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Naturally Temperature-Conditioned Traditional Courtyard Homes: Ready for a Renaissance?

by Jennifer Hattam, Istanbul, Turkey on 02. 3.10
DESIGN & ARCHITECTURE



The Cahit Siki Taranci House in Diyarbakir, Turkey, is an example of a traditional courtyard-style home. Photo via [Diyarbakir Association](#).

[Recycled denim insulation](#) and [programmable thermostats](#) are all well and good (really good), but people 4,500 years ago managed to keep their homes appropriately warm and cool without high technology – and without wasting energy. How did they do it?

Traditional courtyard homes developed between 3,000 or 2,000 BC "incorporate a variety of appropriately designed inward-looking habitable rooms and spaces at different floor levels around a planted courtyard to suit different seasons and to enhance privacy," according to an exhibit at the [Science Museum](#) of London that shows a model of one such house in Baghdad. These "naturally conditioned homes" are still found in many places, from [Beijing](#) to southeast Turkey, and likely beyond:

Courtyard houses are built contiguously (with shared walls) and incorporate natural cooling elements in design. These include a planted courtyard with fountain and basin, room orientation, thick external and party walls, double-glazed windows, [and] air-scoops for natural cross ventilation (inducing external air from the roof terrace to pass through party walls to subterranean rooms)...

[Elan Magazine](#) tipped us off to the exhibit, which it cited as an example of the Muslim world being "green before it was cool." The exhibition itself, [1,001 Inventions: Discover the Muslim Heritage in Our World](#), is focused on engineering and medical achievements rather than eco-friendly ones, but the accompanying book does look at early uses of [crop rotation](#), water-conservation laws, and [herbal medicines](#).

Traditional Water-Conservation Techniques

Of course, we can't romanticize all old ways of doing things, but the traditional Middle Eastern underground aqueducts called [qanats](#) have seen some resurgence of interest as water shortages become a more pressing problem in many parts of the world, as have various [rainwater collection](#) techniques. Admittedly, adopting courtyard-home designs more widely might require some change in our habits, as the Science Museum points out:

Inhabitants move from one space to another at different times of day within the same season, seeking the most comfortable environment. In contrast, inhabitants of modern-style homes stick to the same rooms in all seasons, relying heavily on energy-intensive systems to make their environment comfortable.

But it makes sense, in a lot of ways. In the summer, I find myself seeking out certain restaurants, cafes, or bars that have airy, open spaces in which to enjoy the sun, while in winter, I gravitate toward the ones that are intimate and cozy. So why not do the same thing in your own house? Besides, with things like cell phones, [laptops](#), and mini-DVD players making us less chained to our desks and sofas, such a "mini-migration" through one's own home is probably easier than ever.