disrupted the system of subtle emotional signals that enable us to plan for the future, to follow previously learned social rules, and to decide upon sensible courses of action. Research on Gage and others like him has led many researchers to believe that "rational" decision making is inextricably linked to emotional intuitions and drives.

Trenton G. Smith

See also: Descartes's Error and the Emotional Brain; Emotions and Decision Making; Fast and Frugal Heuristics

Further Reading

Damasio, Antonio R. 1994. *Descartes' Error*. New York: G.P. Putnam's Sons.
Fleischman, John. 2003. *Phineas Gage: A Gruesome but True Story about Brain Science*. New York: Scholastic.
Frank, Robert H. 1988. *Passions within Reason: The Strategic Role of the Emotions*. New York: W.W. Norton.

ENDOWMENT EFFECT

An endowment effect (Thaler 1980) exists if the subjective value of an item depends on whether it is owned or not. This phenomenon has frequently been found in bargaining contexts with items like coffee mugs, pens, wine bottles, or lottery tickets. In this vein, Kahneman, Knetsch, and Thaler (1990) report experimental results showing that the average of buyers' willingness to pay for a coffee mug was only half of the average price that sellers who owned the same mug were willing to accept as minimal price for giving it up.

The standard economic explanation for this difference in valuations is based on two features of prospect theory (Kahneman and Tversky 1979), namely reference dependency and loss aversion. Reference dependency refers to the notion that the subjective value of an item depends on the current reference point of the decision maker. From the reference point of a seller owning an item, a transaction is framed as a loss, whereas from the reference point of a buyer attempting to get an item, a transaction is perceived as a gain. Because losses are known to have a greater psychological impact compared to gains of the same magnitude, sellers should accept losing an item only for a higher price than buyers are willing to pay in order to get it.

This difference in valuation between sellers and buyers of the same good can also be observed with entrance tickets, as Carmon and Ariely (2000) showed that people holding a ticket for a sold-out basketball game requested, on average, $240 to give up that ticket, in contrast to a mean price of $170 potential buyers were willing to pay. Research has also shown that merely touching an object results in increased perceived ownership of that object. Similar effects can be achieved by presenting imagery encouraging touch of an object, because the valuation of an object is said to be jointly influenced by both perceived ownership and valence of the touch experience (Peck and Shu 2009). A so-called quasi endowment effect seems to play an important role in online auctions and explains often observed behavior like multiple bidding and sniping, placing a last bid just seconds before the end of an auction.

Different lines of predominantly more recent research on the endowment effect offer alternative explanations with regard to loss aversion as the main source of the endowment effect. The choice heuristic assumes that people typically own things that they have chosen beforehand and they infer that if they have chosen something it must be more valuable compared to nonchosen alternatives (Brehm 1956). Another line of research emphasizes that chosen items are associated with the self, and people tend to value things more when they are associated with the self (Beggan and Scott 1997). Furthermore, the confounding of ownership and bargaining role in standard buyer-seller tasks investigating the endowment effect might be problematic, because we typically only sell things we own and buy things we do not own. Experimental evidence unconfounding ownership and the bargaining role suggests that the endowment effect disappears when buyers are owners and sellers are not. Thus, ownership rather than loss aversion may cause the endowment effect in the standard buyer-seller paradigm (Morewedge, Shu, Gilbert, and Wilson 2009).

Aside from the bargaining context, endowment effects are often studied within a lottery setting, where participants are endowed with a ticket and get the possibility to trade the endowed ticket for another one. People show a strong reluctance to trade a ticket in possession in these situations. It is controversially discussed whether this phenomenon can be explained by prospect theory or newer versions of prospect theory respectively, because this effect might as well follow from anticipated regret by imagining that an exchanged ticket might win, especially if this ticket was in possession before.

Erich Kirchler and Christoph Kogler

See also: Behavioral Economics; Loss Aversion, Prospect Theory

Further Reading

Bar-Hillel, Maya, and Efret Neter. 1996. "Why Are People Reluctant to Exchange Lottery Tickets?" *Journal of Personality and Social Psychology* 70: 17–27.
Beggan, James K., and Allison Scott. 1997. "More Than Meets Their Eyes: Support of the Mere Ownership Effect." *Journal of Consumer Psychology* 5: 285–297.
Brehm, Jack W. 1956. "Post-Decision Changes in Desirability of Alternatives." *Journal of Abnormal and Social Psychology* 52: 384–389.
Carmon, Ziv, and Dan Ariely. 2000. "Focusing on the Forgone: How Value Can Appear So Different to Buyers and Sellers." *Journal of Consumer Psychology* 27(3): 360–370.
Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy* 98: 1325–1348.
Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 47: 263–271.
Morewedge, Carey K., Lisa L. Shu, Daniel T. Gilbert, and Timothy D. Wilson. 2009. "Bad Riddance or Good Rubbish? Ownership and not Loss Aversion Causes the Endowment Effect," *Journal of Experimental Social Psychology* 45(4): 947–951.
Peck, Joann, and Suzann B. Shu. 2009. "The Effect of Mere Touch on Perceived Ownership." *Journal of Consumer Research* 36(3): 434–447.
Thaler, Richard H. 1980. "Toward a Positive Theory of Consumer Choice." *Journal of Economic Behavior and Organization* 1: 39–60.

Real-World Decision Making

An Encyclopedia of Behavioral Economics

MORRIS ALTMAN, EDITOR

GREENWOOD™

An Imprint of ABC-CLIO, LLC

Santa Barbara, California • Denver, Colorado

Library of Congress Cataloging-in-Publication Data

Real-world decision making : an encyclopedia of behavioral economics / Morris Altman, editor.

pages cm
Includes bibliographical references.
ISBN 978-1-4408-2815-7 (print : alk. paper) — ISBN 978-1-4408-2816-4 (e-book)
1. Economics—Psychological aspects. I. Altman, Morris.
HB74.P8R327 2015
330.01'9—dc23 2014049275

ISBN: 978-1-4408-2815-7
EISBN: 978-1-4408-2816-4

19 18 17 16 15 1 2 3 4 5

This book is also available on the World Wide Web as an eBook.
Visit www.abc-clio.com for details.

Greenwood
An Imprint of ABC-CLIO, LLC

ABC-CLIO, LLC
130 Cremona Drive, P.O. Box 1911
Santa Barbara, California 93116-1911

This book is printed on acid-free paper ∞

Manufactured in the United States of America

Contents