areas
- The use of materials: as little as possible unsustainable in nature;
  - Responsible wood (not from primeval forests)
  - Reed (natural product, but also meant so that birds can use reed particles for building their nests and for foraging (e.g. thatched roofs normally contain a variety of insects))
  - Heathland: underneath the viewing slots (so that birds can use small particles for building their nests)
  - Circular
  - Dismountable
  - Use of local materials (reed)
  - Adjusted to the dynamics and characteristics of the area: e.g. accoya (impregnated wood) is used in the lowest point of the construction so that it is resistant to brackish water, the lowest part of the reed equals the highest point of the water, so that the reed is not damaged, and which permits water to freely flow in. Moreover, it gives the impression that human is subordinate to nature: nature is not always accessible, an object merged into nature neither
- Interior design: showing the grandness of the parametric wooden Zollinger construction and to display in what way wood can be used in creating outstanding objects in order to stimulate visitor experience (the wooden construction is perceived to be unique);
- Use of natural colours: appropriate to, and merging with, nature and landscape colours;
- Type of foundation: loose or attached (attached has been chosen as a result of the dynamics of the area);
- Specific position of the object;
  - In a nesting area of the Sandwich Tern or on its edges (Tij is now situated at the edges of the nesting area. Placing an object in a nesting area gives, however, a great experience to visitors, but might potentially lead to disturbance. Moreover, birds do not nest yearly on the same spot and access the object for maintenance work is potentially disturbing as well)

- In an area where different qualities come together (e.g. landscapes, vegetation, (sub-) ecosystems)
- In view of light sensitiveness (in order to effectively view the surroundings and the birds)
- In order to offer visitors the best experience
- Avoiding disturbance to birds: allowable distance to nestling area of the Sandwich Tern (on the islands in front of Tij);
- Height, size and orientation of the viewing slots: in order to effectively view the surroundings the different types of birds and biotopes (based upon expert knowledge of birdwatchers). Small size of the slots have been chosen to minimize disturbance to birds;
- Practical function: recreational as well as to contributing to nature: e.g.;
  - In the sense of adding components such as a tunnel and a foot path towards Tij in order to stimulate visitor experience and to prevent disturbance to birds and nature
  - To create several touchpoints along the way to Tij from where birds can be observed
  - From an experiential point of view, the narrowness of the footpath surrounded with bushes creates a certain atmosphere and might help visitors to become aware of their place in nature.
  - The tunnel with listening holes might give visitors a feeling of excitement but also ensures that visitors are able to approach birds completely unseen and without any disturbance.
  - In view of preventing disturbance, the footpath towards Tij has been kept as narrow as possible in order to hide humans from the birds, but also to prevent humans from accessing the sensitive surroundings in which they are walking.
  - Adding signage, an information board and virtual components for visitors such as an interactive educational application
  - The creation of holes for sand-martin to nestle and the use of reed for enabling birds to use the material for nestling, cover the tunnel with sand for potential nestling
- Exploitation/business model: in the form of including facilities such as, functioning as a visitor centre, catering facilities, toilet, meeting place, visitor centre function (no exploitation has been chosen since this would be competitive to local facilities and, as a result, in conflict with the project's principles);
- Appearance: visibility to visitors from a variety of touchpoints along the way to Tij (e.g. from the road on the Haringvliet sluice complex, from the footpath towards Tij)

#### 4.3. Tij's role in regional tourism destination development and management

Tij is seen as an object that fits perfectly in the landscape, that not only, from a functional and experiential point of view, displays the location-specific richness of the area in terms of different (sub-)ecosystems and its parameters, varying landscapes and vegetation, multifarious bird species and other non-bird species, the river Rhine that flows into the North Sea, nature's elements and build objects (e.g. Haringvliet locks complex), but the surroundings in which Tij is created has been designed in an experiential, however, responsible way also by touching upon a variety of components that have been created or maintained in order to strengthen people's experiences before they eventually arrive in the bird hide, and to create a certain expectation along the way. However, the intentions of the direct stakeholders in constructing Tij is their focus on a wider integral and regional tourism destination development and management approach also.

*"Tij is approached as an individual icon, but, besides that, it plays a really important role in the bigger picture and that is the recreational experiencing of the whole island (Goeree-Overflakkee) instead of the tourism area with Ouddorp and Goedereede as important tourist places only"* (Alderman).

The area in which Tij is created is traditionally addressed as a large-scale agricultural region. Tourism mainly takes place close to the North Sea, with dune, beach and water sports activities being the prime motivation for visitors. Villages such as Ouddorp and Goedereede are considered to be tourist hotspots here. Nevertheless, *"nature is one of the unique selling points of Goeree-Overflakkee"* (Alderman) and should be responsibly exploited as a *"new economic pillar"* (Project leader) for the region. By investing in *new infrastructure from Rotterdam* (Project leader), adding new nature experience facilities and activities to existing tourism products (such as *"closed recreational bicycle networks, small-scale campsites, camper places by marinas"* (Alderman), Goeree-Overflakkee in general is made better accessible from different parts within the Netherlands, the scope of tourism is widened, but scattered among the wider region also, which should decrease tourism pressure in the traditionally known tourism areas to some extent, attract visitors that visit the traditional tourism area of Goeree-Overflakkee to more inland located facilities and activities for daytrips, offer them a wider selection of tourism products and increase tourism to the Haringvliet delta area so that economic development, resilience, public involvement by creating spin-off facilities/activities in other small villages than Ouddorp and Goedereede solely, and that *"an extension of the tourist season"* (Project leader) is stimulated. In this, Tij should function as an iconic gateway to the area, the first touchpoint or encounter of visitors that encourages to further experience the Haringvliet. In the wider context, Tij and a variety of other recreational facilities and activities have been constructed anticipating on NL Delta being

in 2021 an official renowned National Park (Haringvliet and Biesbosch) 'new style'. Aim of this is to motivate visitors that visit the Biesbosch to continue their journey towards the Haringvliet, but also to narrate the complete story of NL Delta, its dynamics and far-reaching effects on other geographical locations along the river Rhine:

*"By then, you see the bond between what is told in the Biesboschmuseum, but also what is told at the gateway in Stellendam, because, eventually, around fish migration and such, it starts with putting the Haringvliet locks ajar and the whole story thereabout can be best told at the Haringvliet and then the link can be created so that during a visit to the Biesboschmuseum it is being referred to and later indicated by stimulating visitors to visit the Haringvliet for a daytrip in order to experience it themselves"* (Alderman).

Nevertheless, dealing with tourism destination development and management, is concerned with a variety of (other) parties' interests in destination development such as, the province of South-Holland, its municipalities, tourism and nature organisations, agricultural parties, organisations involved in wind energy, amongst others. Tourism destination development and management does not only affect the tourism sector on Goeree-Overflakkee, but other parties outside the tourism domain also. Solitary attempts in tourism (e.g. creating Tij), wind energy (e.g. installing wind turbines), in reclaiming agricultural land for nature purposes should be interconnected with each other in order to function properly and to reach a common goal. As a result, different and contradictory interests of all concerned parties need to be thoroughly discussed, adjusted, balanced and harmonized by carefully considering each parties' point of view in destination development and management. Approaching destination development and management in such a way:

*"shows that, in a relatively small area, agricultural interest can be united with nature interest, that sufficient fresh water for agricultural efforts can be realized, but also that new nature in brackish land can be created and that this is made recreational experienceable, and that wind turbines are placed closely to nature areas"* (Alderman).

#### 4.4. Current effects of Tij

The creation of iconic unprecedented objects assists in promoting the area to the outside world, which is seen in the attention given by trade magazines, newspapers and (social) media. Moreover, on the basis of Tij's construction, the object was awarded the ARC19-award in view of its detailed expressions, which gives the object an aesthetical and functional appeal. In addition, Tij is regularly mentioned as being an 'Instahotspot' and is valued positively by the public. All these factors stimulate the object's allurements and increase the popularity among visitors that wish to visit Tij and ensure that Tij is being perceived as a must-

visit place among locals, Dutch visitors and visitors from foreign countries. In the first months after its opening, the architectural object received a continuous flow of visitors from the Netherlands, Belgium, Germany, United Kingdom, amongst others., who are overwhelmed by the grandeur of the object and the impressiveness of Tij's surroundings:

*"Yesterday, the weather was excellent, than it is busy, I encountered between 10-15 visitors, that is a continuous flow, but on a normal day with dry weather, than there is a continuous flow of people on the footpath towards Tij, and that are mostly cyclists, couples that cycle, elderly people"* (Forester).

*"At the moment visitors access Tij, they fall silent and look around, because it is an impressive building"* (Forester).

*"It immediately attracted my attention, it is a thunderous chirping of birds left and right, it is really fantastic, walking to the hide is tremendous as well, and the last part is completely undisturbed, and you recognize this as soon as you enter the hide: there are so many birds on a short distance from Tij"* (Specialist birdwatcher).

*"A few weeks ago, there was an excursion for volunteers, and then White-tailed Eagles were sitting in front of the hide, if that does not make an impression, everyone likes that"* (Specialist birdwatcher).

*"People start whispering as soon as they enter Tij, that is very funny, it looks a bit sacred"* (Specialist birdwatcher).

*"Birds are closer than ever, you will be astonished for a moment about what you have seen there"* (Project leader).

In contrast, it should be noted that Tij is not accessible to every target group, especially for disabled visitors that are unable to visit Tij. Furthermore, Tij is not easily observed from the outside. Future developments will, however, probably focus on implementing a sailing excursion around Tij in order to enable (disabled) visitors to view the object from the water. Next to that, as a result of the characteristics of the area in which Tij is constructed (regularly flooded wetland), as soon as the water level rises due to rainwater supply, the area is being flooded with water, which makes accessibility to Tij practically impossible to visitors. Moreover, balancing the interests of traditional, advanced and conservational birdwatchers and nature enthusiasts, of which some are against the opening up of certain parts of nature as it might result in disturbance to birds and nature, and more casual birdwatchers and nature enthusiasts, whose motivations tend to be less demanding, is a difficult task for nature organisations and necessitates

to carefully consider what parts of nature are being made public and what not. This now and then yields tension between nature organisations and traditional birdwatchers and nature enthusiasts.

Lastly, by creating new and attractive nature experience facilities and activities that attract visitors, such as Tij, existing local and regional facilities can be maintained, which is seen in local restaurant Loef, for example, located within walking distance from Tij, that transformed due to the arrival of Tij from a stagnating to a thriving facility, resulting in sales improvement and small adjustments in business operations:

*“Nearby Tij, there is a restaurant, Loef, which did not operate smoothly and mainly depended on marina guests who visited for dinner. Since the opening of Tij, you see, and I have visited the restaurant regularly, that the people you encounter by Tij, drink a cup of coffee or eat a lunch, and they enjoy their visit to Tij”* (Forester).

These immediate spin-off effects could ensure confidence among locals and local entrepreneurs, create public support and form a potential catalyst for further developments in the leisure and tourism industry in the municipality of Goeree-Overflakkee.

## **5. Conclusion & discussion**

Globally, the construction of bird hides in nature areas increasingly tend to deviate from traditional and basic objects with purely function-only-based purpose and hardly without expressive qualities to architectural objects inspired by nature and landscape with aesthetic, experiential and responsible values in order to serve the needs of a range of target groups found outside the scope of birdwatching also. From a different perspective, architectural bird hides tend to serve nature, landscape and its belonging elements as objects are merged into, adapted to, adjusted on, and balanced with, the environment they are situated in, which is mainly made visible in the object’s organic design, natural forms and shapes, use of materials and function in nature development and management. Practically, architectural bird hides should be seen as an extension of, or addition to, the surrounding nature, not an object that is in contrast with its environment.

However, architecture is primarily a city concept and is seen as a prominent factor in stimulating a specific cities’ aspiration for tourism development and management, which should lead to visitor attention, increasing the number of visitors, economic and socio-cultural spin-off effects, improving people’s psychological state of mind, local pride among citizens and a sense of place. Moreover, certain distinct architecture might provide a city identity and competitive advantage over others and may be used for

marketing and branding purposes. Furthermore, architecture may be a prime motivation for conservational efforts and driving urban areas to regenerate. In that sense, it was found that academic studies that apply architecture and its role in tourism destination development and management, are mainly conducted in urban environments. The role of architectural objects in nature areas in academic debates was found to be absent. However, architecture in nature areas is a concept that is increasingly being utilized in a variety of geographical locations worldwide, albeit still very niche. Nevertheless, applying this concept might have comparable, yet perhaps more interestingly, incomparable effects as the way in which architecture functions in city environments. As a result, Bird Observatory Tij, situated in the Haringvliet delta area, in the municipality of Goeree-Overflakkee, was studied by means of qualitative research in order to unravel the meaning of such an object in the context of tourism destination development and management.

It was found that Tij functions both in location-specific as well as in broader regional tourism development and management contexts. Firstly, stakeholders' intentions were to transform a traditionally closed nature entity into an entity where visitors are able to experience the area's qualities through the creation of a distinct, architectural, meaningful and experiential facility for meeting humans quest for incomparable experiences among a range of target groups who intend to view birds, enjoy nature, landscape, culture and architecture and those that would like to be educated about the surroundings in which Tij is situated. On the other hand, the object was meant to contributing to nature in the sense of merging the object with its nature and landscape surroundings through its natural and asymmetric form, shape, height, the use of natural and sustainable materials, by bonding with the identity of the Haringvliet delta area and as a means for nature development in view of adding a variety of elements in order to benefit the living species in the area (such as a Sand-Martin nestling wall).

Developing and managing a responsible tourism destination has been done on the basis of assessing and adjusting a range of location- and object-specific factors by a multi actor network in order to find the best location for the construction, and in what way the object should be designed in order to satisfy human experience and nature protection and development. Some of these factors were: finding a location where different natural and cultural qualities come together (e.g. flora and fauna, varying landscape features, 'being in the delta area', the Haringvliet locks complex and its relation with the region's history of flooding), where sensitivity to the area and potential disturbance to nature's qualities is limited and where governmental land use planning was suitable for constructing an architectural object. Object-specific factors that were taken into consideration in the process were, amongst others: the use of natural forms, shapes and colours, the specific position of the object, height, size and orientation of the viewing slots,



practical function, among other things. These processes ensured that location- and object-specific features played a fundamental role in developing and managing the area for responsible tourism purposes and may be considered by other parties involved in nature tourism development and management in their potential dealing with such projects.

From a broader regional context point of view, the results showed that Tij intends to function as a gateway or catalyst for visitors to further experience the Haringvliet delta area. Visitors that visit Tij should be so overwhelmed by the construction as well as Tij's surroundings that they would like to further visit the Haringvliet delta area. In that sense, Tij is made part of an integral chain of tourism and leisure activities and facilities to stimulate visitor increase to the area. While Tij can function solely as a landmark for that specific location and instigate small local economic effects, being part of a larger destination development plan might lead to dispersing visitors among the wider area and stimulate broader regional spin-off effects. Herein, nature as an economic pillar functions as Goeree-Overflakkee's policy direction for the future and is responsibly made accessible to the public, since the entire area is traditionally hardly known in tourism contexts. Tourism mainly takes place in the municipalities' at sea located areas, whereas inland mainly agriculture is the driving force in achieving economic stability. That is also one of the reasons why Tij is situated outside Goeree-Overflakkee's tourism area. Firstly, by developing constructions such as Tij more inland, both the tourism area in the municipality is extended as well as the offering of a variety of tourism products, which might lead to lengthening visitor stay and form a range of spin-off effects for local communities, such as reflected in, for example, economic development, public involvement and local pride. Secondly, traditional tourism areas might be relieved from tourism pressure as a result of developing tourism and leisure facilities and activities to other locations in the municipality. In this way, a tourism destination can be perceived as more mature too. Thirdly, by maturing the tourism and leisure sector, less dependence on other domains outside the scope of tourism (such as agriculture) might be achieved, especially in times of economic difficulty. Fourthly, anticipating on National Park NL Delta (Haringvliet and Biesbosch) in 2021, the complete story of the delta area and its dynamic effects on other geographical locations (such as Biesbosch) might be integrally and completely told through the implementation of new tourism and leisure facilities and activities in Goeree-Overflakkee, stimulating visitors to visit both the Biesbosch as well as the Haringvliet delta area (offering visitors a complete physical customer journey). For marketing purposes, this is beneficial too. Lastly, through the implementation of an architectural object in a nature area, visitors might become (emotionally) overwhelmed and/or surprised by the object and its surroundings and become aware of their place in nature and landscape in all its facets, which might eventually stimulate public support for nature and lead to nature protection.

In conclusion, Bird Observatory Tij might be regarded as an object that is meant to reconnect people with nature. The object sets an example for other geographically dispersed nature areas and organisations that wish to stimulate visitor numbers, nature and landscape awareness, nature protection and development through architectural facilities. These facilities are not necessarily restricted to architectural bird hides. Architectural facilities in nature areas could stimulate transformative tourism experiences and trigger potential responsible attitude and behaviour among society. A shift in both is especially needed in light of societies' contemporary sustainable footprint which is considered to be inconsiderate and individualistic. However, managing distinct architectural objects in nature areas should be carefully planned in order to prevent contrarily effects (e.g. in the sense of destructing a nature environment as a result of crossing its carrying capacity due to high visitor numbers or by inappropriate behaviour). This thin line of disclosing nature areas for tourism purposes and nature protection go hand in hand, however, it is a very difficult one and should be monitored regularly in order to keep an equilibrium.

Future research might focus on the psychological effects of architectural objects in nature among visitors as well as on the effects of architectural objects on visitors' willingness to preserve nature areas. Furthermore, future research could aim for unravelling the impact of architectural objects on local communities and the maintaining of local facilities and activities. Lastly, research attention should be on the potential environmental effects of architectural objects on their surroundings.

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