

Microhouses

by

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Feature article

In Japan, there's a peculiar form of lodging called *kapuseru hoteru* or “capsule hotel”. They're economical, costing only about ¥2000 per night, but the rooms are not very large. In fact, if you're claustrophobic or even a bit tall you might want to look elsewhere for a accommodation because, though the rooms have air conditioning, television, and wifi, and are supposed to be quite comfortable, they only measure 2 m by 1 m by 1.25 m, so it's a bit like sleeping in a well-appointed coffin made out of fibreglass.

They've never been very popular outside of Japan, but it's possible that they may be a preview of what the home of the future will look like. With the building boom in Dubai pushing up rents as much as 64 percent in one year and continue to climb despite the worldwide credit crunch, the problem of how to live where you want and still be able to pay the rent has become a major problem of the 21st century.

It isn't just a Mid East problem either. The problem of too many people flocking to metropolises like London, Paris, or Tokyo takes its toll, as does the effect of natural disasters like hurricane Katrina or the Indian Ocean tsunami displacing millions of people all have had the effect of producing housing shortages that calls not only for more roofs over people's heads, but a lot of lateral thinking as well.

Lateral thinking that looks at packing a lot more living into a lot less space.

Now, we're not talking about living in a tent here or a glorified cracker box there—though looking at some architect's proposals it's often hard to think otherwise. It's much more a matter of how to get the most out of every square centimetre of space by using the most efficient designs and the latest in materials and technologies.

Think of it as the Swiss Army knife approach to combating the housing shortage—except that instead of a pen knife that is a collection of tools that don't do the job as well as the real thing, but are better than doing without entirely, you have a miniature house that does everything a full-sized one does, though not as well and not all at the same time.



These “microhouses” are examples of what designer Jay Shafer of Sebastopol, California calls “subtractive design”; the result of which is his Tiny Tumbleweed House. These 40-500 square foot dwellings look like a cross between an overgrown Wendy house and an ornate garden shed, but

“accommodates a whole slew of needs from home office to vacation home or full-time residence” suitable for a “simpler, slower lifestyle” with the minimum of space and substantial savings in utilities.

Translated, that means that for all its traditional woodland cabin looks, the Tiny Tumbleweed is a one (very small) room house with the “bedroom” usually relegated to a loft. Still, it does cost only \$15,000, to \$40,000, which is astonishingly cheap by American standards, and it can be mounted on wheels, so if the view isn't just right there's always another somewhere over the horizon.



A more high-tech look can be found in Icewall One's Igloo Satellite Cabin. For more than 25 years this 3-metre fibreglass ball has been used in regions from the poles to the tropics and if the Tiny Tumbleweed is an undersized cabin, then the Igloo is an oversized billiard ball. Since it's generally found out on the tundra or in the middle of the jungle, two places where real estate values generally aren't that high, you wouldn't think that size would be at a premium, but they're also places without a lot of roads, so setting up house is less than easy. In fact, it's what engineers generally call “a pain”, so a (small) plastic sphere that can be put together, fitted out, loaded up, and flown in by helicopter has its advantages; even if it seems more popular with geese than the tenants.



The city is like the tundra in that sometimes the only way you can find a place to put your home is by helicopter. That's where the Loftcube comes in. Where the Tiny Tumbleweed is for latter-day Thoreaus and the Igloo is for explorers with spaceman tendencies, the Loftcube is for the busy and relatively well-heeled urbanite who wants to have a fashionable Manhattan or Mayfair address without

paying out the equivalent of the GDP of a small African nation.

Created, by strange coincidence, by Loftcube GmbH, the Loftcube is intended for the likes of Dr “R” (A man of few letters) who says about his living arrangements, “What I really enjoy is to sit with a glass of good red wine and let my gaze wander across London—without borders.” That's all very genteel, but it's hard to relax when the requisite view is so hard to come by, as is an open spot of ground to build on. But Dr R is an early adopter of the Loftcube, which is designed to be dropped by helicopter on any convenient roof to create an instant penthouse.

Presumably the dropping comes after securing permission from the building's owner or some fairly prolonged and heated bickering might result.



With urban housing, “footprint” is everything and the Single Hauz from Poland's Front Architects has the footprint of a sign post. According to the Front website, it's just the thing for the “contemporary Western Man”—assuming he owns nothing weighing more than laptop and is extremely anti-social. One must admit, however that it is split level, very stylish, and is pretty much immune to basement flooding.

Though exactly how the plumbing is supposed to work in this thing is left largely to the imagination.



Of course, if everyone is putting houses on rooftops and on stilts, pretty soon there won't be any place left to put your home no matter how small. Not so, Free Spirit Spheres company of British Columbia.

If all the ground and rooftops are built over, then look to the trees and hang a chic 3.2 metre Free Spirit sphere from the nearest and stoutest branch. Failing that, lamp posts will probably do in a pinch. Free Spirits are also incredibly efficient. Where else can you combine claustrophobia, acrophobia, and motion sickness all in one tidy package?

Not recommended for sleepwalkers.



If all else fails, you can always take the to the road as the first urban nomad of the 21st century with the Walking House designed by N55, which may be a design firm, a person or a floor polish. The news reports aren't very clear on that point. Despite being a 3.2-metre wide, 3.72-metre long hexagon, the Walking House is supposed to “comfortably” accommodate four people and can tear along the public highways at an astonishing sixty metres per hour that will leave the snails and people on crutches absolutely nowhere.

It's also an aggressively green machine with a wood-burning stove, an improbably small solar panel to run the thing, a composter, and a greenhouse that is there to supposedly “to provide a substantial part of the food needed by the Inhabitants (sic)”, so you could get one of these and become part of the walking village of the future, or you could use the \$49,000 that the prototype cost to buy yourself a second-hand motor caravan and actually get somewhere.



But the top contender in the microhouses contest has to be the Microcompact home. British architect Richard Horden calls it “Smart living for a short stay”. A short stay is probably recommended if you're prone to leg cramp, because this is about as small as a house can get without being mistaken for a shoe box. With only 23 square metres of floorspace, this residential cube is not only tiny, but it's almost alarming in its efficiency. Imagine taking a full-sized home, reducing it to its absolute essentials, and then folding them all away so that what's left looks unnervingly like an ordinary one-room flat until you realise that it's barely two steps long and half a step wide.



It has everything you need to live relatively comfortably. There's a kitchen, toilet, shower, two beds, a dining area for five people and a built-in television. The clever bit is that everything is pretty much in one place and to go from bedroom to dining room, for example, is a matter of folding away this, lifting that, and sliding away the other. Imagine living inside a Chinese puzzle box and you get the idea.

Not that living in the Microcompact doesn't involve some adaptation on the part of the tenant. For one thing, you have to resign yourself to having almost no belongings beyond a change of clothes and a laptop because there's almost no storage space. Not to mention that using the compact dining table means tucking your legs into a foot well because the table is only about thirty centimetres high. Even the designers admit that the compactness is something on the extreme side when they point out that it's so small that it was designed to use those tiny plates used on airliners because the standard ones are too bulky. Even the coffee machine is a miniature doling out tiny cups.

It's not just a miniature house, it's a miniature lifestyle. And at the end of the day, that's what it all boils down to. Though the packaging and circumstances is novel, the bits and pieces of the microhouse, whatever its design, aren't really all that new. Anyone who's stayed in a small hotel or sailed on a yacht or even struggled with a Murphy bed has seen similar at one time or another. What makes the microhouse so peculiar is that it tickles that part of the brain that's fascinated by tool kits that tuck into fountain pens or walking sticks that turn into fishing rods. It's what makes complicated wristwatches so compelling and why people love small Italian sports cars.

Mind you, a microhouse hasn't got 400 bhp under the bonnet and can't do 230 miles per hour, but I'm sure that once the kinks are fixed in the sliding beds they'll get 'round to working on it.

Top 5 future past micros

Microhouses aren't new. In fact, they've been around so long that the first micro was probably when Ugh the Caveman suggested that the tribe try out a smaller cave. So as our salute to Small is Beautiful, here are the five great micros of the last hundred years.

- Dymaxion House



- Buckminster Fuller's revolution for the housing industry. Built out of stamped sheet metal, the Dymaxion House sat on a central pillar that contained all of the utility lines. It was designed to heat and cool naturally, had a diesel generator for power, and was light enough to be air lifted anywhere. A pity that most people thought it looked like a biscuit tin with a gland condition.

- Futuro



- A good example of why it is a bad idea to watch too many episodes of *Lost in Space* at one go. This one has it all: Too many windows that still manage to be too small and low, built-in lounge chairs that are both ghastly and uncomfortable, one of those central fireplaces that people gave up on in the Middle Ages for good reason, the acoustics of a milk carton, and a floor plan that makes any hope of privacy one with ages past.

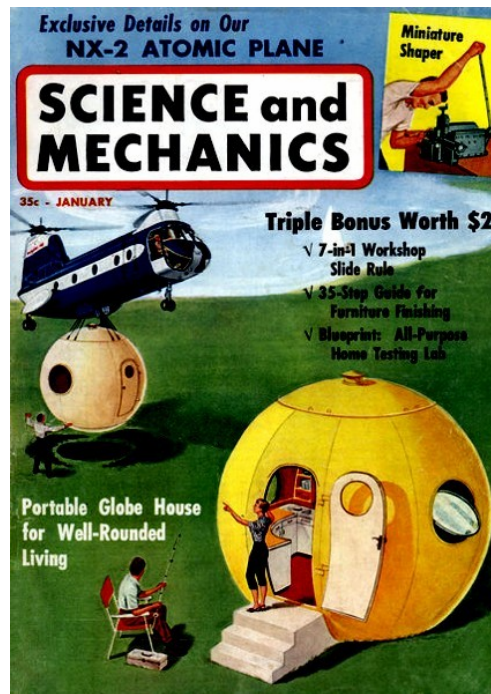
- “Bulle“ à 6 coques



- In 1968, Jean Maneval (1923-1986) thought he was on to a winner. He'd designed a house made out of six plastic shells that could be neatly stacked inside one another and transported with their connecting bits to the building site in a single truckload. Just drive it up to the prepared site, unload, bolt it together, hook up the utilities, and you're just a few throw pillows away from moving in. It also had the towering strengths of having no privacy and a kitchen with dimensions more suited to a Wendy house.

Only thirty were built before the company went bust in 1970.

- Kugelhaus



- Why settle for a spherical room when you can have a spherical house? That is what Dr. Johann Ludowici thought in 1961 when he designed the Kugelhaus; a twelve-foot diameter sphere that crammed an entire house inside like Japanese commuters on the Tokyo Metro. It is not advised to use the Kugelhaus on steep hillsides in earthquake zones. Otherwise, you could be woken up one morning at the start of a rather alarming, albeit brief, career.

- Living Capsule



- Yeah, I've had flats about this big; not enough room to swing a cat and you have to supply your own kitty. At least this example from 1970 has a colour television, videophone, stereo, & bar.

And just to make it easy to fit into any space, it's spherical!

Do you live in a micro?

Is your home a microhouse? Check for these tell-tale signs.

- Are the mice in your house hunchbacked? Sorry, I couldn't resist.
- Do you avoid buying loaves of French bread because it involves leaving the window open to fit it in the kitchen?
- Is your exercise machine a hamster wheel?
- Did you give away your ipod because you didn't have the shelf space?
- When you do the laundry, do you keep getting the bed sheets and the handkerchiefs confused?
- Do you wear a helmet when standing on tiptoe?
- After living in your microhouse for a year, did you discover it's actually the box it came in?
- Is the idea of an "extra" plate difficult for you to grasp?
- Is your favourite film *The Dirty Half-Dozen*?
- Can your cat only walk in circles?

Micro furnishings

Microhouses require microfurnishings, so here are a few tips to help you cope with fitting out your new shoebox—Sorry, home. I meant home. Honest.

- Desktop cooker/coffee maker



- For microhouses you need micro-cooking and this appliance is a coffee maker, hot plate, toaster and fire hazard all in one.

Progress!

- Computer Bed



- Put this in your microhouse and you have a bed and workstation all in one. Or you can put it in your office and resign yourself to the fact that you're never going home. Ever.

- Washing machine/lounge seat



- It's a lounge seat! It's a washing machine! What problem is this supposed to solve? I have no idea.

- Toilet/basin



- The combination toilet and wash basin is finally here. Now the bath tub/cement mixer won't stick out quite so much.

- Walk-in vaults



- A walk-in wine vault? For a microhouse? Are you mad? Not at all. Get one of these, toss in some furniture, and you can get rid of the micro and have air conditioning to boot!