

Predictably Irrational: The Hidden Forces that Shape Our Decisions. Dan Ariely. Harper Collins Publ., 7785 Fulham Palace Road, Hammersmith, London, W68JB. 2009. 400 pp. Price: US\$ 27.99.

The foundations of classical and neoclassical economics are built on the assumption that human beings are intelligent and rational decision-making machines, programmed to optimize the benefit from every situation, after a logical cost-benefit analysis. This, of course, is a comforting hypothesis that can make us confidently start playing with our savings on the stock market. But before you go ahead and do that, it is worth reading Predictably Irrational: The Hidden Forces that Shape our Decisions - a thought-provoking and engaging book by behavioural economist Dan Ariely. The author takes you on an entertaining journey, with each chapter full of brilliant and often amusing social experiments that uncover another side of the human nature, quite irrational and at times even selfsabotaging. To some this may sound disturbing, to others highly doubtful. Psychologists on the other hand, have known and extensively researched such unfavourable attributes in human personality. What Ariely claims is that 'we're really far less rational than standard economic theory assumes' but also 'these irrational behaviors of ours are neither random nor senseless'. His thesis is that we are predictably irrational in our decisionmaking processes and becoming aware of that 'provides a starting point for changing the way we live for the better'. This book is just one more powerful message of the emerging field of behavioural economics, that a modification of the standard economics is needed in a way that incorporates important and relevant insights from human psychology into its theories.

The book has a simple and gripping style that is likely to keep one engrossed from cover to cover. Although the book is written in the context of contemporary American lifestyle, Ariely's highly observant personality questions basic everyday human decisions and actions, that are both common and relevant across nations and cultures. Rather than adopting a historical or theoretical approach to presenting his ideas, Ariely lets the results of his ingenious social experiments speak for themselves and reveal his point. The value of these experiments would be limited, as Ariely says, if they are not taken 'as an illustration, providing insight into how we think and how we make decisions... in many contexts of life'. Therefore, at the end of each chapter, he discusses the implications that his findings may have in the broader contexts of health care, business, public policy and education. Not being afraid to frequently use himself as an example of predictable irrationality, Ariely urges each one of us to examine our own behaviour and become aware of our vulnerability to fall short of being the perfect people from the world of classical economics.

Most of the human actions that stirred Ariely's curiosity and set him on his exploratory adventure, are based on irrational choices and decisions that we make far too often to consider them anything but simply 'normal'. Ariely shines light on our irrationality by providing empirical data from diverse sets of social experiments that reveal unambiguously and directly the emotional and social forces which influence our irrational decisions. The beauty and attractiveness in these experiments comes from the fact that they are drawn from our common experience and we have often, unknowingly, been participants in many of them. For example, to test our irrational behaviour when we eatch sight of the magic word 'free', Ariely set up a table at a large public building, displaying two types of chocolate candies - expensive truffles at a reduced price of 15 cents and regular chocolate candies for the price of 1 cent. Most of the people acted in a commendably rational way buying a lot of truffles, thinking 'What a bargain!'. But, when Ariely reduced the price of both by 1 cent, everybody rushed to get

the 'free' candies, missing the chance to buy truffles at a really good price. Zero, as Ariely explains, is 'an emotional hot button - a source of irrational excitement'. Zero can make you buy things you do not want because shipping is free, or choose the wrong credit card because it has no annual fee, or visit the overcrowded museums during the freeentrance day and have a rather unpleasant experience. Once recognized, Ariery argues that this irrational behaviour can be directed to bring positive change by driving social policies in the area of business, health care and environmental sustainability.

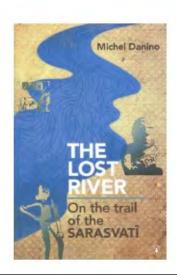
If you believe that the price you pay for your Coffee Day regular latte is based on the principles of free market, Ariely tells you that you are only partially right. An important concept in behavioural economics is the idea of 'arbitrary coherence', where initial prices of new products are often random and once anchored in our minds, they shape present as well as future prices of similar products. To test the power of arbitrary coherence, Ariely asked his students to write down the last two digits of their social security number next to a list of products, thereby anchoring them to an arbitrary price. After that, the students needed to bid on these same products and surprisingly enough, there was a strong correlation between what prices the students were willing to pay and what the last two digits of their social security were! The students with higher-ending social security digits were willing to pay more than their classmates whose last two digits were lower. A series of similar experiments described in the book, shows that initial anchoring plays a significant role in how we make our choices. More often than not, the origin of a chain of events on which we have built certain aspects of our lives can be traced back to a single arbitrary, and seemingly unimportant at that time, choice that created a highly resilient anchor. According to Ariely, the implications of arbitrary coherence stretch beyond our personal life, suggesting that the forces of supply and demand are not independent of each other as stated by classical economics. Often consumers 'don't in fact have a good handle of their own preferences and the prices they are willing to pay for different goods and experiences'. Thus, they can easily become preys to the anchoring manipulations like promotions, MSRPs (manufacturer's suggested retail price) or product introductions – 'all of which are supply-side variables'.

In another set of experiment set to test the strength and resilience of our moral standards, Ariely argues that the tendency to cheat small is as irresistible as a cold drink on a hot sunny day, even to the educated and honourable undergraduates from the Harvard Business School. Interestingly enough, he finds out that restoring our moral balance can be as simple as being reminded of the ten commandments. A discovery that dealing with real money makes us more honest is presented through a rather entertaining and almost funny experiment in which Ariely sneaked in the MIT dormitories to leave packs of coke in the communal refrigerators. He placed coke cans in every fridge except for one, where he left the equivalent price in one dollar bills. By the next day, as you can probably predict, Ariely found that all coke cans were missing, but the one dollar bills were left untouched. The implications of such findings trigger thoughts that go far beyond the frivolousness of the experiment itself. In today's high-tech world, where the variety of electronic transactions increases exponentially and we get further removed from dealing with actual money, Ariely is apprehensive of creating an environment that 'might make it easier for people to be dishonest without ever questioning or fully acknowledging the immorality of their actions'.

Having started Ariely's book, one finds it hard to stop reading. After finished it, one finds it hard to stop playing 'hide and seek' with his/her own irrationality. An engaging read for people with different backgrounds - from a local bookstore manager to a company CEO, and from a physics Ph D student to an aging professor in economics, the book will take you on a journey within yourself. It will strip you of your belief that the human capacity for reasoning is limitless by providing much evidence that 'we are pawns in a game whose forces we largely fail to comprehend'. But it will also reinforce your belief that human capacity to learn is, in fact, limitless. All you have to do is follow Ariely in his discovery of the order and predictability in our irrationality, and read through the numerous ways in which the self-awareness and understanding of these patterns of irrational behaviour can serve as a starting point of positive change in our personal, social and professional life. So, next time you see the 'free' sign, first run to the bookstore and get *Predictably Irrational*. Oh, wait a minute. If you get two copies, you'll get a free leather book marker. I say, go for it!?!

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The Lost River – On the Trail of the Sarasvati. Michel Danino. Penguin Books India Pvt Ltd, 11 Community Centre, Panchsheel Park, New Delhi 110 017. 2010. 357 pp. Price: Rs 399.

This book is about the legendary, mythical river Sarasvati and the human civilization it sustained from about 5000 to about 1300 BCE in the northwestern part of India. Although the existence of this first Indian civilization, known as the Indus or Harappan civilization was well known, that of the now defunct river Sarasvati, particularly its geographic location, source and mouth, has been always debated. This has rightfully resulted in research on various scientific and historical aspects and excavation of the region for 200 years.

Michel Danino has painstakingly gathered a large pool of facts and information from multiple sources such as geology and climate of the region, gazetteer, legends – puranas – traditional folklore,

literature and archaeology and carefully connected all the data to convince a serious reader that the river Sarasvati is not mythical at all; it did exist and flowed from the Himalaya to the Rann of Kutch for sometime in the early Holocene and dried up in the time interval between 3000 and 1900 BCE. The river could have followed any course from near the west of the Aravalli ranges all the way to the Sutley side of the Indus River. When it followed the present ephemeral Ghaggar River (in Punjab, Haryana and Rajasthan) and invisible Hakra (in the Cholisthan desert part of Pakistan), the first Indian civilization started well before 5000 BCE, evolved into a mature urban culture between 2700 and 1900 BCE and witnessed a collapse of the urban phase between 1900 and 1300 BCE. During the early phase, the river was apparently flowing from the Himalayan source all the way to the sea because of large meltwater supply through the Yamuna and Sutlej tributaries. When the two tributaries deserted the Sarasvati to become tributaries to the Ganga and Indus systems respectively, for tectonic reasons the flow in the Sarasvati reduced. The river suffered further reduction of water supply because of the onset of aridity in this region, resulting in the nearcomplete desiccation of the river for most parts and for most part of the year. Only in the Himalayan foothill region, the minor tributaries of remnant Ghaggar have some flow during the monsoon.

In the NW parts of India, although the early excavated archaeological sites such as Mohenja-daro, Harappa and Mehrgarh were located on the bank of the Indus River, a large percentage of the sites excavated so far is located along the palaeo-channel system of the Sarasvati (Ghaggar-Chautang-Hakra). This observation correctly prompted the author to rename the first Indian civilization as Indus-Sarasvati civilization, rather than only Indus civilization. Various aspects of the Indus-Sarasvati civilization are described, including civic order and town planning, arts and crafts, agriculture, architecture, and iconography and script, and have been compared with the historical and present ones to show that the prevailing 'Ganges civilization' is only a new avatar of the Indus-Sarasvati civilization. The suggestion of the author that various geological, climatic, agricultural, urbanization, land and water-use practices and ecological degradation aspects