

The Surprising Power of Language over Memory and Choice

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It's not uncommon to see a Japanese person bowing while on the telephone. One of us is a Japanese-American who bows on the phone — but only in Japanese. Behaviors and manners can become so routine that they emerge even when there's no need for them. Those who are bilingual and bicultural know first-hand that how we behave can depend on what language we are speaking. As scientists with a combined 30 years of expertise studying bilingualism and decision-making, our research shows that who you are in the moment can depend on the language you are using at that time.

This is because when you have an experience, the language you are using becomes associated with it. For bilingual people, this means certain memories are more closely linked to one language than the other — a phenomenon called language-dependent memory.

For instance, a childhood memory is more likely to be remembered when the language spoken during that childhood event is spoken again. Just as listening to nostalgic music can transport you back to a specific period of your life, the language you are using in the moment acts as a hook to draw associated memories closer to the surface. Memories will also often be more emotional when there is a match between the language spoken when the experience took place and the language spoken when remembering it.

How we think and feel can thus change depending on what language we are using. For example, people who are bilingual have a heightened stress response when listening to taboo words and reprimands in a native language. This may be, in part, because our early memories associated with learning a “bad” word or being yelled at by our parents happened in our native tongue. This can mean that a situation can feel more psychologically or emotionally distant when viewed through a foreign language lens.

Because emotions play a key role in how we make decisions, people are often less biased and more consistent when making choices in the less emotional foreign language. Language can even influence our moral judgments and decisions. When asked whether they would be willing to sacrifice one person's life to save a group, people who speak more than one language are significantly more likely to say “yes” when answering in a foreign language. The negative feelings that can prevent us from making difficult choices are muted when using a non-native tongue. For individuals who are responsible for the lives and

well-being of others, the potential impact could be significant.

Our memories can also have a dramatic influence on how we assess probability and risk. Take for example the fact that “terrorist attacks” rank among Americans’ greatest fears, when they are thousands of times more likely to be killed by a gun. This is partly because of the availability heuristic, which is our tendency to judge the likelihood of events based on how easily and clearly examples come to mind. Because of language-dependent memory, using different languages can bring different examples to mind, potentially changing our assessments of risk.

This could have substantial consequences, as how risky something feels affects the choices that we make for everything from medical decisions to national security. For example, in the United States, over 25% of doctors are foreign-born and many of their patients speak another language as well. It is important to be aware of how the language being spoken may be influencing the decisions we and others around us make.

To be sure, some may doubt that language is powerful enough to change our basic beliefs, values, and goals. And indeed, a bilingual person speaking two different languages does not magically become two completely different people. Rather, language creates a strong context that can draw different aspects of ourselves forward. Just as we may become more charitable when reminded of religion, or more withdrawn when reminded of disease, language can influence us by making certain ideas and memories more salient than others.

The influence of language on how we think, feel, and even behave can have an impact beyond the individual all the way to the social and economic levels. While the United States has not had a truly multilingual president since Franklin D. Roosevelt (who was fluent in English, French, and German), prior to WWII, bilingualism was the norm rather than the exception among our heads of state. Outside of the U.S., this is often still the case, with world leaders such as Emmanuel Macron and Angela Merkel making important decisions while using multiple languages. In a way, knowing different languages can provide people with a variety of lenses through which to see the world.

In order to build a functional society, we must work to understand how using or not using multiple languages affects our psychology and behavior - whether it be in our homes, in our hospitals, or at the highest levels of government.