Foreword by
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UNDERSTANDING HUMANS

HOW SOCIAL SCIENCE CAN HELP SOLVE OUR PROBLEMS

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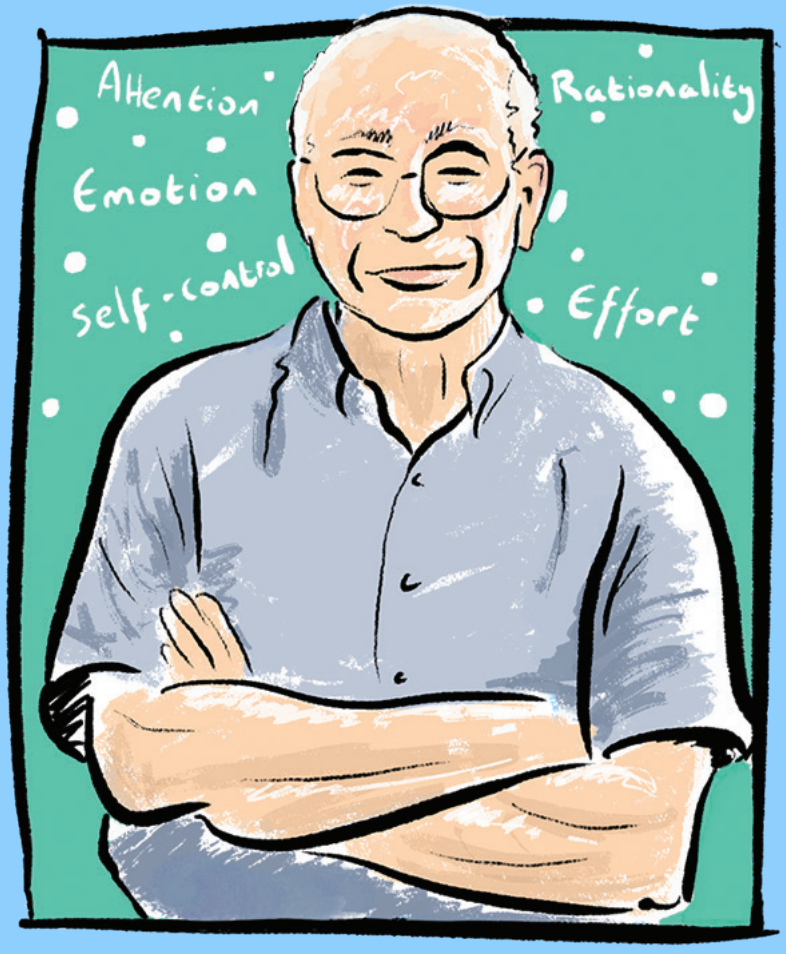
CONTENTS

Daniel Kahneman on BIAS



ABOUT THIS PODCAST

Thinking is hard, and most of the time we rely on simple psychological mechanisms that can lead us astray. Nobel Prize-winning psychologist Daniel Kahneman, Professor of Psychology and Public Affairs Emeritus at Princeton University, and author of *Thinking, Fast and Slow*, talks to Nigel Warburton about biases in our reasoning. His research has revealed that human beings are not the rational decision-makers that many economists had claimed they were.

https://www.socialsciencespace.com/2013/01/daniel-kahneman-on-bias/

THINKING FAST AND THINKING SLOW

When I say '2 + 2', the number 4 comes to mind, and when I say '17 x 24', nothing comes immediately to mind – you are generally aware that this is a multiplication problem. The first kind of thinking, which I associate with System 1, is completely associative, it just happens to you, a thought comes to mind as it were spontaneously or automatically. The second kind of thinking, the one that would produce an answer to the question by computation: that is serial, that is effortful. That is why I call it System 2 or slow thinking.

System 1 is defined really as anything that happens automatically in the mind that is without any sense of effort, and usually without a sense of authorship. It is something that happens to you, it isn't something you do. In some cases it could even be an intention: a wish to do something which you feel is something that happens to you.

Now the domain of System 2 is that when we speak about System 2, we speak about effortful thinking, and that includes not only computation and reasoning, but it also includes self-control. Self-control is effortful. And so anything that demands mental effort tends to be classified as System 2 or slow thinking.

This is more of a metaphor to describe how the brain works, or the mind works. What happens to us, what we do, and how we think involves both systems almost always. System 1, I propose, is invariably active: ideas and thoughts and emotions come to mind through an associative process all the time. And System 2 has a control function: we don't say anything that comes to mind, and it has in addition to the computational function, the ability to inhibit thoughts from being expressed; it controls action and that is effortful. It's the interaction between System 1 and System 2 that, in effect – in the story that I tell – defines who we are and how we think.

AUTOMATIC – SYSTEM 1 – THINKING

One characteristic of System 1 or automatic thinking is that something comes to your mind almost always – appropriate or not. Whenever you're faced with a question or a challenge, very likely something will come to your mind. Quite often what comes to your mind is not

an answer to the question that you were trying to answer, but it's an answer to another question, a different question. This happens all the time: I ask you how probable something is and instead of probability, what comes to your mind is that you can think of many instances, and you will rely on that to answer the probability question; and it is that substitution that produces systematic biases.

We rely on systematic thinking much less than we think we do. Much of the time when we think we are thinking systematically; that is, when we think we have a reason for our conclusions. In effect the conclusions are dictated by the associative machinery. They are conclusions produced by System 1, in my terminology, which are then rationalised by System 2. So much of our thinking involves System 2 producing explanations for intuitions or feelings that arose automatically in System 1.

WHY DON'T WE USE SYSTEM 2 MORE?

Because it's hard work. A law of least effort applies. People are reluctant; some more than others, there are large individual differences. But thinking is hard, and it's also slow. Because automatic thinking is usually so efficient, and usually so successful, we have very little reason to work very hard mentally. And frequently we don't work hard when, if we did, we would reach different conclusions.

As a society, when we provide education, we are strengthening System 2; when we teach people that reasoning logically is a good thing we are strengthening System 2. It is not going to make people completely rational, or make people completely reasonable, but you can work in that direction, and certainly self-control is variable. Some people have much more of it than other people, and all of us exert self-control more in some situations than in others. And so creating conditions under which people are less likely to abandon self-control is part of promoting rationality. We are never going to get there, but we can move in that direction.

People are interested in promoting rational behaviour. They can be helped, I presume, by analysing the obstacles to rational, reasonable behaviour, and trying to get around those obstacles.

SOCIAL SCIENCE BITES PRESENTS...

Daniel Kahneman on Bias