

# Canal Festival



# Canal Festival

Submitted by on October 13, 2017

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Santiago Brignardelli

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Salomon Frausto  
Head of Education



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## Evidence

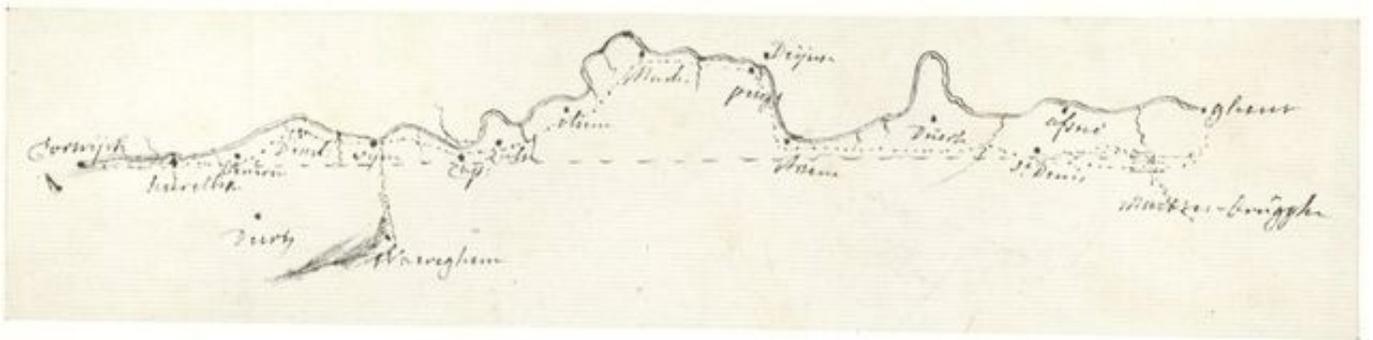


*Koeien bij het oversteken van de Leie (Cows crossing the Lys River) by Emile Claus (1899) Royal Museums of Fine Arts of Belgium, Brussels*

## **EVIDENCE**

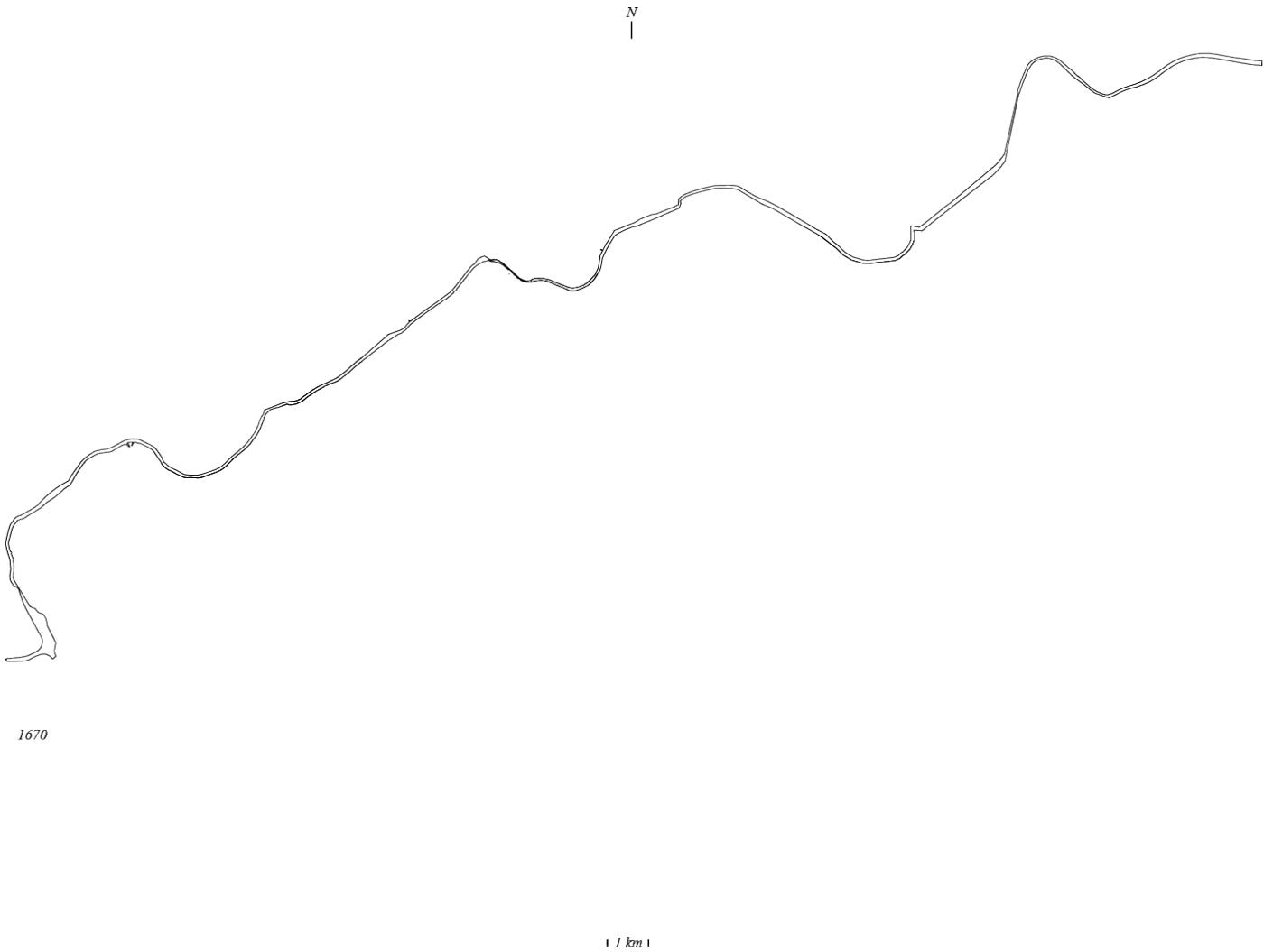
1. In 1600's the river Leie/Lys was a commercial navigation that flowed from Pas-de-Calais to Gent. Between the cities of Armentieres and Mennen it traced the Belgium-French border. It's devastating floods demanded major works and meander cut-offs, leaving a set of 7 islands at the sides of the canal.
2. The 4.5 meter difference in elevation along the border section of the river was overcome by two locks completed in 1780. The river carried a heavy traffic in grain and linen to Ghent and Antwerp. The navigation was leased out to a company around 1825, and the locks upgraded to 5.20 m wide, for a draught of 1.60 m.
3. From 1930s, the border section improved the size of lock chambers to a length of 39 metres, a width of 5.2 metres and a minimum water depth of 2.2 metres, thus allowing Va class barges to pass through. Also, in 1995, the Schengeng area agreements have dissolved the permanent border controls between Belgium and France.
5. Though the decline of major industrial activities and the lock's outdated size, the river is still used by cargo barges and recreational boats. Intentions from the Eurometropolis to recover the canal's cargo flow by updating the lock's size to a Vb class barge, and intensify its recreational uses are being debated.

# Evidence

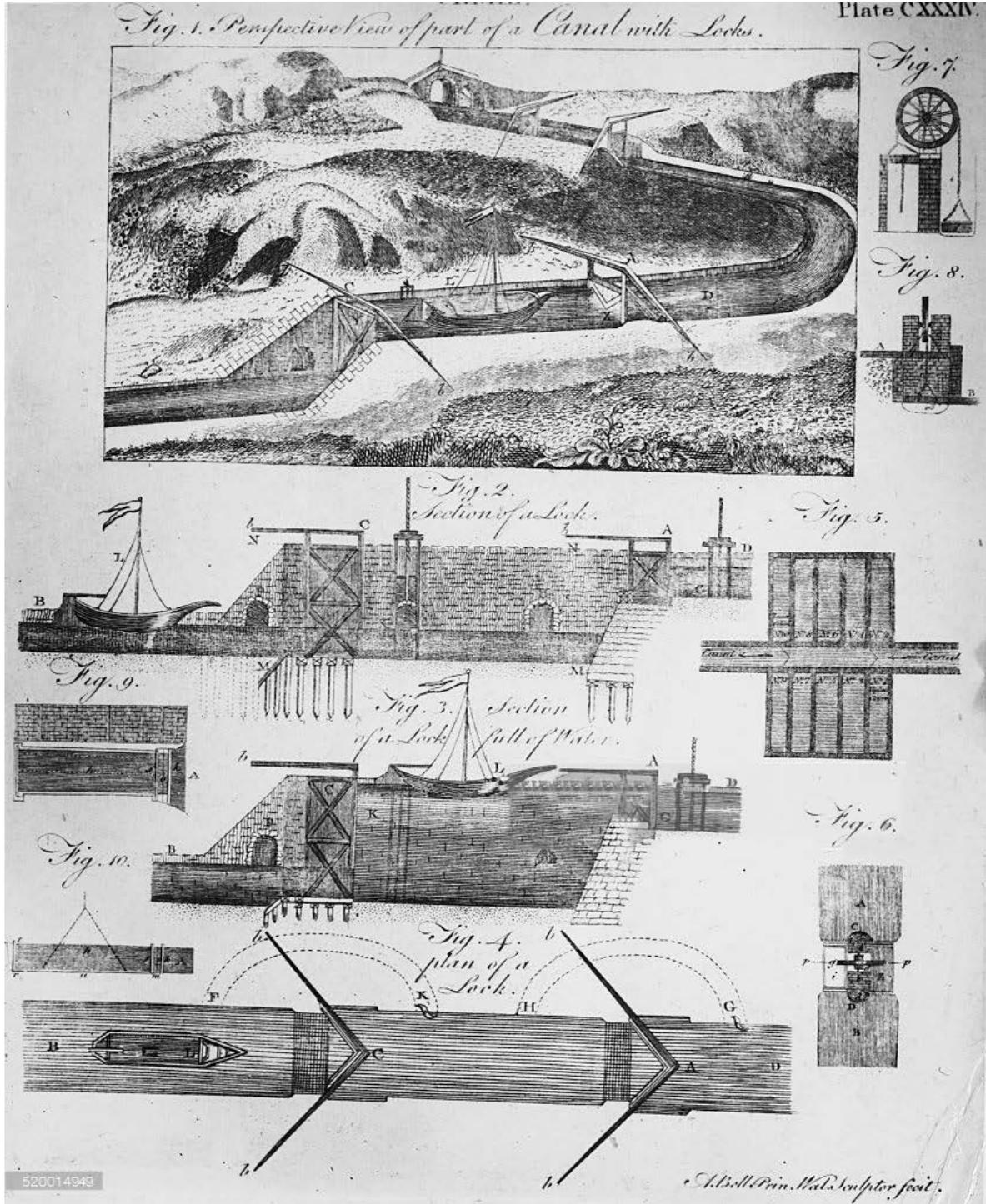


*Kaartje met loop van de Leie tussen Gent en Kortrijk, Museum Van Deinze en de Leiestreek.*

# Evidence

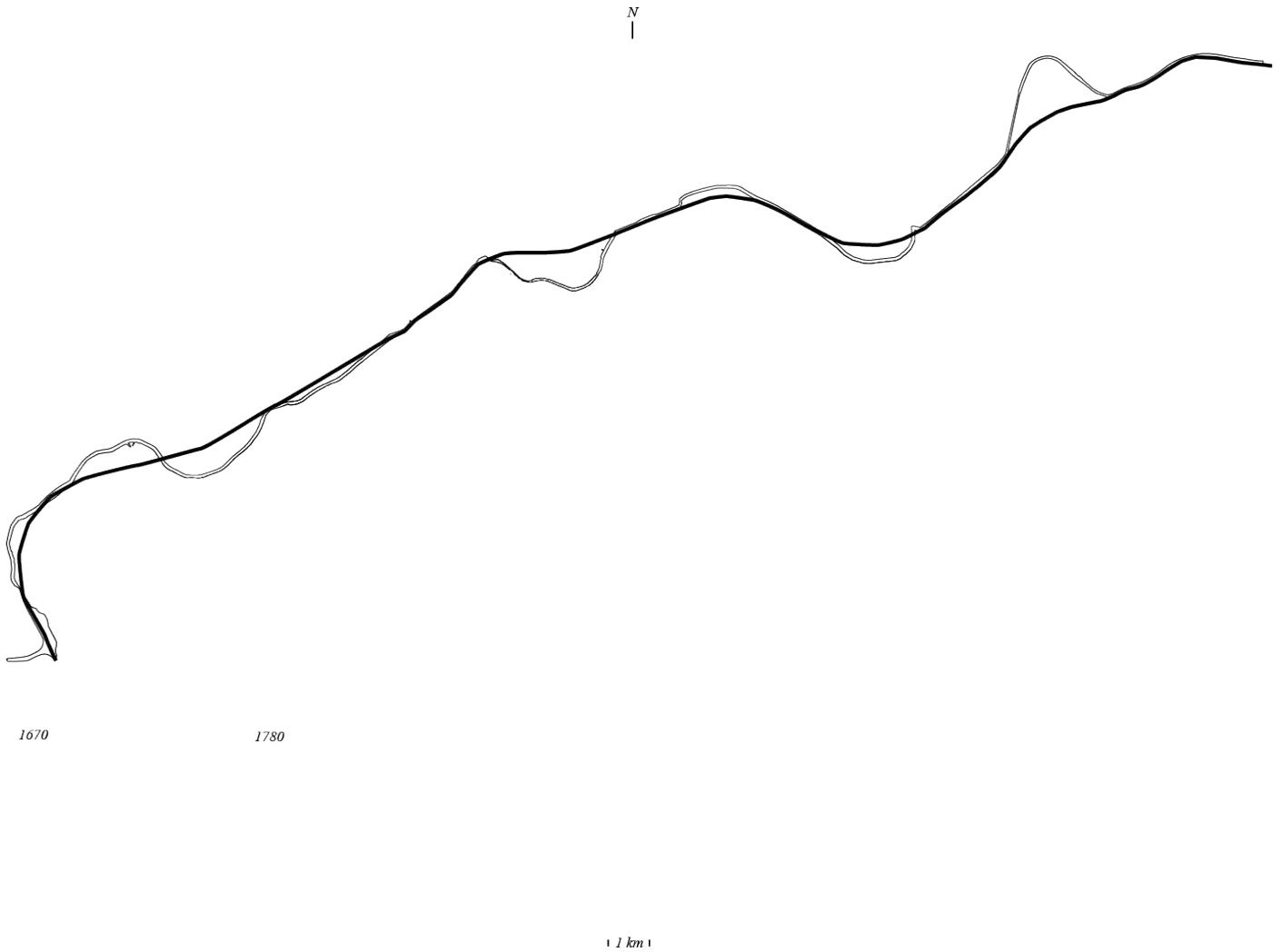


*In 1600's the river Leie/Lys was a commercial navigation that flowed from Pas-de-Calais to Gent. Between the cities of Armentieres and Mennen it traced the Belgium-French border. It's devastating floods demanded major works and meander cut-offs, leaving a set of 7 islands at the sides of the canal.*



A series of diagrams showing the design and function of a canal lock system, circa 1770. The illustrations show (top to bottom) a stretch of canal with locks, sections of a lock empty and filled with water, and a plan view of a lock. Original publication: 'Encyclopedie' by Denis Diderot, Mathematics plate 4.

# Evidence



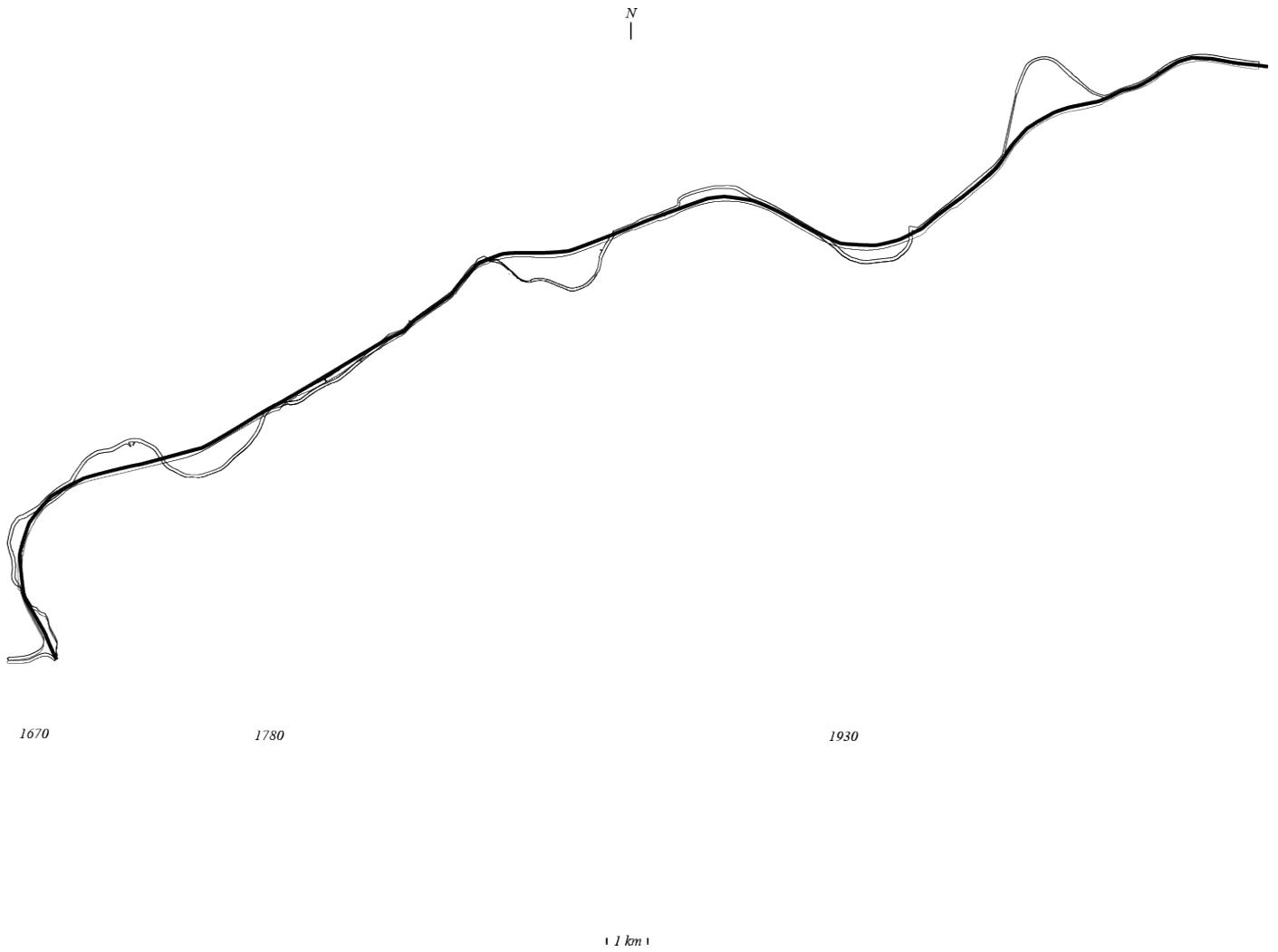
*The 4.5 meter difference in elevation through the border was overcome by two locks completed in 1780. The river carried a heavy traffic in grain and linen to Ghent and Antwerp. The navigation was leased out to a company around 1825, and the locks upgraded to 5.20m wide, for a draught of 1.60m.*

# Evidence



*Floods Lease in Deinze 1964-1965, Museum of Deinze and the Leiestreek  
photo paper*

# Evidence



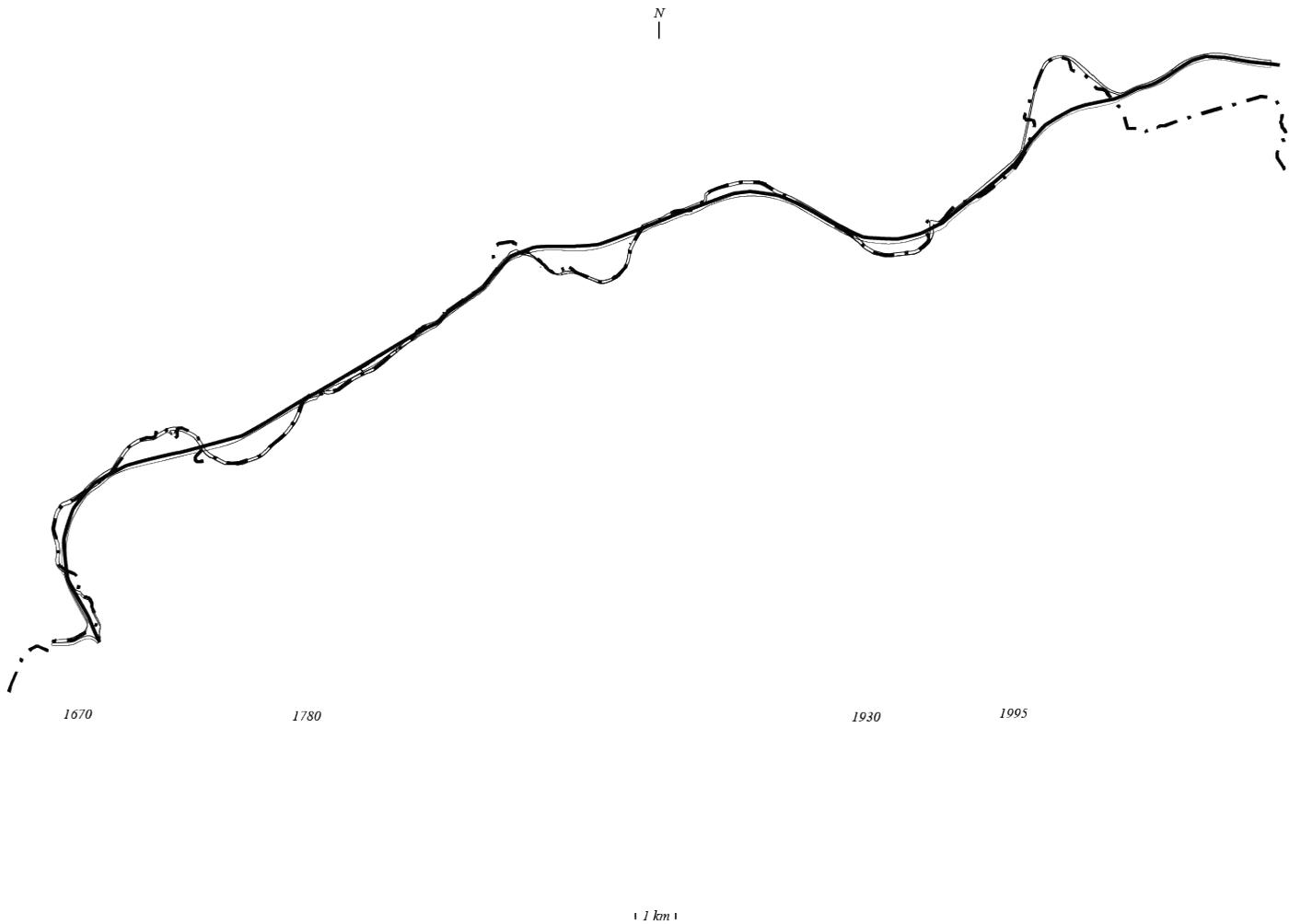
*From 1930s, the border section improved the size of lock chambers to a length of 39 metres, a width of 5.2 metres and a minimum water depth of 2.2 metres, thus allowing Va class barges to pass through.*

## Evidence



*Historic parade on the occasion of the centenary celebration 1848 - 1948 the silk and bride industry in  
Deinze. Fireworks along the Lead by Mr. Ricard.  
Dating 1948 - photo paper*

# Evidence



*In 1995, the Schengeng area agreements have dissolved the permanent border controls between Belgium and France.*

*After the decline of major industrial activities and the lock's outdated size, the river is used by recreational craft and small cargo barges. Intentions from the Euro metropolis to recover the canal's cargo flow by updating the lock's size to a Vb class barge, and intensify its recreational uses are being debated.*



La Junnesse de Bacchu [The youth of Bacchus] by William-Adolphe Bouguereau (1884).- Oil on canvas. Private collection

## TYPE

1. Belgium has a long-existing festival culture from Flemish kermis to its actual 32 annual festivals. Likewise, France has historically delivered policies of access to culture for the masses, from the ideals of 'droit a la culture' that built in 1961 'Maisons de la culture' to de-centralize cultural activities, to 'Fete de la Musique', where culture in the public space was open to the citizens.
2. But since the first Woodstock in 1969, music festivals have become a multibillion-dollar industry dominated by two corporations: Live Nation and AEG Live. They are able to draw the biggest artists to far-flung venues, bringing along with thousands of people food vendors, sanitation, camping installations and stage sets boxed inside a premise. They are built at open-air sites with temporal structures away from the city centres because of their massive attendance, producing a high environmental impact caused by the disposable residues of temporally inhabiting and the CO2 emissions of private transportation.
4. Nevertheless, festivals have played a significant role in cities 'cultural regeneration', especially in post-industrial cities in which traditional manufacturing industries have declined and in which culture is used as a means of attracting service sector professionals.
5. Infrastructure for massive events has been built since long ago defining spaces to containing audience, stages and facilities. They occur for short periods and with a large attendance, while still existing rest of the year as part of the landscape. Its increasing size is an opportunity to rethink the ephemeral character, and review an architectural form for its infrastructure.

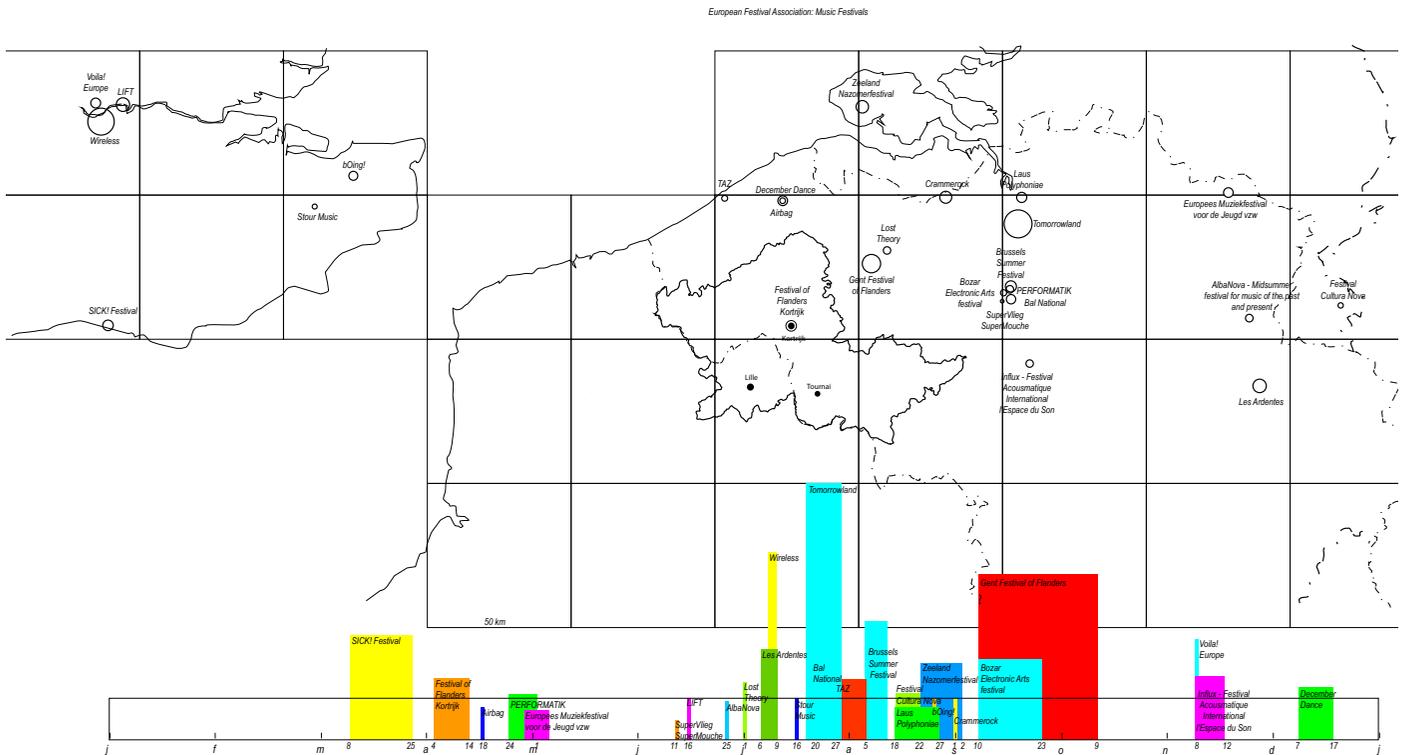
## PROJECT

1. The infrastructure of a festival space will be designed for one island as part of re-programing a waterway infrastructural elements, becoming an exemplar of a strategy applicable to the other six.
2. Canal elements as concrete retainers for soil borders or water locks are reconfigured in order to define spaces within the festival.
3. Permanent infrastructure is able to be occupied by temporal inhabitation, being reprogramed from a lock, to stage scaffolding, or to a campsite.
4. Music festival infrastructure is used as a contemporary program that questions the ephemeral character of a massive attendance event. By extending the waterway infrastructure to festivals there is a potential of manifesting an architectural form to the new programs in a post-industrial landscape.



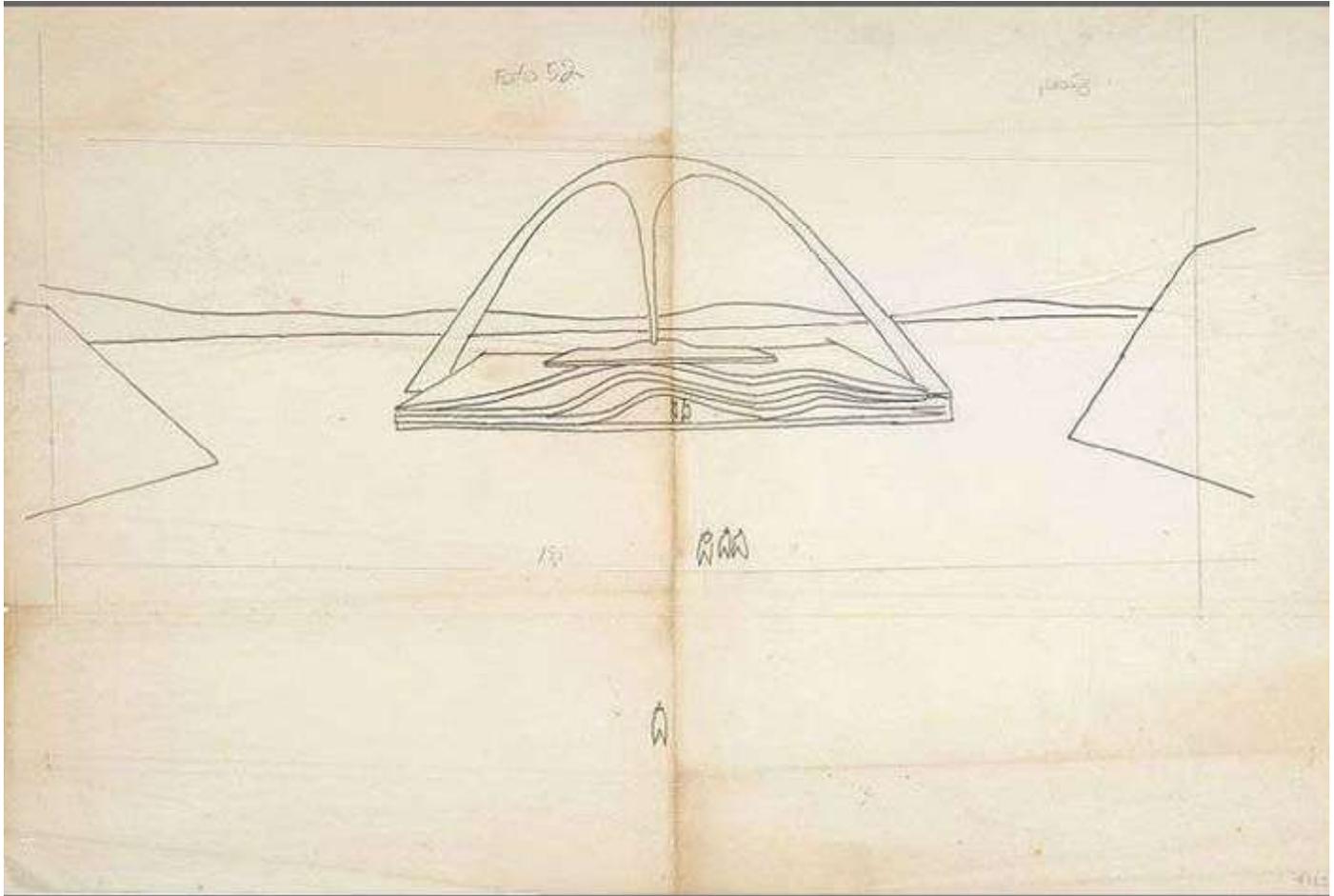
*Flemish Kermis, Hans Bol, (Mechelen 1534 – Amsterdam 1593)*

# Type



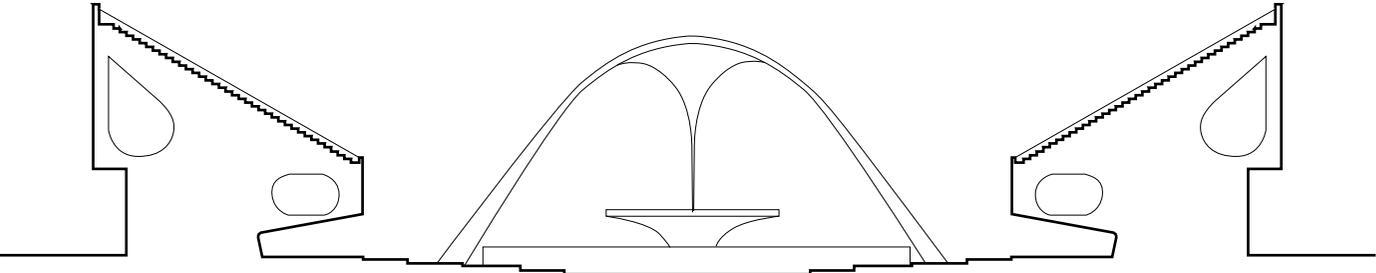
Belgium has a long-existing festival culture from Flemish kermis [kermis painting] to its actual 32 annual festivals. Likewise, France has historically delivered policies of access to culture for the masses, from the ideals of 'droit a la culture' that built in 1961 'Maisons de la culture' to de-centralize cultural activities, to 'Fete de la Musique', where culture in the public space was open to the citizens.

Type



*“Passarela Professor Darcy Ribeiro”, original perspective of Arco de Apoteose - Sambodromo, by Oscar Niemeyer, 1984.*

Type



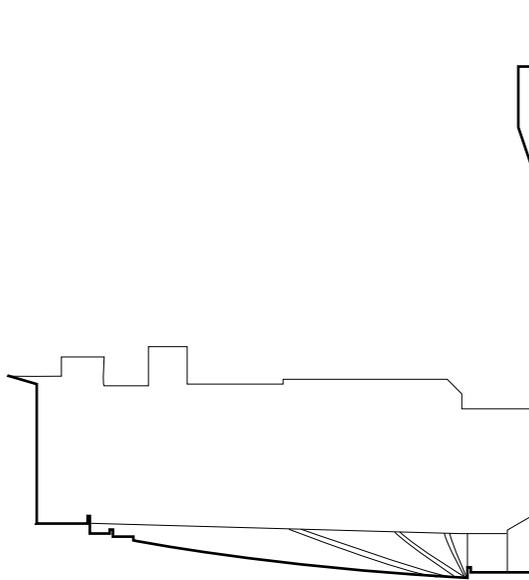
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*Piazza del Campo, first version of sketches by Louis I. Kahn, 1951.*

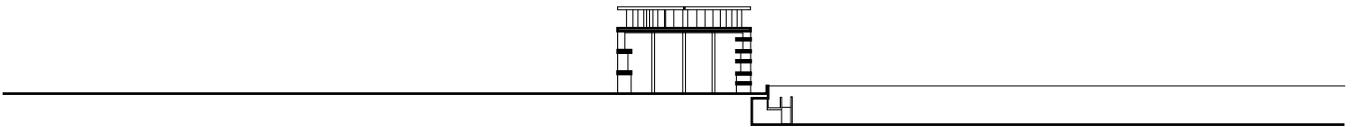
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# Type

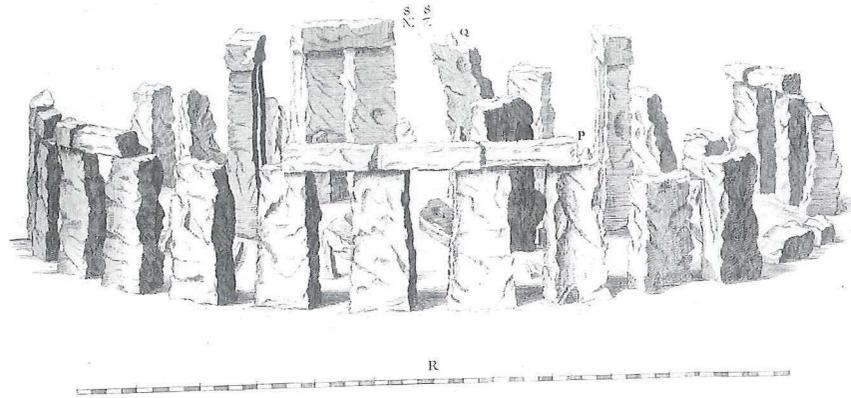


Figure 5.2 Inigo Jones, view of Stonehenge in original state. From: *The Most Notable Antiquity of Great Britain, vulgarly called Stone-Heng, on Salisbury Plain. Restored by Inigo Jones, 1655*, plate 7. Photo: Koninklijke Bibliotheek, The Hague, Netherlands, 3318 B 30.

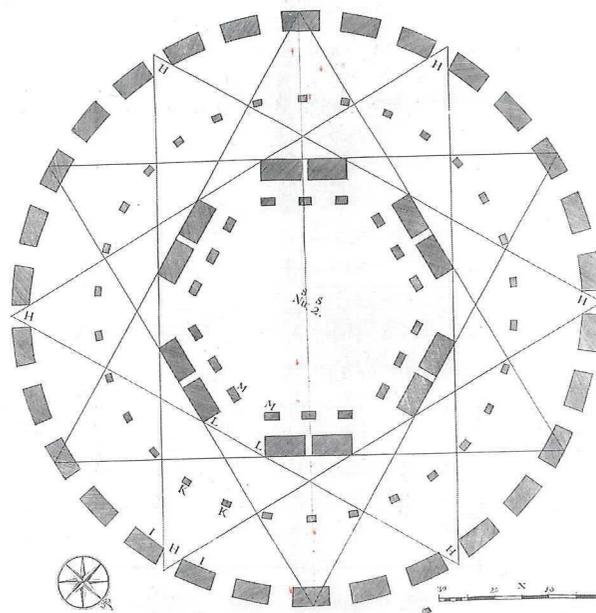
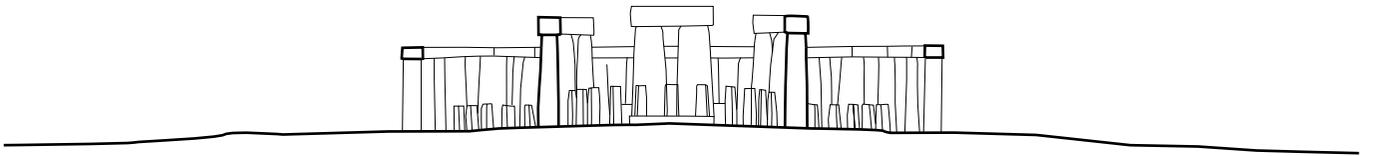
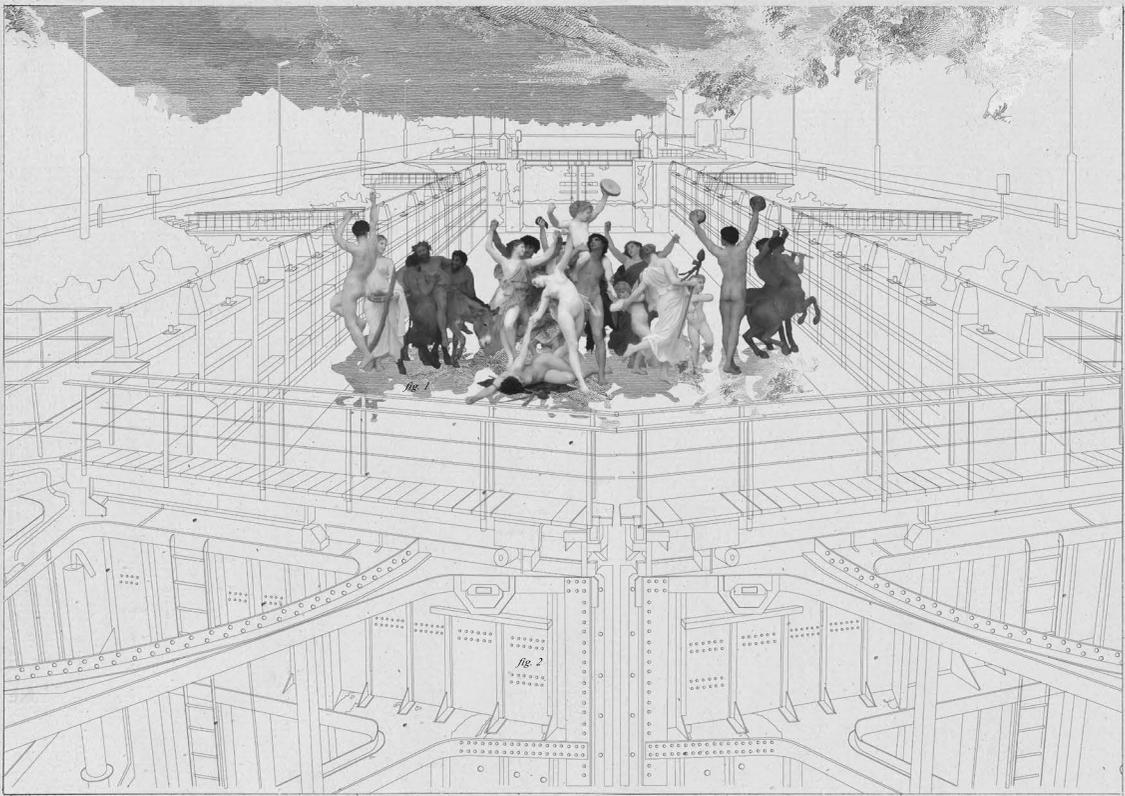


Figure 5.3 Inigo Jones, reconstructed ground plan of Stonehenge in original state. From: *The Most Notable Antiquity of Great Britain, vulgarly called Stone-Heng, on Salisbury Plain. Restored by Inigo Jones, 1655*, plate 6. Photo: Koninklijke Bibliotheek, The Hague, Netherlands, 3318 B 30.

Type



# Project

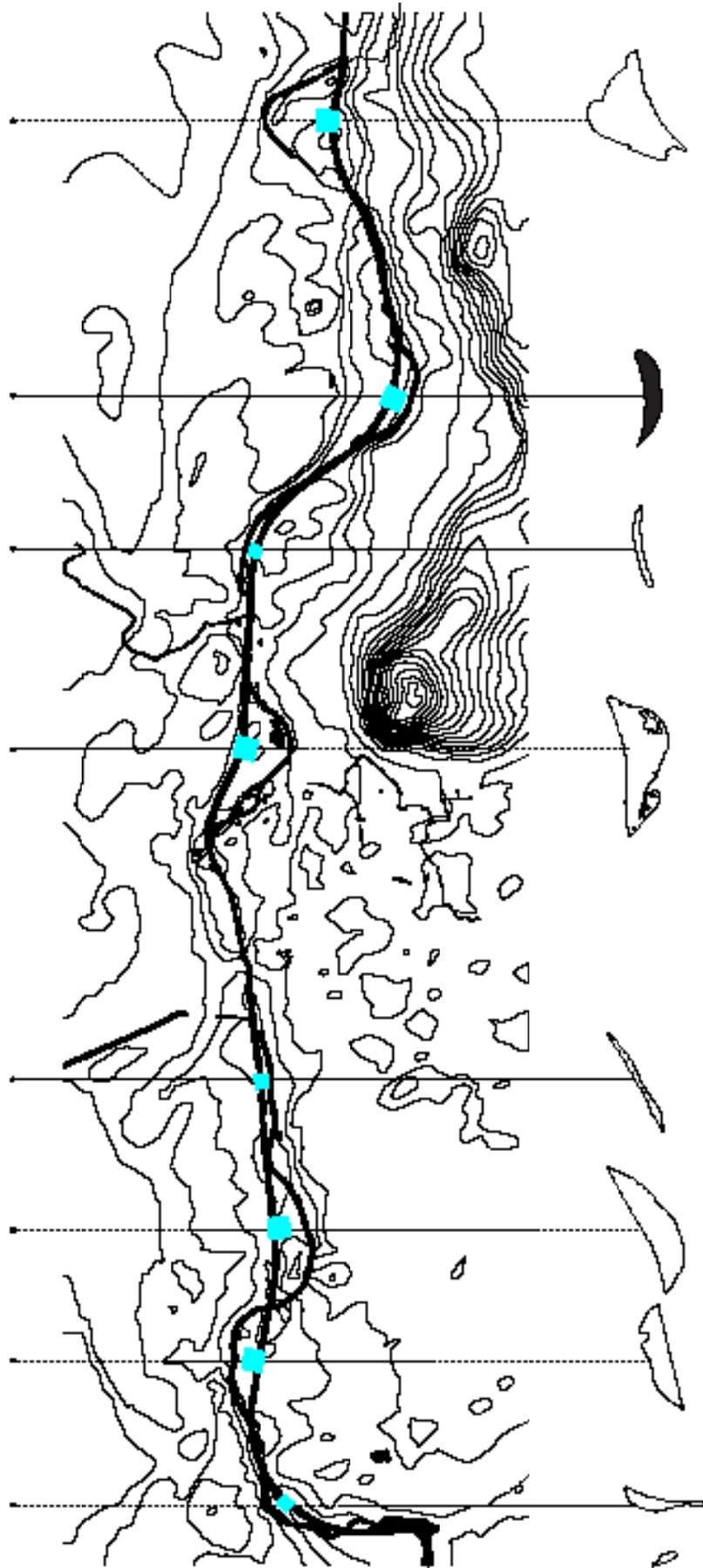


*Celebrating Infrastructure*

# Project

## PROJECT

1. The layout of a festival space will be designed for one island as part of re-programming a waterway infrastructure elements, becoming an exemplar of a strategy applicable to the other six.
2. Canal elements as concrete retainers for soil borders or water locks are reconfigured in order to define spaces within the festival.
3. Permanent infrastructure is able to be occupied by temporal inhabitation, being reprogrammed from a lock, to stage scaffolding, or to a campsite.
4. Music festival infrastructure is used as a contemporary program that questions the ephemeral character of a massive attendance event. By extending the waterway infrastructure to festivals there is a potential of manifesting an architectural form to the new programs in a post-industrial landscape.
5. The disruption between massive temporality and abandoned concreteness is referenced by sites post-industrial character.



*Territory map identifying the interventions in the islands*



*Territory model 1:10.000*



# Project

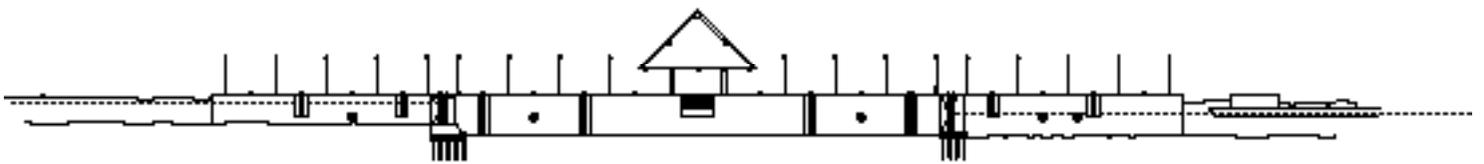
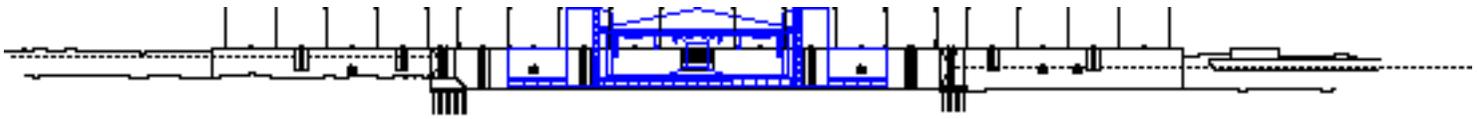


*Site model 1:1.000*



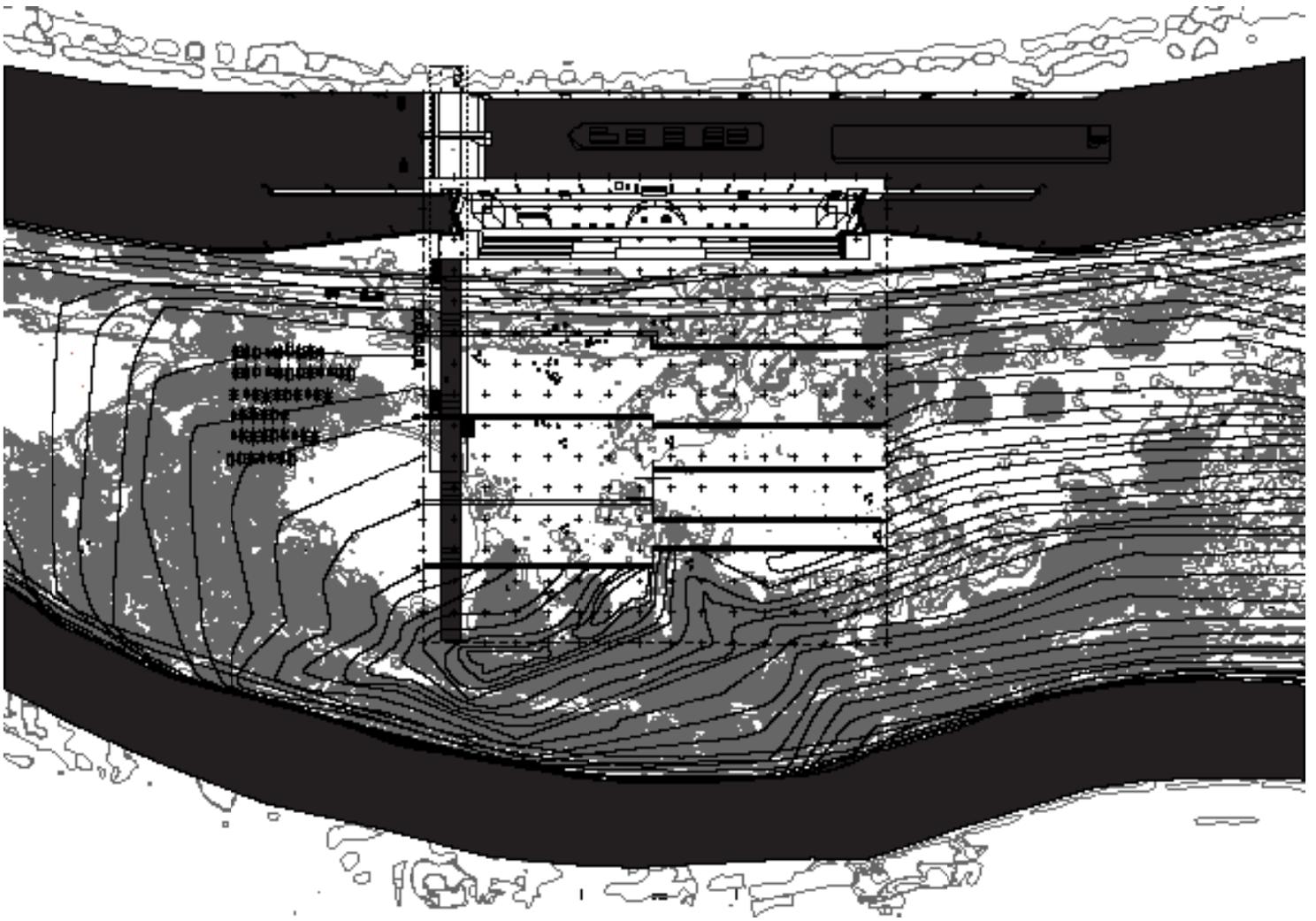
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*Detail of temporal occupation 1:50*

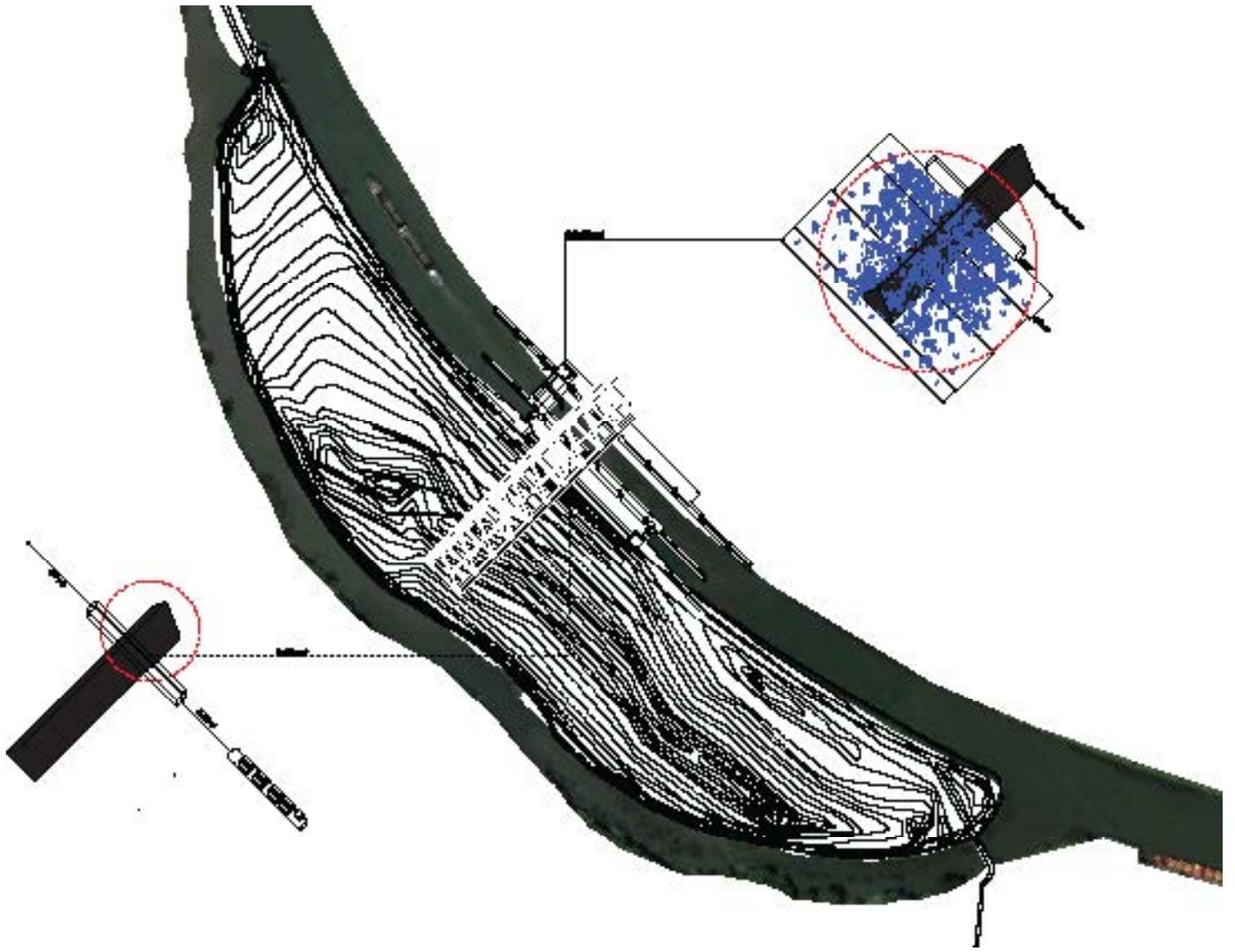


| 1:500 |

Section 1:500



Layout plan 1:500



*Axonometric diagrams*

## Annotated Bibliography

1. Bonnemaïson, Sarah, and Christine Macy. 2008. *Festival Architecture. The Classical Tradition in Architecture*. London: Routledge.
2. Ryckewaert, Michael, and Andrew Jocelyne. 2011. *Building the Economic Backbone of the Belgian Welfare State : Infrastructure, Planning and Architecture 1945-1973*. Rotterdam: nai010.
3. Shannon, Kelly, and Marcel Smets. 2016. *The Landscape of Contemporary Infrastructure*. Rotterdam: nai010.



# A Conversation with an Expert: Menno Hoeszee



# A Conversation with an Expert: Menno Hoeszee

Submitted by on October 12, 2017

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Santiago Brignardelli

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Salomon Frausto  
Head of Education



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## Personalia & Relevance

**Name**

Menno Hoezee

**Title**

Founder, owner, tent consultant, project manager and on-site tent-supervisor at Tentconsultants International

**Date of conversation**

13th October 2017, Zandvoort-Delft.

**Biography**

*2013-*

Founder, owner, tent consultant, project manager and on-site tent-supervisor at Tentconsultants International

*2013-*

Member Dutch standardisation committee for EN13782/13814  
Dutch standardisation committee NC 341055

*2011-*

Member of Work and Steering Committee "AMvB Fire Safety Other Places"  
Mega Tenthire International bv.

**Relevance**

Worldwide consultancy, design, engineering, on-site counsel and assistance, advice and maintenance. Manufacturing, sale and hire of tents and other temporary structures such as tents and canopies for in- and outdoor events.

Tent Consultants International is a worldwide partner in the constructive safety of (festival) tents and overcrowding. No matter how big your indoor or outdoor event is, we always strive to reach the desired level. We do this through intensive cooperation with organizers, governments and suppliers.



Top Tents, Tomorrowland, Belgium, 2010.

## Questions & Transcript

How is the basic layout of festival?

First thing you need an area, of course, before the audience arrives, all outdoor event in Belgium and the Netherlands are in areas where there is nothing, everything has to be brought in. Always first guys from the site executive production arrive. Guys who are going to install the production office and the fencing, as production containers and machinery. What's arriving first are the people that are laying out the steel plates to protect and control the roads for trucks. One group of guys makes the measurements for the roads, fences and offices. This site guys arrive in the first week. They make the site production and the crew catering first, and one or two people from electricity, water and sewage systems. They also start taking the measurements of the stage, tents and fencing. Until the first week the people from the stage and tent have to be finished.

What are the regulation to be met?

In the second week the people from food, lighting and sound come in. At the end the people from the council come to check up the regulations. They check everything. Food and beverage, fire regulation, electricity, everything.

In Europe there is a couple of standards of Euro-codes, embedded in the regulations, for stages, tents, fire regulations, site itself, crowd support everything. In the Netherlands there is the Dutch Standard Committee NNI. EN European Normalization are embedded in European normative committee, and they are all referring on each other. For Tents there is the EN 1782, European standards for tents. For stages there is temporary structure regulations for fair grounds and amusement parks, is the EN 13815. Talking about amusement park rights and all the other stuff. There are all based on the law of the Euro Codes, they mention everything about materials and other stuff. Fire brigade team is the EN 13501-1. In the Netherlands we took parts of these standards and put them in our regulations. We always take the normative part and the fire part when designing events. It always start with NAN 1820- when designing events and festivals.

How the site does conditions influence.

Totally different approaches. If you are a new organized you can try to do everything from scratch or hire a production company that know everything

about the specific sites, they do the drawings, consultant, talk to the municipality. If you want to organize a new event you should contact a production company that specialized in the specific contexts where you are working, and also for the permits and crowd support books and events and safety things. You have to start a year in advance and give in to the municipality at least 6 months in advance. A company who is doing that big time is the Side line production, Back Bone production in the Netherlands. For example the Good Guys is a production company that helps with the drawings, vendors, and guidance of the investments and budgets, companies for fences, sewage. Big organizations have this people in-house.

Is there a study on the amount of people occupying?

It is the crowd management part. You usually hire some who does your crowd management arrangements, you take the blueprints of your site and you can predict through computer models how are people are going to behave. For example is you have 4 stages you don't program it at the same time, if you have a bigger event it is a big part of the organization. Also the production company helps with that.

What happens to the site after?

Afterwards you take everything out and clean it up. The government comes to check if it's enough, and if not you have to restructure it. It depends what you have arranged with the city. Sometimes the city says we will do that at our expenses or share the costs.

Is there permanent elements on site?

No. Some areas have some office buildings or a shed you can use as a construction office, or a hill you can use as a tribune. In Germany we have an event in an old naval place, where you can use an old shed. This has to always be adapted. There is no place in Netherlands and outdoor permanent event area. In Las Vegas there is permanent site for events, with production office there.



Van Ham Tents and Stages, 1997.

## Questions & Transcript

### Time of preparation and assemble

The event is usually one day. The assemblage before is between one week to 3 days. Except the big ones as Tomorrowland that takes 2 months in advances, and 1 month afterwards. It has 150.000 people, as the Deftcon 1 festival.

### Benefits of its temporality

Spontaneity. And all the temporary infrastructure can be brought everything in.

### What can be concrete

It doesn't matter, we just need the permit to build somewhere and well do it. Some cities are wanting to make a semi-permanent site for events and site, and the make the sewage or electricity points of connection, and you can rent it out to them, but it is usually one point, but you always have to bring your stuff in. The municipality is not the only one, you also have some private owned sites, as the Lowlands festival site, the festival organizers team up with the owner of the property and make an arrangement for 10 years, for example, and are going to do 5 or 6 festivals on the site. They invest together for tunnels or something, like infrastructure, but every event is different, they say for example, we have a big piece of land and we provide in each corner to connect. But it is almost not always the city because the municipality doesn't have the money for this investments.

## Questions & Transcript



# A Conversation with an Expert: Onno Koole



# A Conversation with an Expert: Onno Koole

Submitted by on July 7, 2017

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Santiago Brignardelli

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Salomon Frausto  
Head of Education



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## Personalia & Relevance

**Name**

Onno Koole

**Title**

Group Marketing & Communications Director

**Date of conversation**

30th June 2017, Alkmaar-Delft.

**Biography**

*2014-*

Marketing Director at De Boer Structures

*2012-*

Owner XPDR Marketing, Antwerp

*2012-2014*

Member Professional Field Committee/ Beroepenveldcommissie CE

**Relevance**

De Boer is one of the biggest temporary space providers in Europe. With base in Netherlands, Belgium, Germany, Spain France, it intends to expand to South-America and Asia. 70% of its business comes from providing tents for events, from hosting to festivals.



Mutua Madrileña, Madrid\_Open, Madrid, Spain, 2014.

## Questions & Transcript

How does the market of temporal spaces work?  
Type of clients for the Industrial, Event, and Rapid Deployment Systems (RDS) market segments?

Summer is high season, 70% of the business is events related (festivals, sports, business), mostly because of the weather. It can be done in the winter but it takes more heating or insulation.

Events for sports such as Golf and Tennis necessitate to occur in the summer time, from May to October.

Most events take place in permanent infrastructure, but some events are so big that the permanent infrastructure in the site can't host the event, such as golf championships.

Merchandizing or high end hospitality are the requirement for most of the spaces, such as Olympics, or FIFA, UFA, to host the VIP and others. Business cycles are going faster and faster, many business don't want to invest in a permanent hall for 30 years because they don't know what's going to happen with the economy.

How do they adapt to the different uses or are they the same flexible spaces for any use?

There are 500 projects every year, and each one is different. Optimum flow studies aren't calculated because the layout changes every time.

Some spaces such as the Mobile World Congress, that takes place inside the Theatre of Barcelona hall, needs halls and auditoriums inside the permanent hall, with sound insulated auditorium for congress speakers. It is not so much additional space but as space within space. Or to double the floor space with a double deck.

Semi-permanent spaces are built during renovations, such as Bowmat or Frankfurt exhibitions. They are temporary halls for use of a month, so they can continue their business during the renovations. Multiple of these events are held inside.

The structure flexibility depends on the market, sound insulation and heat insulation requirements, because they usually rent at the same price as a permanent hall.

Other type of uses are provided, such as asylum seekers. When they create a peak in the housing demand, it is necessary for the company to work with the government when there is an emergency. These spaces require flexibility, for they will need to be dismantled once que asylum seeker are assigned a house.

30% is business spaces, for example if a storage or bakery space is burnt down, they need a temporary space. Insurance for business have temporary

spaces to be rented.

Festival you get 2 people per m<sup>2</sup>, and a sitting VIP you need 2 m<sup>2</sup> per person. Also take into account the Back of House flow. Depends per function and usage. The festival is the most densely populated area rented. All the people don't mind being squeezed to each other under a tent.

Sizes of the spaces depending on their use?

Exhibitions are usually the largest, such as an Air-Show, where the airport can't host it. It takes 3 months to build it, and a week of event, providing 90.000 m<sup>2</sup> of temporary space. Most of the spaces are used for 2 or 3 events because of the costs. Others, as the Rihe in Amsterdam, requires extra space for exhibitions. Other uses as storage pays for cubic meters.

For the August Low-lands festival, we provided the Alpha Stage for the last 10 years. It is a temporary space of 9.000 m<sup>2</sup>, including changing, washing rooms, lavatories, supermarkets, non-stage space.

Time of assembly, duration of use and time is of de-assemble.

The time to assemble the tent depends the people you through at it. If you need it to build it fast you use cranes, but if you have time you can stager it with its own personal.

Most of the time is lifting and carrying the material.

Materials depending the use, or the time?

Most tents are structured out of extruded aluminium columns, and on the side PVC or insulated panels, single layers or double layer for insulations, and glass windows or double glassed.

We don't only provide the tent, also heating, lighting cooling, insulation, furniture, carpet, to make it look as a permanent building.

Prices of the spaces, and how are they calculated?

The production cost differs a lot. Some cost 100 euros per m<sup>2</sup> and specialist's costs 500 euros m<sup>2</sup>. Most are used for 15 years, aluminium can be reused but the PVC has a lower time.

The fee for specific structure depends on the demand for it. If a specialist structure is rented only 2 times a year, the fee is higher.

The cross over point is if you use the space for longer than 1.5 to 3 years, then it's cheaper to buy it and make if from steel. If it's shorter you can build it aluminium and rent it, it required flexibility and can



Air Show Exhibition, Farnborough, 2005.

## Questions & Transcript

be extended.

In spaces such as the Holland Olympic Stadium, big part of the cost is erection and dismantling. The temporary structure is double or triple the cost of a permanent. Then it shared for multiple events to share costs.

A calculation tool is in the web page. The factors are: seasonality, rental time, equipment needed as cranes to hoist the roof, personal hired, transport for the materials (they come from the storage location in central Belgium) and fee for cleaning. Most of it is third party cost.

Three levels for calculation for price levels, basic (really an empty tent) comfort and deluxe. It show how the tent alone isn't much of the cost.

The majority of the work is project, logistics management.

Festivals requires the least third party work, because the bands bring their own sound and light equipment. They don't need cooling, lighting or heating. They are the most minimalist, especially music festivals. They are the only type of clients that would ask specifically for a tent because it has a look that goes with festivals.

Fix elements required to bring up a temporal spaces? Are all the elements re-used?

20-25% it the tent structure, and the rest is logistics which is the biggest factor.

The tent is the first thing to be assembled.

We usually have 1 builder of ours and 5 temporary labourers.

Cosco or empty building, depends on the size of the space what type of air conditioning do you need.

They rent everything that isn't structural of the building from third parties, and every clients wants something different.

The bigger it gets the bigger the load on the structure, and depends on the area as close to the sea you have to build more wind crosses. The pressure on the surface where it is build can be distributed or reduced with Silcon plates, large concrete slabs that can be removed after used, sometimes build on top parking garages so you have to position on the columns . The concrete slaps cost a lot of money to transports.

New technologies being developed?

Technology in insulation is where the markets gets more demanding, and the building codes are getting higher, so they get closer to a permanent building. The PVC is still the most cost effective material, but it can be up-cycled.

Capacity of solar cell increasing over the years, which can be integrated in the future.

Carbon fibre is introduced more and more in the structural elements.

3d printing to design the joints and the roofs, but it has to be dismantled and carried by the people.

Floors have to be much lighter because people aren't allowed to carry so much weight.

Live streaming instead of physical presence, is taken into account, to expand in virtual space is being studied. Though people still go to festivals, for the social aspect.

Like there is still a demand for newspaper and books, and people still want to ride horses even though everyone has a car, there will still be a demand for tents.

now even with less. Nowadays with a design team of 3 people you can make the biggest collections. You have an idea, and just need people to produce it, first draftsmen and then an atelier. At a certain moment, every label has its archive, its predefined fittings, and a new collection can be made with minor changes to those elements. New music, new prints, new entourage. Everything looks great on the show, but actually its not so complicated. And it has to be like this, because the next season is reaching soon. Sometimes they have a break of a month, when they visit museums, second-hand-stores and get new inspiration. All this inspiration is then collected on a wall, 3 designers, 3 interns, and then Raf chooses the things he likes, which are then developed into styles. I remember that we had 600 different garments and fabrics on our inspiration wall, of which in total only around 90 pieces were used. Ofcourse there are designers who work differently, and with a less commercial, more artistic approach. For example, I heard about the ateliers of Rei Kawakubo that every designer is designated to and busy with only one piece for 6 months.

## Questions & Transcript

