The Map in Our Head

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The Wall Street Journal:

When you're strolling in your home city, and you see someone with pull out a map, you can be pretty sure you're looking at a tourist. But a new study suggests that a map-like spatial orientation is layered on top of people's understanding of even highly familiar places. In other words, you may not have a map stashed in a fanny pack, but you can't escape the way of looking at the world that maps tutor us in. From a new study in Psychological Science:

"We examined how a highly familiar environmental space—one's city of residence—is represented in memory. Twenty-six participants faced a photo-realistic virtual model of their hometown and completed a task in which they pointed to familiar target locations from various orientations. Each participant's performance was most accurate when he or she was facing north, and errors increased as participants' deviation from a north- facing orientation increased.... Although participants recognized familiar local views in their initial locations, their strategy for pointing relied on a single, north-oriented reference frame that was likely acquired from maps rather than experience from daily exploration. Even though participants had spent significantly more time navigating the city than looking at maps, their pointing behavior seemed to rely on a north-oriented mental map."

Read the whole story: The Wall Street Journal