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# **Moshe'z Reading**

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Some public notes about the books Moshe reads.



## WORDS OF RADIANCE

Obvious spoiler warning is obvious.

*Words of Radiance* is the second book in Brandon Sanderson Stormlight Archive series. As always with Brandon Sanderson:

- There are a lot of interleaving stories
- The magic system is uniquely tailored to the environment.

This is the first series in which he has a non-human race, the Parshendi/Parshmen.

If the previous book is the one where the characters who have powers *discover* them, this book is about a “coming out”. This book is the one that pays off most of the mysteries from the previous one – the per-knights-radiant-order spren kind and how they relate to the power, what are the shardblades (dead spren except...), why did Syl insist that the assassin in white is *not* a Knight radiant, etc.





## MAKING GREAT DECISIONS

This **book** is a weird mix: it teaches important techniques for making good decisions with the most horrifying example.

For example, it advises thinking carefully about the consequences of decisions. It show cases this idea by talking about a time one of the author has “hired away” someone from a client, and the client retaliated by refusing to work with him. The person who was “hired away”, presumably for more money, has no role in this story except for an object. How would he feel about the story about the regret the author feels for offering him a well-paying well-deserved job? Who cares!



## SOFTWARE ABSTRACTIONS

This [book](#) covers the language `Alloy` and what to use it for. I have complicated feelings about formal methods. It would be cool to find a way to decrease software defects: the so-called “silver bullet”.

The first problem is that formal methods mostly don’t try and solve this problem. They are a tool for finding problems with the *design*, not the *implementation*.

But this sounds like it might be useful too. If you do follow a process that has a design step, why not formalize the design? This is where Alloy comes in.

It uses SAT-solving to find counter-examples to the design: places where the assumptions are met, but the invariants do not hold. Unfortunately, it does so by having you hard code things like “maximum model size to use”. Only by working around these things can you usefully use Alloy.

I still hope to some day have an opportunity to see if this will be useful. But so far, the main conclusion is that if you are tempted to use Alloy, your design is too complicated.



**EXISTENCE**

Warning: Spoiler warning for David Brin's Existence.

This [book](#) is *not* part of the Upliftverse, despite dolphins being uplifted. This threw me for a loop, but I guess Brin considers dolphin uplifting to be an immutable part of the universe.

I have a lot of critiques of the science and tech aspect in this book. Brin avoids them all by implying there's an answer and then never giving it, so I cannot check to see the answer makes sense.

This is not the only cheap story telling trick in this book. The most important part of the book happens "off camera": there's a big conflict coming up, then there's a time-skip, and the conflict is in the past.

However, the book does have twists. A lot of them. Good one.

Ultimately, it is an entertaining book, with good story-telling. This is also the first book where the author self-insert character is both minor and, arguably, villainish.



## ACCELERATE

If this **book** was written about doctors, it would recommend lollipops to improve healthcare outcomes. Consider: the evidence for implementing checklists to improve outcomes is flimsy, and hard to replicate.

But doctors who give lollipops to patients get a much higher survival rate than those who do not. This seems strange, until you consider that many kids go to doctors for regular check-ups, and are in general healthy. In contrast, many people go to doctors with serious conditions.

While lollipops are *predictive* of patient outcomes, in that you can make a good guess that if a patient gets a lollipop they will survive, it is not a good intervention.

Sadly, much of this book's evidence is no stronger. It completely fits my biases: I am a big fan of automated testing, continuous integration, monitoring, trunk-based development, and many of the other practices they tout.

Because of this, I want to scrutinize evidence that agrees me with me hard. This book did not survive the scrutiny.

It is is easy to complain that measuring interventions is hard and expensive. It is! But economists do it using natural experiments. People who have to obey laws and codes about ethical constraints manage to measure health-care interventions. This book is laziness touting something I already believe in.





## FREAKONOMICS

It's hard to say anything about this [book](#) that has not already been said. Yes, there are offensive bits there, no matter who you are. Definitely too many places where "he" is used as a neutral pronoun.

But all of this fades as I enjoyed the author's unique taste – the truth. The drive to find out the hidden truth, the true causality, trying to eliminate any alternative hypothesis – it's so much fun.

The Q&A ask what's left on the editing room floor. The authors respond that few things are left on the editing room floor, but a lot is left on the *research* floor. If they can't find a story backed up by data, they just don't publish it. I believe it.



## PACKING FOR MARS

There are many books about the technology of space exploration. They focus on rockets, landing, heat shielding, and other flashy stuff. This book assumes it all way.

Instead, it focuses on the much messier, and less flashy, side of space exploration technology: living beings, and especially humans. Of all the devices in a rocket, these ones are unique.

People sweat. People feel. People eat. People exercise. All of these things are complicated by zero gravity, radiation, and cramped quarters. Strapping humans to a rocket going to space is hard.

As always, Roach explores the disgusting side of science with an open and frank tone that is hard to match. It is easy to be overly sterile, use euphemisms and technical terms that obscure the emotionality of what's going on. But it is just as easy to become a shock artist, focusing on breaking taboos to the detriment of the content.

Roach walks a fine line well, and describes the knowns and unknowns related to crewed space exploration.