How do you predict world tragedies, succeed on the stock market, save the planet?

From Wall Street to Washington, many believe that the future can be forecast, the world is knowable, and risk can be measured and managed. But best-selling author, Nassim Taleb, Ph.D., believes otherwise and said so in a keynote address at a conference hosted by The University of Texas at Dallas School of Management.

Most future events are unpredictable, yet most people fail to accept this fact, Dr. Taleb said. In fact, many substantially underestimate the significance of extreme events, such as 9/11, in contemplating the future. Dr. Taleb called these extreme events, black swans not imaginable until they are seen.

Dr. Taleb, best-selling author of Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets (Random House Trade Paperback, 2005) and author of the recently released The Black Swan: The Impact of the Highly Improbable (Random House, 2007), spoke to an audience of about 150 on May 22 at UT Dallas. He was one of four keynote speakers at the two-day Risk and Analysis Conference hosted by the International Center for Decision and Risk Analysis at The School of Management.

The term black swan came from a phenomenon that confounded observers for centuries. Until a black swan was discovered in Australia in the late 1600s, it was assumed not only that all swans were white but that black swans could not possibly exist. The story, Dr. Taleb said, illustrates the fragility of knowledge and the limits to learning from experience. For it is the impact of the highly improbable that shapes our world: the invention of the wheel, Pompeii, the Wall Street Crash, Google, the tsunami, 9/11. These events are all considered black swans, he said.

None of the significant events, discoveries or disasters of history, Dr. Taleb maintained, could have been predicted from the statistics that dominate the thinking of economists or government officials. The need to simplify and categorize information is part of the human psyche, leading people to fool themselves about possible future risks, he said.

But not all black swans are bad. Just look at the success of J.K. Rowling, the growth of the Internet and the rise of Google, Dr. Taleb said.

Benefiting from black swans, Dr. Taleb said, means dwelling in the realms of Extremistan rather than the area of Mediocristan. Mediocristan is the terrain of the ordinary, answering to statistics and known probabilities, and including such data as height and weight. Personal wealth, however, is in the realm of Extremistan. In Extremistan, past events are a faulty guide to projecting the future. Wars also reside in Extremistan.

What to do? According to Dr. Taleb, look for ways to foster opportune developments (like discoveries, or good black swans) while always preparing for the unexpected.

Dr. Taleb holds an MBA from the Wharton School at the University of Pennsylvania and a Ph.D. in financial mathematics from the University of Paris. He is currently visiting professor of marketing at London Business School; the Deans Professor in the Sciences of Uncertainty at the Isenberg School of Management at the University of Massachusetts, Amherst; adjunct professor of mathematics at the Courant Institute of New York University; and affiliated faculty member at the Wharton Business School Financial Institutions Center.