



Scientist of the senses

By Andrew Braithwaite

12 | Though often labelled France's king of molecular gastronomy, Thierry Marx prefers to call his culinary innovations "techni-emotional."

He's a master of textures, temperatures and, especially, breaking down and restructuring his raw materials. He's inspired, he tells me, by Frank Gehry and Tadao Ando,

and by the swooping steel sculptures of Richard Serra. "But," adds the 47-year-old chef, "the form must complement the particular tasting experience I'm trying to reproduce. It's like an architect designing a home: his forms are selected so as to make the home inhabitable."

In terms of culinary homes, Marx has two. His primary residence is his two-Michelin-starred Château Cordaillon-Bages, outside Bordeaux. But the place where he can get away and think is FoodLab, his test kitchen in Paris. Linked to Le Laboratoire and run by Harvard scientist David Edwards as a centre for cross-disciplinary collaboration, FoodLab is a forum where Marx experiments with new ingredients and techniques – using the fibrous skin of a turnip, for instance, as an emulsifier.

Marx doesn't aspire to be a chemist, or a physicist, or a designer. Rather, he surrounds himself with them. For a collaboration he conducted at FoodLab two years ago, he teamed up with French physicist Jérôme Bibette to explore the technical world of colloids. The result, prepared live for FoodLab visitors,

featured such dishes as tomatoes and mozzarella reconstituted into tiny, fine-membraned particles, each the size of a salmon egg.

These days, FoodLab offers twice-weekly tastings, which serve as dry runs for dishes that might eventually end up at Cordaillon-Bages. But there's also an element of performance art: patrons look on as the chefs experiment with foams and liquid nitrogen; and they eat at the bar of a kitchen conceptualized by Mathieu Lehanneur, who masterfully covered the ceiling with mirrors, to involve all guests in the culinary processes no matter where they are in the room.

The tastings aren't always guaranteed to please. Of the 1,700 experiments performed last year, only 30 were deemed worthy of Cordaillon-Bages. But sometimes – as with Cordaillon's grapevine-smoked beef tenderloin with a side of restructured potatoes inspired by the columns of French sculptor Daniel Buren, the worlds of innovative gastronomy and contemporary design aren't so far apart after all.



13 | An event space in a hurry

The award-winning Wind and Water bar began life in flood-prone southern Vietnam as a case study in emergency rapid construction with low-cost materials. It took local architecture firm Vo Trong Nghia just three months to build the 10-metre-high, 15-metre-wide structure with 48 bundles of locally sourced bamboo and fire-resistant bamboo leaves. The dome's natural ventilation system and vernacular design also make it a convenient community hub. votrongnghia.com



14 | Post-consumer packaging

This postgrad project by Manuel Jouvin of France brings new meaning to the expression "nose to tail." Working with a snail farmer, Jouvin discovered that castings from cellulose-eating snails could be moulded into containers for the gastropods. He then came up with the idea of feeding them Pantone-coloured paper. Materia is manufacturing the biodegradable material under the name of Dejection-Molding. [Tory Healy](http://ToryHealy.com)



16 | A printer that makes dinner

MIT Ph.D. students Marcelo Coelho and Amit Zoran are in the final stages of working on Cornucopia, their 3-D food printer, which literally reinvents food preparation. Equal parts convenience machine (fridge meets microwave) and nutrition guardian, the "personal food factory" is equipped with a heating and cooling chamber. Once a human plans the components of a meal, its ingredients – stored in torpedo-shaped, refrigerated canisters – are piped into a mixer. A touch screen on the side of the machine lets the user adjust caloric and carbohydrate content as the printer fabricates dinner, layer by layer. [Nina Boccia](http://NinaBoccia.com)

New frontiers



15 | A recycling plant for the home

Conceived by France's Faltazi Lab, the EkoKook was designed to help manage home kitchen waste. The stainless steel and PET unit comprises three mini-factories. Organic scraps go from the counter to a composter that houses worms; an internal rotator mulches the decay to render it suitable for indoor garden fertilizer; and a two-drain plug system diverts relatively clean water from the sewer into a reservoir (this water can be filtered and used by the dishwasher). Lastly, hand-cranked mechanisms in the recycling bins – a paper shredder, a can and plastic crusher and a glass breaker – compact these materials, reducing the energy used to break them down conventionally and the frequency of municipal pickups. faltazi.com

17 | Cutting-edge cutlery

Designed by Berlin's Culture Form for the catering trade, these high-polished, dishwasher-safe Tokyo utensils complement ambitious meal presentations. culture-form.com

