Urban design in the context of delta landscapes is quite a challenge. By nature, deltas are highly dynamic environments. Despite all the risks they pose to people, over many centuries they have provided favorable conditions for intensive agriculture and human habitation. Always heavily used, in our time deltas throughout the world are coming under huge pressure from urbanization - while also facing all the threats and consequences of impending climate change.

More than ever before, the creative disciplines will have to consider the factors time and uncertainty in their approach to deltas, to learn to think in terms of strategies rather than simply of spatial solutions. This is the type of mindset we wish to foster among our students at the Delta Interventions Studio, where we help them to develop the skills necessary to think along these lines.

In this context, design is increasingly being viewed as a form of research. That is, as a tool to be used when conceiving ‘potential futures’, in the investigation of intervention-effect relationships and in the development of more widely applicable instruments and tools.

However, designers should look beyond their own research as well. They need to explore possibilities and develop practical tools. They face the challenge of translating spatial interventions into physical forms, and structures, in a manner appropriate to a specific time and place, and of creating a consistent composition which retains some novelty and originality to attract attention and involvement. Rarely does their task end with the developing of tools - the real test lies in the ability to face the challenge of translating spatial interventions into physical forms, and structures, in a manner appropriate to a specific time and place.

Of course, space does not exist in isolation. In deltaic landscapes, in particular, spatial forms result from countless interrelated natural and human processes, and they are in a constant state of flux. At certain moments, however, these processes will solidify into more or less fixed forms or artifacts, which tend to lead a life of their own. Many of these outlast human lifetimes, and directly or indirectly influence other concurrent or future processes. The traces they leave in the landscape form a narrative in space that we need to learn to understand as thoroughly as possible before adding new chapters of our own.

The designer has to constantly move between the languages of words and images. He or she is continually switching from one medium to the next. And those switches are nothing like the one-way traffic - from words to images, from figures to maps, from problem statements to spatial solutions - that dominates the discourse-driven, formula-dominated scientific world of the technical university. Rather, they represent a never-ending movement in both directions. In recent decades, reflection upon this ‘designerly way of thinking’ has emerged as an essential discipline in its own right. Even as a design process asks for a ‘co-evolution of solution and problem spaces’ (Cross, 2003), Cross and others state that, analysis and synthesis occur simultaneously in design processes. For designers, the evaluation of potential solutions is often more important than the analysis of the problem itself. From the very beginning of the process, their focus is on refining the problem in the context of potential solutions (Schon, 1994).

The way in which we humans experience space is ambiguous. We are torn between two extremes. On the one hand we perceive it in terms of its confines, just as we ‘perceive’ a room by virtue of its walls: a foreground and a background) to an interior ‘place’ (or the German Raum). But at the other end of the scale we find unbounded space: endless, abstract and, in its indefinability, potentially threatening. Here, space does not relate to objects (or to the French espace). The relative safety of the manageable ‘place’ evokes images of the mundane and the picturesque, while we associate the experience of ‘infinite space with the exceptional and the sublime. It is from the combination of the two, the picturesque plus the sublime, that the Lissahm region - (like many other delta landscapes) - derives its aesthetic appeal.

The concepts described here are deeply rooted in the design-driven disciplines of architecture, urban planning and landscape architecture, and are constantly being reinvented. Their professional history offers a wealth of experience to the practitioners who have approached the relationship between intimacy and vastness.

From: Frits Palmboom

**RESEARCH, DESIGN, MAKING SOMETHING**

**REFERENCE**

Frits Palmboom

**Research by design**

Durgarden #02 - cross-section combined with a longitudinal perspective

Drawing

To be able to move back and forth effortlessly between abstract problem and spatial solution, drawing qualities are vitally important. As a means of grasping the intrinsic qualities of space, drawing should not be regarded merely as a technique used to express solidified ideas but rather as a way of investigating and conceptualizing spatial phenomena. In this respect, too, delta landscapes present designers with unique challenges. What makes these environments so fascinating is not just their ability to change over time, but also the fact that they combine extreme spatial elements all in one place.

Delta landscapes are characterized by the entanglement of land with water. They are interfaces where the solid meets the fluid, the tangible, the endless, the defined, the undefined. The delta landscape attracts the eye but also seduces it. The great openness and openness of the Lissahm region make it hard to discern an overall spatial form, never mind capturing it on paper and yet much value can be attributed to those very features. Interventions like coastal reinforcement, dyke raising, new shorelines and construction of wind barriers are controversial, unleashing fierce debate. The art of drawing and visualizing these landscape features can help clarify the situation, contextualize it, and help make a better informed discussion.

**Space and place**

Rather than an open sea, a vast expanse of water, the Lissahm is a ‘famed’ land sea hemmed in by stretches of coastline, headlands and landmarks that constantly loom into view, then disappear again. The value of its open character comes not from total nothingness, not from an ‘absence of everything’, but from the relative experience of space it provides: the aesthetic of ‘almost nothing’. The way in which we humans experience space is ambiguous. We are torn between two extremes. On the one hand we perceive it in terms of its confines, just as we ‘perceive’ a room by virtue of its walls: a foreground and a background) to an interior ‘place’ (or the German Raum). But at the other end of the scale we find unbounded space: endless, abstract and, in its indefinability, potentially threatening. Here, space does not relate to objects (or to the French espace). The relative safety of the manageable ‘place’ evokes images of the mundane and the picturesque, while we associate the experience of ‘infinite space with the exceptional and the sublime. It is from the combination of the two, the picturesque plus the sublime, that the Lissahm region - (like many other delta landscapes) - derives its aesthetic appeal.

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**Sewing, Drawing, Flying**

The experience of ‘almost nothing’ also puts the art of drawing to the test. How do you capture on paper the relationships between the bounded and the unbounded, the defined and the undefined?

To address this challenge, we offer two support courses alongside the graduation studio. For students of Urban Planning and Landscape Architecture there is ‘Sewing, Drawing, Flying’, an exercise in viewing, thinking and craftsmanship. This begins with the physical measurement and drawing of a spatial section of the boundaries between land and water: a quay, levee or coastline (see Figure 171). The surveyed cross-section is then combined with a longitudinal perspective (see Figure 170). By cycling along the boundaries, students gather the data needed to compile a bird’s-eye view (see Figure 172). In turn, this material can be combined with cartographic information to zoom out even further (see Figure 173). The student is thus challenged, encouraged and trained to understand, through drawing the relationships between proximity and distance and between the view on the ground and its representation on the map.

The course also reveals how the succession of bay and headland unfolds along a coastline, and how introverted ‘places’ alternate with extraverted ‘spaces’.

Architecture and the Sea

For Architecture students, we offer the course ‘Aspects of Water-Related Design’, also known as ‘Architecture and the Sea - Making Place Facing Infinity’. While students of Urban Planning tend to look at the scope to abstract scenarios and strategies, their architectural counterparts like to go directly to the core of the matter, and to understand this built object - in the process losing sight of the broader context. For them, the challenge lies in relating a project on a manageable scale to the vast expanse of the delta.

To this end, we have taken a series of sketches by Le Corbusier as our inspiration. The students are encouraged to produce something similar, starting with the elementary ‘space’ of a horizon with an icon, before moving through landscape (landscape) with depth, a foreground and a background) to an interior ‘place’ (localiser le fauteuil, ‘framing the view’). They are also asked to sketch the approach to the building (a prominent architecture), and to design the cross-section showing where land, water and building meet. This encourages them to see clear skies above and a promenade architecturale (a promenade architecturale) to the side. This expanse of space, between exterior and interior, between proximity and distance, and between the view on the ground and its representation on the map.