

METROPOLIS

INSIDE:
Duany
on Rem
Corbu
Universal
Bike
Barcelona
Making a
Restaurant

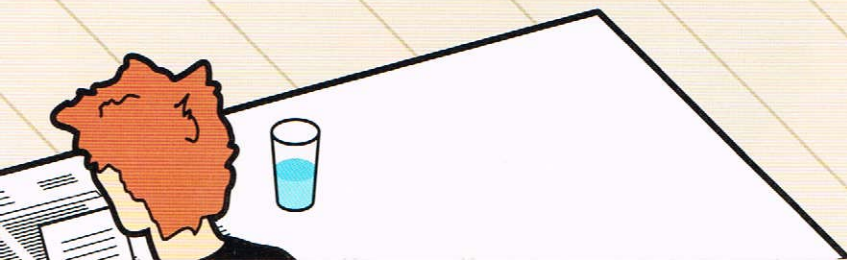
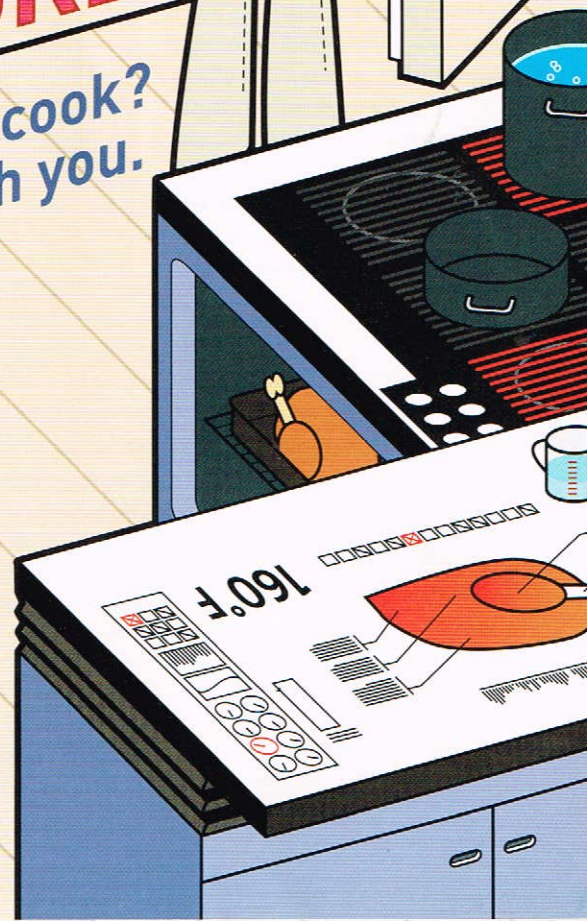
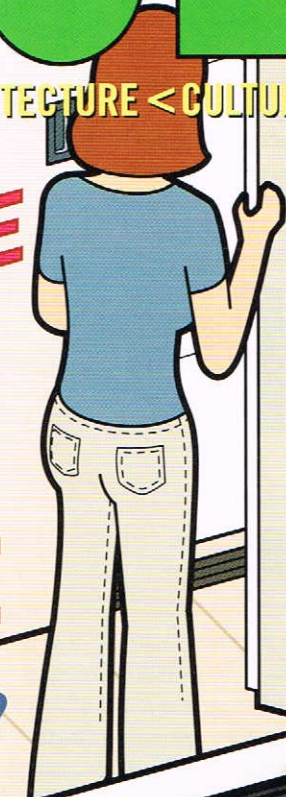
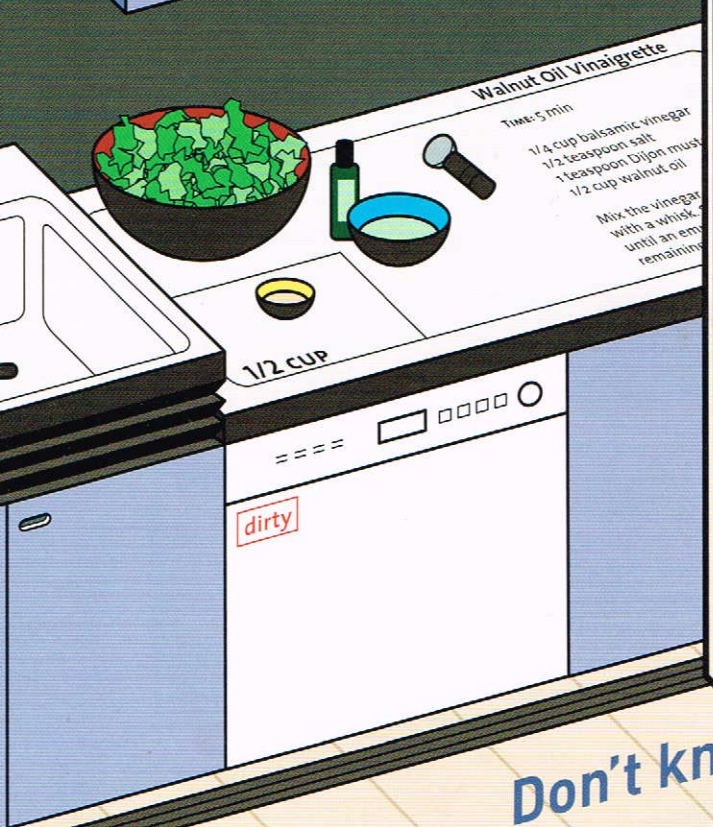
ARCHITECTURE < CULTURE > DESIGN

April 2

**WELCOME
to the
KITCHEN
of the
FUTURE**

Don't know how to cook?
It will teach you.

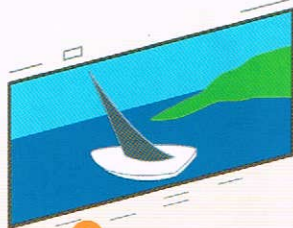
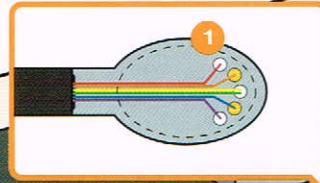
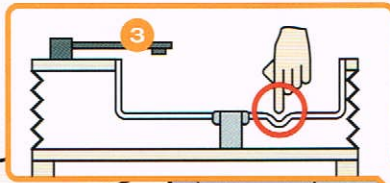
Venturi and Scott Brown
look at Disney's newest resort



The Kitchen of the FUTURE

Illustration by
Nik Schultz/L-dopa
for *Metropolis*

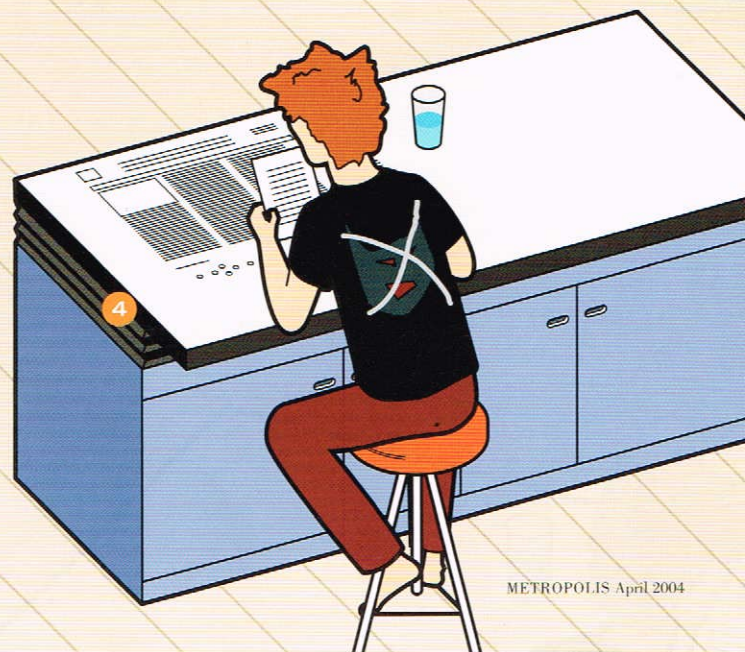
1
Implements, like this spoon, are embedded with sensors, allowing them to "taste" food and provide advice. "So many of us don't even know how to cook," Selker says. "This spoon, when you put it in batter, will tell you that you need some baking powder." A scale built into the counter tells you when you've poured enough, say, flour into a bowl.

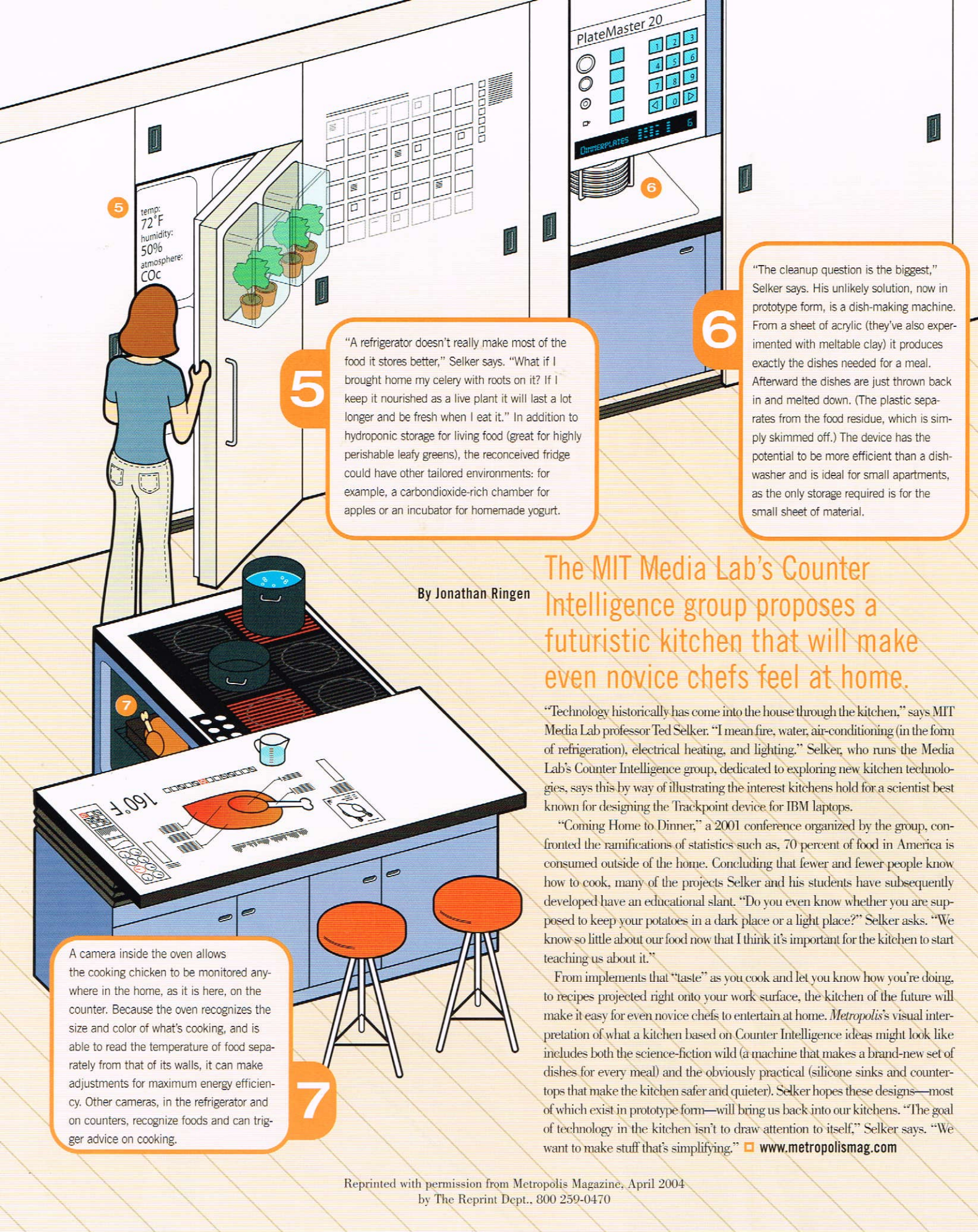


2
The kitchen is "painted" with video, making any surface a potential source of information. "You can tell it to put a list on the refrigerator or indicate that the dishwasher's clean," Selker says. "It's done with video projectors. When you have friends come over, you put a beautiful Italian marble pattern on the floor." An obvious application: recipes projected onto countertops can't get soiled.

3
"We made a sink out of silicone," Selker says. "I like to drop goblets into it and not have them break. We also made a Kevlar-reinforced silicone counter for cutting on. One of the worst things about the kitchen is the noise. By making all of the surfaces out of high-tech rubbers that can take hundreds of degrees, we make a quieter kitchen, and a safer one." Also, a LED in the faucet illuminates running water in red or blue to indicate temperature.

4
The kid sitting at this island (the sink and all the surfaces in the room are automatically height-adjustable) is working on a project for school. By bringing computer resources into the kitchen, the family can spend more time together. "Now at breakfast mom is balancing the checkbook, dad is reading the newspaper, kids are doing their homework, and they're all sitting around the table," Selker says. "The kitchen once again becomes the hearth for the family."





5 "A refrigerator doesn't really make most of the food it stores better," Selker says. "What if I brought home my celery with roots on it? If I keep it nourished as a live plant it will last a lot longer and be fresh when I eat it." In addition to hydroponic storage for living food (great for highly perishable leafy greens), the reconceived fridge could have other tailored environments: for example, a carbon dioxide-rich chamber for apples or an incubator for homemade yogurt.

6 "The cleanup question is the biggest," Selker says. His unlikely solution, now in prototype form, is a dish-making machine. From a sheet of acrylic (they've also experimented with meltable clay) it produces exactly the dishes needed for a meal. Afterward the dishes are just thrown back in and melted down. (The plastic separates from the food residue, which is simply skimmed off.) The device has the potential to be more efficient than a dishwasher and is ideal for small apartments, as the only storage required is for the small sheet of material.

7 A camera inside the oven allows the cooking chicken to be monitored anywhere in the home, as it is here, on the counter. Because the oven recognizes the size and color of what's cooking, and is able to read the temperature of food separately from that of its walls, it can make adjustments for maximum energy efficiency. Other cameras, in the refrigerator and on counters, recognize foods and can trigger advice on cooking.

By Jonathan Ringen

The MIT Media Lab's Counter Intelligence group proposes a futuristic kitchen that will make even novice chefs feel at home.

"Technology historically has come into the house through the kitchen," says MIT Media Lab professor Ted Selker. "I mean fire, water, air-conditioning (in the form of refrigeration), electrical heating, and lighting." Selker, who runs the Media Lab's Counter Intelligence group, dedicated to exploring new kitchen technologies, says this by way of illustrating the interest kitchens hold for a scientist best known for designing the Trackpoint device for IBM laptops.

"Coming Home to Dinner," a 2001 conference organized by the group, confronted the ramifications of statistics such as, 70 percent of food in America is consumed outside of the home. Concluding that fewer and fewer people know how to cook, many of the projects Selker and his students have subsequently developed have an educational slant. "Do you even know whether you are supposed to keep your potatoes in a dark place or a light place?" Selker asks. "We know so little about our food now that I think it's important for the kitchen to start teaching us about it."

From implements that "taste" as you cook and let you know how you're doing, to recipes projected right onto your work surface, the kitchen of the future will make it easy for even novice chefs to entertain at home. *Metropolis's* visual interpretation of what a kitchen based on Counter Intelligence ideas might look like includes both the science-fiction wild (a machine that makes a brand-new set of dishes for every meal) and the obviously practical (silicone sinks and counter-tops that make the kitchen safer and quieter). Selker hopes these designs—most of which exist in prototype form—will bring us back into our kitchens. "The goal of technology in the kitchen isn't to draw attention to itself," Selker says. "We want to make stuff that's simplifying." www.metropolismag.com