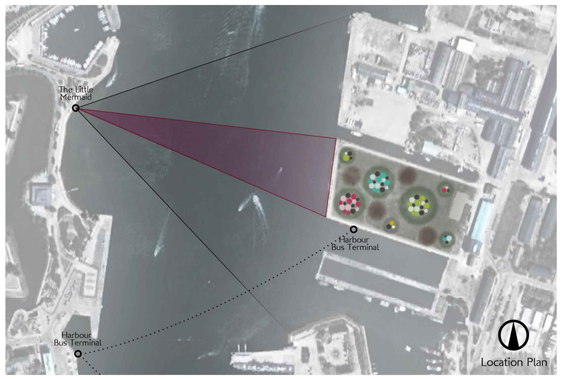


[WASTE BECOMES USEFUL AGAIN]

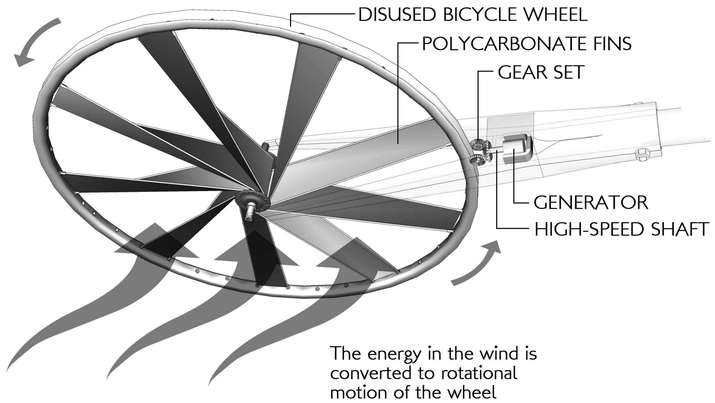
We propose to transform the old bicycles into a wind farm, harnessing the natural resources of the city while making use of what would otherwise be wasted resources. Deconstructing the bicycle into its basic elements; its frame and its rims, the individual parts are reassembled into a tree like structure. Each rim is then fitted with polycarbonate fins to catch the wind, thus allowing the disused bicycle to be readapted for use as a windmill. Waste becomes useful again.

[THE LITTLE MERMAID'S GARDEN]

More importantly than the power each wheel generates is the visual impact the design would have on Copenhagen. Edvard Eriksen's statue of the Little Mermaid sits against a barren sky, her back framed by nothing but chimney stacks, warehouses and tourist boats. Our design would visually transform her setting to create a backdrop more akin to Andersen's original description of the Little Mermaid. Like branches and leaves on the tree, each wheel would spin and sparkle against the wind and the sun, creating a strikingly animated addition to visitors of the Little Mermaid in Langelinie.

The recycling of unused waste to create energy is a concrete reminder of the ways in which sustainability reaches beyond architecture and building. By placing the design in such a prominent location, visitors to Langelinie will be reminded of Copenhagen's commitment to sustainability. The Little Mermaid becomes Copenhagen's ambassador for sustainability and renewable energy.

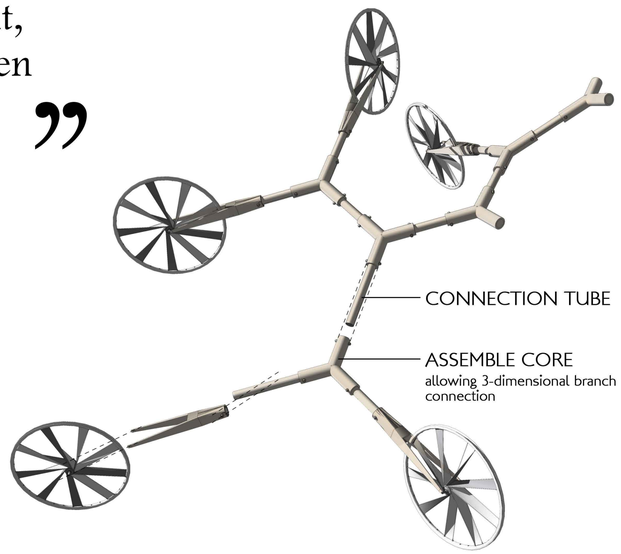
> "When you have reached your fifteenth year, you will have permission to rise up out of the sea, to sit on the rocks in the moonlight, while the great ships are sailing by; and then you will see both forests and towns."
>
> Hans Christian Andersen, *The Little Mermaid*



The energy in the wind is converted to rotational motion of the wheel

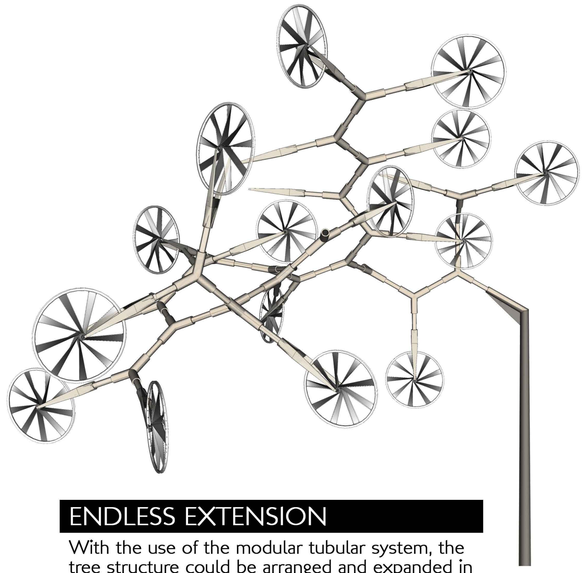
THE WHEEL

The frame and rim of disused bicycle wheel are reassembled to form windmill. Each rim is then fitted with polycarbonate fins to catch the wind.



MODULARITY

Standardized assemble cores and tubes are adopted for the branching structure. The modular system allows maximum efficiency in industrial mass production and thus reducing construction waste. It also makes the installation on site quick and simple.



ENDLESS EXTENSION

With the use of the modular tubular system, the tree structure could be arranged and expanded in endless ways. The installation is not a one-off product but an ever growing organism within the city, continuously contributed and shaped by the city of Copenhagen.