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Aesthetic of Climate The Potential of Microclimate as Immaterial Element for the Design of Distinctive Places

If we think about research regarding microclimate in landscape architecture, terms like urban heat islands or climate change might come to our mind. In research papers about this topic, open space is often been described as green infrastructure which offer ecosystem-services. But such functional aims are just one perspective of microclimate-design. This paper argues for an additional potential of microclimate-design in landscape architecture: its potential for a design of distinctive and inspiring places through an aesthetic empowerment of microclimate. Such affective microclimate-design aims to build projects which offer rich and delightful experiences. Microclimate is directly perceived by intimate close-up senses: hot and cold, dry and wet, windy and wind-still are mainly perceived by the sense of touch, including the sense of temperature. It is through the intensity and

the intimacy of this perception, that it arouses embodied association and imagination.

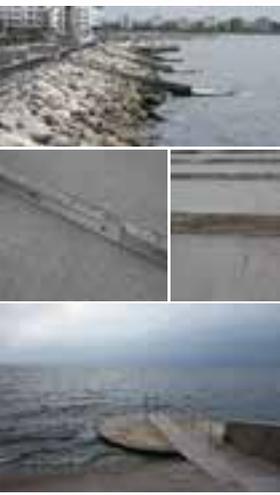
How can landscape architects design with microclimate, an immaterial, dynamic, always unfolding phenomenon?

To answer this question the paper presents a theoretical framework of the term microclimate. It argues that the scientifically coined term „microclimate“ needs to be supplemented by the perspective of the perceiving human being: Firstly, microclimate can be explained objectively on a scientific basis, by dividing it into weather elements such as air temperature, humidity and wind speed. These can be measured and quantified. Secondly, microclimate is a phenomenon, which is perceived by the entire body

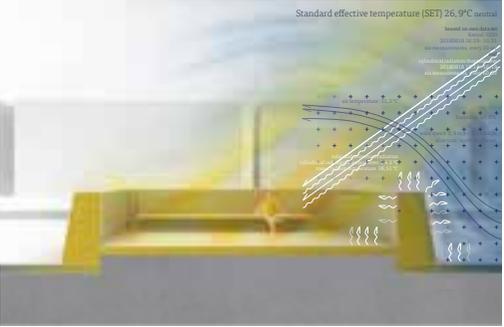
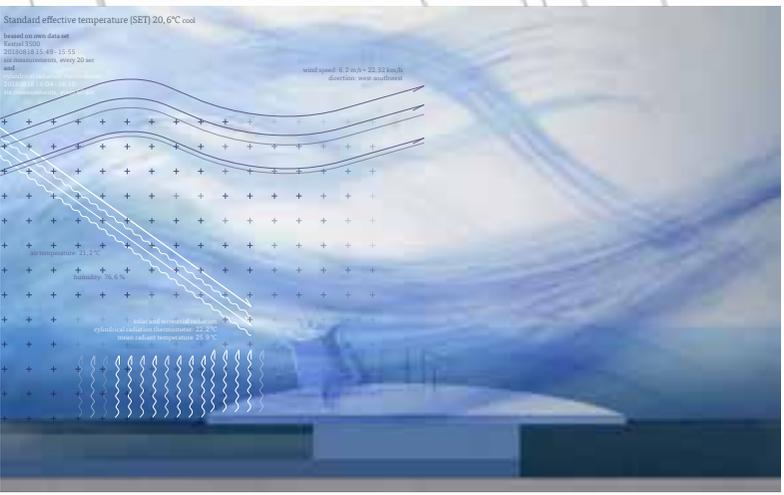
[Leib] with all it's senses and embodied experiences and therefore affects human wellbeing. This perspective acknowledges microclimate as a phenomenon, which strongly influences our perception of a place and our relation with the place.

The theoretical framework is the base for a field study of microclimate in landscape works in Scandinavia and the Iberian Peninsula. Overlaying sequence graphics bring together both perspectives on microclimate: it measurable factors and the qualitative phenomenon. These graphics are a knowledge and experience collage which provide a fused base of qualitative and quantitative information. Based on the collages design principles for an affective microclimate design will be derived.

Daniaparken, Malmö
 Thorbjörn Andersson with Sweco Architects



4 A stable concrete wall leads to the sea. I head down six wide stairs and step on the wooden, circle shape platform, right over sea level. Like on an island, I am completely surrounded by water. Air gets noticeable humid, wind is strongly blowing. gust of wind swirl my hair and clothes, I am fresh, a little bit cold. Small waves wash up regularly and splash over the platform and the rocky slope. The timber is wet. I slide off my shoes. The rhythm of the waves is soothing, at the same time invigorating, stimulating. Over and over a bigger wave swashes the platform, sloshes over my bare feet. I feel the suction of back flowing water and the pricking, cool touch of wind, which strikes gustily over my wet feet. I sink into wind, air, light and sea, feel vibrant and connected with the world.



5 I sit down on one of the wide concrete steps and lean against the wall. Even if the wind still blows, it is possible, to get some rest. If I cling very close to the wall. Sun shines directly on my face. On my cheeks I sense soft warmth, like a gentle, careful touch. I am exhilarated by light, warmth and wind.

6 I continue to walk up the stairs, while the wind still blows with same strength. I sit down on a wooden bench and find myself enclosed by solid natural stone walls, via a vis with the sea shore. From the moment I sit down, the wind appears to stop. Its calm. Sun is present, shines from the side on my face and body. Slowly, warmth diffuses inside my body. I close my eyes, turn my face toward the sun, enjoy for a couple of minutes. I spread my arms on the armrest, my mind wonder off.

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Aesthetic of Climate

The Potential of Microclimate as Immaterial Element for the Design of Distinctive Places in Landscape Architecture

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The theoretical framework is the base for a field study of microclimate in landscape works in Scandinavia and the Iberian Peninsula. Overlaying sequence graphics (preliminary results see pdf) bring together both perspectives on microclimate: it measurable factors and the qualitative phenomenon. These graphics are a knowledge and experience collage which provide a fused base of qualitative and quantitative information. Based on the collages design principles for an affective microclimate design are derived.