

How Our Brains Navigate the City

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The Atlantic:

To navigate certain parts of New York City — namely Queens and much of Manhattan — all you need to be able to do is count. In Manhattan neighborhoods like the West Village, and most of Brooklyn, things get a good bit trickier. You can no longer depend on the logical numbered progression of streets and avenues, and must instead rely on some other picture inside your head.

For a while now psychologists have debated just what that picture looks like. Some believe we need to orient ourselves by local reference points. Under this theory, we're lost until we see that certain street or certain landmark, at which point the rest of the grid emerges in our minds. Others argue that experience is our mental cartographer. This idea suggests that if you cruise around the city enough, you develop a spatial memory that helps you find your way no matter which direction you face; at the same time, if this is true, it should become harder to reach a destination that's farther from your familiar starting point.

A third alternative suggests that our internal GPS system is informed by frequently looking at maps. In other words, the more time we spend finding directions on Google Maps, the more our minds may grow familiar with the officially documented outline of our city, rather than the one created through our own experiences. This idea receives support in a recent study published online late last month, ahead of print, in the journal *Psychological Science*. A team of psychologists led by Julia Frankenstein of the Max Planck Institute for Biological Cybernetics in Tübingen, Germany, found evidence that we're best oriented when facing north — just like a reliance on maps would suggest.

Read the whole story: [The Atlantic](#)