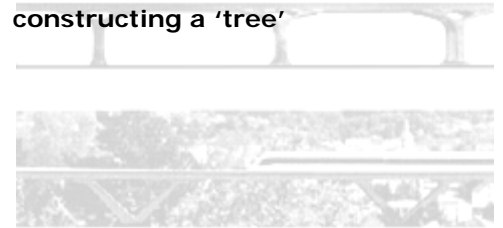


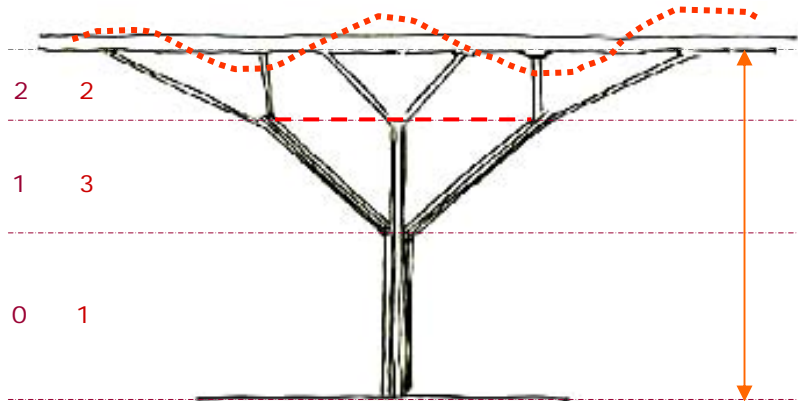
a branched construction can be designed in various ways:



constructing a 'tree'



decisions on:



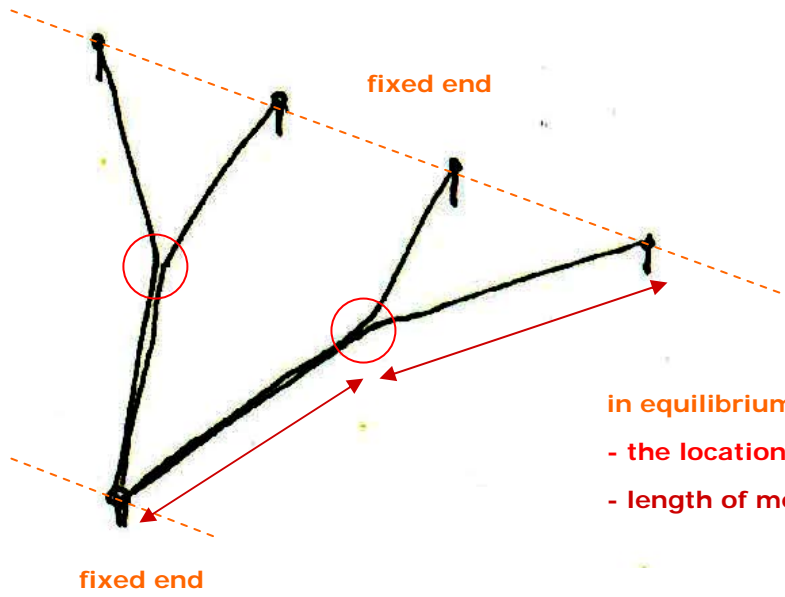
- number of levels
- number of branching for each level
- additional horizontal springs for each level [optional]
- geometric conditions [optional]
- variable height



frei otto's experiment setting:



thin threads are hung loosely
then moistened
to find the path system of branches



in equilibrium system finds:

- the location of nodes
- length of members

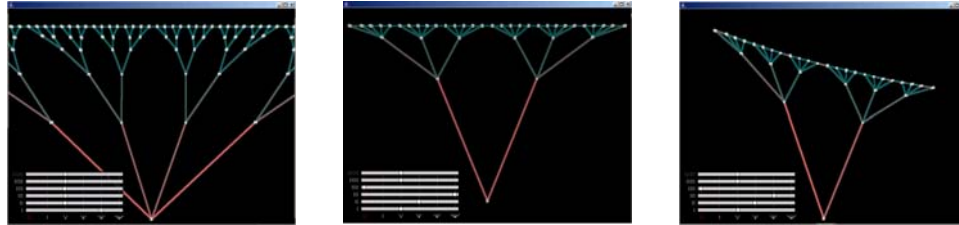
constructing a 'tree'



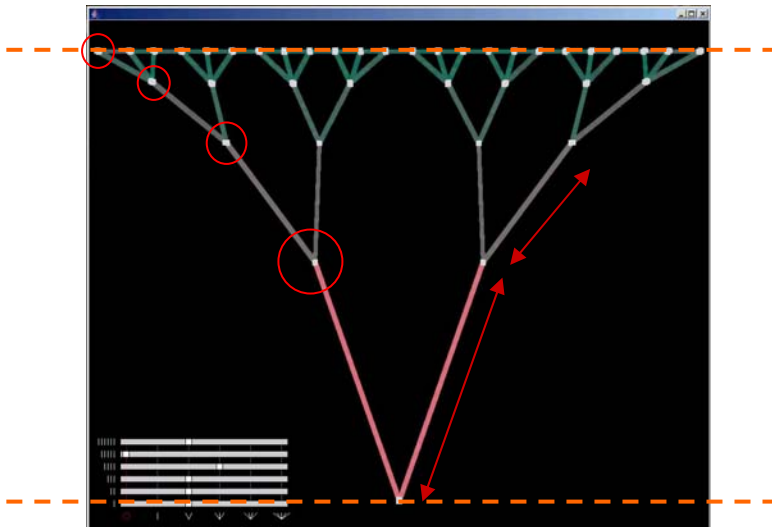
finding the form



tree_generator v0.9:



creates different branched structures according to user preferences



uses particle spring system to find the path system of branched structure

[tree_generator v0.9 applet](#)

constructing a 'tree'



finding the form



constructing a 'tree'



finding the form



future concerns



load input

variable `SpringRestLength` for each level to
enable user to decide on proportions of the geometry

3D tree generator



thank you

12 | 06 | 2004