

# Culture & maintenance of pleached trees in the Netherlands

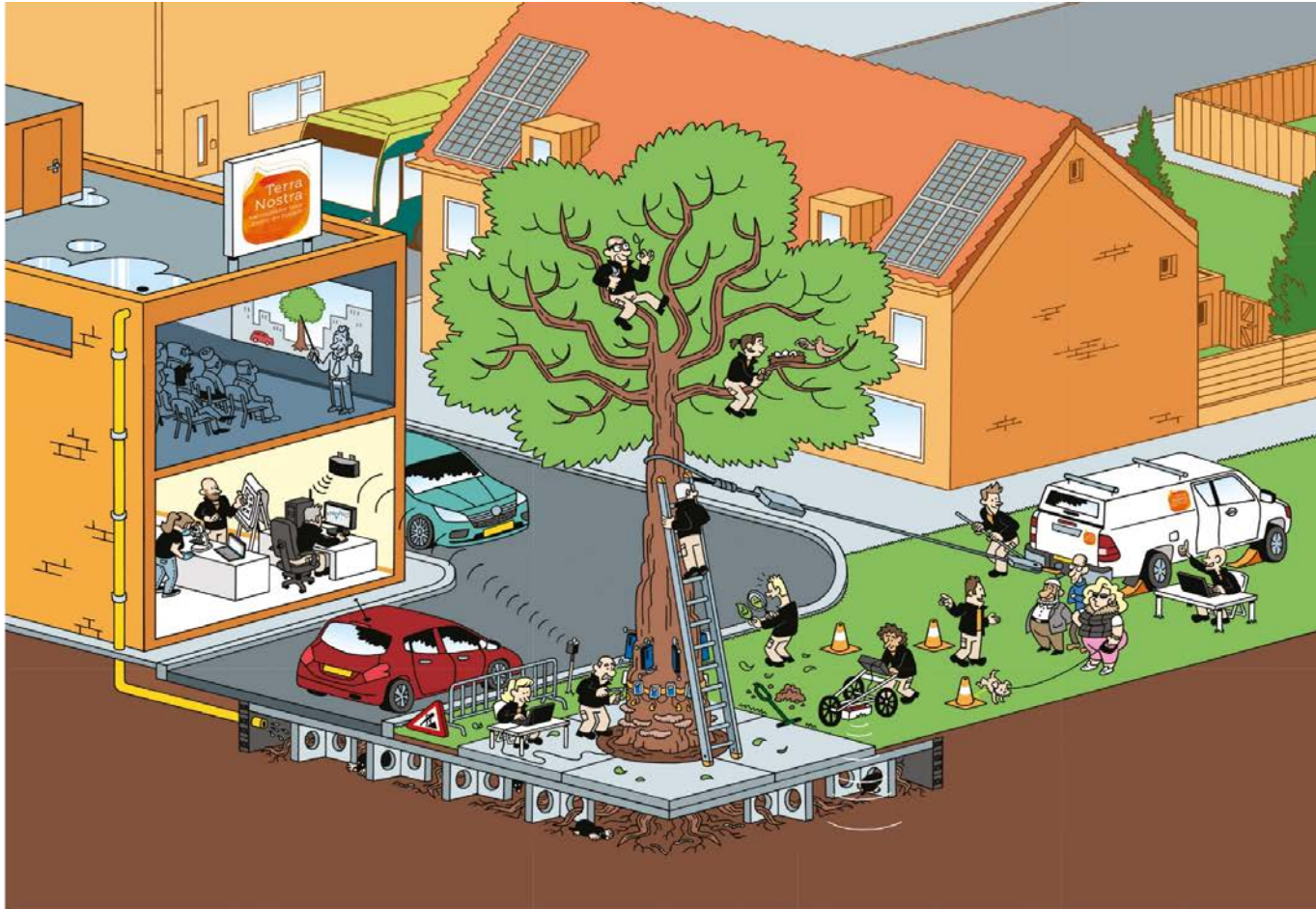
Crown & Canopy Management, Exeter

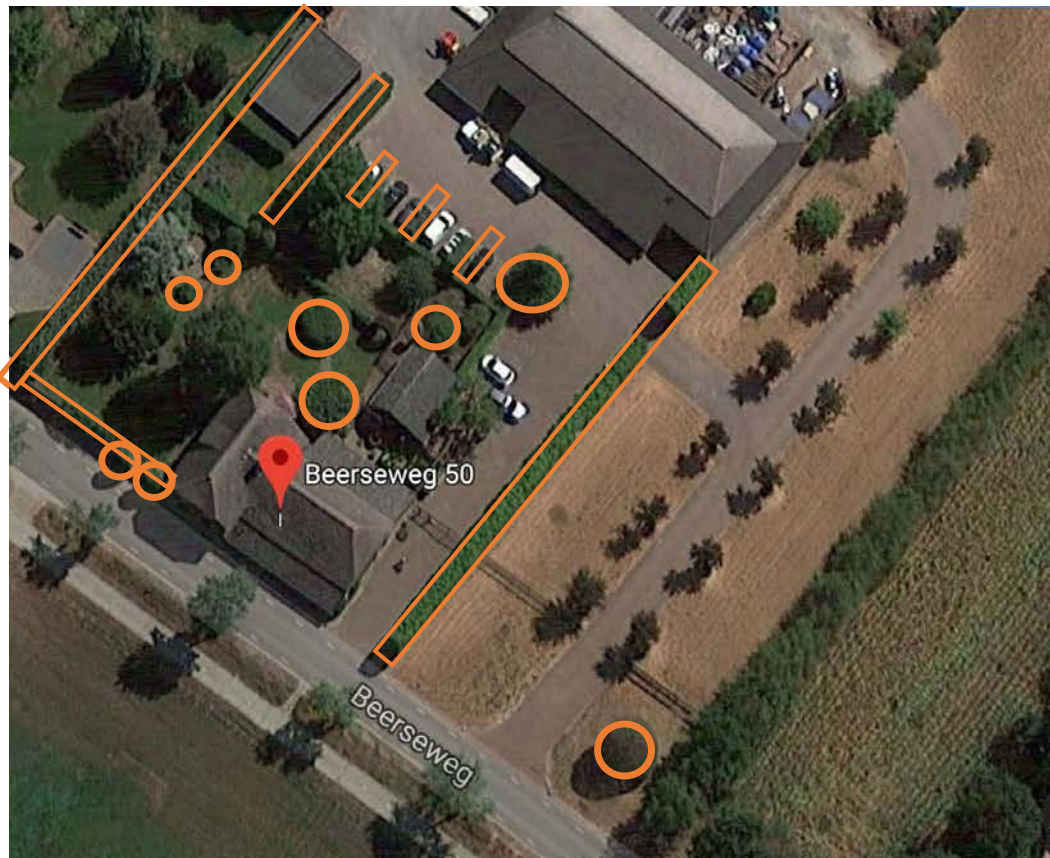
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# Terra Nostra knowledge centre for trees and soil







Het Loo, Apeldoorn

## History of artificial tree shapes

- 17th century, Het Loo
  - Hedges: Carpinus, Ulmus, Tilia, Ilex, Fagus
  - Topiary trees: Taxus, Buxus, Cupressus
  - Fruit trees: Malus, Pyrus, Prunus, Ficus
- 17th century, individual shaped trees in village centers.
- 18th century, practical application near buildings.
- End of 18th century topiary is old fashion in estates, private people still keep them. Cone with birds were most popular.



## Topiary

Sleeping Bird Topiary, Claude Ponti, Jardin de Plantes Nantes France

## Practical application

- Esthetic function
- Protection of building
- Use branches/fruit



Tilia Woudrichem



## Protection of buildings

- Protection against sunlight
- Protection of heavy winds
- Leafcover protects against fire from surrounding buildings



# Protection of buildings

Shared model





# Protection of buildings

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Sheared model



## Protection of buildings





## Area marker

Tilia, Brakel, Netherlands



## Area marker

Tilia 1750-1800, Geertruidenberg



# Fruit models



# Fruit models

Belgium fence



# Fruit models

Horizontal palmet



# Fruit models

V palmet





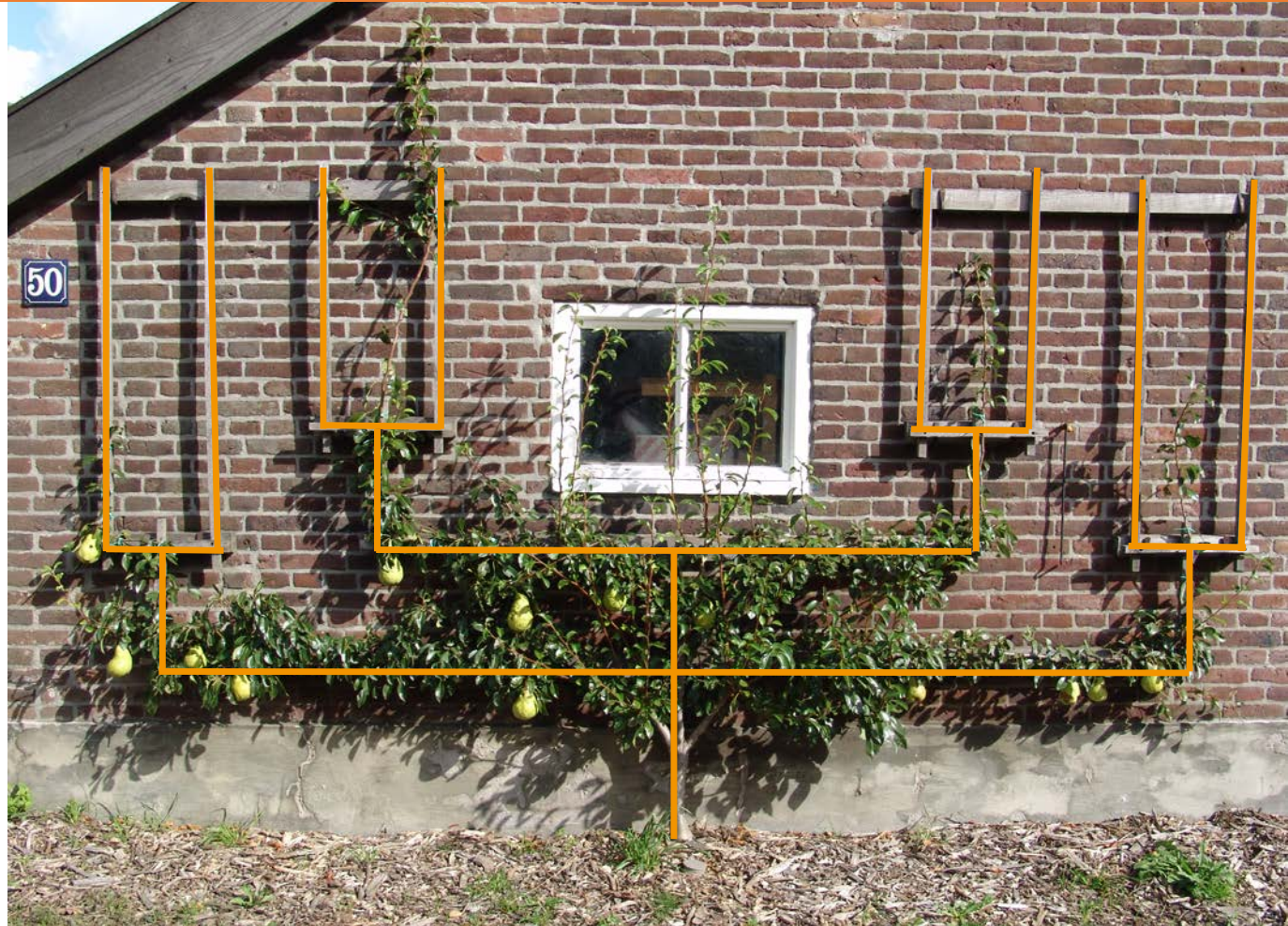
# Fruit models

Candle palmet



# Fruit models

4 double U palmet



# Fruit models

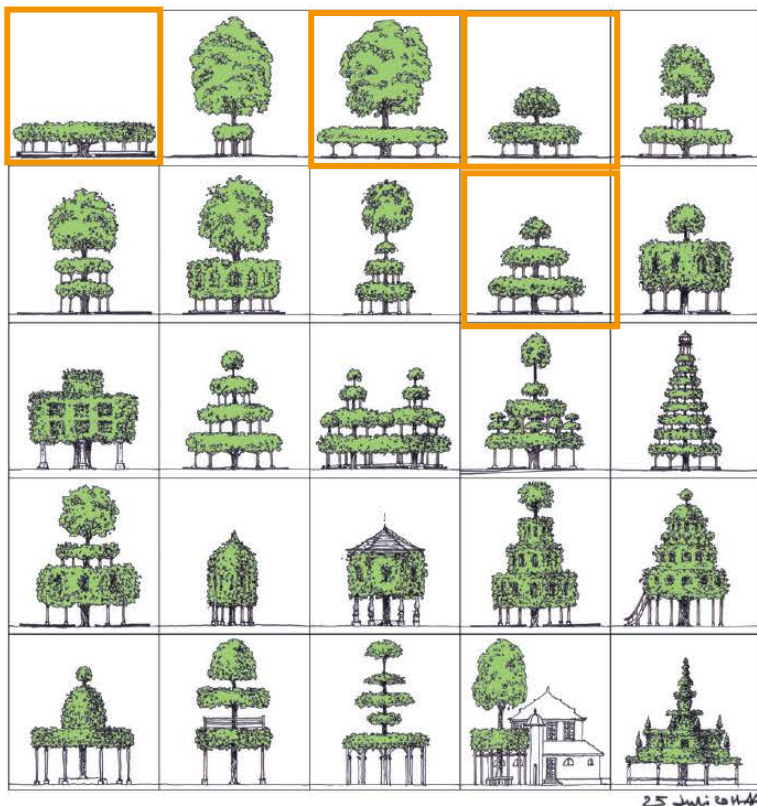
4 double U palmet



# Fruit models

4 double U palmet





## Individual different shapes

Pleached trees in village centers

- Marking point
- Social function
- Administration of justice
- Catholic symbolism



## Marking point

Moeierboom

*Tilia platyphyllos*, 1675, Etten Leur





## Marking point

*Tilia platyphyllos*, 1750, Oisterwijk





# Administration of justice

*Tilia platyphyllos*, 1650-1750, Nuenen







# Administration of justice

*Tilia platyphyllos*, Nuenen, Netherlands





# Administration of justice

*Tilia platyphyllos*, Nuenen





# Administration of justice

*Tilia platyphyllos*, Nuenen



# Administration of justice

*Tilia platyphyllos*, Nuenen, Netherlands





# Administration of justice

*Tilia platyphyllos*, Nuenen, Netherlands







2002

## Toll charge

*Tilia x europaea*, 1820, Gassel





2004

## Toll charge

*Tilia x europaea*, 1820, Gassel







## Toll charge

*Tilia x europaea*, 1820, Gassel





2006 spring



2006 autumn



2007

# Administration of justice

*Tilia x europaea*, 1820, Gassel





February 2005

## Marking point

Prilleke, *Tilia x europaea*, 1870

Uden Marketplace





## Marking point

Prilleke, *Tilia x europaea*, 1870

Uden Marketplace, Netherlands





## Marking point

Prilleke, *Tilia x europaea*, 1870

Uden Marketplace, Netherlands





2013 support construction

## Replant of marking point

Prilleke, *Tilia europaea*,



Basketed design



2013 support construction installation and replant

## Replant of marking point

Prilleke, *Tilia plathyphyllos*







27 March 2013 opening event of Prilleke

## Replant of marking point

Prilleke, *Tilia plathyphyllos*,





27 March 2013



October 2013



June 2014



July 2019

## Replant of marking point

Prilleke, *Tilia platyphyllos*

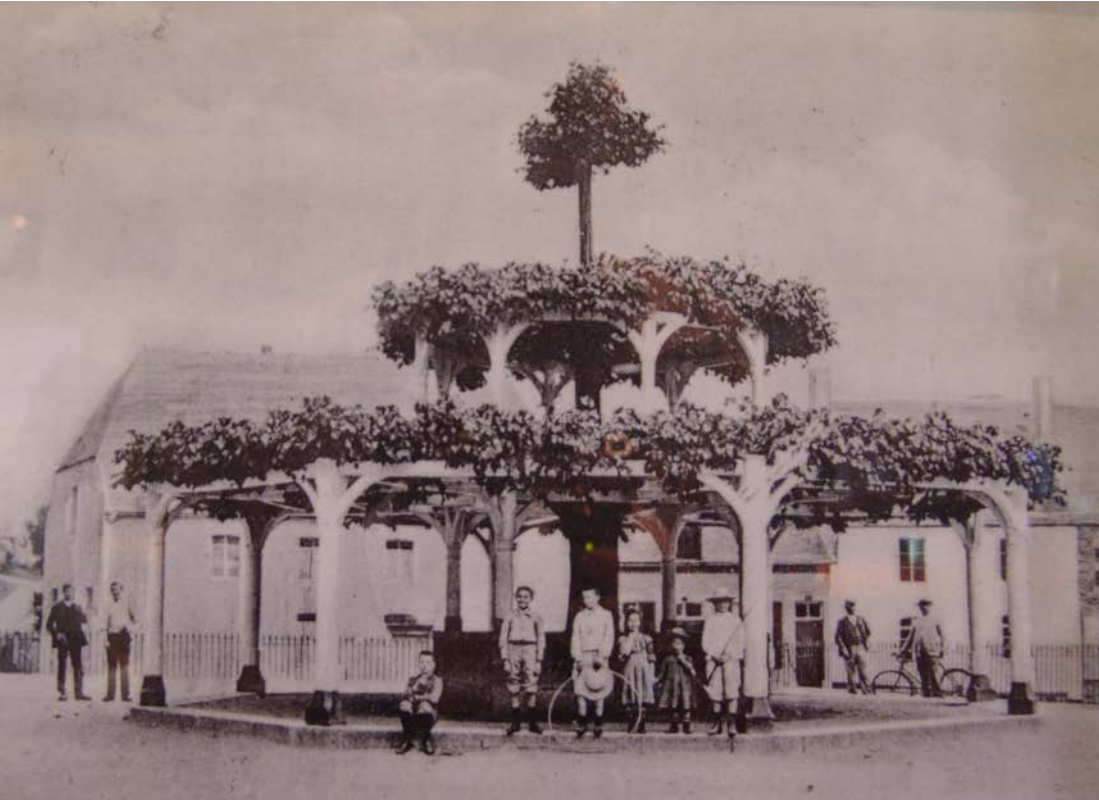


Wedding, Cuijk 1954

## Social function

*Tilia x europaea*, plm. 1850, Cuijk





## Catholic symbolism

*Tilia x europaea*, 1714, Macon, Belgium



## Catholic symbolism

*Tilia x europaea*, 1714, Macon, Belgium

Leaf-diameter ratio





## Catholic symbolism

*Tilia x europaea*, 1714, Macon, Belgium





2019

## Catholic symbolism

*Tilia x europaea*, 1714, Macon, Belgium





## Catholic symbolism

*Tilia platyphyllos*, 1800-1850, Groeningen







# Catholic symbolism

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*Tilia x europaea*, Nursery



## Catholic symbolism

*Tilia x europaea*, 2006, Groeningen, Netherlands





# 1 Storey tree?

*Tilia x europaea*, 1580-1623, Sambeek



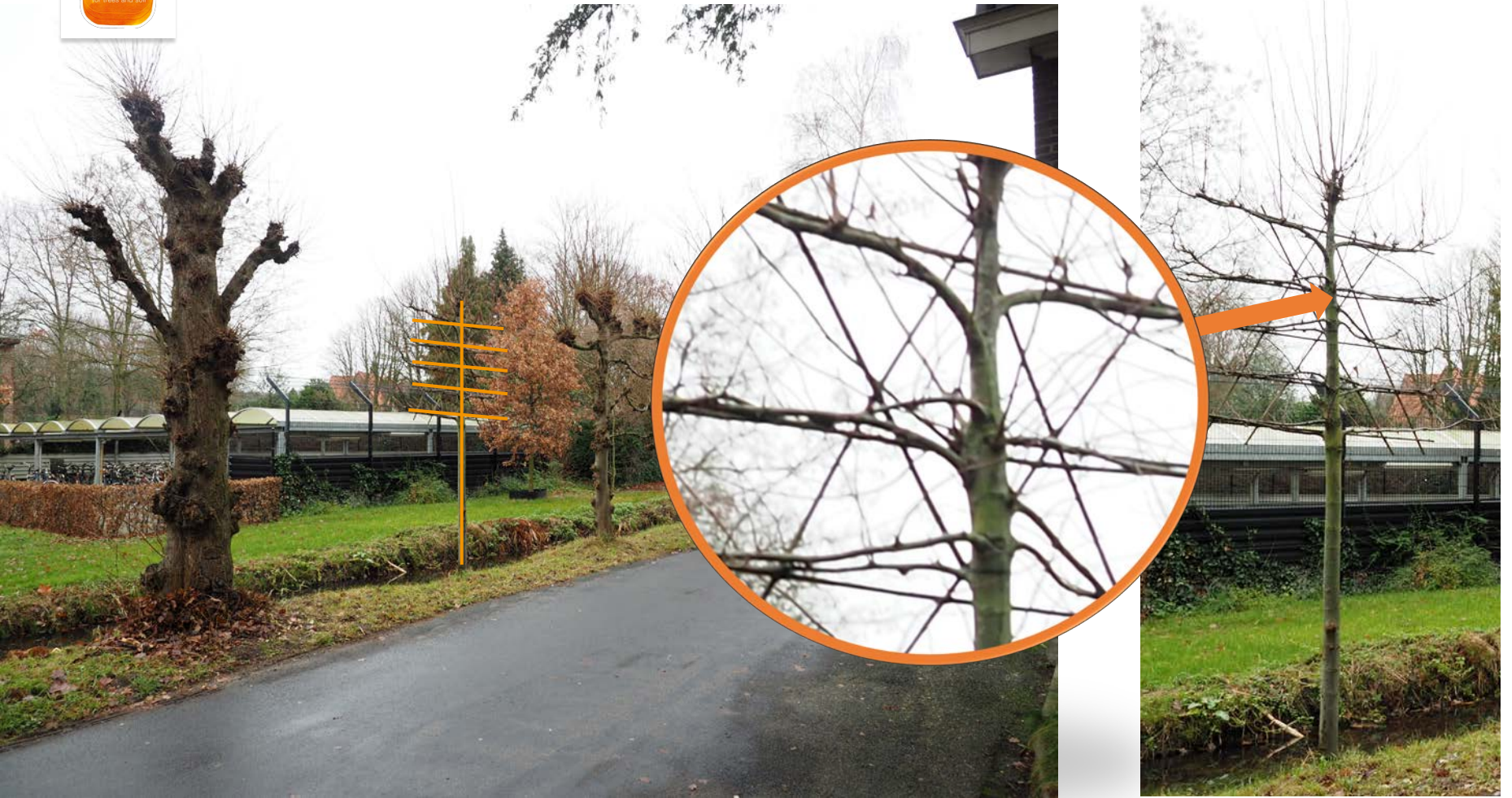




# Crown structure

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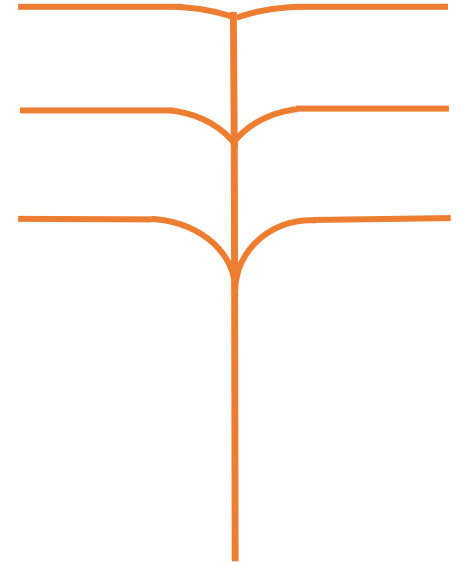
Analyse design





## Crown structure

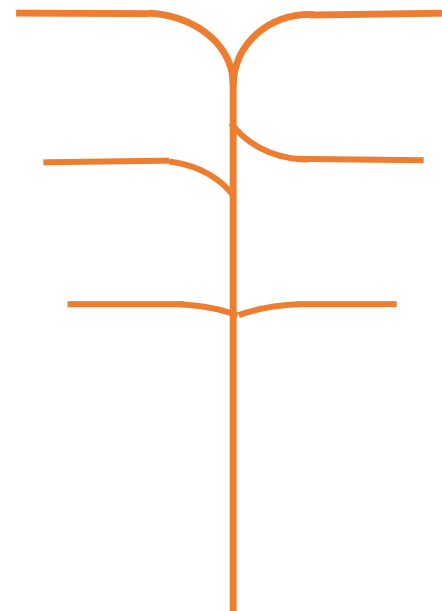
Ideal design, higher position=> more right angled



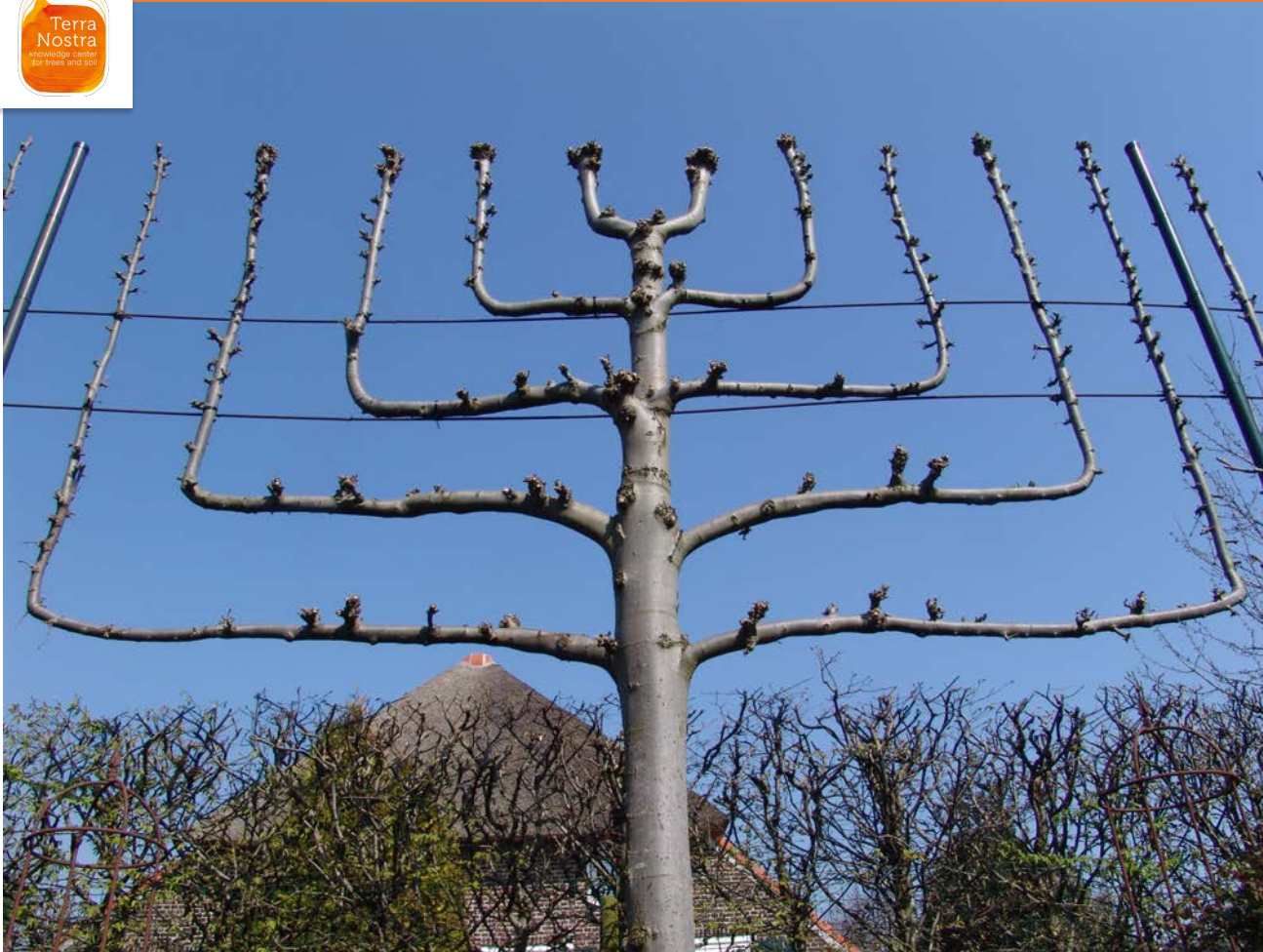


# Crown structure

Usual practice







# Crown structure

Best design by growth principals



# Maintenance

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- Shaering
- Pollarding

# Shaering

*Acer saccharinum* 'Pyramidalis'



# Shaering

*Acer saccharinum* 'Pyramidalis'



# Shaering

*Acer saccharinum* 'Pyramidalis'



# Pollarding



# Pollarding



# Pollarding





# Pollarding

Knuckleheads



# Pollarding

Knuckleheads



# Pollarding

Knuckleheads



# Pollarding

Yearly short cut



# Pollarding

Alternating pruning



# Pollarding

Alternating frequency



# Fruit trees

Maintain flower buds





## Conclusions

Apply in limited above  
ground area





## Conclusions

Creative application:  
natural roof





# Conclusions

Garden House





# Conclusions

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Be aware of knuckleheads



# Conclusions

Lifetime maintenance



# Advice



# Advice



# Advice

Grettstadt, Germany



# Advice

Peesten, Germany

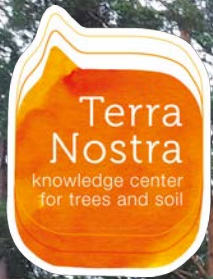




# Advice

Peesten, Germany





Thanks for attention!

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