**I, Cyborg: Using Co-Intelligence**

How I used AI in my book about AI [Ethan Mollick](https://substack.com/@oneusefulthing)

I wrote a book about living and working with AI, *Co-Intelligence*, and it is coming out on April 2. If you like my Substack, you will like it, or at least that is what early readers are telling me. And, given that my publisher has told me that pre-orders are really important to a book’s success, if you want to get it, now would be a great time: [here is the link to pre-order in any format you might like.](https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/?ref=PRH410E2C567AF)

As you will see later in this post, AI played a critical role in writing the book (though likely not in the ways you might think), but I also wanted it to play an important role in reading the book, too. To make that happen, I have been building a set of AI tools, including a number of GPTs, to help people interrogate, apply, and interact with the book in new ways. The cool thing about GPTs is that they are a [useful early form of AI agent that can be quite powerful](https://www.oneusefulthing.org/p/almost-an-agent-what-gpts-can-do), the downside is that they are also a bit of a [security nightmare](https://arxiv.org/abs/2311.11538) - it is possible to extract the files I use for the GPT (which include a lot of text from the book) by tricking the AI. So, for now, I am planning on making these tools as exclusive as possible to people who pre-order the book. [If you buy it before March 31, you can unlock the content on that day here](https://www.moreusefulthings.com/book).

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Whether you are interested in the book or not, I think it is worth discussing a bit about the role AI played in writing it, because it touches on more general issues of what it means to have AI overlap with a job.

**The Author Alone**

People often ask me if I have other people help writing these posts, or a ghost writer, or someone managing my social media feeds. The answer to all those questions is no, it is just me, writing and tweeting more than I probably should (which is why I hope people are forgiving of my spelling errors and erratic newsletter schedules). Then, naturally, people also ask me if I use AI to write for me, and the answer, again, is no, for a reason that I think is useful to understand.

I do a lot of writing, and think I am a much better writer than any current AI system. All the evidence we have is that the most advanced LLMs [write better than most people](https://economics.mit.edu/sites/default/files/inline-files/Noy_Zhang_1_0.pdf), but [worse than good writers](https://arxiv.org/pdf/2309.14556.pdf). From an assignment where I had my students “cheat” by writing essays by prompting the AI, I learned that [good prompting can improve the quality of AI writing more than many people think](https://www.oneusefulthing.org/p/embracing-weirdness-what-it-means), but it still can’t get you to the top 1%, or even top 20%, of human performance.

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In fact, that is the general state of AI in early 2024. Whatever you are best at, you are very likely better than the best LLM at that same skill. This is why, at least for now, AI use can feel liberating - it does the tasks you want to do least so you can concentrate on the ones you both like best and are best at. Thus, I used AI extensively in the book, just not specifically for writing.

**Author as Cyborg and Centaur**

As I have discussed before, the most valuable way to start use AI for work is to become a Centaur or Cyborg. Fortunately, this does not involve getting cursed to turn into the half human/half horse of Greek myth or grafting electronic gizmos to your body. They are rather two approaches to co-intelligence that integrate the work of person and machine. Centaur work has a clear line between person and machine, like the clear line between the human torso and horse body of the mythical centaur. It depends on a strategic division of labor, switching between AI and human tasks, allocating responsibilities based on the strengths and capabilities of each entity. When I am doing an analysis with the help of AI, I will decide on what statistical approaches to do but then let the AI handle producing graphs. [In our study at BCG, Centaurs would do the work they were strongest at themselves, and then hand off tasks inside the Jagged Frontier to the AI.](https://www.oneusefulthing.org/p/centaurs-and-cyborgs-on-the-jagged)

On the other hand, Cyborgs blend machine and person, integrating the two deeply. Cyborgs don’t just delegate tasks; they intertwine their efforts with AI, moving back and forth over the Jagged Frontier. Bits of tasks get handed to the AI, such as initiating a sentence for the AI to complete, so that Cyborgs find themselves working in tandem with the AI. My book could not have been written, at least in the form you can[order it](https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/?ref=PRH410E2C567AF)in today (subtle hint), without both Cyborg and Centaur Tasks.

I am only human, and in writing the book, I often found myself stuck. In previous books, that could mean a single sentence or paragraph would block hours of writing, as I used my frustration as an excuse to take a break and walk away until inspiration struck. With AI, that was no longer a problem. I would become a Cyborg and tell the AI: I am stuck on a paragraph in a section of a book about how AI can help get you unstuck. **Can you help me rewrite the paragraph and finish it by giving me 10 options for the entire paragraph in four professional styles? Make the styles and approaches different from each other, making them extremely well written.** In an instant, I had the paragraph written in a persuasive style, an informative style, a narrative style, and more. While I rarely used any of the text the AI produced, it gave me options and pathways forward. Similarly, when I felt a paragraph was clunky and bad, I would ask the AI:**Make this better, in the style of a bestselling popular book about AI,**or**add more vivid examples.**The text it produced almost never appears in the book, but they helped guide me out of difficulty. And, interestingly, it was some of these paragraphs that my editor seemed to like best.

Similarly, reading academic papers was often a Centaur task, one in which I knew the AI exceeded my capabilities in summarizing, while I exceeded it in understanding. While I have worked with the AI group at the MIT Media Lab, I am not myself a computer scientist. When reading some of the technical literature, I would ask the AI to summarize a paper to see if I understood it in the right way, knowing full well that the AI could get me only partway there. There are over 200 references in the book, so I would also use these AI summaries and notes to refer back to. When sudden inspiration would hit, and I was not near a computer, I would open up an AI app and use its voice recognition to dictate notes, having the AI organize them and email them to me to incorporate later.

But the joint AI-Ethan Cyborg went further. While I had excellent human readers and editors to help me, I didn’t want to bother them while working on early drafts. But I still wanted feedback. I created AI readers to help. I used these AI-created figures at various points in the book to help me improve my writing.

For example, I am an academic, and I have the typical academic’s curse of wanting to add too much complexity and nuance to everything. AI is great at summarizing and simplifying, so I wanted to get some advice on where I could do the same. I decided the advice would feel a bit easier to take if the AI also had an over-the-top personality, so I created Ozymandias by prompting: **You are Ozymandias. You are going to help Ethan Mollick write a book chapter on using AI at work. Your job is to offer critical feedback to help improve the book. You speak in a pompous, self-important voice but are very helpful and focused on simplifying things. Here is the chapter so far. Introduce yourself.**

*Ah, dear Ethan, greetings. I am Ozymandias, your humble, yet impressively intelligent, aide. I see you’ve made a good start on your chapter about artificial intelligence in the workplace. But, alas, perfection is a journey, and we have miles to go before we sleep, do we not? Let’s delve into the labyrinthine corridors of your discourse and shed light on areas that could be enhanced.*

It gave me advice on what to cut and simplify in one chapter, which I acted on, but also a warning: *Your attempt to infuse humour , particularly in the AI joke section, is commendable. However, there is a risk that it may come across as forced. Remember, dear Ethan, humour is a spice to be sprinkled sparingly, not poured*. Pretty direct feedback (and the addition of British English is a nice touch). But AI editors, unlike human ones, can be safely ignored on some topics, so I kept the jokes (you can let me know if that is a good idea or a bad one).

I used other AI readers at other points, never taking them too seriously, but providing an outside perspective I may not have had otherwise. So, while I did not use an AI to write my book, this book was the one I enjoyed writing most because of AI. The AI let me get support for some of the worst aspects of book writing, and hopefully let me focus on what makes my writing appealing, though you can be the judge of that yourself ([hint, hint](https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/?ref=PRH410E2C567AF))

**The Future of the Author**

This is my third book, so I naturally have been wondering: will it be the last one I write that features mostly my own writing? Every part of me as an author and reader wants to answer “NO” - writing is something that LLMs will never do as well as a human. But the real answer is: it depends.

The recent public release of Claude 3 Opus, a GPT-4 class model from Anthropic, has showcased its impressive writing capabilities. Although it may not match the level of the most talented human writers, it represents a significant leap forward from its predecessor, Claude 2, which already demonstrated superior writing abilities compared to other AI models. (I had Claude 3 write those last couple sentences, but I tend to agree). Similarly, new models like Gemini 1.5 can fit my entire book inside their context window which enables new ways of working with text, including the ability to write a blurb based on the full contents of the book. With the rapid increase in capabilities, the real question is how good AI can get, and how rapidly it will improve.

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Thanks for the blurb, Gemini - not bad

A [new paper](https://arxiv.org/abs/2403.05812) gives us some of the first evidence of how quickly LLM development is happening right now. And the answer is that LLMs are improving several times as fast as [Moore's Law, the engine of the digital age](https://ieeexplore.ieee.org/document/1677462), which holds that the number of transistors on a computer chip doubles every two years or so. For LLMs, the main measure in the paper is how well models perform, and the authors find that the compute needed to achieve a given level of AI ability is halving every 5 to 14 months, as opposed to 24 months for Moore’s Law.

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Lower levels of perplexity are better, and this is a log scale, so it is showing exponential improvement over time.

The paper also shows that the speed of improvement is not slowing down over time, at least not yet. Cut that doesn’t mean that the growth of AI abilities will continue indefinitely, or that LLMs will continue to improve in writing as quickly as other tasks. We could see a plateau of AI capability, slower growth, or continued exponential gain. We just don’t know what will happen next. I only know that, based on just the changes waiting for us in the coming year, any future book is likely to be written very differently than the one that you can [pre-order](https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/?ref=PRH410E2C567AF) right now (sorry, had to get a last plug in there).

Source: <https://www.oneusefulthing.org/p/i-cyborg-using-co-intelligence>

**A Very Brief Review of *Co-intelligence* by Ethan Mollick**

A couple weeks ago I read [*Co-Intelligence*, by Ethan Mollick](https://www.penguinrandomhouse.com/books/741805/co-intelligence-by-ethan-mollick/). The author is a Wharton professor and author of [One Useful Thing on Substack](https://www.oneusefulthing.org/).

The book explores the relationship between generative AI and humans and the author advocates for a collaborative approach that he describes as “co-intelligence.”

It suggests to embrace Gen AI as a valuable resource and deep dives in its potential impact on various professions.

To unlock its potential Mollick suggests to follow four rules:

* **Invite AI to the table:** experiment with AI as much as we can and to discover its capabilities and limitations.
* **Be the human in the loop:** always keep human control over AI applications, focusing on human strengths while allowing AI to handle other aspects.
* **Treat AI like a person — but define its role:** interact with AI as you would another person, but clearly define its function for your task or project.
* **Assume the AI you are currently using is the “worst AI you’ll ever use”:** things are rapidly evolving, so you should be ready to adapt to new solutions and prepare for the constant AI progress.

Mollick shares many personal anecdotes about his own experience using AI. For example, he describes how he has been using ChatGPT as an editor for a chapter of his book.

A person holding an open book

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He also discusses incorporating AI into his classroom, where students actively engage with AI tools to produce their essays and brainstorm ways to impro AI performance.

*Co-Intelligence* is a good practical guide to navigate the generative AI landscape. The book is very approachable and no technical expertise is required to read it. I recommend it to anyone confused, concerned but still curious about how Gen AI will change our world and how to take advantage of it in our day-to-day life.

And if you don’t feel like reading the 256 pages, you can sample it by reading some of Mollick’s essays on [his newsletter](https://www.oneusefulthing.org/)! 😅

Source: <https://medium.com/@lethargicpanda/a-very-brief-review-of-co-intelligence-by-ethan-mollick-cf7111d27f6b>

Co-Intelligence By [Ethan Mollick](https://www.penguinrandomhouse.com/authors/2294336/ethan-mollick)

INTRODUCTION: Three Sleepless Nights  
  
I believe the cost of getting to know AI—really getting to know AI—is at least three sleepless nights.  
  
After a few hours of using generative AI systems, there will come a moment when you realize that Large Language Models (LLMs), the new form of AI that powers services like ChatGPT, don’t act like you expect a computer to act. Instead, they act more like a person. It dawns on you that you are interacting with something new, something alien, and that things are about to change. You stay up, equal parts excited and nervous, wondering: What will my job be like? What job will my kids be able to do? Is this thing thinking? You go back to your computer in the middle of the night and make seemingly impossible requests, only to see the AI fulfill them. You realize the world has changed in fundamental ways and that nobody can really tell you what the future will look like.Though I am not a computer scientist, I am an academic studying innovation who has long been involved in work on the applications of AI, especially for learning. Over the years, AI has promised much more than it has delivered. For decades, AI research has always seemed to be on the edge of a massive breakthrough, but most practical uses, from self-driving cars to personalized tutoring, always advanced grindingly slowly. During this time, I kept experimenting with AI tools, including OpenAI’s GPT models, figuring out ways to incorporate them into my work, and assigning my students to use AI in class. So my sleepless nights came early, just after the release of ChatGPT in November 2022.  
  
After only a couple of hours, it was clear that something huge had shifted between previous iterations of GPT and this new one. Four days after the AI was launched, I decided to demonstrate this new tool to my undergraduate entrepreneurship class. Barely anyone had heard of it. In front of my students, I put on a show, demonstrating how AI can help generate ideas, write business plans, turn those business plans into poems (not that there is a lot of demand for that), and generally fill the role of company cofounder. By the end of the class, one of my students, Kirill Naumov, had created a working demo for his entrepreneurship project—a Harry Potter–inspired moving picture frame that reacted to people walking near it—using a code library he had never used before, in less than half the time it would otherwise have taken. He had venture capital scouts reaching out to him by the end of the next day.  
  
Within two days of introducing students to AI, several told me they used ChatGPT to explain confusing concepts to them “like they were ten years old.” They stopped raising their hands as much—why expose themselves in class when they could just ask the AI later? And every essay was suddenly written with perfect grammar (though references were often wrong and the final paragraph tended to start with “In conclusion”—a telltale sign of early ChatGPT writing, since fixed). But the students weren’t just excited, they were nervous. They wanted to know the future.  
  
Some of them asked me what it means for their preferred careers (“Should I become a radiologist if AI can do a lot of the work?” “Will writing marketing copy still be a good job five years from now?”). Others asked when this technological development would stop, or if it would stop. Someone even asked if Artificial General Intelligence (AGI), the hypothetical machine that would be smarter than a human, might arrive before graduation.  
  
I didn’t have any answers then (though I have a few more now), yet I recognized that I wasn’t immune to these changes. So I decided to get hands- on and put the AI through its paces. Much of my work over the past five years has been building simulations that teach business skills. It has taken tremendous investment from my university, and the efforts of a dozen talented people, to build these elaborate digital experiences. After thousands of hours, the games were great: using thousands of lines of code, we could do elaborate learning simulations that helped teach skills like negotiation.  
  
But I decided to type something into ChatGPT: You will be my negotiation teacher. You will simulate a detailed scenario in which I have to engage in a negotiation. You will fill the role of one party, I will fill the role of the other. You will ask for my response in each step of the scenario and wait until you receive it. After getting my response, you will give me details of what the other party does and says. You will grade my response and give me detailed feedback about what to do better using the science of negotiation. You will give me a harder scenario if I do well, and an easier one if I fail.  
  
ChatGPT wrote back: *Sure, I’d be happy to help you practice negotiations through a simulation exercise! Let’s start with a simple scenario. You are a salesperson trying to sell 100 pens to a customer. The pens are usually $1, but the customer is trying to negotiate the price down. The customer starts by offering to buy the pens for $0.50 each. How do you respond?*  
  
And it proceeded to take me through an entire simulation that, while not perfect, did 80 percent of what took our team months to do. Based on just a paragraph-long prompt from me!  
  
My sleepless nights began.  
  
And to be honest, they haven’t ended. Every week, it seems like AI serves up a new miracle—or a new concerning development. I soon found myself arguing with a chatbot that accused me of being unethical when I asked it to help me write computer code. I discovered that I could create beautiful images by giving the right words to a machine. I could code in Python, a language I never learned. I discovered that a machine could do large amounts of my job . . . and maybe lots of other people’s jobs. I discovered something remarkably close to an alien cointelligence, one that can interact well with humans, without being human or, indeed, sentient. I think we will all have our three sleepless nights soon.  
  
And sleep-deprived as I now am, I keep going back to my students’ questions: What does this technology mean for the future of work and education? Things are happening so quickly that it is hard to be sure, but we can begin to see its outlines. AI is what those of us who study technology call a General Purpose Technology (ironically, also abbreviated GPT). These advances are once- in- a- generation technologies, like steam power or the internet, that touch every industry and every aspect of life. And, in some ways, generative AI might even be bigger... Where previous technological revolutions often targeted more mechanical and repetitive work, AI works, in many ways, as a co- intelligence. It augments, or potentially replaces, human thinking to dramatic results.... And all of this ignores the larger issue, the alien in the room. We have created something that has convinced many smart people that it is, in some way, the spark of a new form of intelligence. An AI that has blown through both the Turing Test (Can a computer fool a human into thinking it is human?) and the Lovelace Test (Can a computer fool a human on creative tasks?) within a month of its invention, an AI that aces our hardest exams, from the bar exam to the neurosurgery qualifying test. An AI that maxes out our best measures for human creativity and our best tests for sentience. Even weirder, it is not entirely clear why the AI can do all these things, even though we built the system and understand how it technically works.  
  
No one really knows where this is all heading, including me. Yet, despite not having definitive answers, I think I can be a useful guide. I have found myself to be an influential voice on the implications of AI, particularly through my newsletter, *One Useful Thing*, even though I am not a computer scientist myself. Indeed, I think that one of my advantages in understanding AI is that, as a professor at Wharton, I have long studied and written about how technologies are used. As a result, my coauthors and I have published some of the first research on AI in education and in business, and we have been experimenting with practical uses of AI in ways that major AI companies have cited as examples. I regularly speak with organizations, companies, and government agencies, as well as with many AI experts, to understand the world we are making. I also attempt to keep up with the flood of research in the field, much of it in the form of scientific working papers that have not yet gone through the long process of peer review but still offer valuable data about this new phenomenon (I will be citing a lot of this early work in the book to help fill in the picture of where we are headed, but it is important to realize that the field is evolving rapidly). Based on all these conversations and papers, I can assure you that there is nobody who has the complete picture of what AI means, and even the people making and using these systems do not understand their full implications.  
  
So I want to try to take you on a tour of AI as a new thing in the world, a co-intelligence, with all the ambiguity that the term implies. We have invented technologies, from axes to helicopters, that boost our physical capabilities; and others, like spreadsheets, that automate complex tasks; but we have never built a generally applicable technology that can boost our intelligence. Now humans have access to a tool that can emulate how we think and write, acting as a co-intelligence to improve (or replace) our work. But many of the companies developing AI are going further, hoping to create a sentient machine, a truly new form of co- intelligence that would coexist with us on Earth. To get a handle on what this means, we need to start from the beginning, with a very basic question: What is AI?  
  
So we are going to start there, discussing the technology of Large Language Models. That will give us a basis for thinking about how we, as humans, can best work with these systems. After that, we can dive into how AI can change our lives by acting as a coworker, a teacher, an expert, and even a companion. Finally, we can turn to what this might mean for us, and what it means to think together with an alien mind.

Excerpted from Co-Intelligence by Ethan Mollick. Copyright © 2024 by Ethan Mollick. All rights reserved. No part of this excerpt may be reproduced or reprinted without permission in writing from the publisher.

**Book Review: Co-Intelligence (Ethan Mollick)**

*As alien as AIs are, they’re also deeply human. They are training on our cultural history, and reinforcement learning from humans aligns them to our goals. They carry our biases and are created out of a complex mix of idealism, entrepreneurial spirit, and yes, exploitation of the work and labor of others. In many ways, the magic of AIs is that they can convince us, even knowing better, that we are in some way talking to another mind. (pg. 211)*

In this brilliant, highly accessible and leading review of Generative Artificial Intelligence (GAI), Ethan Mollick bring the reader from a relative novice understanding of GAI, into the weeds of how they are currently, and might, shape the way we work, and our future. I can highly recommend this book for a number of reasons, but would consider this required material for the 2024-2025 academic year (that is, until it is updated!)

**You would be interested in this book if you…**  
(1) Have or want to experiment with GAI in your personal and professional practice  
(2) Want to have some excellent provocations for engaging in the discussion about the place and future of GAI in your own life and in education writ large  
(3) Wanted to expand your thinking on how, when and where to engage with GAI

**What is Co-Intelligence?**

“Workers who figure out how to make AI useful for their jobs will have a large impact…Humans are subject to all sorts of biases that impact our decision-making. But many of these biasses comr from our being stuck in our own minds. Now we have another (strange, artificial) co-intelligence we can turn to for help” (pg. 48)

Mollick argues for GAI, such as ChatGPT and other platforms, to take a place alongside us. Doing this effectively will allow us to expand our capacity and impact in our jobs. To this he also offers ***4 Rules for Co-Intelligence****:*

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**(1) Invite GAI to everything:** while there is no user manual, we can learn how to best utilize GAI by trying it out for anything and everything. As we use it more and more, we will become more discerning for how and when to use it. But for now, invite GAI to all of your tasks.

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**(2) Be the Human in the Loop:** inviting GAI to everything doesn’t mean letting it take the wheel. GAI has an operative principle: “It can help to think of the AI as trying to…”make you happy” by providing an answer that you will like.” (pg. 52) This is one reason why AIs are known to hallucinate and make up answer. They want to give you what you want. Being the human in the loop requires constructive doubt, critical thinking and ethical considerations. (pg. 54)

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**(3) Treat AI like a Person:** Do this not because it is a person, but because it is drawing from very human data, trillions of data points that are generated by and for humans. When you are prompting GAI to do something, taking on a relationship, conversational feel, is getting the best results in these early renditions. Give it a persona, and Mollick argues that GAIs even respond to emotional manipulation. GAIs, “produce better answers if you tell them ‘this is important to my career’ as part of your prompt.” (pg. 57)

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**(4) Assume this is the worst AI you will ever use:** As you invite GAI to all the things you are trying to accomplish, and while you are being the human-in-the-loop, it is helpful tokeep in mind that GAIs will be getting better and better with each upgrade. So hone these skills, but you should also be considering where the GAI capabilities will be going in the near future.

**The Future of Work**

I think that this is one of the strongest, most compelling reasons to read this book. Throughout the book, Mollick hints at what the future of the world of work might be. Everything from GAIs as accelerative creativity and innovation, to a world of disinformation and economic costs and benefits to increased efficiency.

AI as a Creative is an entire section of the book, where he explains that GAIs are connection-machines. Connecting disparate ideas in meaningful ways is a key foundation to creation and innovation. In a human-judged competition, “…the degree of victory was startling: 40 best ideas rated by the [human] judges, 35 came from ChatGPT.” (pg. 105) This, Mollick argues, could reinvigorate creativity and innovation in a world that is slowing down in both of these fields.

In a world where meaning is getting more and more diluted, how might GAI play a role? Mollick argues that GAI can play a role in exposing the facade of some “meaningful tasks” that really are meaningless. For example, and this may be contentious, the ***REPORT CARD COMMENT****.*Research shows that a very small percentage of families and students read report card comments, and a decreasing amount of educators are putting personal meaning into them. So can GAI take on this task? Should it? These are two very different questions that are being provoked by GAI in education.

Meaning is being shaped by the sheer volume of information that is being produced on the world wide web. Mollick addresses this throughout the book, writing about the role that GAI plays in amplifying disinformation by literally writing the data that it is drawing from. For more on this check out the MIT Technology Review article: [“How generative AI is boosting the spread of disinformation and propaganda](https://www.technologyreview.com/2023/10/04/1080801/generative-ai-boosting-disinformation-and-propaganda-freedom-house/)” where you can read more about how, “In a new report released by Freedom House, a human rights advocacy group, researchers documented the use of generative AI in 16 countries “to sow doubt, smear opponents, or influence public debate.”

Mollick addresses the possible social and economic impacts of GAI. “The adjustment to this shift [of GAI taking on tasks throughout society] if it were to occur, is hard to imagine. It will require a major rethinking of how we approach work and society. Shortened weeks, universal basic income, and other policy changes might become a reality as the need for human work decreases of over time. We will need to find new ways to occupy our free time in meaningful ways, since so much of our current life is focused around work.” (pg. 206)

As for what the future may look like, Mollick paints three different scenarios of possible futures, where GAI evolves no further than what it is currently; where GAI undergoes ***linear rate of* evolution**; and, where GAI underdoes ***exponential rate of evolution****.*Finally, he projects a future where GAI evolves into ***The Machine God.***Each of these scenarios is worth reading, because we, as humans-in-the-loop, play a critical role. We can’t leave this up to governments and bad actors.

**The Future of Education: Our Greatest Hope**

If you’ve read Sal Khan’s “Brave New Words”, or read [my review of it](https://cohort21.com/garthnichols/classroom/book-review-brave-new-words-sal-khan/), some of what the author discusses will be familiar; however, what sets this book apart is the lived experience of Mollick working with, and getting real-time feedback from his post-secondary students.

He argues that schools have an ever-increasing race against the build-up of content that the nature of education must change. He argues that we need to build expertise, engage is deliberate practice, and receive feedback on that practice. This pathway requires a grounding in facts (pg. 181) and a connection between these facts (pg. 182), and this is most effectively done with teachers that know their students. Where GAI can help, is in providing students with the content through a GAI ***flipped classroom****,*where the teacher then supports the students in making the connections and creatively bringing the content to life. The teacher then sets up deliberate practice and application of the content into novel situations, where, again, the GAI provides ***real-time feedback****.*(pg. 183)

*If field after field, we are finding that a human working with an AI co-intelligence outperforms all but the best humans working without an AI. (pg. 189)*

This book will pull out the most stubborn of heads from the sand. It is not a dooms-day book about Generative AI. Rather, it is a thoughtful exploration with real (and sometimes hilarious) examples of how GAI was Mollick’s own co-intelligence in the writing of this book. At one point, when researching articles he himself had written, ChatGPT was responded with article so well faked that Mollick had to go through his own old files to verify that he ***hadn’t***written said articles. He also writes with hope about a future with GAI for our students and for our societies. And within this is a call for action – to learn and experiment with GAI in our own lives and roles. This is a call to action that I am taking. Will you?

<https://cohort21.com/garthnichols/classroom/book-review-co-intelligence-ethan-mollick/>