

# The House of a Thousand Headaches\*

## BEYOND THE WORLD BOTTLE

**Bottle houses are a snug fit with that old chestnut about necessity and invention, especially those made of glass. A dearth of resources has sporadically resulted in an afterlife for such vessels, and there's plenty of websites devoted to liquor-soaked pioneer tales of bottle masonry in the world's mining outposts. The story of the Heineken World Bottle is special, and although nearly half a century and a change in material separates it from today's United Bottle, the ingredient of compassion connects the two**

Text by Anneke Bokern, images by Allard van der Hoek except where mentioned otherwise

Beverage brick, anno 2007: The United Bottle, designed by Instant Architekten.

Facing page: John Habraken and his bottles: In the back a prototype of the first design, in front the final WOBs.

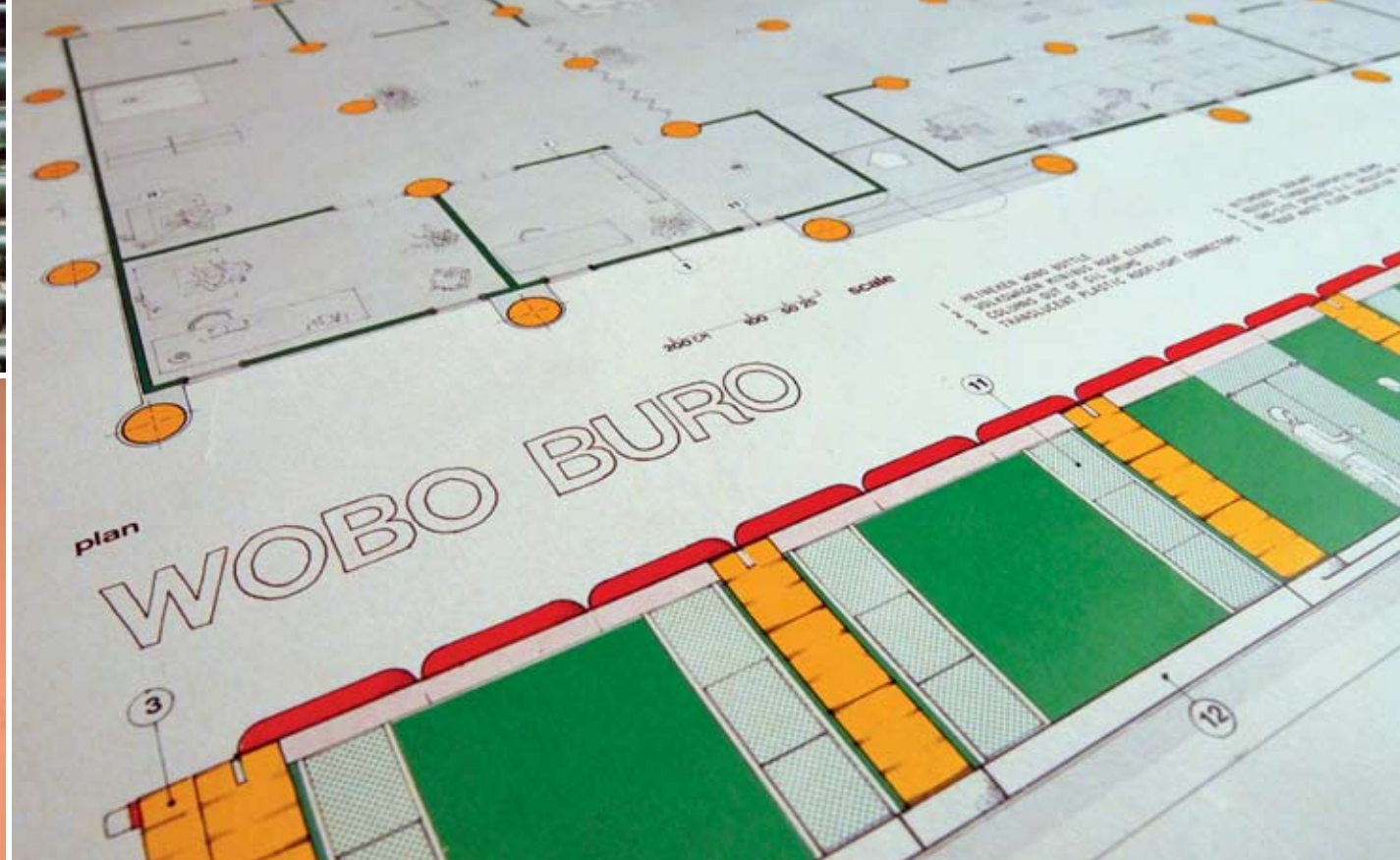
Among last year's winners of the Red Dot Design Awards was the United Bottle, developed by Instant Architekten from Berlin and Zurich. The architects had come up with an idea that seemed equally simple and clever: a special PET-water bottle with grooves in its sides, which can double as a building brick in LEGO-style. With these bottles, it becomes possible to solve two humanitarian problems in one fell swoop: drinking water can be distributed in crisis areas in the bottles, and once empty, they can be used for the construction of temporary huts. The concept detailed an approach that addressed issues of redirecting regular recycling circuits, upcycling and integration into local resources, all with the aim of thinking 'beyond the product' in times of emergency.

The chameleon qualities of the design resound with the current eco-agenda, yet the idea of using bottles as building material is not a new one. To varying degrees of aesthetic or functional success, bottle walls or houses have been around for over a century. The United Bottle's closer cousin first took shape some 47 years ago, with aims no less humanitarian. However, leaving aside pleasure preferences for respective contents, in contrast to its descendant there were no prizes or plaudits to be won. It was bottled up before ever really being put to use.

### AFFORDABLE BUILDING MATERIALS

The unlikely philanthropist behind this bottle was Dutch brewery-owner Freddy Heineken. During a trip to the former Dutch colony of Curaçao in 1957, he was struck by the ramshackle huts in which many of the island's inhabitants were forced to live (a result of the extreme scarcity of affordable building materials on the Caribbean island.) At the same time, he noticed the numerous empty Heineken bottles that littered the beaches. The reason for all the rubbish wasn't just that Antillians had a partiality for Dutch draft, but rather that Heineken wouldn't part with his recipe: in contrast to today, all Heineken beer was produced and bottled exclusively in the Netherlands, in order to guarantee its quality. And while domestic bottles were already refilled up to 30 times, it wasn't worth transporting the exported ones back to the plant. They ended their lives on Caribbean beaches. Freddy Heineken put two and two together and came up with his own idea of four. Why not use beer bottles to solve the housing problem?





Above, left: A hut constructed from United Bottles was presented at the Design Annual 2007 in Frankfurt. Photo: Messe Frankfurt/Constantin Meyer/Cologne

Top, middle: Not macho enough: The first, rejected design for the Heineken beer brick resembled a Chianti-bottle.

Top, right: The only building ever constructed from WOBOS was a simple bottle hut on Heineken's estate in the Netherlands.

Above, right: Getting a grip: the WOBO was short and sturdy, with an indentation in its base for the next bottle neck, and little dots on its sides for better grip.

One might assume that beer has helped more people lose their homes than build them, but Heineken was serious. Back in the Netherlands, he started to look for a designer who could devise a new kind of beer bottle. He mentioned this during a business lunch with one of his lawyers, and as it turned out, this lawyer happened to be the uncle of a promising young architect from Delft called John Habraken. 'He told Heineken that I might be mad enough to go for it,' remembers Habraken, now a fit-as-a-fiddle octogenarian. 'And he was perfectly right.'

### BUTCH BEER BOTTLE

Mad or not, soon afterwards Habraken set about designing the world's first beer brick, dubbed WOBO (world bottle) by Heineken. He learnt that the crux of any bottle design is the neck, which has to bear a great force when the cap is jammed onto it. 'So at first, I designed a bottle with a very long neck, which was meant to be stacked vertically. Its body had a groove on each side, so the next bottle could be slotted in upside down. It would have resulted in a very solid, possibly even mortarless wall, and thanks to the long neck, the glass could have remained very thin.' There was just one hitch: the thing looked more like an 'elegant wine' rather than 'butch beer' bottle, and Heineken's marketing advisors didn't like it. 'It just wasn't macho enough for them,' recalls Habraken with a suitable chuckle.

Without suit-approval it was back to the proverbial board, and accordingly beer brick number two took an entirely different shape. Rectangular and decidedly masculine, with a short, stubby neck, Habraken had to take into consideration that square shapes can bear far less pressure and therefore the glass would have to be much thicker. This bottle was meant to be laid horizontally, and Habraken added little rounded projections to its sides to help the mortar grip, and an indentation to its base, into which the neck of the next bottle would fit. 'They were laid in rows, the necks pointing in one direction in one row and in the opposite direction in the next. This way you created a bond and could even insert windows or turn corners,' explains Habraken. As bonding system, he envisaged a mixture of mortar with a silicone additive.

### MARILYN MONROE

The design finished, Heineken and Habraken approached Royal Leerdam to produce 60,000 test bottles. Although the factory owners didn't feel much like stopping their runs for a small charge of wacky glass bricks, they didn't have much of a choice. 'After all, Heineken was a good client,' remarks Habraken. To test the concept, he made a design for a simple little hut, much like the ones that beer drinkers in Curaçao would be able to build for themselves. It was constructed in the garden of Heineken's estate in the town of Noordwijk. The bottle bricks turned out to work perfectly.

So why aren't the Dutch Antilles covered in bottle huts today, their facades glistening in the Caribbean sun, casting emerald shadows onto the sand, happy beer-drinking families living behind them? As is so often the case, the fun was spoiled by managers and marketing advisors. 'They were afraid that WOBO might damage the Heineken image. Especially in America, Heineken was marketed as an upmarket product at the time. They didn't think it was a good idea to associate it with rubbish and poor people,' says Habraken. 'They thought that the only way to promote this would be to convince Marilyn Monroe to live in a WOBO-house.' A tempting image, but one that was on a road to nowhere associated with reality. Instead, 60,000 WOBOS disappeared into a storage shed somewhere in the Netherlands.

### WOBO BUREAU

There was only one more attempt to bring WOBO back to life. In 1974, nearly 14 years after the Heineken marketing department had bottled out, a noticeable change of zeitgeist had happened. Thanks to the oil crisis and hippy movement, designers were starting to think about socio-ecological issues. So Habraken convinced Heineken to give it another try. His employee Rinus van den Berg designed an office building called WOBO Bureau with bottle walls, columns made from oil vats and a roof made from VW-van roofs, which was to serve as an extension of Habraken's studio in Eindhoven. 'It all looked very good, but in the end we didn't manage to find the necessary sponsors. And to be honest, my colleagues weren't too enthusiastic about it, anyway. They were scared it might leak.'

Today, only a handful of the bottles still exist. Even the test house on the Heineken estate was demolished after Freddy Heineken's death in 2002. Habraken himself admits that the idea had a few flaws: 'Glass isn't a friendly material. The inhabitants could never even have put a nail into a wall! And there's more glass needed for these bottles than for normal ones, making them expensive to produce and transport.' So what does he think about the United Bottle? 'Sounds very interesting. But how much water would you have to drink before you have a hut?' If your life doesn't depend on it, WOBO-juice would make that chore far more fun. #

[www.united-bottle.org](http://www.united-bottle.org)

\* Bottle house mythology maybe, but the title was too good to miss & has been taken from [www.agilitynut.com](http://www.agilitynut.com) in its reference to Doc Hope's bottle house in Virginia, USA. Given the number of wine bottles used in the construction of the pharmacist's home, apparently local residents found it a suitable nickname.

Above, left: Floorplan of the WOBO Bureau, designed by Habraken and Van den Berg in 1974.

Top, right: VW-roofs, oil vats and beer bottles were all that was needed for the office building. It never got further than the scale-model stage, though.

Above, right: WOBO Scale model office building