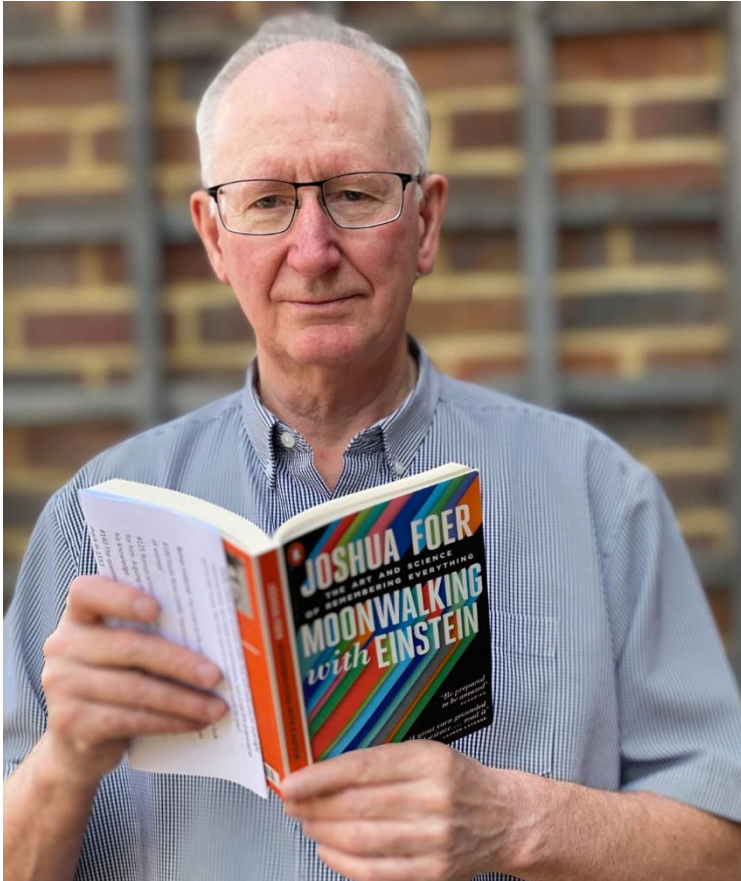


Wealden Business Group

Book Review: "Moonwalking with Einstein" by Joshua Foer Report by Bill Ferguson, 23 August 2023



"Moonwalking with Einstein" by Joshua Foer is roughly an autobiography of an 'ordinary' person (albeit a journalist) who stumbled into the world of professional memory competition. His journey began when he was covering a story and became fascinated by the techniques employed by the world's top memory athletes. Intrigued, he embarked on a year-long challenge, to train his own memory and ultimately competed in the 2006 USA Memory Championship, setting a new record of 100 seconds to memorise a pack of cards. He shares his experiences attending memory training workshops,

interviewing experts, and participating in memory competitions.

He blends his personal narrative with scientific research, and historical anecdotes. We meet some key figures in the field of memory, delving into the techniques they employ and their astonishing abilities. And we consider the history of the art of memory, tracing its roots back to ancient civilizations.

Early in the book we are told that there seems no limit on the number of images we can recognise as 'seen before' or 'not seen before'. This may be a basic survival tool, hard wired into the mammalian brain. This is a type of memory, but not very useful if you want to recall specific information. It seems that we are much better at remembering images if they are combined with strong emotional feelings. This is the basis of many traditional techniques such as 'the memory palace' which Joshua used to remember a shopping list. Associating a trigger word, an image and an action at various points during an imaginary journey through his home allowed him to recall a list of items in the correct order.

How does memory shape our understanding

How does memory shape our understanding of ourselves and the world?

Our identity is built on past experiences, accomplishments, and relationships. Memories allow us to learn from our mistakes and successes, enabling better decision-making.

Emotions are closely tied to memories, generating happy or sad feelings based on recollections.

Our perception of reality is filtered through the lens of memory, as positive or negative past associations influence how we interpret new experiences. Relationships are shaped by memories of interactions, influencing how we connect with others.

Cultural knowledge is stored in memory, allowing us to understand traditions and values. Some traditional societies with no written history relied on story telling to teach their children, as did the church in the past with illiterate members of their congregations. A good story makes you visualise, add repetition and the story sticks in your mind!

Memories aid problem-solving by recalling past solutions, contributing to effective strategies.

The narrative of life is constructed from memories, providing a coherent life story. Memory also guides goal-setting, fosters empathy, and creates a framework for understanding ourselves and the complex world we inhabit

Remembering and Forgetting

Look at the science behind memory, the functions of different brain regions and the cognitive processes involved in remembering and forgetting.

Remembering

Encoding transforms sensory input into memory-friendly form, associating it with existing knowledge.

Storage occurs in brain regions like the hippocampus and neocortex, with strong synapse connections aiding memory retention.

Consolidation (repetition) stabilises memories, forming new neural connections. Successful retrieval relies on initial encoding quality, association strength, and retrieval cues.

Forgetting

Interference arises when new information disrupts the recall of old memories. Decay suggests memories fade over time, but it's not the primary cause of forgetting, lack of active recall is more likely.

Motivated forgetting involves intentional or unconscious suppression, often due to emotions.

Brain injuries or diseases like Alzheimer's impact memory. (Consider WBG as a model of the brain: each of us is a neurone, we all eat, excrete, sleep, communicate, breathe and we each have specialist abilities. We cooperate to ensure optimum success. In terms of special abilities we self-organise into subsets and if one of these subsets is eliminated, the group will do its best to make up the deficit, but it probably won't be as good as before at covering that specialty).

Insufficient consolidation during encoding can lead to retrieval difficulties. We are given a few hints regarding consolidation. The images that Foer created to memorise playing cards, dealt randomly from a pack are emotional and often obscene. The message seems to be that if you want to use this technique you need to build your own library of images that is specific to you, and then practice using them several hours a day. Only by doing the work can you hope to become a memory athlete. The good news is that you don't have to worry about your brain filling up. There seems to be no upper limit to the images that you can store, the limiting factor is your imagination and your ability to create vivid associations.

Sadly, there are no cheat codes that will make you an overnight memory hero, but there are techniques, and if you are prepared to put in the hours, the next memory champion could be you!

Bonus material

The notes at the end of the book are worth a look.

#100 Paulo Rossi (2000) 'memory is marvellously excited by images of women'

#125 Roman aristocrat Calvisius Sabinus got his slaves to memorise for him.
Arguing that whatever is known by his household is part of his knowledge.

#140 The question mark was invented in 1587 and the exclamation mark in 1553

#143 The 'well stocked' Sorbonne library contained 1,017 books

#151 Apple and Windows OS based on 'Theatre of the Mind'

#166 An example of the Millenium System for encoding sequences of numbers
