

Architecture

World Architecture Festival: homes that work with nature

New designs offer a breath of fresh air

Excerpt from original article

Yet perhaps the most innovative project on this shortlist (also on the Small Projects shortlist) is not a multimillion dollar family home but a tiny, oddly-shaped cabin — which, like The Roof House, features unusual skylights — in the crowded *hutongs* of Beijing. It cost just \$10,000. Looking like a shiny white cubist sculpture squeezed into a narrow alleyway, Mrs Fan's Plugin House is as idiosyncratic as its name. "Our Plugin work began in 2014 in low-income slum conditions," says James Shen, principal of Beijing-based People's Architecture Office. "We use the term 'Plugin' to emphasise the idea that drastic improvements can be made on top of, or inside of, what already exists; it's not necessary to tear things down and start from scratch."

The small extension to Mrs Fan's original 1970s house contains a private (composting) toilet — a luxury in the *hutongs* which have no sewerage system, meaning residents have to share a public toilet. Yet mostly, thanks to cleverly positioned skylights, the Plugin brings daylight and a feeling of space and sleek modernity into what was an oppressively dark home. The neighbours' quality of living has not been compromised. "The form of Mrs Fan's Plugin is determined by the limitations given by her neighbours. The angled slices and cuts come from the need to maximise Mrs Fan's space without blocking the sunlight and ventilation of the people around her," says Shen.

The Plugin's panellised form meant construction was quick and easy, taking just over one day. The lightweight panels, which are being patented by PAO, are made of a sandwich material that incorporates insulation, structure and interior and exterior finish materials into one moulded part. Electrical conduit is moulded into the panels during the manufacturing process. PAO has completed about 20 similar Plugins across China, some of them wholly within existing structures that are hundreds of years old. "We insist on making our interventions clear; what's old is old, what's new is new," says Shen. "We believe all traces of history are valuable, regardless of how ugly or pretty it is, therefore we don't touch original structures, except to make them safe. There's enough sanitising of history going on." PAO's work means that these "slums" are being revived instead of demolished to make way for new offices and tower blocks. Like many *hutong* residents, Mrs Fan had relocated to a modern tower block with all mod-cons further from the city centre before she moved back to her childhood home with its new extension. "I enjoy being back in my familiar neighbourhood where my commute to work is just one hour compared with four," she says.



Mrs Fan's Plugin House, Beijing, China © People's Architecture Office

“For original residents like Mrs Fan to move back to these historic parts of Beijing is rare,” says Shen. “Through improving living standards for an affordable price within given social constraints, the Plugin House attempts to breathe new life into old neighbourhoods with a new urban vernacular.” That “new vernacular” includes a roof-deck, a rare find in the *hutongs*. There, Mrs Fan can sit in relative privacy, dry washing and grow fruit and vegetables.

The 10th edition of the World Architecture Festival takes place in Berlin, November 15-17.

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