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#### INTRODUCTION

Last summer I unexpectedly but gladly became part of a very interesting initiative, called DORP at Welcome To The Village Festival. It all started with the fact that me and my friend won the D-exto design competition for sustainable festival furniture, which made it possible for us to execute our design and to showcase it at several festivals by traveling along with the D-exto pavilion. D-exto, Delft Experience Tomorrow, is a TU Delft based initiative focussed on sustainable innovation on campus where students of diverse disciplines work together to design and present appealing technical designs or applications in a sustainable pavilion that invites visitors to interact and thereby provoke thought and motivation to change their lifestyles. The pavilion travels to different events and festivals in order to promote sustainable awareness among its visitors. D-Exto believes that festivals and events are the perfect playground for sustainable innovation as a festival is like a city; in need of all daily services. The temporality however, makes it very simple to test new innovations that can then be developed further to be implemented in the 'real world'. Based on this idea DORP was developed.

### **DORP**

DORP is a project in which numerous partners collaborate to investigate ways to build future editions of Welcome To The Village (WTTV) on fair and sustainable principles, which when successful can be applied to real villages. Since WTTV had approximately 7500 visitors during its edition this year, it is in size comparable to the size of the real villages located in the surroundings. And thus the festival can be a perfect testsite where sustainable transformation can be investigated. Even before the festival has begun, artists, scientists, engineers, entrepreneurs, students, professionals and the public work on finding sustainable solutions for the different challenges faced. Festivals provide an unique arena for the exchange of ideas and knowledge where crossovers can stimulate innovation. And that is exactly what the DORP project is about. As the festival organisation puts it nicely into words:

"Our festival is a temporary miniature society. Right in the middle of nature area the Groene Ster a village emerges for merely three days, holding 7.500 people having a good time, working, performing, eating, drinking, peeing, pooing and so on. Because there is a fence surrounding the property, you could think of the festival as a sort of living laboratory. We can measure everything that enters and leaves. Naturally we do not think of our guests, volunteers and artists as guinea pigs. However, we do seize this unique situation as an opportunity to try out things that are not only useful for our festival, but would also work for the world surrounding it - if a bright idea can improve a festival, it might also make the world a better place."

This year, WTTV15 took place on 17, 18 & 19th of July, on a site just outside of the city Leeuwarden located in the North of the Netherlands. DORP started on Monday, July 13th, at the same time the build-up preparations for the whole festival started. The first step was to install the 'beating heart' of DORP, the mobile D-exto pavilion that acted as the battery and 'motherboard' during DORP. In here the social meet-ups, workshops, development of prototypes, discussions, lunches and exchange of ideas took place.

The DORP-team consisted of a diverse group of people, from all kinds of backgrounds and fields of studies. Among others, people from the TU Delft, NHL Hogeschool, artist collective WERC, architectural bureau ALB Surroundings (the Architect has Left the Building), Lab Vlieland and a handful of entrepreneurs with exciting prototypes worked together with participating students and volunteers on the different challenges. Finnish documentary filmmaker Joel Kinnunen captured everything on tape, while radio maker Maud van Maarseveen recorded sharp podcasts, interviews and 'the sounds of DORP' throughout the week.

In total, the participating partners were:

- TU Delft
- D-Exto: Delft Experience Tomorrow
- WERC
- Frisian Design Factory
- Frysklab
- Lab Vlieland
- Into The Great Wide Open
- NHL Hogeschool
- Provincie Drenthe
- ALB Surroundings
- Light Challenge
- · Kening fan 'e Greide
- Youth Food Movement Agrarische
- Jongeren Fryslân

#### **CHALLENGES**

At the start of DORP, four main challenges were formulated:

- 1. How do we set up a logical, local food chain? (Food & Waste)
- 2. How do we make our energy consumption more sustainable? (Energy)
- 3. What are more sustainable alternatives for a camping tent? (Alternative sleeping place)
- 4. How do we involve 1% of all visitors in our issues? (Integration of user)

This was as mentioned the start, from which multiple sidetrack challenges and ideas derived. For instance, how to organise sustainable lighting for the dark part of the walking path to the campsite, as part of the energy challenge. Or the search for opportunities to establish a logical, local food chain with our food caterers and how their rest products could be reused or become part of the waste recycle chain. Some projects consisted already of a concept that needed to be improved and elaborated, like the PIXI's, while others started completely from scratch, like Nest.

Underneath, a summary of the different projects developed during DORP is given to provide an impression, though not the whole scope of projects is covered. More information about DORP and its content can be found on: http://welcometothevillage.nl/project/dorp











PIXI's, radio recording, our Kartent camp, Nest, discussions in the Oerkoepel.

## **PROJECTS**

## **Planned projects**

Pixi's: a solution for the dark part of the path leading from the festival site to the camping. Artist collective WERC designed and made two hundred interactive light spheres that jointly light some of the dark campsite route. The PIXI's communicate with each other through their own WIFI, which each generates via an embedded chip. This project was in the concept phase and needed some feedback and ideas at the start and a lot of hands to help build these 200 lights. One of the problems encountered when using the PIXI's was that some people like to take them home, meaning that over 40 lights were stolen.

**Pee power:** a dry toilet that stores urine and feces in separate compartments. The urine is converted into struvite (phosphate replacing fertiliser) by a low cost installation, while compost is made of the stool. This project had already been developed and was now tested in DORP.

**Kartent:** a new festival tent made of cardboard which is easy to recycle. This as a respond to the waste left on campsites after a festival, since one out of four festival visitors leave their tent behind, which creates a lot of waste. Most people were sceptic about the waterproofness of the design, but we all slept in a Kartent and stayed dry during multiple days of rain! In this way, Kartent also got proper user-feedback from the DORP-participants sleeping in them during the period of the project.

**Nest:** An art installation that offers an alternative place to sleep or rest within nature. The artwork consists of 6 meter long wooden beams that form a nest in the woods, using the existing trees as columns to form a architectural and cultural structure that coexists in close harmony with nature. After the festival, the structure can be taken away without leaving a trace to its natural location. It provides a place to come to rest, to relax, to meet others and join conversations or can even be used as alternative stage. Festival visitors are invited to discover this hidden oasis and to explore the structure and its possibilities.

**Documentary:** Directly at the start of DORP, Finnish filmmaker Joel Kinunnen was involved to capture the event on camera. He made a beautiful short documentary about DORP which can be seen here: https://vimeo.com/133851124

**Radio:** The same goes for Maud van Maarseveen who recorded interviews, podcasts and 'the sounds of DROP' throughout the event. Her recordings can be found here: http://welcometothevillage.nl/dorpsblog/zomaar-radio-in-dorp-1

**Storyboard:** Not only was the event recorded in sounds and film, but also drawn up on a big white canvas by a visual artist. He tried to capture all the different projects and their relations in an artwork to make everything that was going on in DORP more comprehensible for its visitors.

'Oerkoepel' (Honeydome): A beautiful dome made from wood and felt, already built and used at previous events, that now functioned as the warm living room during DORP, where the discussion sessions, interviews, a capella performances and silent disco were held.

#### **D-exto**

The travelling D-exto pavilion already contained multiple projects that try to stimulate sustainable awareness in different playful ways. The projects used during DORP were the pavilion as **Power generator**; the integrated smart grid system is linked with a solar roof, and due to the extended size of DORP with a solar trailer and greenbatteries, to render it completely self-sufficient in terms of energy. The **Blenderbike**; is a the concept of blending your own smoothie with human power by cycling on a hometrainer that is connected to a blender. The **Waste Reuse Workshop:** where everyone is invited to make new creations with waste material, such as bags from old clothes or lights from empty tins. **Pelican House** also joined; high quality headphones you can lease, in which use is more important than possession, following the circular economy spirit. And me and my partners creation for the D-exto pavilion, the **Mix & Match**; a unique sustainable and interactive piece of festival furniture designed to be flexible, versatile and easy to use.









The Waste Reuse Workshop, Blenderbike, Pelican House Headphones and Mix & Match at DORP



Clockwise: the Information Totem, Storyboard, Oerkoepel, Yoga at DORP (Oerkoepel and white Interaction board in the back), hands-on building, Nest, the Silent Disco (Pelican House), the Solar-charge-lounge and Wipje Wasje.

#### **On-site initiatives:**

During DORP, we had many brainstorm sessions from which unplanned ideas and projects derived. Such projects include the **Smoke & Vote**; an elaborated ashtray that presents the festival smoker with a question to which he or she can answer by voting with the sigaret but in the assigned 'yes' or 'no' ashtray. This way the visitor is triggered to think about the (always related to sustainability) question and stimulated to put the sigaret but in the tray instead of on the floor. Integrating two challenges in one project; reducing the waste and integrating the users into the sustainability transformation process. Other projects of this kind were the **Wipje Wasje**; where you could wash and dry your clothes by playing on a seesaw and swing, **the information totem**; a structure made of waste wood informing the visitors which projects can be found where, the **Interaction board**; each day a sustainable related topic would be questioned by the use of a big white board on which all visitors could leave comments or ideas, and the **Solar phone charge lounge**; where a solar panel could be connected to small lamps to which you could connect your phone to charge. To make this inviting we built a lounge from waste pallets, combining the lounge angle with the optimal solar charge angle.

## CONTRIBUTION

During DORP I participated in many brainstorms, discussions, feedback sessions, creations, initiatives and hands-on building tasks. Underneath I will describe the projects I have worked on the most and my contribution to them.

## Mix & Match

As mentioned before, the Mix & Match lounge is my personal project. In preparation for the festival season I designed and built a sustainable festival lounge that could travel along with the D-exto pavilion, with my partners Roxanne Kiel and Enzo Yap. This meant we did not built it at DORP, but it was intensively used during the preparations of DORP as well as at the festival by the visitors. We had to take care of it, pack and unpack, remodel it to accommodate its users as good as possible, and of course promote it to potential clients, commercial or private.

#### **Nest**

I personally did not start with DORP on Monday, but joined the group on Wednesday. I directly got involved with the Nest-team. They had started to built the structure in the woods and I helped from that stage on to complete it. This meant in the first instance hoisting, pushing and pulling many long wooden beams in order to get them in the right place. The concept was to leave the beams in their original length, unless we needed more beams at different places, only then we were allowed to cut a piece. Also, the aim was to make the structure form fit - that it would hold itself in place - but also safe for the visitors to explore the structure. This meant we tried to minimise the screws used to make it safe enough to walk on. The team had not yet considered how to make the structure easily accessible, so a team mate and I developed places where you could 'enter' the nest by creating subtle steps that were integrated in the total design. Afterwards, I analysed light possibilities; a search for the lights possible and available and atmosphere these would create. In the end we settled for two big industrial lamps that were positioned at the roots of the trees, illuminating the whole

The Nest at night, with the light installed and the hammocks in use.









Examples of a betjak, mobile coffee cart and story walk.

structure with a defusing light from these points. Above the 'sleeping/resting' places, we hang a small lampion light, covered with a piece of waste cloth, creating different coloured 'night lights'. I also suggested to create a 'vooronder' instead of only plateaus to lay on top of, by making a rest space underneath the plateau accessible and hang hammocks in there. Subsequently, I made hammocks from old banners that were donated as waste material for the reuse workshop.

## Festival to camping route and back

During the festival (the weekend) we also reflected on which challenges were faced, reflecting on our own experiences as festival visitor. These were: too long lines for the showers, loads of sigaret buts that mainly end up on the floor and the long and tedious road from the festival to the camping and vice versa. Together with two others we focused on the last challenge, and came up with various ideas that could improve this experience. There are different options to change the situation; you can make the route last shorter, by increasing the transport speed or by cutting the route in parts, making it seem shorter, or you can make the route more fun. Our proposals were:

- The 'Win-win-fiets-'m-erin'; a betjak that festival visitors can 'rent' with one coin, on which they can bicycle to the camping themselves or also bring others with them on the betjak. For this service, the biker can ask the other visitors to pay one coin. This way, each festival visitor can choose if they would like to get to the other point fast, and if so if they are willing to put in energy or money. Also, festival visitors that spent all they coins before the end of the event can easily earn new coins by dedicating their energy to the transport of other visitors.
- The Pitstopbar: on the route there will be a small vending cart that will sell coffee and breakfast in the morning and midday and beer or cocktails in the evening to have a pitstop on the route.





Roxanne promoting the Pelican House Headphone

• The Story Walk: Along the route from and to the camping, posters or boards could be placed with one storyline on them, which combined form a story. This way you will discover the story step by step along the route. On the back of this poster a different story can be told. These stories could be changed each day to make the walk a true discovery each time. We also opted that a festival writer could write these short stories about things that happen at the festival, relating it to events the festival visitors also attended and making it directly related.

#### **Information Totem**

At the opening day of the festival we realised we were missing a way to show visitors what kind of projects can all be explored or experienced within DORP. As a response, we decided to built an Information Totem. This we constructed out of waste material, creating name plates for each project that pointed in the direction this project could be found. Herewith we created a nice centre point within DORP where visitors could orientate themselves. Here I helped to initiate, design, construct and paint the creation.

### **Pelican House**

The Pelican House Headphones are designed and manufactured by Dorus and Tom, but Roxanne and I helped them with setting up, packing up and promotion of their product. This came about due to the fact that our lounge was a good environment to stimulate their product.

# **Integration board**

Someone had two big white boards left over which we installed next to the road with a different question about sustainability each day to trigger the visitor to think about these issues and give their feedback and ideas.

## Conceptual stage for next year

Together with the creators of this years conceptual small scale Hooibaaien stage (stage made from hay bales), I had a personal brainstorm about the possibility for a small

(floating) stage next year, in front of DORP. We came up with multiple ideas, including the concept of a stage that only operates if you put energy in it. The idea is that upcoming artists can perform on this small stage, if they find a crowd that wants to put their energy in to listen to them. The crowd has to for instance cycle on hometrainers that power up the music installation to be able to hear the music. The band has to get the crowd excited so they don't want the music to stop and want to work for their enjoyment. This way a playful way to create sustainable awareness is promoted as well as an intensification of social interaction.

# CONCLUSION

DORP is a great initiative that really brought loads of people from different field of study or work together to investigate the possibilities to make the festival more sustainable. It was a very fruitful event during which many solutions and ideas were developed as well as executed. This really made it innovation on location, in my experience. I am grateful I could be a part of this and hope to be able to participate next year again. Moreover, it would be very interesting to see which ideas have been picked up and which changes have been made to improve the sustainable performance of the festival. But I assume challenges will still be encountered and I would love to help solve them in any which way I can.

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