

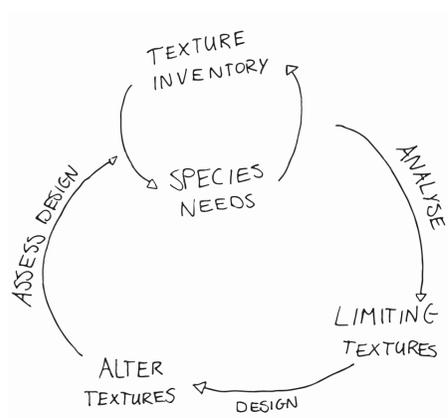
Designing for Coexistence

or how to overcome the speciesistic bias in spatial design

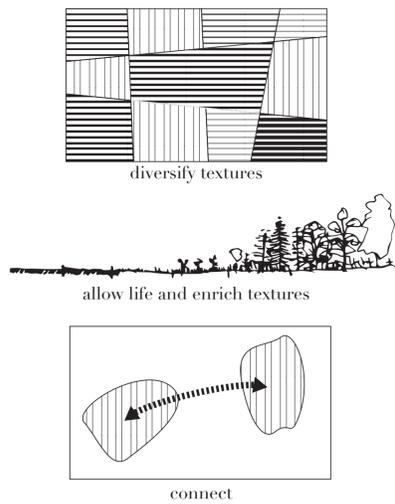
Due to increasing human land use, the world's biodiversity is declining. These losses of biodiversity in many places create problems for the resilience of the ecosystems in which we live. How we design our spaces has an impact on all the species that live in them. In order to protect and improve the biodiversity, spatial designers should change their approach from an anthropocentric towards one that has a plural perspective towards environments. All species have their own basic (spatial) needs that allow them to live. These basic needs can be generalised as follows: climate, infrastructure, shelter, food and water. Climate are the basic conditions of a place, that is formed by the atmospheric, hydrospheric and lithospheric conditions. Infrastructures make it possible for species to move. Shelters are needed for protection. Food and water form the basis of their energy and hydration. Environments are filled with textures that create the affordances of these basic conditions. One can therefore argue that in order to design for multitude of species, one needs to view space as textures that hold affordances, rather than only seeing it with the human meaning in mind. Textures can be analysed on basis of their affordances and combined with the limiting impacts on biodiversity. This will show where the rich textures are that have many different affordances and the places that limit biodiversity. In order to alter space in order to improve coexistence, a designer should use the following design principles: (1) Diversify textures; by having many different textures, there are many opportunities for species to find food and places for shelter. (2) Enrich textures by allowing it to grow; a simple method to create rich and diverse textures is by allowing plants to grow. Heavy maintenance not only limits the life of the plant that is being limited, but also the life that could have benefitted from the plants. (3) Connect rich textures; this creates the ability to move. Spatial design can be used to plan infrastructures for species, both human and nonhuman.

The Thames Estuary is used as a case study to test the approach and design principles. It resulted into a new vision for the Thames where human impact on biodiversity is reduced. In order to come to that vision a strategy is made by focussing first on the minimal effort, then on restoring infrastructures and finally to use these infrastructures to transform the areas surrounding.

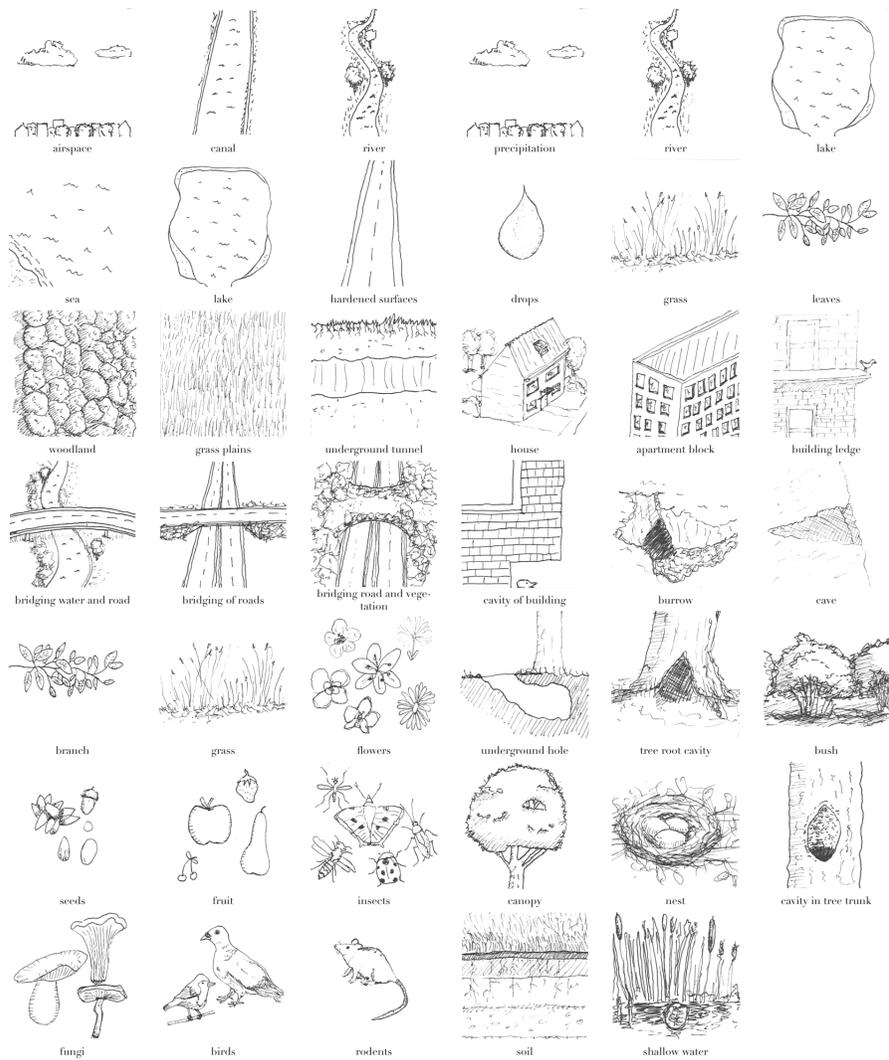
Approach



Design principles



Textures

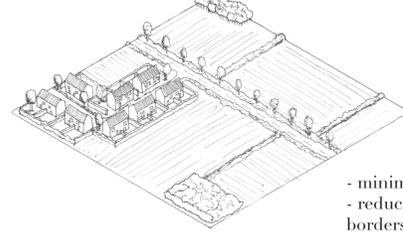


Limitations

■ least limiting
■ most limiting
— barriers



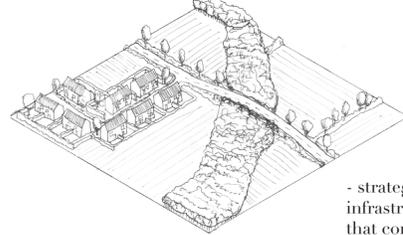
Phase 1 - Initiation



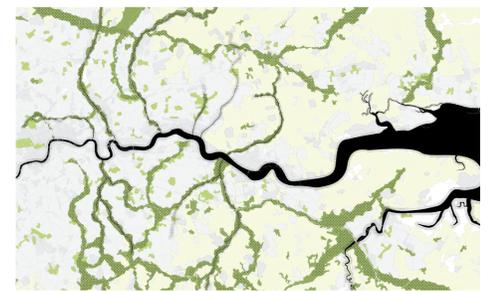
- minimal effort,
- reduction of maintenance of borders and derelict areas



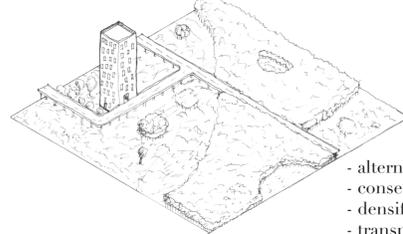
Phase 2 - Restoration



- strategical creation of infrastructures maintenance that connect rich textures



Phase 2 - Transformation



- alternative agriculture
- conservation areas
- densification
- transport system change

