

## Parting's Sweet Sorrow

by *Steve Mitchell* on 11 June 2008, 12:00 AM | [Permanent Link](#) | [0 Comments](#)

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People tend to think their favorite possessions, such as a car or an iPod, should command top dollar, but they balk at paying the same price when the items belong to someone else. Researchers have now linked this so-called endowment effect to a brain region responsible for our fear of loss. The findings could lead to a better understanding of how we decide whether a product is worth the price tag.

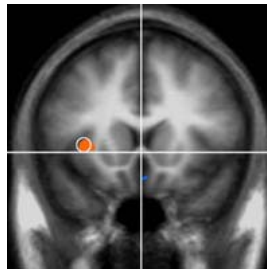
To gain insight into the endowment effect, a team led by neuroscientist Brian Knutson of Stanford University in Palo Alto, California, monitored the brain activity of people who were haggling over the prices of popular gadgets. The researchers gave 24 men and women two electronic toys, such as an iPod or a digital camera, which they were allowed to keep after the experiment. While their brain activity was scanned with functional magnetic resonance imaging, which measures blood flow to various parts of the brain, the participants were shown the items and asked to decide whether to buy or sell them at certain prices.

Fear drove the transactions. The right insula region of the brain, which is involved in the anticipation of negative consequences such as pain, was more active when the participants were making decisions about selling the items they owned than when other products were involved. The higher the insula activity, the more likely the participants were to demand a higher price to part with the item than they were willing to pay for it. The finding suggests that the anticipated pain of giving up a possession is what drives the endowment effect, the researchers report in the 12 June issue of *Neuron*. "We can't stand the thought of losing the item," Knutson says.

Hackjin Kim, a psychologist at Korea University in Seoul, says the findings could help create a better economic model to forecast the choices people will make about products, interpersonal relationships, and other issues. Future advances might "allow us to predict an individual's behavioral tendency [to buy or sell an item] with remarkable accuracy simply by examining his or her brain responses," Kim adds.

But Gregory Berns, a neuroeconomist at Emory University in Atlanta, Georgia, isn't convinced that the insula is causing the endowment effect. The region's activation could signal merely that people who are susceptible to the endowment effect are emotionally aroused by the prospect of selling an item, but the insula may not be spurring them to place a higher value on it, he says. Experiments that test whether suppressing insula activity shuts down the endowment effect could help confirm the role of the brain region, he adds.

[ENLARGE IMAGE](#)



**Finders keepers.** The right insula region (orange) of the brain may make us fear parting with our possessions.

Credit: Brian Knutson/Stanford University

