Review of<sup>1</sup>

A Map that Reflects the Territory: Essays by the Less Wrong Community Author: Less Wrong Publisher: Less Wrong Press

720 pages, Year: 2020, \$30.00

Review by
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#### 1 Introduction

Less Wrong is a forum founded by Artificial Intelligence Theorist Eliezer Yudkowsky in 2009. The stated philosophy is:

We are a community dedicated to improving our reasoning and decision-making. We seek to hold true beliefs and to be effective at accomplishing our goals. More generally, we work to develop and practice the art of human rationality.

That seems to cover a lot of ground! A satire of it would say the following:

There are discussions about discussions, discussions about arguments, arguments about discussions, and arguments about arguments.

That is not fair. The topics seem to be (1) how does one find the truth in science and in life, (2) AGI (Artificial General Intelligence), and (3) probability. The most common non-trivial word in this book might be Bayes (a trivial word would be something like the which is likely more common but less interesting).

This book is a best-of collection. We quote the preface: Users wrote reviews of the best posts of 2018, and voted on them using the quadratic voting system, popularized by Glen Weyl and Vitalik Buterin. From the 2000+ posts published that year, the Review narrowed down the 44 most interesting and valuable posts.

The collection of posts are now gathered together in a book from the Less Wrong forum, titled A Map that Reflect the Territory: Essays by the Less Wrong Community. This is the book under review.

This set of essays is a set of five books, titled Epistemology, Agency, Coordination, Curiosity, Alignment. Each book is small—about 6 inches long, 4 inches wide, and 1/4 of an inch thick.

#### 2 General Comments

**PROS**: Many of the essays bring up a point that I had not thought of before. Many of the essays say something interesting in passing while getting to their point.

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**CONS**: Some of the essays are trying to say something interesting but have no examples. There are times I am crying out *give me an example!* (Reminds me of my days as a pure math major.) Some of the essays are locally good but it's not clear what their point is.

**CAVEAT** (both a PRO and a CON): Many of the essays use a word or phrase as though I am supposed to already know them. If I was a regular member of the forum then perhaps I would know them. In the modern electronic age I can try to look them up. This is a PRO in that I learn new words and phrases. For me this is a really big PRO since I collect new words and phrases as a hobby. This is a CON in that going to look things up disrupts the flow of the essays. And sometimes I can't find the new word or phrase on the web.

In the third to last section of this review I will have a list of all of the words and phrases I learned by reading these books and either their meaning or that I could not find their meaning. Why third to last? Because the second to last section is my summary opinion and the reader of this review should be able to find the meanings quickly (the last section is acknowledgments). I posted to LessWrong a request for what some of the words mean and got a few responses. I also emailed Robin Hanson to find out what a Hansonian Death Trap is. I now know (or think I know) all of the words and phrases I encountered; but it was challenging finding them all.

## 3 Epistemology

I quote the first sentence:

The first book is about epistemology, how we come to know the world.

Most of the essays are on how to have a good argument. (Reminds me of Monty Python's classic sketch the argument clinic, which is here:

https://www.youtube.com/watch?v=ohDB5gbtaEQ

The essays are more enlightening but less funny.)

Scott Alexander's Varieties of Argumentative Experience is especially good and has... wait for it ... **examples!**. Here is one concept I found very interesting: double-crux. Say Alice thinks gun control is good and Bob thinks gun control is bad. They should find related statements X and Y such that if X is true Alice will change her mind, and if Y is true then Bob will change his mind. In this case it could be

X is If we have gun control then crime will go up.

Y is If we have gun control then crime will go down.

Hence the argument can now focus on a question that can be studied objectively. (I will now plug my cousin Adam Winkler's book: Gunfight: The Battle over the Right to Bear Arms

https://www.amazon.com/Gunfight-Battle-Over-Right-America/dp/0393345831

which is an intelligent discussion of gun control including the history of the issue.)

Another essay that I interpret as on the topic of how to have a good argument is Local Validity as a Key to Sanity and Civilization by Eliezer Yudkowsky. The essay is actually about laws and norms, but it's more about the need to avoid having laws that only apply to some people and not others. While this seems like an obvious point, he gives it history and context.

There are essays by Alkjash about how to come up with new ideas: babble and prune. Have lots of (possibly half-baked) ideas, and then prune to get the good ones. There is a delicate balance

here — how much to babble? how much to prune? A fascinating aside in the article: babies *can* make all the phonemes — they learn language mostly by pruning.

The essay *Naming the Nameless* by Sarah Constantin is about aesthetics and arguments. Why are artists left wing? What to do if you are are a conservative who likes modern art? She then critiques certain types of arguments from an aesthetic point of view.

The last essay, Towards a New Technical Explanation of Technical Explanation by Abram Demski is the most technical. Its about logic, uncertainly, and probability. It seems to point to a way to predict things under uncertainty, however there are no examples. I felt like shouting **Does it Work?** Can you test it?

## 4 Agency

I quote the first sentence:

The second book is about agency, the ability to take action in the world and control the future.

Despite the above sentence, this book does not have a coherent theme; however, it does have several very interesting essays.

Eliezer Yudkowsky has two essays on honesty: Meta-Honesty: Firming Up Honesty Around the Edge Case (The Basics) and Meta-Honesty: Firming Up Honesty Around the Edge Case (The Details). When should one be honest? The usual easy example is lying to Nazis who ask if you are hiding Jews (you should lie). Is there a consistent rule you can use? The essays suggest rules that involve never lying about lying. The second essay has two conversations that are so funny they should be made into a Monty Python sketch: (1) Dumbledore trying to find out if Harry Potter robbed a bank, and (2) the Gestapo asking about hiding Jews. What makes these conversations hilarious is that all parties know all about the issue of meta-honesty. Eliezer admits that these scenarios would never happen. These essays raise interesting points; however, it is grappling with problems that probably have no solution.

Michael Valentine Smith's essay *Noticing the Taste of the Lotus* is about noticing that you are (say) playing a computer game to get more points, and using those points to buy things so that you can ... play better and get more points so that you can buy things .... We (I mean every human) needs to **BREAK OUT OF THIS DEATH SPIRAL**.

Scott Alexander's *The Tails Fall Apart as a Metaphor for Life* begins by talking about the following: even though reading and writing scores are correlated, the top reading score **is usually not** the top writing score. He then applies this observation to happiness and morality. That is, different definitions of happiness are sometimes correlated, but not at the high end. Same for morality. This essay gave me lots to think about, though I don't know what to conclude.

The other essays were of the same type: they made some interesting points but didn't really answer the rather hard questions they set out to tackle. This reminds me of what I liked about philosophy (my minor in college): the questions raised (e.g., What is Truth? What is Knowledge? What is Beauty?) are not going to be answered, but reading about the attempt to answer them is interesting.

#### 5 Coordination

I quote the first sentence:

This third book is about coordination, the ability of multiple agents to work together.

Four of the essays are on game theory. They all go beyond the usual introduction of the Prisoner's Dilemma and hence are all interesting. My challenge is is to give 1-2 sentences about each one.

- 1. Anti-Social Punishment by Martin Sustrik. This describes an experiment that people really did involving whether a player does what's good for himself or what's good for the group. Results are interesting and seem to really tell us something.
- 2. The Costly Coordination Mechanism of Common Knowledge by Ben Pace. The key to the prisoners dilemma is that the parties cannot talk to each other. In the real world how do enough people talk to each other so that they do not fall into the dilemma?
- 3. The Pavlov Strategy by Sarah Constanin. This describes strategies for Prisoner's Dilemma.
- 4. Inadequate Equilibria vs Governance of the Commons by Martin Sustrik. This gives real examples of how people got around the tragedy of the commons.

Prediction Markets: When do they work? by Zvi Mowshowitz is an excellent article about, as the title says, when Prediction Markets work. I was most intrigued by the fact that insider trading is quite legal; however, if it is known that people are doing it, less people might use that market.

The Intelligent Social Web by Michael Valentine Smith views life as improv. In order for a scene to work everyone must naturally follow their role. In life we have a view of ourselves that we have to stick to to make the scene work. We may change slowly to adapt to a different scene. This is a fascinating way to view life!

On the Loss and Preservation of Knowledge by Samo Burja begins with the question: What would Aristotle have thought of Artificial Intelligence? No it doesn't! The essay really begins with the question How would you approach the question of "What would Aristotle have thought of Artificial Intelligence?" It goes on to talk about how knowledge, schools of thought, and philosophies have a hard time being preserved, and giving signs that they were or were not. Alas, it is likely that the Aristotelian philosophy is not so well preserved to answer the question (that's my opinion).

There are a few other essays, but the ones I mentioned are the highlights. This was my favorite book since so many of the essays were interesting.

# 6 Curiosity

I quote the first sentence:

The fourth book is about curiosity, which is the desire to understand how the world works.

There are three essays that look at the pace of science and other advancement:

- 1. Is Science Slowing Down? by Scott Alexander,
- 2. Why Did Everything Take So Long? by Katja Grace, and
- 3. Why Everything Might Have Taken So Long also by Katja Grace,

Scott Alexander argues that science is slowing down and he gives good reasons for this. Katja Grace examines why, for example, even though humans have been around for 50,000 years the wheel was invented only about 6000 years ago. So for 44,000 years people didn't have the wheel! (My students are amazed that 30 years ago people didn't have Netflix.)

The essay What Motivated Rescuers During the Holocaust? by Martin Sustrik is interesting both in what they can say about the question and how they can say anything about the question.

The essay Is Clickbait Destroying Our Intelligence? by Eliezer Yudkowsky is locally interesting but wanders around quite a bit. Another negative is that the answer is so obviously Yes.

The essay What Makes People Intellectual Active? is somewhat interesting but longer than it needs to be.

The essay Are Minimal Circuits Daemon-Free? by Paul Christiano is about circuits (really AI systems) that satisfy the problem constraints but not in the way that you want. It was too technical for my tastes. Also (and this is not an objection), it may have fit better in the book Alignments.

There are a few other essays, but the ones I mentioned are the highlights.

## 7 Alignment

I quote the first sentence:

This fifth book is about alignment, the problem of aligning the thoughts and goals of artificial intelligence with those of humans.

The essay Specification Gaming Examples in AI by Victoria Krakovna is about when AI systems do well but for the wrong reason. For example, a deep-learning model to detect pneumonia did well, but only because the more serious cases used a different X-ray machine. She has a longer article and many example here:

https://www.lesswrong.com/posts/AanbbjYr5zckMKde7/specification-gaming-examples-in-ai-1

This essay is excellent in that it states what the problem of alignment is, getting AI systems to do what we want for the right reasons. Then there was a great satirical essay *The Rocket Alignment Problem* by Eliezer Yudkowsky. There were some other essays of mild interest about what might happen (e.g., slow and steady or fast and abrupt progress). But the collection bogs down with a series of essays (about 1/3 of the book) on Paul Christano's research on *Iterated Amplification*, which is also called *Iterated Distillation and Amplification (IDA)*. The idea is that you start with a system M that is aligned—it gives the right answers for the right reasons. Perhaps a literal human. You then amplify to a smarter system Amp(M) (perhaps letting it think longer or spinning off copies of itself). Then you (and this is the key!) distill Amp(M) into a system M+ which is aligned. Repeat this many times. But note that you always make sure its aligned.

That sounds interesting! It might work! But then the essays seem to debate whether its a good idea or not. I kept shouting at the book **JUST TRY IT OUT AND SEE IF IT WORKS!** I have since learned (from comments on LessWrong about an earlier draft of this review) that current AI is just not smart enough to do this yet. This raises a question: How much should one debate

if an approach will work before the approach is possible to try? If the debate produces interesting results (like research on quantum computing giving insight into quantum and computing) then the debate is worth having. I did not see that here.

### 8 Newords that I Learned or Tried to Learn From These Books

This section has a list of newords <sup>2</sup> that I learned from reading this book. From looking them up, posting to LessWrong, and emailing Robin Hanson, I found out what they all meant.

### 8.1 From the book Epistemology

- 1. No Free Lunch Theorem: If an ML algorithm does well on one set of data it will do badly on another (this is a simplification). This is not just an informal statement—it has been formalized and proven.
- 2. Code of the Light: On page 19, in the article Local Validity as a Key to Sanity and Civilization by Eliezer Yudkowsky, is the following sentence:

I've been musing recently about how a lot of the standard Code of the Light isn't really written down anywhere anyone can find.

Google Searches for *code of the light* only lead to the essay. The phrase was in green so I thought maybe in the original it was a link that would tell me what it means. Nope. There is an irony that he notes that *Code of the light isn't really written down anywhere* and then not write down what it means.

When I posted an early version of this review I got a comment from gjm which I paraphrase. I think that EY made up this terms for the occasion and he intends them to be, at least roughly, clear from context. It means "how good, principled, rational, nice, honest people behave."

3. Straw Authoritarians: On page 20, in the article Local Validity as a Key to Sanity and Civilization by Eliezer Yudkowsky, is the following sentence:

Those who are not real-life straw authoritarians (who are sadly common) will cheerfully agree that there are some forms of goodness, even most forms of goodness, that it is not wise to legislate.

When I posted an early version of this review I got a comment from gjm which I paraphrase.

Straw authoritarians are authoritarians who are transparently stupid and malicious, rather than whatever the most defensible sort of authoritarian might be.

Is this what EY meant? Probably yes. Could I ask him myself? Probably not. Why not? A recent LessWrong post (see

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<sup>&</sup>lt;sup>2</sup>This is not a misspelling—I use newords instead of new words. The best neologisms do not need to be explained; however, (1) when I posted this review on my blog I got 5 emails "correcting" the spelling, (2) when I posted this review on the LessWrong blog I got some comments "correcting" the spelling, and (3) when I emailed this to Fred Green, SIGACT News book review editor, he inquired if this was a misspelling.

was titled I wanted to interview Eliezer Yudkowsky but he's so busy so I simulated him instead.

- 4. Whispernet Justice System being tried in the court of public opinion. I am guessing from context. Google only points to the essay it appeared in. Even so, this should be a word!
- 5. The Great Stagnation: The name of a pamphlet by Tyler Cowen from 2011 that argues that the American Economy has run out of steam for a variety of reasons. The phrase is now used independent of the book but with the same meaning.
- 6. Memetics: The study of memes in a culture.
- 7. Memetic collapse: On page 27, in the article Validity as a Key to Sanity and Civilization by Eliezer Yudkowsky, is the following sentence:

It's [the book Little Fuzzy by H. Beam Piper] from 1962, when the memetic collapse had started but not spread very far into science fiction.

Google searches only lead to the same essay I read this in. Searches on LessWrong lead to a few hits but they all seem to presuppose the reader knows the term.

When I posted an early version of this review on LessWrong I got a comment from gjm which quotes from a Facebook post by EY. I paraphrase the Facebook post:

Since people can select just what they agree with (on the internet, on Facebook, etc) there is a collapse of references to expertise. Deferring to expertise causes a couple of hedons<sup>3</sup> compared to being told your intuitions are right. We're looking at a collapse of interactions between bubbles because there used to be just a few newspapers serving all the bubbles; and now that the bubbles have separated there's little incentive to show people how to be fair in their judgment of ideas from other bubbles. In other words: changes in how communication works have enabled processes that systematically made us stupider, less tolerant, etc., and also get off of my lawn.

I am happy to know what EY meant by the term. I'm surprised he says the memetic collapse had already started in 1962. I would have thought it started later than that. The history of the memetic collapse might be a good topic for historians.

- 8. AGI: Artificial General Intelligence
- 9. Double cruxing: Alice and Bob are having an argument. Get them to agree on a fact that would change their mind. Example: Alice is for gun control and Bob is against it. If Alice would change her mind if she knew gun control causes crime to go UP and Bob would change his mind if he knew gun control causes crime to go DOWN then they have reduced their disagreement to a factual statement that can be investigated.

### 8.2 From the Book Agency

1. Lotus Eater: In the Odyssey they land on the Island of Lotus-Eaters. The taste of the lotus is so good that your goal is to eat them and you ignore other goals. Some of today's games have that property - you accumulate points that allow you to play more to get more points....

<sup>&</sup>lt;sup>3</sup>I had to look this one up: a hedon is a unit of pleasure used to theoretically weight people's happiness. Like how happy I am when I find a cool new word like *hedon*.

I've also heard of going to the gym and lifting weights so you get better at lifting weights. Origin might be Duncan Sabien (a contributor to LessWrong).

#### 2. Medioracistan and Extremistan

On page 16, in the article *The tails coming apart as a metaphor for life* by Scott Alexander, is the following:

This leads to (to steal words from Taleb) a Mediocristan resembling the training data where the category works fine, vs. an Extremistan where everything comes apart.

I paraphrase an enlightening comment by gjm.

In Nassim Nicholas Taleb's book The Black Swan Mediocristan and Extremistan are imaginary countries. In Mediocristan things have thin-tailed distributions, so differences are moderate. In Extremistan there are fat-tailed distributions, so difference are sometimes hugh. These countries are used to indicate if data is thin-tailed or fat-tailed.

- 3. Deontology: An ethical system that uses rules to tell right from wrong. Once the rules are set, no need for God or anything else.
- 4. Glomarization: Always saying "I cannot confirm or deny." I got this definition from the essay. It's a more common term than I had thought: there is a Wikipedia entry on Glomar Response.
- 5. Dunbar's number: The number of people that we can interact with comfortably. Dunbar estimated it to be 150. Be careful who you choose for your 150st friend.

### 8.3 From the Book Coordination

- 1. Miasma: This seems to be the opposite of hype, but Google says its an unpleasant smell.
- 2. Goodhart's Demon: On Page 54, in the article The Intelligent Social Web, is the following:

Ah, but if we are immersed in a culture where status and belonging are tied to changing our minds, and if we can signal that we are open to changing our beliefs, then we're good ... as long as we know Goodhart's Demon isn't lurking in the shadow of our minds here.

I could not find this anywhere on the web (except for the article). I suspect the following contrast is true:

Goodhart's Law if a measure becomes a target it ceases to be a measure. Example: Colleges admissions committees use the number of clubs you are in as a measure of a person's wide ranging interests, but then people begin joining clubs to impress college admissions committees.

Goodhart's Demon The temptation to game the system.

3. Hansonian Death Trap: On page 73, in the article Prediction Markets: When Do They Work, is the following:

If you're dealing with a hyper-complex Hansonian death trap of a conditional market where it's 99% to not happen, even with good risk measurement tools that don't tie up more money than necessary, no one is going want to put in the work and tie up the funds.

Google Searches only turned up hits to this essay. Searches within LessWrong point to a few more hits, but they presuppose the reader knows the term. I suspected that Hanson was Robin Hanson, so I emailed him and got this response:

Hi. I'm pretty sure I'm the only Robin Hanson mentioned in those circles, so that must be me. However, I've never heard the phrase "Hansonian Death Trap", so I expect it isn't in common usage; you are just seeing one person make up a phrase.

It is true that speculators will put less effort into trading on conditional claims with lower probabilities, and so prices will be less accurate, but there isn't a problem of "tying up funds".

- 4. The Costanza: Do the opposite of what you naively think you should do. This is from an episode of Seinfeld where George Costanza intentionally does this since all of his past decisions have been wrong. Not to be confused with pulling a Costanza which means, if you are fired, show up for work the next day as if you weren't, as if your boss was just joking.
- 5. Lucas Critique: It is naive to predict the effect of an economic policy based on past uses.
- 6. Counterfeit Understanding: Knowing the words but not their meaning. Like people who memorize proofs in math line-by-line but do not know the intuition behind them. Students memorize proof templates without understanding take the proof that  $\sqrt{2}$  is irrational and blindly modify it to show  $\sqrt{4}$  is irrational.

### 8.4 From the Book Curiosity

- 1. Dectupled: Multiply by 10.
- 2. Price's law of scientific contributions: If there are n people on a project then half of the work will be done by  $\sqrt{n}$  people.
- 3. Yudowsky's law of mad science: Every 18 months the min IQ needed to destroy the world decreases by one. Scary!
- 4. Opsec: Short for operational security.
- 5. Bystander Effect: On page 28, in the article What Motivated Rescuers During the Holocaust? by Martin Sustrik, is the following:

As I already said, I am not an expert on the topic, but if what we see here is not an instance of the bystander effect, I'll eat my hat.

He is referring to the fact that people who begin helping one Jew escape the Nazis end up helping more.

The phrase Bystander Effect is on the web! A lot! It seems to be that the more people that are bystanders who could prevent something bad from happening the less likely someone really will. This seems different from how it's used in the essay.

When I asked the LessWrong forum about this I got two responses:

(a) beriukay said Since I have not read the first one [the article], I could only speculate that the people who end up helping realize that nobody else is doing to do anything to help,

which breaks them out of the effect and they end up helping more. Excellent! This seems to say that what the author of the article meant to say is that this is an example of the converse of the standard by standard affect.

- (b) Tetrapace Grouping said: The bystander effect is an explanation of the whole story:
  - Because of the bystander effect, most people weren't rescuers during the Holocaust, even though that was obviously the morally correct thing to do; they were in a large group of people who could have intervened but didn't.
  - The standard way to break the bystander effect is by pointing out a single individual in the crowd to intervene, which is effectively what happened to people who became rescuers by circumstance that forced them into action.
- 6. Memetically: This seems to be related to memes but I could not find the word on the web.
- 7. The Sequences: On page 83, in the article What Makes People Intellectually Active? by Abram Demski, is the following:

What is the difference between a smart person who has read the Sequences and considers AI x-risk important and interesting, but continues to be primarily a consumer of ideas, and someone who starts having ideas?

The Sequences is impossible to look up on Google. Fortunately, if you search on the Less Wrong site you get the following:

The original sequences were written by Eliezer Yudkowsky with the goal of creating a book on rationality. Someone with the name MIRI has since collated and edited the sequences into Rationality: AI to Zombies. If you are new to Less Wrong, this book is the best place to start.

Darn. I started with A Map that Reflects the Territory: Essays by the Less Wrong Community.

8. Yed graphs: On page 85, in the article What Makes People Intellectually Active? by Abram Demski, is the following:

I might write one day on topics that interest me, and have sprawling Yed graphs in which I'm trying to make sense of confusing and conflicting evidence.

When I asked the LessWrong forum what a Yed graph is I got a pointer to a product, Yed Graph Editor, that generates high quality graphs. Here is the pointer:

https://www.yworks.com/products/yed

When I was looking for what a Yed graph was, I did come across that, but I thought it was not how the term was being used in the article.

- 9. LW-corpus: Everything in the Less Wrong website.
- 10. TAP: On page 92, in the article What Makes People Intellectually Active? by Abram Demski, is the following:

It's like the only rationality technique is TAPs, and you only set up taps of the form "resemblance to rationality concept"  $\rightarrow$  "think of rationality concept".

When I asked the LessWrong forum what TAP was I found out that it stands for *trigger* action plan and I got a pointer to another LessWrong article that may be where the term originated. Here is the pointer:

https://www.lesswrong.com/posts/vE7Z2JTDo5BHsCp4T/instrumental-rationality-4-2-creating-habits

#### 9 Should You Read This Book?

Yes.

Okay, I will elaborate on that.

In the spirit of the Less Wrong community, I looked at *evidence* on this question. What kind of evidence? I went through all five books and, for each article, marked it either E for Excellent, G for Good, or M for Meh (none were B for Bad), and counted the number of each.

- 1. Epistemology E-1, G-6, M-3.
- 2. Agency E-2, G-2, M-1.
- 3. Coordination E-6, G-2, M-2.
- 4. Curiosity E-4, G-2, M-4.
- 5. Alignment E-2, G-3, M-5.

What to do with this information?

- 1. There are 15 excellent articles! That's... excellent!
- 2. There are 15 good articles! That's... good?
- 3. There are 15 meh articles! That's... meh.

(I did not plan to have 15-15-15. Honestly! In the spirit Eliezer Yudkowsky essays on Meta-Honesty I tell you that this is not the kind of thing I would lie about.)

So is 15-15-15 a good ratio? Yes! And note that the good articles are still ... good. But let's take a more birds-eye view (Do birds really have a good view? Do crows really fly "as the crow flies"?): What did I learn from reading these 45 essays?

- 1. Many interesting questions were raised that I had not thought of. Here is just a sample: (1) Why do inventions take so long to be invented? (2) Why do I play to much Dominion online? (From *Noticing the taste of the Lotus*, and it also says why I should stop),
- 2. Many interesting meta questions were raised that I had not thought of. Here is just a sample: Can we know what Aristotle would think of AI?
- 3. Some answers or inroads on these questions were made. Sometimes the answers were actual answers. Sometimes they gave me things to think about. Both outcomes are fine.
- 4. Some newords for my newords hobby!

So are there any negatives? Yes:

- 1. There were some words that I had to go look up. This interrupted the flow of the articles. I re-iterate that this can also be seen as a positive as you get to learn new words.
- 2. The problem above points to a bigger problem: LessWrong writers (and I presume readers) seem to have their own language and hidden assumptions that it may take an outsider a while to catch onto.
- 3. Some of the essays need examples. This may also be part of the bigger problem: LessWrong writers (and I presume readers) may already know of the examples or some context. And again, it makes it a bit rough for outsiders.

And now for the elephant in the room: Why buy a book if the essays are on the web for free? I have addressed this issue in the past since I've reviewed 3 blog books (see

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https://www.cs.umd.edu/~gasarch/BLOGPAPERS/lipton.pdf
https://www.cs.umd.edu/~gasarch/BLOGPAPERS/liptonregan.pdf
https://www.cs.umd.edu/~gasarch/BLOGPAPERS/tao.pdf
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and have written my own blog book: Problems with a point: Explorations in Math and Computer Science by Gasarch and Kruskal (see

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https://www.amazon.com/Problems-Point-Exploring-Computer-Science/dp/9813279974).
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Here is an abbreviated quote from my book that applies to the book under review.

#### The Elephant in the Room

So why should you buy this book if its available for free?

- 1. Trying to find which entries are worth reading would be hard. There are a lot of entries and it really is a mixed bag.
- 2. There is something about a book that makes you want to read it. Having words on a screen just doesn't do it. I used to think this was my inner-Luddite talking, but younger people agree, especially about math-on-the-screen.

# 10 Acknowledgments

I thank Oliver Habryka for giving me this opportunity to review these books.

I thank Ben Pace for proofreading and useful comments.

I thank beriukay, Tetraspace Grouping, and gjm for clarifying some of the words and phrases that either I did not know or thought I did but was wrong.

I thank Daniel Kokotajlo for his comments on Iterated Amplification which I have incorporated into the review.

I thank Ruby Bloom for helping me post this review to the LessWrong forum in text form (having a pointer to the review I learned was not as good).

All of the people acknowledged help make this review LessWrong.