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Organizzato da: **Dipartimento di Scienze della Cognizione e della Formazione**

Responsabile scientifico: Nicolao Bonini

Deciphering Descartes' Error

Experimental Tests of the Somatic Marker Hypothesis

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Sala Riunioni - Dipartimento di Scienze della Cognizione e della Formazione

Trade Center - IV piano - Via Matteo del Ben 5, Rovereto (Trento)

ore 12.00

Abstract

Damasio's (1994) Somatic Marker hypothesis posits that emotion-generated mental markers influence our decisions and, in particular, tend to curb inherent tendencies to seek risk, to be impatient and to be callous in social situations. Ventromedial (VM) prefrontal cortex damage interferes with this marking process, resulting in risk seeking behavior, impatience and socially inappropriate behavior. In the present study, we present 27 normal controls and 17 patients with prefrontal cortex lesions with batteries of questions designed to probe their attitudes toward risk, intertemporal preferences and behavior in social contexts. The results demonstrate that VM patients are no more risk seeking, impatient, or prone to behavior in socially inappropriate manners than normal subjects. Indeed, we find no significant differences of any sort between the two groups of subjects on any the dimensions investigated. We discuss why VM cortex damage in humans appears to influence decisions in certain circumstances but not in others.

Jonathan W. Leland

Dr. Leland is currently a professor in the Department of Computer Science and Business Studies and member of the Interdepartmental Center for Research in Economics and Management at the University of Trento where he teaches courses in behavioral economics and in industrial organization and business strategy. He is on leave from his position as Director of the Decision, Risk and Management Science program at the National Science Foundation. Dr. Leland has extensive expertise in the areas of individual decision making and industrial organization. He has conducted research on the theory of individual choice, the role of emotions in decision making, the measurement of trust and trustworthiness, the determinants of Internet adoption, and the evaluation of "core" capabilities in the military. His research has appeared in the Journal of Risk and Uncertainty, Economic Inquiry, the IBM Systems Journal, and Management Science.

In the past, Dr. Leland has been a researcher at IBM's Thomas J. Watson Research Center and professor in IBM's Advanced Business Institute, a defense analyst at the Center for Naval Analyses, and a professor in the Department of Social and Decision Sciences and Graduate School of Industrial Administration at Carnegie Mellon University.

Dr. Leland received a Ph.D. and Masters degree in economics from UCLA in 1986 and 1982, respectively, and an AB in economics from Occidental College in 1979.