

Are we there yet? Our brains play with us in measuring time

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A new study explains why the return trip often feels shorter than the trip going to the destination. Flickr/José Cuervo Elorza

Humans are advanced creatures, but we are not so good at measuring time. Our sense of how much time is passing often depends on what is going on in our lives, what we are doing at a certain moment, or even on our mood.

This causes a lot of unusual things to happen, like the "return-trip effect," which often happens when we go somewhere for the first time.

When we go somewhere new it often seems that the trip back took less time than the trip to get there. This is especially strange considering both trips are exactly the same distance.

Research has found that a "return-trip effect" actually exists.

How Do We Measure Time?

A study in Japan split participants into two groups. Both groups sat in a dark room and watched a 20-minute movie showing a cameraman walking around a city and recording his journey. Some of the people in both groups were asked to tell the scientists every time they thought three minutes had passed.

Then a second movie was shown that was different for both groups. The first group watched a cameraman walk to one place and then take the same route back, while the second group watched him take two completely different trips.

The study found that the two groups did an equal job at measuring how time passed during the actual experiment. They were then asked to think back about how time passed once the experiment was over. This time, the answers were very different between groups.

The first group remembered the man's return journey as being shorter. The second group did not experience this effect because the second route was different than the first.

The study suggests that the "return-trip effect" has something to do with memory and reflection. It may be caused by the way people talk and remember an event. To experience the effect, you need to know that you are making a return trip.

It is not completely clear why this happens, but there are a few theories.

Paying Attention Counts

One idea is that the "return-trip effect" has something to do with paying attention to time. When you try to pay attention to time, time seems to take forever. When you are distracted by more interesting things, time passes quickly.

This presents an interesting idea. By paying attention what is happening now, we may be able to slow the brain's idea of time and make events, and even our lives, seem longer.

Scientists also have another theory. On the way out, you do not know the route. On the way back, you recognize things you saw before and this makes the trip seem to go faster. Yet people do not experience the "return-trip effect" on rides they take often, like to jobs. This is because they already know the route that they take and have a good idea of how long the journey will be.

This may not be the whole explanation for the return-trip thinking. One study found that people can experience the effect even when they are in unfamiliar territory.

When A Longer Trip Really isn't

In a 2011 study, scientists asked people to bicycle to a fair. Then they split the group in half after they arrived. One group rode home on the same road that they biked in on. The other group took a different route, but it was exactly the same distance to go back as the first group. Both groups reported feeling the "return-trip effect."

This study decided that people are often too positive on their first journey, and expect it to be shorter than it really is. This makes the trip out seem longer. On the way back, they adjust their mindsets to expect a really long trip. When it turns out to not be so long after all, the journey back ends up seeming shorter.

In the end, the "return trip effect" may be caused by all of these things.

