## Thinking in a Foreign Language Makes Decisions More Rational (理性的な、合理的な)(Wired Science)

A series of experiments on more than 300 people from the U.S. and Korea found that thinking in a second language reduced deep-seated(執拗な), misleading biases(先入観) that unduly(過度に) influence how risks and benefits are perceived.

"Would you make the same decisions in a foreign language as you would in your *native tongue*(母語)" asked psychologists led by Boaz Keysar of the University of Chicago in an April 18 Psychological Science study.

"It may be intuitive(直感的な) that people would make the same choices regardless of the language they are using, or that the difficulty of using a foreign language would make decisions less systematic. We discovered, however, that the opposite is true: Using a foreign language reduces decision-making biases," wrote Keysar's team.

Psychologists say human reasoning is shaped by two distinct modes(様式) of thought: one that's systematic, analytical and cognition-intensive(知識を駆使した), and another that's fast, unconscious and emotionally charged(感情のこもった).

In light of this, it's plausible(もっともらしい) that the cognitive demands of thinking in a non-native, non-automatic language would leave people with little leftover(余った)mental horsepower(処理能力), ultimately increasing their reliance on quick-and-dirty(おざなりの) cogitation(思考).

Equally plausible, however, is that communicating in a learned(造詣の深い) language forces people to be deliberate(意図的な、計画的な), reducing the role of potentially unreliable instinct. Research also shows that immediate emotional reactions to emotively charged words are muted(弱める) in non-native languages, further hinting at deliberation(熟考、故意).

To investigate <u>these possibilities</u>, Keysar's team developed several tests based on scenarios originally proposed by psychologist Daniel Kahneman, who in 2002 won a Nobel Prize in economics for his work on prospect theory, which describes how people intuitively perceive risk.

In one famous example, Kahneman showed that, given the hypothetical(仮説に基づいた) option of saving 200 out of 600 lives, or taking a chance that would either save all 600 lives or none at all, people prefer to save the 200 — yet when the problem is framed in terms of losing lives, many more people prefer the all-or-nothing chance rather than accept a guaranteed loss of 400 lives.

People are, in a nutshell(一言で言えば), instinctively risk-averse(危険を避けたがる) when considering gain and risk-taking when faced with loss, even when the essential decision is the same. It's a gut-level(生理的なレベルの) human predisposition(傾向), and if second-language thinking made people think less systematically, Keysar's team supposed the tendency would be magnified(拡大する). Conversely, if second-language thinking promoted deliberation, the tendency would be diminished(小さくなる).

The first experiment involved 121 American students who learned Japanese as a second language. Some were presented in English with a hypothetical choice: To fight a disease that would kill 600,000 people, doctors could either develop a medicine that saved 200,000 lives, or a medicine with a 33.3 percent chance of saving 600,000 lives and a 66.6 percent chance of saving no lives at all

Nearly 80 percent of the students chose the safe option. When the problem was framed in terms of losing rather than saving lives, the safe-option number dropped to 47 percent. When considering the same situation in Japanese, however, the safe-option number hovered(のあたりをうろつく) around 40 percent, regardless of how choices were framed. The role of instinct appeared reduced.

The researchers believe a second language provides a useful cognitive distance from automatic processes, promoting analytical thought and reducing unthinking, emotional reaction.

"Given that more and more people use a foreign language on a daily basis, our discovery could have far-reaching(広範囲に及ぶ) implications," they wrote, suggesting that people who speak a second language might use it when considering financial decisions. "Over a long time horizon(長い時間かかって), this might very well be beneficial."(764)