EDUCAN: SCHOOL FOR DOGS, HUMANS AND OTHER SPECIES

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Categories: Contributors, Densities, Eeestudio, Formats, Lys Villalba, Middle Density, Project, Technology and fabrication, Topics, Urban Paradigms

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Eva, Carlos, two Belgian Malinois (Bicho and Bomba), Harris the owl, five swift families, six kestrel families and 20 sparrows are all companion species. They live and learn together in this building, 30 kilometers west of Madrid. Sitting among fields, in a rural environment transformed over recent decades by urban development and intensive pesticide-reliant agriculture, Educan School is testing ways to recover the conditions of the ecosystem.

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Its architecture is a multi-species design. While the two main classrooms are busy with dog-human pairs practicing agility or dog sports like Schutzhund, birds' nest on the upper floor's nest-façade offer ideal views and orientation. Small birds of prey feed on rodents, maintaining a balance with crops and other local flora. Small birds and bats – who also inhabit the lettering on the south facade – feed on insects, including mosquitoes that can carry certain canine diseases, and are part of the pollination cycles of flowers and plants in the surrounding fields. Sparrows make an impromptu appearance in this self-regulating ecosystem, nesting in the circular holes of the container edges.

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Non-humans are at the center of the design. The floors, usually designed for people and their shoes, are adapted to the pads and joints of canine paws: the training classrooms use removable rolls of PTE-based synthetic turf, approved for canine training, while theory classrooms are finished in semi-polished, exposed aggregate concrete made of river pebbles. The average eye height drops from over a meter and a half to just half a meter. Interior openings are raised to heights of more than one meter to avoid doggy distractions; louvred window shutters shade the south façade, leaving enough space below for dog traffic to the outside, where rainwater from the roof is harvested in large troughs for dogs and birds. Spoken words turn to barks, and the interior surfaces are clad with

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sound-absorbing pyramid foam insulation, minimizing echoes, noises and reverberation.

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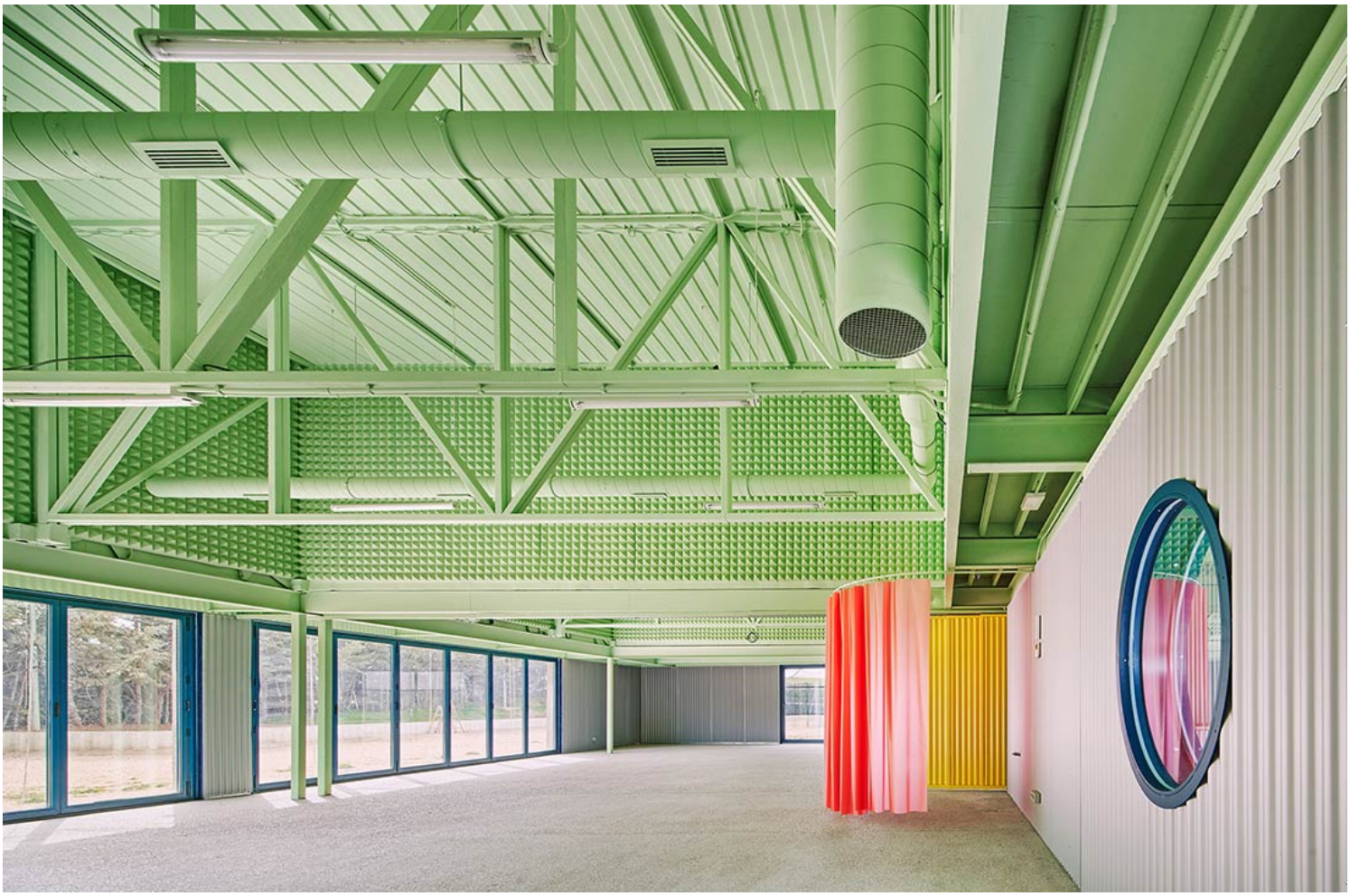

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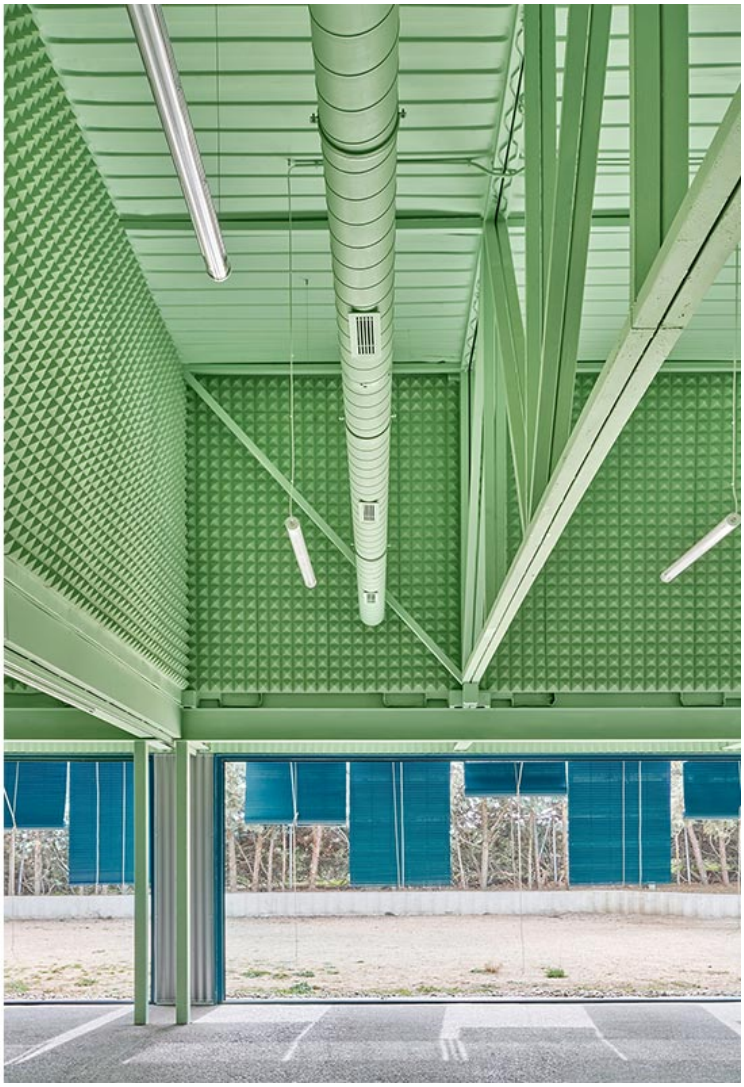

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Material Crossovers and Constructive Innovation

The building uses a diverse range of materials, combining different building techniques, trades and production systems: from material ecology and waste reduction, with the reuse of shipping containers, to the adaptability and thermal mass provided by in-situ concrete and its smooth and undulating formwork that makes use of sheets recovered from the off-cuts for the new trusses; from the standardization and optimization of industrial metal sheet panels to the precision of laminated timber CNC-cut joints; from the industrial standardization of basic ingredients like 40' HC containers

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to the hand-crafted ironwork offering customized joints, bespoke assemblies and unique elements such as bench legs, lamps and large sliding doors that open and close the different spaces; from automated air conditioning systems to manual bioclimatic control elements like the perforated shutters and roller blinds; from the material weight of the foundations and concrete walls to the lightness of the rest of the dry-assembled elements.

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Educan is also an experiment that demonstrates that agricultural architectures, usually considered lesser within the discipline, can also be places of exploration and architectural innovation.

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