



**ENTWERFEN 3  
KICK OFF  
05.10.2022**

# THE LIVING FOREST QUADRA

## ARCHITECTURES OF CO-HABITATION OF AN URBAN FOREST IN PALMAS

### BRAZIL / Entwerfen 3 | Winter Semester 2022-23

In our Co-habitation Vol. 4 we will design the 1:1 "more-than-human" relationship of individual house typologies and its surrounding living nature. We will create architectures of entanglements between the built and the natural as a precedent for future urban-living model in the Global South – to design what we call 'Plant Urbanism.' This approach will be applied in a walkable city block prototype in the Brazilian city of Palmas, Tocantins. Here, we will apply biometeorological design principles to orient the urban heritage of Brazilian modernity towards the sustainable future of human and more-than-human habitats. Situated in the Brazilian Cerrado biome, the city of Palmas is located at the State's geographic center. Out of political and economic imperatives, the city was founded, planned, and constructed from zero ground in 1990 on a former agricultural land plot. Today, only 25 years later, Palmas faces drastic economic, ecological, and social degradation due to climate shifts which are rapidly changing the existing biome and endangering the city's ecological survival. With a fresh design approach, we will inquire on the possibilities of incorporating the performative capacities of local vegetation as a

basis for architectural and community design. For that, we will collectively design individual building typologies that collectively assemble to a super-quadra of a different kind. Starting with the 1:1 plant-human scale, we will study specific plant properties from the Cerrado and Amazonas biome. We will explore their faculties in depth to understand which bio-climatic and bio-meteorological conditions they provide. In a second step we inquire Brazilian vernacular housing typologies which will be transformed according to our plant studies to accommodate more-than-human and human needs combined. Each project will explore and test, how to permeate between building and plant. The individual yet communicating architectural proposals will grow with and within the forest vegetation leading towards architectures of co-habitation in the global south. This process will create an interwoven rich spectrum of living typologies that are capable to dissolve conventional divides between urban, residential, and productive landscapes. Ultimately a collective design of a Super-Food-Forest will evolve, which will grow into vegetal density over time, establishing through diverse plant compositions a unique plant and human

community that serves as an ecological urban prototype with new spatial, morphological and performative potentials for the formulation of more-than-human architectures.

**COURSE**  
Entwerfen 3 (153.506)

**WHERE**  
Seminar Room Ia&I

**ENROLL**  
30.09.2022, 11 am , TUGRAZonline

**WHO**  
Prof. Klaus K. Loenhardt  
DI Ing. Valentin Spiegel-Scheinost

Image credit: House of the Big Arch, Frankie Pappas

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