Collected Notes of Matthew Abate

vol. I

Notes of 2023

Edited by
Matthew Abate

Collected Notes of Matthew Abate
Volume I: Notes of 2023

Edited and Published by **Matthew Abate**

Copyright © 2025 Matthew Abate. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

ISBN: 979-8-218-86131-5

Published in New York City, NY, USA.
First printing: November 2025.
Second printing: December 2025. (online pre-publication)

For inquiries, rights purchases, or further information, please contact Matthew Abate at `mabate13@gmail.com`.

Disclaimer: This book includes sensitive content and contains entries pertaining to real people, with names listed as originally noted. While these entries reflect the author's experiences and observations, they are presented with no intent to harm or defame others. Readers are advised to approach these narratives with an understanding of their personal and potentially sensitive nature.

Contents

Foreword **4**

How to Read **5**

Journal 2023 **7**

January 7
February 15
March 22
April 28
May 41
June 52
July 60
August 65
September 70
October 79
November 88
December 94

Collected Errata **108**

Collected Addenda **109**

Index of Entries **110**

Foreword

About ten years ago, in 2013, I started saving notes to myself with ideas for future projects. At the time, I didn't realize the habit—maybe once a month, somewhat unintentionally, I would add a note to the Notes app on my iPhone. Notes were large blobs of text that weren't well-maintained, or lists that were appended to, reordered, or edited as time went on. For example, I had a long list called *Ideas* that I would semi-regularly write to as I would come up with new concepts for inventions, products or jokes. Another list was called *Thoughts*.

After a few years, I was consciously journaling more often. By 2018, most of my notes contained their date, and by 2022, many also contained the time. I kept the notes in order and regularly reread them. Many notes developed into completed projects.

2023 was, I think, the first year where the frequency and quality of my notes allowed for the possibility of a published set; I realized this mid-year and began collecting, editing, and formalizing journal entries in a project on the order of my Ph.D. Thesis.

What has arisen is some mixture between a scrapbook and an artist's notebook. Many entries are ideas for art and engineering projects. Others are records of funny circumstances and stories from my life. The result is a wonderful personal journal that I am excited to reread later and share with you now.

Matthew Abate, March 23 2024: 8:33pm

How to Read:

This edition features 395 total journal entries from 2023, which I've grouped using generic titles. For example,

- **Idea**: Concept for business, product, or joke.
- **Thought**: Light philosophy, a realization, or something that made me happy.
- **Scene From my Life**: Something that happened to me that was funny or might work in a movie.
- **Micropoem**: A short phrase that rhymes or reminds me of poetry.
- **Audio Recording**: A note that came from a saved recording of myself speaking, whistling or playing piano.
- **Remember Me Later**: A cool fact or piece of trivia.
- **I Remember**: Usually pre-2023, an old scene from my life where I felt I learned something.

In addition to the titles above, I also include certain more unique titles for artistic works such as **Painting** or **Film**, and I include **Concept** when the work was only partially finished (e.g., *Story concept*). Timestamps, which appear next to titles refer to USA Eastern Time (EST), unless noted otherwise.

For poetic entries, I sometimes include rhythmic notation to mark the on and off-beats (*o* and ., respectively). For example,

Pineapple biting is vital to happiness
o . . o . . o . . o . .

Quite low in calories, high in pineappliness.
o . . o . . o . . o . .

"Pineapple Biting is Vital to Happiness"
M. Abate, Aug. 19, 2023, 1:14 AM, page 67.

See page 109 for a full index of entries by title.

Thought **January 1, 2023: 12:58am**

Skeletons dancing through a graveyard... on the way to their graves.

on New Years.

Product Concept **January 1, 2023: 5:29pm**

Sell a 13-month calendar, with an extra January at the end as a buffer month.
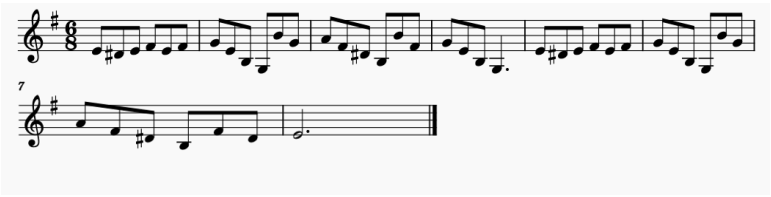
Thought **January 2, 2023: 3:23pm**

It would be nice if our language made it so that words which go naturally in a sequence, progress in alphabetical order, possibly reverse alphabetical order. For example, "Small, Medium, Large, Extra-Large" is in reverse alphabetical order (S. M. L. E.). Most natural sequences don't exhibit this behavior.

Joke **January 2, 2023: 11:45pm**

An autonomous car dealership that gives out a bottle of hard liquor with every vehicle sold. You know, for the ride home.

Audio Recording **January 2, 2023**



Gigue Theme. Transcribed March 22, 2024: 1:25pm from an Audio recording of Matt whistling on January 2.

Idea **January 4, 2023: 1:29am**

A news show called *OK, Where were we*?

Scene From My Life **January 5, 2023: 1:02am**

Matt is explaining a math problem to Mark and Ben. He uses some deep jargon, promoting it as exciting. He says: "And that's the solution... **but Matt, you say...**". Matt takes a long pause and then very quickly says "**You say, but Matt,** What about the third case?" He then immediately goes on.

Scene Concept **January 6, 2023: 8:07pm**

In a dystopian future, people have no attention span. Radio stations play songs 6 seconds in length.

continued January 9, 2023: 12:24pm: Movie theatres show TikToks.

Micropoem **January 12, 2023: 9:38am MT**

1. Where do rain-men remain?
2. What makes Eric epic?

Utah Ski Trip.

Idea **January 13, 2023: 7:26pm MT**

A webtool where you upload many photos and select a main photo. The tool creates a collage out of the photo set, so that, when you stand back, you see the main photo.

Thought **January 13, 2023: 8:49pm MT**

High School was my middle school – if you think about it. Like, it goes (1) Elementary School, (2) Middle School, (3) High School, (4) Undergraduate College, (5) Graduate School. High School's the one in the middle.

Friday the 13^{th}.

Photo **Undated**



Matt standing with Banksy painting in Park City, Utah.

Thought **January 14, 2023: 2:55pm MT**

It makes me happy that it's called a "Spaceship." If you think about it, the Earth is like an island in a three dimensional sea.

Idea **January 14, 2023: 8:55pm ET**

A tool for letting you check crosswords with a camera.

Film Concept **January 17, 2023: 2:16am**

A gif perpetually zooming in on a man watching a man watch TV on TV. Start by playing it forwards—the camera zooming in on the TV. Then switch and go backwards, out of the TVs.



continued December 4, 2023: 2:04pm. Made the above figure with Dalle-3. It wouldn't work for a gif, but I really like the way it looks. The AI hallucinations are very trippy artsy.

Idea **January 17, 2023: 7:25am**

Sing "Happy Birthday U2" to Bono on his birthday.

Thought **January 17, 2023: 7:58am**

Can a human brain be split into two parts and survive on both sides? This would create a lot of philosophical questions about consciousness.

Thought **January 17, 2023: 11:08am**

Back in the day, doctors might record "old age" as a cause of death. I wonder who the youngest recorded person to have died of old age was.

Micropoem **January 18, 2023: 12:00am**

I lick liking you.

to ice cream.

Thought **January 18, 2023: 12:03am**

It's Wednesday – the morning of my birthday eve.

Thought **January 18, 2023: 1:33am**

Is a Poisson process in backwards time also a Poisson process? For example, say I put some popcorn kernels in a pan – the time of the first pop is a Poisson random variable – what kind of random variable is "the time that I started cooking popcorn, given one just popped?"

Scene Concept **January 18, 2023: 10:58am**

Throwing out a trashcan.

said by Cecie

Thought **January 18, 2023: 10:46pm**

My birthday is in an hour ish. What's the last thing I want to do while being 27?

Event **January 19, 2023: 12:02am**

I'm 28. The last things I did while I was 27 were: I took a Polaroid of myself at 11:53pm • I listened to my piano pieces on YouTube • I turned on Mozart's Lacrimosa at 11:58ish. Then I looked down and it was 11:59, and I was like crap I need to do something. I decided to race midnight to square $74^2 = 5476$. I got it pretty fast, and then waited half a minute until midnight.

Event **January 19, 2023: 11:48am**

At Ink and Dagger tattoo. My appointment is at noon, so this is my last few minutes with my arm intact. I'll miss him.

Photo **January 19, 2023: 9:31pm**



Birthday Cake, made by Cecie.

Photo **January 19, 2023: 11:47pm**

Great birthday. Got tattoo. Talked to everyone on the phone. Went to Grind House and spent the night doing riddles and crossword puzzles with a group around the projector.



Mixed Monotonicity Tattoo, January 19, 2023. 3:16pm: This is part of a figure from my thesis. The blob is the reachable set (set of all possible futures) of a dynamical system. The rectangle is an over-approximation derived using mixed monotone systems theory.

Joke **January 19, 2023: 11:47pm**

I was asked to make up a chemistry joke: "So Drogen walks into a bar... and everyone says 'Hi Drogen!' "

Remember Me Later **January 20, 2023: 12:38am**

Do more completing square math problems. The concept can be used to prove the quadratic equation.

Dream Log **January 21, 2023**

Transcribed March 23, 2024 12:44am, from an Audio recording made just after midnight, January 21, 2023. The dream it references was January 20, 2023 from 4:50pm to 8:00pm.

Today, I had my first lucid dream where I felt like I had a lot of control. Let me explain:

Every once in a while I have a lucid dream. The plot might look something like this: I wake up in my bed and I immediately realize I'm dreaming because the room is too big. Once I realize I'm dreaming, I get excited and try to get out of bed. But then I fall on the floor and lose the ability to move—I lie on the floor in the dream for a while, rolling a bit in a clump of bedding, and entering these panic cycles where I try to influence the dream but can't. Then, after a while, I wake up in my bed again.

Second tangent: recently, before bed, I've been practicing a meditation where I try to focus on being awake as I drift to sleep. The idea is to focus on the part of you that is awake, that is not your body, and attempt to maintain consciousness while entering the dream. I've generically titled this action "sleep experiments."

But what happened today: I was tired and went to my room to watch a few YouTube videos and nap. But I couldn't stay awake. I closed my eyes and ran the sleep experiment. Instead of me losing consciousness, my sight unblurred and I was in my bed. I sat up, and grabbed my laptop (which was there in the dream room) and I would think about things and they would appear on the screen and I could wave my hands, and the pictures on the screen would move. I wouldn't say I had complete control over what was happening, but much much more control than normal. I

think the fact that it was a laptop made it easier for me to control things without panicking or breaking my brain. I then saw dream-physical dust on my laptop and was able to control it by moving my hands. I turned it into snowflakes. Then, many people burst in the room and I woke up.

I need to start more regularly logging my dreams–especially the lucid dreams and sleep paralysis cycles. They are incredibly interesting, and could maybe be a good tool for something? I'm not sure. Next time I have control in a lucid dream, I should try to do a math problem and see what happens.

Painting Concept **January 24, 2023: 3:02am**

A bunch of people are in a swerving line in the desert, each kneeling prostrate toward the next. Possible variant would be to have god or some object sort of in the middle, with the line unnaturally swerving around him.

Thought **January 25, 2023: 12:23am**

The phrase "the love of my life" has five syllables with a 3-1-2-3-1 meter / emphasis.

Thought Exp. **January 27, 2023: 3:38pm**

Consider a conversation as a controls problem. Find a controller that steers from an initial condition to some final state while ensuring stability, robustness, and minimum effort.

Remember Me Later **January 28, 2023: 7:27pm**
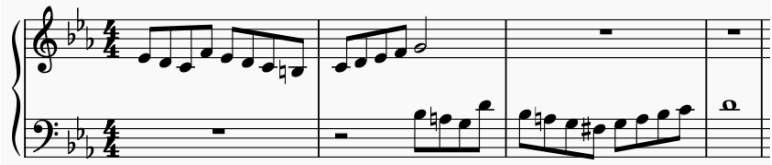
Listen to the song "Que Sera, Sera" by Doris Day.

Advice **January 28, 2023: 11:37pm**

It's important to make happy little decisions. The tree is going to look however it's going to look. When you don't make decisions you won't make paintings.

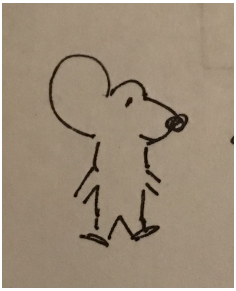
from Bob Ross.

Audio Recording **February 1, 2023: 4:58pm**
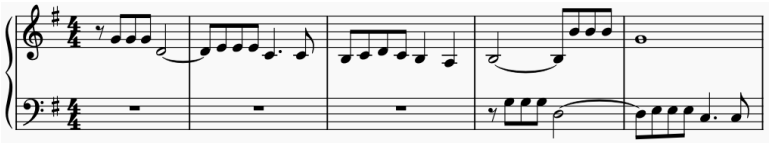


Fugue Subject transcribed from Audio recording of Matt speaking and playing. Matt: "Alright, so the bad news is that my phone has to be plugged in because it's at 0% and the piano is all the way over there. But I've got a little bit of a subject that I wanted to record before I use the bathroom and it sounds something like...".

Drawing **February 2, 2023: 7:06pm**



Edward Smallmin, a gift to Cecie.

Audio Recording **February 2, 2023: 8:49pm**



Invention Exposition transcribed from Audio recording of Matt playing piano.

Game Concept **February 5, 2023: 1:19am**

Dots are bouncing around in a grid, you need to steer them so that dots of the same color don't hit one another.

Film Concept **February 5, 2023: 9:25pm**

The trailer is a long scene, but the movie is filmed like a trailer. Like all cut together with emotions bouncing.

Thought **February 5, 2023: 10:13pm**

It would be great if there were better ways to allow prisoners to benefit people outside. I don't really know what this means – certainly, I wouldn't want anything exploitative or abusive, but maybe something mutually beneficial? Like maybe an inmate could work for a company, and some portion of their wages are donated, with most going to the prisoner.

Thought **February 6, 2023: 3:12am**

I'm pretty confident I could build something that fits the definition of life. I'm very not confident that I could build consciousness.
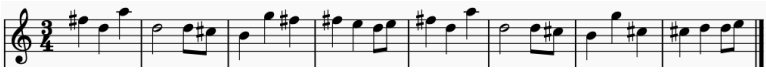
Thought **February 8, 2023: 12:43am**

Today, when we think about the 1300s (in Europe) we think of knights. In the future, when people think about the early 2000s they'll think of us as the people who drove cars – even though they've been around for 100 years.

Thought **February 8, 2023: 12:49am**

Cecie said something interesting about how she would never want to hurt my feelings because that would be stuck permanently in my previous selves. Like, if you think of me as a 4D object, any hurt would be kinks in the object forever.

Audio Recording **February 14, 2023: 7:30pm**



Minuet Theme, transcribed from Audio recording of Matt whistling.

Event **February 14, 2023: 11:15pm**

Cecie and I had a nice Valentine's day walking on the Atlanta belt-line and eating at Ponce City market. I love her.

Idea **February 14, 2023: 11:17pm**

Find the closed form solution to the game Mancala.

Scene Concept **February 15, 2023: 2:23am**

Blimp crashes in disaster. Reporters cover the disaster – their voices all increase in frequency.

Scene From My Life **February 16, 2023: 12:07pm**

Matt thanks Ben and then pats him on the back. Matt says "Crap, now I've got the team on my hand."

Thought **February 17, 2023: 5:15am**

I wonder what the neuroscience is behind itchiness.

Film Concept **February 19, 2023: 2:00am**

Make a totally fictitious true crime documentary.

Thought **February 19, 2023: 3:05am**

I don't like fighting—verbally, anyway. Fighting is two people explaining to each other why they each think they are right. I don't know—It's weird. For other things I can be very patient. But as soon as someone else says "You're wrong, I think this" I say "That's fine we can think different things."

Scene From My Life **February 19, 2023: 2:15pm**

Earlier I went to the bathroom and Cecie said "European!"

Film Concept **February 21, 2023: 2:41am**

Make a documentary about a person, using candid videos taken around them in life. Like, it would be super interesting to hear someone say "When I was a kid, this happened," like, at dinner, without knowing that that would appear later in a documentary.

Thought **February 21, 2023: 2:41am**

A few weeks ago, Ben asked why I say so many jokes out loud that aren't funny and that only I get. This led to an interesting philosophical conversation. I expressed that jokes are funnier when spoken, but he did not feel this way, and perhaps felt the opposite. I wonder if this personal feeling (which was exposed only through this conversation) explains my personal projects: I get a lot of enjoyment out of creating things and showing them to others. I show my projects to others, even when I know others won't get them fully. Similarly, I'll tend to say jokes aloud when they strike me, regardless of whether my company will understand.

I Remember **February 21, 2023: 2:44am**

I remember learning Adobe flash in middle school (video editing software). We had a project in the Computers class where we had to make videos about Leonardo da Vinci inventing the bicycle. Mine was pretty over the top, and others seemed to like it.

I Remember **February 21, 2023: 2:45am**

I remember going to the Central Park Zoo as a kid and watching the bell tower with my mom. There were these little brass monkeys that would hit the bell and then animals that would come out and dance.

Event **February 21, 2023: 10:35pm**

Cecie's thesis defense was today :) She is now a doctor.

Painting Concept **February 21, 2023: 10:35pm**

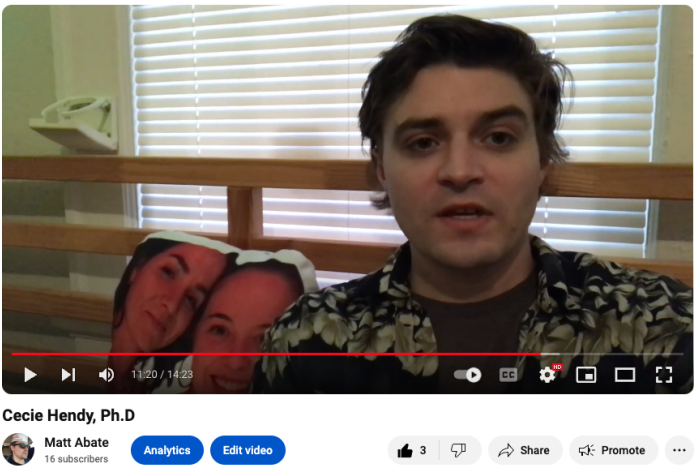
Paint an older man and woman holding (like a candle) two younger people dancing.

Thought **February 22, 2023: 12:55am**

When I was in public school, we were taught about drugs in this very bizarre way where we were told why they were bad but not at all about them. For example, I didn't know marijuana was a plant or was smoked until late high school. I question whether this is the correct way to teach about drugs so that the least number of students try them. This is not necessarily my intention, but possibly it's the State's intention. That question would be: What is the way to teach about drugs so that the least possible number of people try them? I'm not sure.

Film **February 22, 2023**

As a Thesis Defense gift for Cecie, I collaborated with Ellie on a film: titled *Cecie Hendy, Ph.D.*. Truthfully, the film was Ellie's idea and she supplied a lot of the stories and talking. I did the editing and the silly side of the film, which I'm actually really proud of.



"Much like every good movie, ours begins in a place of serious character development and standard plot, only to then veer into a dreamlike picture sequence that really makes you question your reality and overall what you are watching. That part of the movie begins now." Japanese-Pop starts playing.

Quote **February 24, 2023: 3:00am**

Kepler, who worked with Tycho Brahe, said that on Tycho's deathbed he repeated over the words "Let me not seem to have lived in vain. Let me not seem..." Powerful stuff—Indeed, he did not.

learned from Cosmos, with Carl Sagan.

Scene From My Life **February 25, 2023: 6:00pm**

Matt: "I think that's a sign of autism."
Mark: "You know I saw a sign for autism. Ben's face was on it."

Idea **February 25, 2023: 7:05pm**

Make a fiber-optic computer. Like transistors resistors and capacitors out of fiber in some way. It wouldn't work, but could be very fast.

Thought **February 26, 2023: 12:16am**

The phrase "I've seen it all" is pretty poetic. When one dies, they will have "seen it all," so to say. All there ever was.

Idea **February 26, 2023: 12:16am**

A camera filter that makes a picture or video look as if it came from an old camcorder. The idea would be to construct the filter using a rigid physical model in software – and simulating how the light would go through the lens and affect the film.

Thought **February 26, 2023: 1:39am**

If we didn't have middle fingers or toes, we would have two groups of two fingers, on each of our two hands (which are paralleled by our feet).

Thought **February 26, 2023: 1:39am**

It's interesting that our bodies have 1 plane of symmetry – in comparison to two or three. A clam has 2 (almost), a worm (almost) has three, and a starfish has an axis of rotational symmetry. I wonder what kinds of symmetries a four dimensional animal would exhibit.

Thought **February 26, 2023: 2:25am**

I wonder what the optimal strategy is to 20 questions. You can only ask for twenty bits of information.

Thought **February 26, 2023: 2:45am**

I wonder how many papers have been written in control theory. You could probably estimate this number by sampling papers of various years, and then counting the papers each cites. You might also be able to set it up as a German-tanks problem. It's definitely an interesting math problem—I wonder if there are other analogous problems or applications.

Thought **February 27, 2023: 11:16pm**

I like the idea that an employee should never pay their company (employer) for anything. The cashflow really should go only one way.

Scene Concept **February 28, 2023: 11:35pm**

The director of the Bachelor says "Say that again, but as if you are begging the American public to remain famous."

Film Concept **March 2, 2023: 3:15am**

Create a fugue in film in the following way:

One person enters a room, sits down on a couch, and begins speaking – with some meter – but with drawn-out spaces in the text. A second person then enters and says the same passage, now with the first person responding within the passages' holes.

I think you could script this out by taking the rhythm (but maybe not the melodies) of a Bach fugue and using them to place the calls and responses, and to determine how the key sentences need to interact with one another. You could even have parallelisms, where more than one voices says the same thing at the same time. Writing the text on top would then be similar to filling in a cryptogram.

You might also make the text rhyme. In this case, you would want a poem where you can remove words or change the order of the lines and it still makes sense.

Idea **March 2, 2023: 3:23am**

Remake my self-enumerating email and make a YouTube video out of it. Cool time by the way.

Thought **March 2, 2023: 3:43am**

There probably wasn't a "first cell" in the universe – I mean – there definitely was a first cell in the universe, but likely it died before reproducing or its offspring died – and we are not descendants from that first cell. Really, my guess is that there was a ten million year time period or something where cell populations would spontaneously be created and then die off – until eventually one didn't, or it mutated, or the population got very large and merged with others. It must be the case that this spontaneous creation of cell life is possible – but it also must not happen that often today or we would see new kingdoms of life. However, this would mean that there is an environmental settings (or experimental settings) where the spontaneous creation of cell life is more likely.

Thought **March 2, 2023: 3:48am**

Organic molecule reproduction through simple enzymes must have evolved before the cell. That is – reproduction of molecules came before what we typically consider to be "life."

Scene Concept **March 2, 2023: 3:57am**

For a Horror movie: Scared girl says "Has the fireplace talked to you guys too?"

Scene From My Life **March 3, 2023: 9:51pm**

Taylor: "Does that girl still ask about me?"

Cecie: "Taylor, you met her once 2 years ago at a party."

Taylor: "Yeaaa... so does she still dress like a pirate? Or was that just a Halloween thing."

Thought Exp. **March 5, 2023: 12:27am**

How would you visualize a point? Could you do it using time?

With my eyes, I think I only see line segments of length and width. But I definitely don't "see" segments of time I don't think.

Micropoem **March 6, 2023: 1:41am**

"I can't believe you ate all the ice cream."

said by Cecie – might make good text for a fugue

Story Concept **March 6, 2023: 7:10pm**

I. A man has to wake up every 9 hours to run some command on his computer. There are 9 chapters, titled 12am, 9am, 6pm, 3am, 12pm, 9pm, 6am, 3pm, 12am. It could be made ambiguous whether the story takes place over 3 days (forwards in time), or whether the story takes place over a single day (jumbled in time).

Second concept: Write a *circular book* with page numbers given in degrees – so that they wrap around at 360°.

Event **March 7, 2023**

Landed in SF for Pioneer Summit.

Thought **March 17, 2023: 1:47am PST**

I'm really worried that I deleted two weeks of notes before this :(My phone seems to have lost them.

Painting Concept **March 17, 2023: 1:47am PST**

Man looking down to see paint on his shoes after walking through a ground portrait of a crucifix, with a wet paint sign next to it. Truthfully, I'm only 50/50 on adding the wet paint sign.

Thought **March 17, 2023: 1:58am PST**

Time only exists when there are two objects moving with respect to one another. This means that relative motion implies time and time implies relative motion.

Thought **March 19, 2023: 11:27pm PST**

In the old days, people didn't have an option, and generally took the profession of their families. They probably thought they were in a clan (or perhaps even species) of blacksmith. Interesting to think about.

Podcast Concept **March 20, 2023 PST**

You just have a form online where random people can sign up to be interviewed on a podcast. Then you interview them. I actually think the output would be very interesting to listen to.

Joke **March 24, 2023 PST**

Say "I hope you're having a Friday" instead of "I hope you're having a nice Friday."

I Remember **March 25, 2023: 1:15am PST**

I remember being a little kid – probably on the Fourth of July – and Dad teaching me that the last part of a fireworks display is called the "Grand Finale." I'm not sure that's a real common phrase in the specific context of fireworks but I love that memory and hope to pass the phrase onto my kids.

Micropoem **March 25, 2023: 1:59am PST**

Wacon Wacon – Eggs and Bacon.

Audio Recording **March 25, 2023: 2:48am PST**

I'm drinkin in my room,
All alone... on Zoom...
Thinking how nice it'd be,
If someone came and joined me.

Poem, transcribed from an Audio recording of Matt singing, while waiting to be joined by college friends in a video call. However, I believe that this was originally written during the 2020 pandemic.

Scene Concept **March 26, 2023: 4:27am PST**

Soldier: "I've run hundreds of miles, punched hundreds of bags–with hours I could have been using to save lives."

Idea **March 27, 2023: 2:21am PST**

Make an applet for ranking movies against one another, and creating an ordered graph from the rankings. From this, you can give a movies a 1-5 score against their neighbors, or create, e.g., scores for genres.

Thought **March 28, 2023: 8:39pm PST**

"was" is "saw" backwards.

Idea **March 28, 2023: 11:52pm PST**

AI that takes natural language prompts and writes software for mathematical optimization. For example, it might write Python scripts to perform mixed integer programming, or to solve convex optimization problems. I imagine OpenAI will pursue this, perhaps indirectly.

Thought **March 28, 2023 PST**

I think a company is defined by its product – and a good company is one where there exists a market for that product. If you want to make company you should research what markets exist, because ultimately you want your market to be as large as possible and it's important to know beforehand where you want to end up. And you can and should do that – research – research as long as you want, but you don't get to say you started a company until you make a product – something that can be bought. A company is defined by its product – why do you think it's called Coca-Cola?

The truth is that your first product is going to be shitty – you're going to make something that either (1) no one uses or that (2) is in a different market or submarket than the one you aimed for. But at that point you can just pause and think about the market you want – more research can help – and then with the new envisioned market you make a new product, and your new product creates a new market – still different than you want – and that's OK.

You keep oscillating like this between product changes and market changes, and if you're lucky – really lucky – you will stabilize to an equilibrium point (that I suppose is slightly moving) and this equilibrium point is called product-market fit.

Do research before this whole thing – you want your terminal condition to be in as money-full a market as possible – but you don't get to say you started until you make a product.

Advice **March 29, 2023 PST**

- Why is the company you are reaching out to interesting?
- How do you think they could benefit from [your company]?
- What is [your company]?
- Who do you work with?
- Call to action!

Sales email template, given to me by Shri Kolanukuduru, at Pioneer Summit in San Francisco, CA.

Advice **March 29, 2023 PST**

For whatever reason, I am remembering now two stories from my life in which I learned something and for which I am grateful:

I. As an undergraduate, I once got a low B on a final project for a music class. I went to the professor, Steve Swayne and said, in different words "Steve – What the hell? I came to all the office hours, you practically told me what to write. How did I get a B? I spent a lot of time on this paper." In response, Steve told me "The time you spend on a paper, and the grade you get, are totally different things." This was, I feel, one of the most important life lessons I learned in school.

II. As a graduate student, I had a lot of difficulty initially finding a research advisor, since I didn't come into grad school with funding. I ended up working with Sam Coogan and Eric Feron—after doing a semester of unpaid research, and writing my first paper, I was given funding (salary, tuition) and the ability to complete the Ph.D. My then biggest problem was a major dislike of the research project I was assigned to, which I didn't see as using any math or problem solving. Eric, one day, wrote a puzzle on the board—and, now in my interest band, I solved the puzzle and began pumping out papers on this new topic called *Meta-Lyapunov Functions*—honestly, they offered little if any practical use in engineering. One day, Sam called me into his office after a few papers had gone out, and implied that despite the publications I was not making progress in the Ph.D. I learned then that the measuring stick and the KPI's are different things.

Idea **March 29, 2023: 10:46pm PST**

Use embeddings and vector databases for online search – Google must be on this already.

I Remember **April 1, 2023: 11:29am PST**

My Mom would make me "soft boiled eggs in a mug with bread bits." I also would make this for myself. The basic recipe is (1) cut up a soft boiled egg in a mug, (2) Rip a slice of wheat bread into 10-15 pieces and put in mug, (3) Mush with spoon and eat.

Thought **April 2, 2023: 10:33pm PST**

An apple seed, somehow, knows to make a tree. We have doctorates in engineering and we can't figure out how to make an engine. A company is just an engine that runs on fuel made of this unobservable matter called problems. The company solves the problems and is able to grow in return – like an apple seed. This means to make a company we have to be constantly running different experiments until we find this dark matter that we hope to be the source of energy that allows our company to grow.

Quote **April 2, 2023: 10:40pm PST**

"I acted entirely on my own authority, and I have no excuses."

from Attack on Titan, Season 1, Last episode.

Puzzle Concept **April 3, 2023 PST**

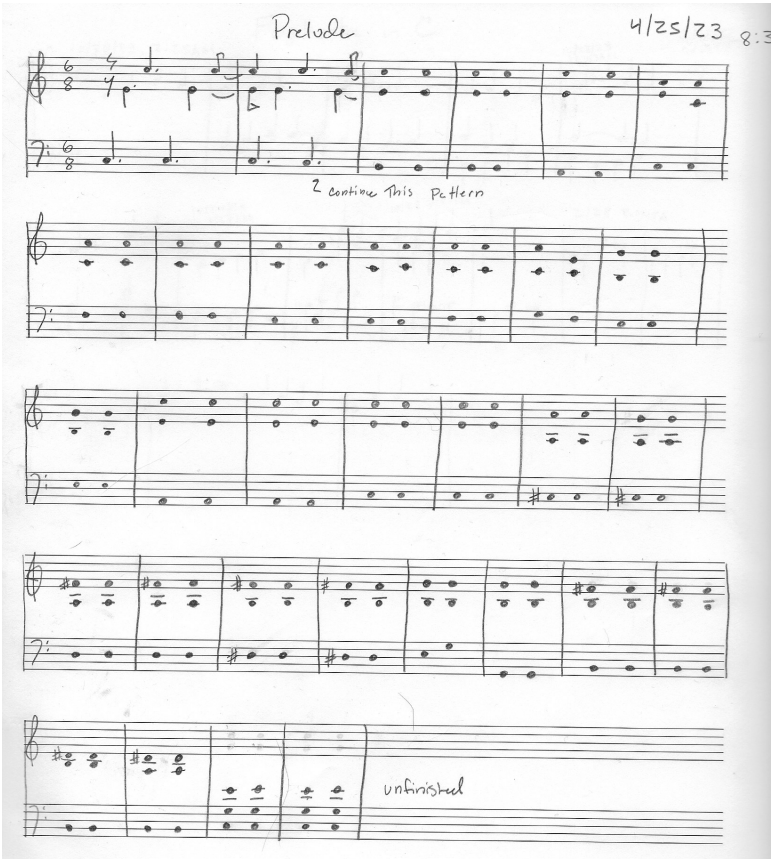
A jigsaw puzzle that you put together and it makes a maze. Then there are puzzle pieces embedded in the maze so you solve the maze and it gives you a new jigsaw puzzle this one also has a maze that you have to solve. Maybe the final maze spells a word or something, allowing the solution to be a word.

Thought **April 3, 2023 PST**

For the last 3 years, I've been wearing different pairs of white Nike shoes, all with a maroon swoosh. Interestingly, this is very similar to Marty McFly's white/red Nike Bruins shoes in Back to the Future. This makes me happy.

Idea **April 4, 2023 PST**

Make the Collatz function just one case using some sort of invertible $y = F(x)$ transformation.



Prelude in C major, unfinished. Written for Louis Morgner. Incorrectly back-dated as April 25 2023: 8:34pm.

Idea **April 5, 2023 PST**

Create a sorting function in the following way: compute the mean and standard deviation of a sequence, then assign numbers to locations in vector based on their standard deviations. Then compress. Note: this wouldn't actually work, would require a tolerance for the min, and would be slow. But it's a creative idea.

Idea **April 6, 2023: 3:00am PST**

Design transformer to finish pieces of sheet music that are only partially started. In particular, classical music, written in counterpoint.

Idea **April 6, 2023: 3:03am PST**

When money becomes electronic, it will possible (for the government) to give people money with the stipulation that it needs to be spent within a week – that is, any time money enters the hand of the holder, it must be spent within a specific amount of time. I suppose money without the stipulation would still need to remain in the economy – but this new form of dual currency would add a forcing function to the economy – and maybe businesses would accept it a lower value because of presumed risk.

Thought **April 6, 2023: 12:46pm PST**

I wonder if you can go to jail for saying your food is vegan when it's not (if you're a restaurant owner).

Scene From My Life **April 9, 2023: 2:27am**

Matt: "Babe you've got a killer body. Wait, did I say body? I meant booty. You have a killer booty baby."

Painting Concept **April 10, 2023: 1:22pm**

Paint an object that doesn't look like anything we have today but instead looks super futuristic. If, in the future, something evolves into that shape / look, they will say "How did the painter know of this object 1000 years before it's invention?"

Micropoem **April 12, 2023: 1:04am**

The fastest person to run a mile in 5 minutes.

Thought **April 12, 2023: 1:22am**

I wonder if you can triangulate GPS positions backwards around the earth. Or filter out the interference from that direction to get better positioning. (They must do this already.)

Idea **April 13, 2023: 4:34am**

People communicate with their phones so much today. I bet if an AI lived in the background of your phone it could make a really good estimate of how you are feeling, what is going on in your life, and what you're going to do next. This could also really augment humans in phone usage - like I bet an AI tuned on a single human's phone patterns would quickly learn to draft text responses in the user's voice.

Event **April 15, 2023: 8:38pm CET**

This morning, I flew into Amsterdam with Cecie :) We're on a trip around Europe: Amsterdam → Berlin → Leipzig → Prague.

Idea **April 15, 2023: 8:39pm CET**

Google "What was Hitler's middle name?" on someone else's phone.

Idea **April 15, 2023 CET**

Use AI agents for organizing your schedule / calendar.

Thought Exp. **April 15, 2023: 10:50pm CET**

How would you determine what percent of people like Barbeque chips? A survey of some kind – But how would you deal with bias? For example, should you consider the feelings of people who don't like chips of any kind? Yes—we shouldn't throw out their votes in the survey—since they are part of the question "Do you like Barbeque chips?" On the other hand, it seems like the main differentiating factor of Barbeque chips is the Barbeque flavor. You would need to throw out the votes of people who don't like chips in order to access that, even though that would heavily inflate the percentage of people who vote yes.

Idea **April 16, 2023: 1:11pm CET**

I should name my next company "Matte."

Joke **April 16, 2023: 3:55pm CET**

"Anne Francakes"

Thought **April 17, 2023: 1:12am CET**

How many different varieties of Peeps are there?

Undated. I looked into this further - there are waay more flavors than you would think, including many many weird flavors (like watermelon and Dr. Pepper).

Thought **April 17, 2023: 3:07am CET**

If there is a god, I would find it hard to believe that it tests people.

Scene From My Life **April 17, 2023: 1:11pm CET**

Matt: "Puccini composed operas. He wrote Turandot."
Cecie: "Turn down for what?"

Thought **April 17, 2023: 8:32pm CET**

The best bathrooms are those designed with the toilet facing the door. I wonder if Feng Shui has any comments on toilet placement or bathroom design.

Remember Me Later **April 17, 2023: 10:14pm CET**

The phrase "Manifest Destiny" means "If you believe it, it will happen."

Art Concept **April 17, 2023: 10:41pm CET**

Make a clock using pictures of my body taken from the side. Make the long hand my body and the short hand my arms.

Idea **April 18, 2023: 12:17am CET**

Build a protein skimmer farm. Get a house on a lake (like Mountain Lake, with lots of algae). Then buy or build protein skimmers to remove organic material from the water. This would clean the water, and the output could be used for fertilizer or compost.

Micropoem **April 18, 2023: 5:10am CET**

I wet my sweatpants while out in the rain.
˚ . . ˚ . . ˚ . . ˚

Thought **April 19, 2023: 1:47am CET**

What good is it—being smart—if you can't outsmart a single person, company or system?

Thought **April 19, 2023: 2:46am CET**

Never round down when speaking about the amount of time you worked without success. Don't say "I've only spent 6 months doing X." Any time passing is a long time passing–and time should not be part of an excuse.

Idea **April 19, 2023: 3:02am CET**

Design a Large-Language-Model-based tool for writing grants and SBIR applications. Then sell the tool; do not actually apply for grants.

Remember Me Later **April 19, 2023: 7:42pm CET**

A PID controller can stabilize a constant error to zero. A PI^2 controller can stabilize continuously increasing error to zero $\dot{x} = u + t$ where u is a PI^2 controller.

Remember Me Later **April 19, 2023: 8:32pm CET**

1 kilometer is about 0.6 miles.

Idea **April 20, 2023: 7:57am CET**

Build a game that is actually a tool for writing your thesis faster. I'm not sure how, but the game is the important thing.

Idea **April 20, 2023: 5:01pm CET**

Train an LLM to learn ancient Egyptian hieroglyphics, self-supervised. This would be interesting because western humans were unable to decipher hieroglyphics self-supervised; it was the discovery of the Rosetta Stone that later facilitated deciphering.

Scene From My Life **April 20, 2023: 6:22pm CET**

Matt: "The problem is that everything that I wore to the bar last night now smells like cigarettes—which I guess isn't really a problem—but like this shirt, that I wore to the bar last night now smells like cigarettes—which I guess isn't really a problem—but..."

Thought **April 20, 2023: 6:51pm CET**

Two people work well together when they have differences in their initial state; however, their dynamics keeps their brains' trajectories close together.

Advice **April 21, 2023: 2:28am CET**

I remember telling an ex-girlfriend that I thought it would be good if we talked less. She told me "don't tell someone that you're going to talk to them less, just talk to them less." Profound—I think. Certainly the story has stuck with me.

Thought **April 21, 2023: 9:55am CET**

I've observed the following conversation tactic, which annoys me greatly. The idea is to steer a conversation by only asking questions, getting the other person in a conversation with themselves until they arrive at your idea. I should watch out for this being used—on me or otherwise—and attempt to end these conversations fast.

Thought **April 22, 2023: 12:21am CET**

I'm new to Anime, but the general trend I have found is that a show will contain 100 random side-characters and then randomly name one the new arch villain every 3 episodes in a reveal.

Photo **April 22, 2023: 8:01am CET**



Matt standing with the Statue of Johann Sebastian Bach, at Thomaskirche in Leipzig, Germany.

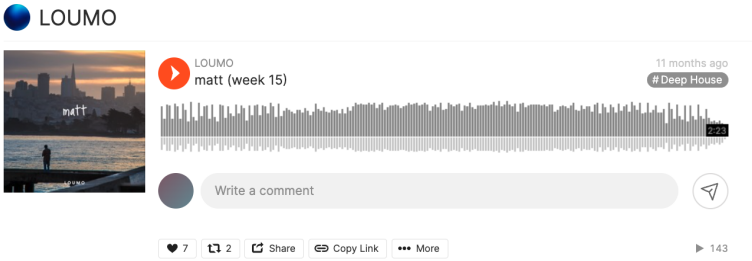
Remember Me Later **April 22, 2023 CET**

J.S. Bach failed many of his auditions, including his at Thomaskirche in Leipzig. He was the towns third choice for Cantor; Georg Philipp Telemann was first. Apocryphally, when Telemann declined the role the interviewer said "Since the best man cannot be obtained we will have to resort to a mediocre one." Later "The world will forget Telemann, should Bach accept the role."

Scene From My Life **April 22, 2023: 10:21pm CET**

Matt sarcastically: "wait.... wait.. wait... wait a second. wa.. you're telling me..... You're telling me that Alice in Borderland was canceled after only 2 seasons?"

Composition **April 23, 2023 CET**



Louis Morgner and I collaborated on this EDM song, titled "Matt." I wrote the chords and some of the instrumental melodies. Listen to it here: https://soundcloud.com/loumomusic/matt-week-15.

Puzzle **April 23, 2023: 9:53am CET**

There is a train with one-hundred numbered seats on it. Every day, passengers enter the train (in order) and sit in their assigned seats; so the person with the first ticket sits in seat number 1, the person with the second ticket sits in seat number 2, in order, until the last passenger sits in seat 100. Suppose one day, the first passenger sits in some random seat on the train (like seat number 35). Every subsequent passenger then attempts to sit in their assigned seat—and if that seat is taken, they randomly choose an open seat to sit in instead. What is the probability that passenger number 100 will end up sitting in his correct seat in the end?

Answer: 50%. A passenger choosing a random seat will have an equal chance of closing the loop or sitting in seat number one-hundred. This is interesting because the probability has no dependence on the total number of seats.

Someone told me this puzzle in high school. I didn't write it. Just remembered it now, on a train from Dresden to Prague.

Photo **April 23, 2023: 2:12pm CET**



Matt standing with the statue of Il Commendatore, Estates Theatre, Prague, which commemorates Don Giovanni which premiered there 1787. Matt to go see Così Fan Tutte (1790). This photo later became my profile picture for GitHub.

Business Concept **April 24, 2023: 4:11pm CET**

"Pay to Pee"
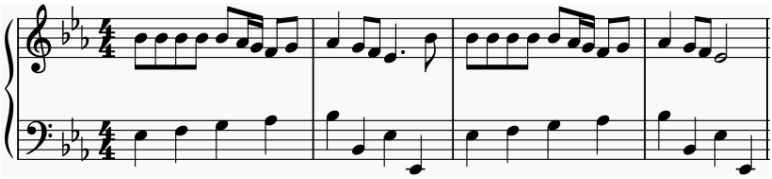
Scene Concept **April 25, 2023: 11:02am CET**

Seinfeld style joke concept about a man who finds a really nice bag in the airport.

Thought **April 28, 2023: 2:23am**

The word "best" is interesting. The suffix "est" almost means "most." For example, "biggest" and "tallest" mean "most big" and "most tall." "Best" is like the "most at being."

Audio Recording **April 29, 2023: 11:13am**



Minuet Exposition. Transcribed from an audio recording of Matt composing at the piano.

Dream Log **April 29, 2023: 4:57pm**

I was sick today and napped in my room at 505 8th Street NE, Atlanta, GA 30308. But I dreamed that I was sick in bed, in a different room. This room had two twin beds and I was in one of them trying to fall asleep. In the dream, I thought that Cecie was in the other room, and since I was tired (in the dream I was tired) I didn't really want to leave the room or get her attention. I just wanted to nap in peace because I was sick. At some point in this "trying to fall asleep in the dream" I realized that my arms were sort of in the wrong place – I felt them by my sides (I was asleep in Atlanta, and they were by my sides) – but in the dream, my arms were sort of over my face and I could move them, but I could feel the fact that that wasn't where they were. And then it

hit me that I wasn't in my apartment and that it was a dream. I tried to get out of bed, but then I fell through the floor and floated in space for a moment before waking back up in the twin bed. This happened two or three times before I woke up for real in Atlanta. Cecie and others were outside of my room audibly talking. Seems like the dream was heavily influenced by what was going on around me while I was sleeping, and also how I felt before napping.

Transcribed from Audio Recording of Matt speaking. The nap referenced was from 3:30pm to 4:52pm on April 29, 2023.

Dream Log **April 29, 2023: 7:50pm**

This entry follows the previous dream log–when I woke I still felt sick and took a second nap. The dream at 3:30pm was more of a Lucid dream. In this second dream, I had no control, at least for most of it. But I think I've had this dream before? Which is what makes it so interesting.

The dream starts and I'm driving a smaller version of my car; perhaps about 80% of the true scale. I'm lying on the roof of the car, my hands are under my butt, and I'm steering it like a toboggan, by leaning left and right. The dream setting seems to be a mix of the New Jersey highways and the highways in Atlanta. First I pass the Mountain Lakes police station, and then I'm on the route to Cecie's apartment in Druid Hills. I determined I should drive to Wawa (Princeton NJ), but then the car appeared at a crossroads like in Boonton Township. This is all a repeat of a previous dream. The road is very inclined so that on my right the road slants uphill and on the left it slants downhill. I drive left, and the road goes through a forest. I pass the Lake Hopatcong rowing area somehow. Then I'm on a highway and I pull into the parking lot of a Firehouse Subs. I enter the building and then leave without a sandwich. I now see the Wawa on the other side of the highway, which can be reached by climbing this small cement mountain that is about 10 feet tall. So I pick my car up with my hands (it's large, but very light) and begin to climb up with it over my head. There is an older woman and a middle-aged woman silently watching me from the top. I get to the top and set the car down. I enter the Wawa - but it's just a dark square room with a green light flickering. I walk to

the corner–there is a mound of dirt and I hear a child crying.

Then I wake up in my bed at 505 8th Street, Atlanta–but it's still the dream. My room is messy and there's this little construction by my bed with a bunch of boxes on top of one another and a scarf wrapped around them. There is a frog on the ground by my bed. I put him on the scarf, and put a baseball cap over him–I say "wait here for a moment." And as I'm walking to the bathroom it hits me that I am dreaming. I immediately gain control and can move my limbs, but then I wake up in my bed again, and notice the small construction. I say "I wonder if the frog is still in there" and when I pull off the baseball cap the frog jumps out. I'm like "I need a Tupperware for this frog" and I get one from the kitchen, but then many frogs and lizards jump out of the hat and I'm shoving them into the Tupperware. Then I notice there's a girl in the bathroom, and I forget the frogs and go to greet her. Then, I wake up in my bed for real.

I dream so irregularly–this one was perhaps only brought on by my sickness–but the plots are so interesting to me. I need to continue to remember to make dream logs. Also I'll need to come up with a consistent vocabulary for analyzing these dreams. It would definitely be confusing to a reader when I say "I wake up in my bed, but actually it's still the dream."

Transcribed from Audio Recording of Matt speaking. The nap referenced was from 5:30pm to 7:50pm on April 29, 2023.

Thought **May 1, 2023: 12:31am**

There are a lot of cool Math problems in the game Yahtzee. Say you're playing Yahtzee and you roll a 1 2 3 4 and 6. Your goal is to get a large straight. What should you reroll? Just the 6? Or the 1 and the 6?

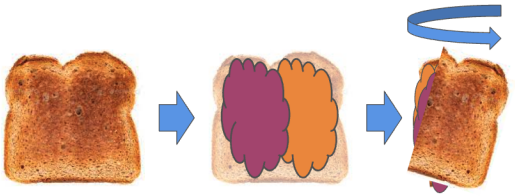
added January 9, 2024. The worst thing to do in Yahtzee is overthink a straight forward best roll situation. But this is a fun puzzle–especially considering there are two more rolls.

Joke **May 2, 2023: 3:16pm**

I don't know the joke yet, but the punchline is "fashion police brutality."

Thought **May 3, 2023: 2:43am**

How to make a Peanut Butter and Jelly Sandwich with one piece of bread? Butter and Jelly the left and right halves separately and then fold it together. I'm not sure anyone does it this way – I do – and it actually works very well.



How to make a PB&J with one Piece of Bread

Idea **May 4, 2023: 2:32am**

Train squirrels by creating an acorn banking system.

Event **May 5, 2023: 2:11pm**

Cecie's Ph.D. graduation – on Cinco de Mayo.

Thought **May 5, 2023: 5:21pm**

Some thoughts on jailing: I don't really like the idea of imprisonment (I assume this appears other places in my journal). My basic thought is that time living–with some freedoms and independence–is the most valuable thing in the universe. So it doesn't make sense to me that we would take time away from anyone for any reason. Instead, if you cause measurable monetary damage you should (be perhaps forced to) repay it, but any nonviolent crime shouldn't be repaid in time.

Here now debating myself, it doesn't seem like retribution is

anyone's main philosophical justification for imprison. Rather, we jail people when others don't feel safe around them. While this allows for a fairly benign imprisonment system, such as a removed colony where some independent life is possible–this justification allows for jailing regardless of guilt or accusation :/

Product Concept **May 5, 2023: 7:15pm**

A litter box (for a cat) that uses glass or a one-way mirror to allow you to see the cat without it seeing you. This may require an internal light.

Recipe Concept **May 7, 2023: 11:37am**

Make a cocktail with pineapple and Canadian bacon. Name it the "Piña Can-ada."

Thought **May 10, 2023: 3:09am**

Academia seems pretty Kafkaesque, maybe? I had this interesting conversation with Saber today. He has like five responsibilities—writing papers, grants, mentoring etc.—He's also behind. He spent like four hours today already on the grant, two on the paper, and two mentoring. So I asked him: "if you could freeze time and knock one out, or take a work vacation where you had no responsibilities but had to work, which task would you complete first?" And he seemed to have real difficulty answering. It seemed like deadlines were being thrown at him so fast he hadn't really considered which responsibilities were helping him and which he enjoyed.

Idea **May 11, 2023: 10:44pm**

I keep a movie list, where I rank movies by hand. I should really figure out a way to rank them with an ELO score. See also *Idea, from March 27, 2023: 2:21am PST.*

Thought **May 11, 2023: 11:02pm**

I like Twitter–but I rarely use it. But recently, Ben has been showing me some genuinely funny content from it. It's funny, I always remembered Twitter as being "pre Facebook," something that was improved upon, and that only people 5 years older than me use. But maybe it's changed. I wonder if, in the future, online communities will become like cities with people moving between them (whatever online / online community means in the future).

Thought **May 15, 2023: 10:30pm**

A few days ago I wrote about some fun math problems in Yahtzee. A little trick I've learned is that sometimes it probably makes sense to take a zero in the ones box. For example, if you roll 3 4 4 5 5 (and you don't have Chance left), then it's better for your top board game to take a zero in the 1's box than, e.g. two 4's.

Remember Me Later **May 18, 2023: 11:28pm**

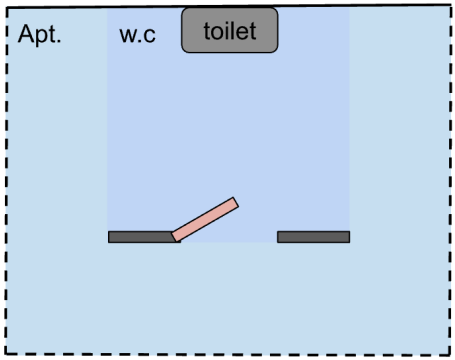
Why do we use Frequency Modulation (FM) to transmit radio signals, as opposed to Amplitude Modulation (AM)? I'm not sure I'd learned a good justification until now–AM is certainly more intuitive. The answer is: there's lightning, and other (even small) electrical disturbance, that effect the amplitude transmitted signals. But, this has negligible effect on the signals frequency. Super cool. Now, how do you make an FM microphone? Make the microphone vary in capacitance based on the amplitude of the input sequence–then with some EE design the amplitude vs. time behavior at the input effects the frequency vs. time behavior at the output. Super super cool.

Quote **May 19, 2023: 10:20pm**

JFK's began his last speech to the United Nations with "Ladies and gentlemen, we meet again on our quest for peace." Incredible opening, from a great speech writer.

Arch. Concept **May 22, 2023: 2:40pm**

Design for a Bathroom in a studio apartment. Place a door facing the toilet, but leave the side walls open (or glass).



Bathroom design concept

Scene From My Life **May 21, 2023: 4:49pm**

Matt and Ben take a walk, and stop at Cecie's apartment to feed Cypress. Ben doesn't like cats and is walking around with his shirt over his nose. Matt makes a video singing from the perspectives of Cypress and Ben, pointing the camera to the intended speaker.
Cypress: "I am Cypress"
Ben: "And I am Ben."
Cypress: "Human words."
Ben: "Meow. Meow. Meow."
Cypress: "I speak human"
Ben: "And I speak cat."
Cypress: "We are both best friends."
Ben: "Meow!"
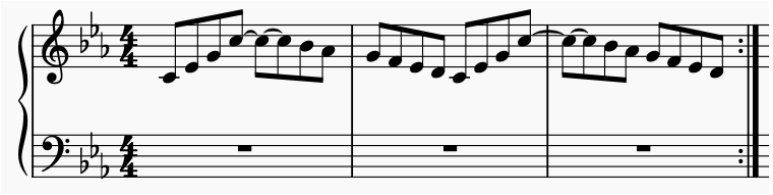
Puzzle Concept **Undated**

I don't have the full puzzle, but the concept would be there are two people that say "He always says a number two times too high," and "He always says a number two times too low."

Thought **May 24, 2023: 6:09pm**

Texting has fundamentally changed written language (as opposed to verbal language). Texting abbreviations, like "LOL" have been in the dictionary for years–and this makes some sense since the dictionary should include the words we use–and we do write LOL. But it's also more common now for humans to know niche abbreviations and misspellings of words and phrases–"I no," and "thx." I imagine that the recent advent of Language Models / AI will have a similar effect on written language–it's now possible to type barely decipherable gibberish into a Chatbot and have it answer your concern perfectly. I wonder if common misspellings and abbreviations will enter the written language and communication between people, just because these phrases work with communicating to language models.

Composition **May 24, 2023**



Just a riff, repeated. Can also be moved to E flat major.

Thought **May 24, 2023: 6:10pm**

Think about the interplay between Gödel's incompleteness Theorem and English-language dictionaries. What are the axioms for English? What can't be proved?

Idea **May 25, 2023: 6:13pm**

Type total gibberish to your texting app and a language model will convert it into an appropriate text message.

Remember Me Later **May 26, 2023: 11:55pm**

Just learned the absolute craziest thing. So, like Sine and Cosine can be written

$$\sin(x) = 1/2e^{-ix} - 1/2e^{ix} \qquad \cos(x) = 1/2e^{-ix} + 1/2e^{ix}$$

These definitions are related to Euler's formula $e^{ix} = \cos(x) + i\sin(x)$ and imaginary numbers blah blah blah. Anyway, $\frac{d}{dx}e^{ix} = ie^{ix}$, and now since $i^4 = 1$ we get that $\frac{d^4}{dx^4}\sin(x) = \sin(x)$.

Cool OK–I never really learned anything about the hyperbolic Sine and Cosine, but

$$\sinh(x) = 1/2e^{x} - 1/2e^{-x} \qquad \cosh(x) = 1/2e^{x} + 1/2e^{-x}$$

So now, since imaginary numbers are stripped we find

$$\frac{d}{dx}\sinh(x) = \cosh(x) \qquad \frac{d}{dx}\cosh(x) = \sinh(x)$$

$$\frac{d^2}{dx^2}\sinh(x) = \sinh(x)$$

In this case also $e^x = \cosh(x) + \sinh(x)$. Crazy–two derivatives to get back. Also, note $\sinh(-x) = -\sinh(x)$ and $\cosh(-x) = \cosh(x)$. Further, inverses expressed simply with natural logs, and derivatives of inverses simply (with fractions). These are sweet functions–it would be awesome if they were used more.

Short Story **May 28, 2023: 1:57am**

and just as he jumps out, the first man enters.

12:00am: A large room, dirty, a note on the ground. A man walks in the door and then into the machine. It's powering on and sparks are flying. He has a vision of a note on a table and a dream narrates "I have built a time machine and have decided to go back in time one hour." Looks up, sees 12:00pm. "Let this note serve as an explanation in the event..." ZAP.

11:00am: It's all blurry–He steps out with a brief moment of clarity and looks to see 11:00am on the clock. "It worked." But suddenly he's shoved and falls tumbling along with the machine.

"Move," says the clone. The first man rolling from shock and light pain. "Sorry–but look and I know this is weird but you have to go back to 10:55am."
"What?" says the first man. There is a second time machine on the ground.
"Just do it. I was confused too, but just do what I did now–I mean–in 5 minutes." The man starts tuning the machine.
"I don't underst..."
"Look it's weird–and when you get there you're going to have 5 full minutes to think about how weird it is. Don't believe me–just stand there at 11:00am and if I appear BAM you push."

11:10am: The machine ZAPs gone and the first man falls backwards. "I really hope he listened." His head turns to see 11:10am. "I have to get back." He stands up, headed towards the free time machine in the room. but BANG, another time appears where the first machine first entered. "Wow–Thanks for getting that out of the way–I was kinda worried that wouldn't work–even though–you know–I remember being you."
The first man now on the ground baffled "No... I have to get back."
"Back where?"
"Back? Back to noon. Don't you see? Things popping up this way? I can't control what happens to me–If I keep popping up to control what happens to me. Out of my way."
"I hear what you're saying–but... how's that going to help? Are you going to avoid yourself at a different time?" The first man stops programming the machine. "Can you stop yourself from appearing at..."
"I'll destroy it."
"Destroy my machine. It's older than yours."
"I'll destroy them both" now at the other's machine.
"How about you destroy my machine–but at 11:30am."
"I'm not waiting any longer."
"Who said anything about waiting? You have a time machine! Look–you know what would be easier, breaking it with a hammer–There's a hammer there–11:30am and I'm not."
"You're not there–then who is?"
The first man sighs

11:15am: "C'mon now you'd just be skipping 15 minutes."
The first man concedes "fine–set the time." The first man steps in. "One, two, three" and ZAP he's gone. The first man falls

backwards and tilts his head toward the clock from the ground. "I hope so." He sits still. Closing his eyes.

11:28am: Opening now. "It's me!" He hops up. "Oh my god–the hammer!" he thrusts himself down looking under the bed. And then over to a chest in the corner. pulling out clothes until.

11:30am: "Here!" he says. Holding the hammer he found now above his head.
"Give me that" says a voice behind him.
The first man turns. "It's not fair" he says.
"I'm angry and I came here for that–I'm destroying this machine."
"I said that too. Perhaps you don't believe me."
"Forget it–I'm going back–before this all started." Programming the machine.
"Back to noon? You wouldn't rather wait?"
"You and I have met three times now, and that is too many."
"This machine here–this one is yours–it's been waiting for you here since you left it 20 minutes ago."
"Enough."
"Is it not exhilarating to be the youngest in the conversation. You have that free will."
"What do you want?"
"I want you to do destroy your machine and wait–here–for another 25 minutes–you'll be free if you do.
"I'll find you here at noon." He programs the machine.
"You're going to do what I did." The man flips around. "You're going to pick a random time. Because you think I wont be there." Frantically the first man dials. "But I will, and we'll talk again." ZAP the man leaves.

11:59am: The man kneels over. "This won't stop–No–the time" He sees it now 11:59am. "There isn't time" he says throwing open the window. And just as he jumps out, the first man enters.

January 28, 2024: 3:06am. "The First Man," Based on a plot from May 28, 2023: 1:57am.

Idea **May 28, 2023: 2:52am**

A service that would allow the users of a YouTube channel to volunteer work for the channel owner. For example. Adding categories for videos or making playlists that the owner can then approve.

Thought **May 28, 2023: 5:21pm**

The intro to the Bad Romance music video is Bach's B minor Fugue from WTC I, BWV 869. Awesome choice https://www.youtube.com/watch?v=qrO4YZeyl0I.

Thought **May 28, 2023: 11:10pm**

It seems like "Best Black Actor" is a very logical Academy Award–there is of course already the Best Actress (female actor) award. But who knows, maybe we should just have one award.

Idea **Undated**

Figure out a vector representation of a chess board so that moves are linear combinations. i.e. x is the board now and Ax is the board after move a occurs. This actually doesn't work at all: taking pieces for example, just can't be done with linearity. Still, there must be some way to operate on a vector to move through moves.

Thought **May 29, 2023: 10:31pm**

Owning a cat has a lot of similarities to being addicted to marijuana.

Dear Reader **May 29, 2023: 10:59pm**
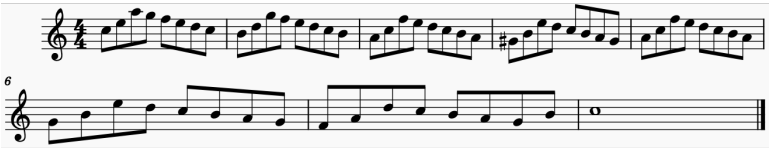
Please take this very seriously. In the event of my death or injury:

- Please publish my journal and notes.
- Please do not conduct any bodily invasive procedure, such as an autopsy. Do not cut into my chest. Do not remove my organs. Do not touch my nervous system or brain.

In the event that I ever suffer from debilitating mental illness:

- Do not put me on any medication. Do not commit me to a mental institution.

Audio Recording **May 29, 2023**



Transcribed March 23, 2024: 4:46pm from an Audio recording of Matt speaking and playing piano. Matt: "Hello? Ok. Cool. Here's a little riff."

Remember Me Later **May 29, 2023: 10:59pm**

Good names for a dog or cat:

- Lemma
- Corollary
- Garlic

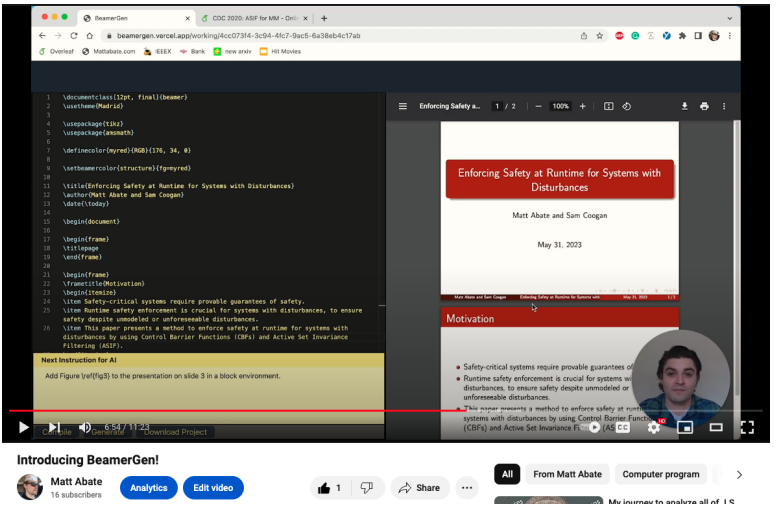
Scene From My Life **May 29, 2023: 11:58pm**

"And it was then decided that he should go back and forth from his desk, composing."

Quote **May 30, 2023: 2:26am**

Apparently, Paul Dirac didn't believe in god and really didn't like religion. It lead to this wonderful quote by Wolfgang Pauli:
"There is no god, and Dirac is his prophet."

YouTube Video **May 31, 2023: 2:46pm**



"Introducing BeamerGen," demo video for BeamerGen website. "LaTeX compiler with an AI agent that knows your papers."

Remember Me Later **June 4, 2023: 8:34pm**

I was reminded that I met Renee Fleming at Dartmouth.

Interview Question **June 4, 2023: 9:05pm**

Do you feel that straws are utensils?

Thought **June 4, 2023: 11:28pm**

If I were to roll the dice again, and start life over as another person, it would be unlikely to get another person as wonderful and full of potential as me.

Event **June 5, 2023: 12:54am**

Cecie and I saw Henry Joyce and Casey Renka for drinks in New York City.

June 5, 2023: 1:51am: This was quite a night. I actually drank too much and became ill on the New Jersey Transit.

Scene From My Life **June 5, 2023: 12:54am**

Cecie: "Play Thank!"
Matt: "I was thinking of Thank!"

playing Wordle with Cecie

Scene From My Life **June 6, 2023: 12:56am**

Watching the Ultimatum on Cecie's couch in Rahway. Cypress appears on the right and then walks over my keyboard. So I move him to the left, but then almost instantaneously he appears again on the right, after having gone up and behind me around the couch. So I keep moving him in this micro purgatory limit cycle. This is the perfect scene concept for a guy who's stuck.

Thought **June 6, 2023: 3:12pm**

"Placing you atop your shoulders, and from yourself there you will hang."

Spoken by some villain in a dream.

Scene From My Life **June 6, 2023: 11:05pm**

Cypress is meowing out of control. Cecie reads an online article: "It says don't give cat attention when meowing. Especially not lifting the cat or placing it in another room."
Matt: "Well obviously this article was written by a cat."

Thought **June 9, 2023: 4:25am**

What if the proton is what happens when quarks are literally exactly on top of one another. The waves that each generate somehow cancel out to create the electromagnetic and gravitational properties of the proton.

Thought **June 9, 2023: 10:27pm**

I'm not losing my hair. But it's interesting to think of all of the hair in my life that I have lost—All of the me that I don't know the location of.

Scene From My Life **June 9, 2023: 10:32pm**

Shreyas toasts: "To Two, the number of us."

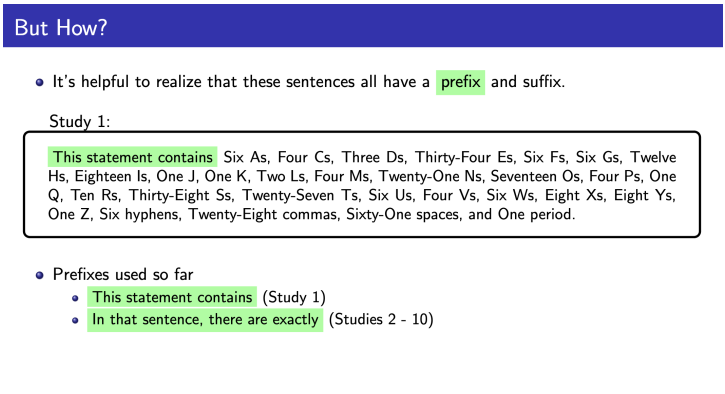
Thought Exp. **June 10, 2023: 12:56am**

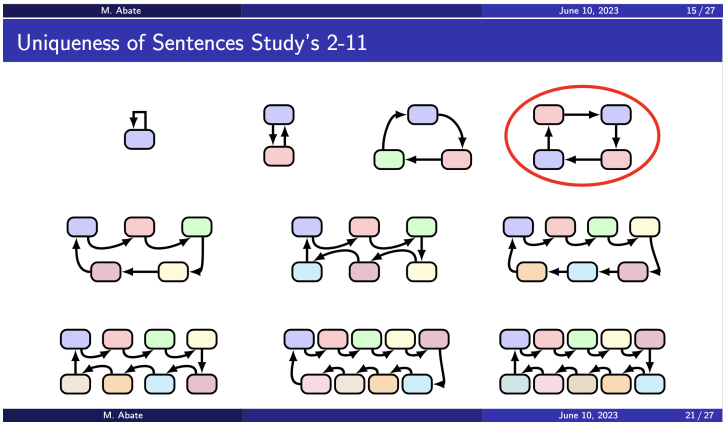
Do shapes have a notion of primeness?

I started a slide-deck using Beamer, for storing self-enumerating sentences when I find them. For example:

Is it possible to construct a sentence containing exactly Seventy spaces, Twenty-Nine commas, Five hyphens, Eight As, Two Bs, Eight Cs, Two Ds, Forty-Three Es, Seven Fs, Seven Gs, Twelve Hs, Twenty Is, One J, Two Ks, Five Ls, Four Ms, Twenty-Eight Ns, Eighteen Os, Four Ps, Two Qs, Eleven Rs, Thirty-Nine Ss, Thirty-Four Ts, Six Us, Eight Vs, Nine Ws, Three Xs, Ten Ys, One Z, and One question mark?

The slide-deck was titled *Studies 6/10/23*, and was added to over the coming days. I'm attaching some screenshots below.





Thought Exp. **June 11, 2023: 6:33pm**

Let's say you buy an ice cream. Does that change the probability that the next person who enters the store will also buy an ice cream? Are we samples or do we steer the distribution?

Idea **June 11, 2023: 6:39pm**

Optical illusion. Place water and oil in a glass bottle, so that it appears as though there is a single liquid on the top of the bottle, fighting gravity.

Thought **June 12, 2023: 1:33pm**

BeamerGen is a tool I made for generating Beamer presentations with AI. My thought is, to sell BeamerGen (or anything), it probably makes more sense to go after a group of people currently using Beamer and would switch, rather than people who have never used Beamer and would consider it if there is a new feature. It's tempting, there are currently more people not using Beamer than are, but... I guess I don't trust the people not using it.

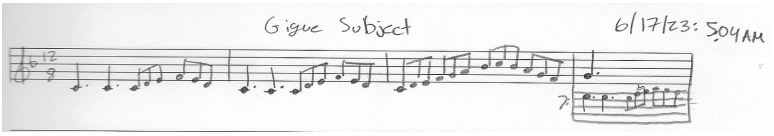
Thought **June 14, 2023: 2:11pm**

Time gravity - do objects accelerate toward one another in time? or just space.

Thought **Undated**
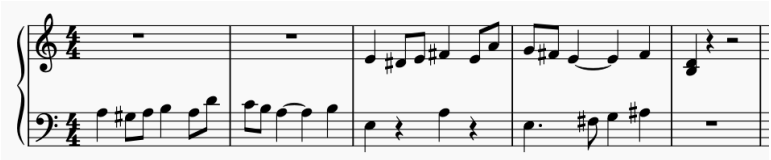
Had panic attack about not having Cecie. I should make sure to let her know.

Composition **June 17, 2023: 5:04am**



Gigue Subject in F major

Composition **June 17, 2023: 2:13pm**
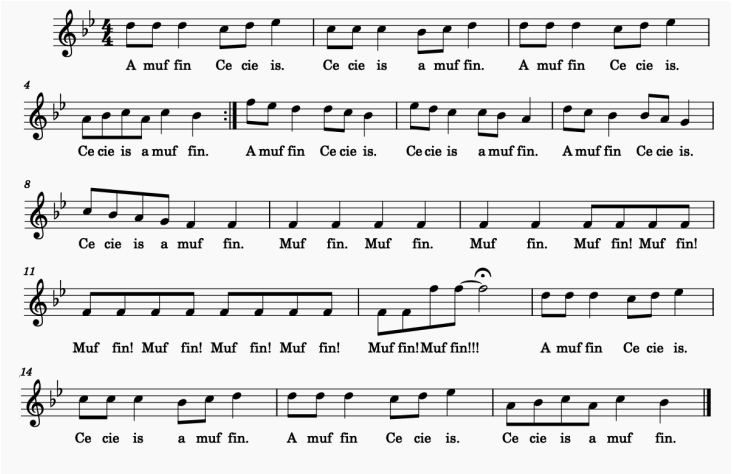


Invention Subject in A minor

Thought Exp. **June 17, 2023: 2:37am**

"Would all beings in any universe discover integers." I think the answer is yes, but they would represent different things. For example, an organism might count using a logarithmic scale, in halves and multiples. In which case they would find integers often but they would mean fundamentally different things in equations.

Audio Recording **June 17, 2023**



"A Muffin, Cecie Is" a song by Matt Abate. Transcribed from an Audio Recording of Matt Singing it to Cecie after is was written.

Art Concept **June 18, 2023: 5:08am**

Chorus sings a loud and full chord. It oscillates from the left and right speaker.

Thought **June 19, 2023: 5:42am**

Many times, I wake up and check my phone just before my scheduled alarm–I'll then turn it off early and start the day. I used to think this was related to my circadian rhythm or something. I'm now wondering whether I wake up many times each morning, and go back to bed in the instances where my alarm is far off. Then I might only remember the times that I woke up and stayed up.

Thought **June 20, 2023: 3:22am**

I wonder if there is a connection between Green's Theorem and Voronoi partitions, optimization or mixed monotonicity.

Idea **June 21, 2023: 3:32am**

Think about "square root dollars" as a scientific unit. Like a 100 dollar bill can be thought of as 10 root-dollar bill squared. How would this work? Would 3 root-dollars plus 4-root dollars be 5 root-dollars?

Scene Concept **June 21, 2023: 11:10pm**

Matt tending bar at fraternity "Have a beer."
Freshmen: "Thanks, do I have to pay for this?"
Matt: "What? Oh no, the second one is free."
Frosh: "This is actually my first beer."
Matt: "O jeez. Where are my manners? Here's another. The first one is free too."

Thought **June 21, 2023: 11:12pm**

Consider a body switching movie, like Face Off or Freaky Friday. Every actor will play 2 characters and every character will be played by two actors.

Thought Exp. **June 21, 2023: 11:27pm**

Consider a movie script about characters Tom and Jim who build a robot that looks like Jim. Now the actor that plays Jim plays two characters. How much screen-time would you expect the two actors to get relative to one another? Would you expect the acting role of Jim to require 3 times as much work as that of Tom? Or 2 times as much? Some thoughts:

- Maybe both actors would have the same screen-time. There are game theory and cultural aspects here: maybe a script writer would want to increase Tom's dialogue, just to keep the focus off the characters who are potentially confusing.
- Maybe, instead, each "role" would appear about equally in the script, making so that the actor who plays Jim has about twice as much screen time as the that of Tom.
- There is a third option, when there are a lot of two-person conversations. There will be scenes where Jim talks to Tom, Tom talks to the Robot, and The Robot Talks to Jim. Assuming there are an equal amount of these conversations you might expect the actor who plays Jim to read about 75% of the lines.

I guess this line of thinking also pertains to movies about twins, possibly also movies with flashbacks.

Art Concept **June 24, 2023: 3:25am**

Circle of life analog clock, two concepts: (1) the face displays animals which eat one another, (2) the face displays stages of human life.

Scene From My Life **June 25, 2023: 11:08pm**

Cecie Walks in, says "what are you microwaving." Matt says "uhh uhhh a seltzer?" Cecie looks over, sees White Castle fries, pauses and says "You're disgusting."

Scene From My Life **June 26, 2023: 1:07am**

Matt walks up to box with 1.5 doughnuts in it, eats half of the full one.
Cecie: "Why didn't you just eat the half doughnut that was in there."
Matt: "This makes it more likely I get another doughnut half later."

Thought **June 26, 2023: 1:07am**

Some people like to write books and some people like to read them. Some people like to read books to others and some people like books read to them.

Scene From My Life **June 26, 2023: 1:07am**

Matt: "Yes—well—my model allows for the fact that yours is wrong."

in conversation with Ben.

Micropoem **June 26, 2023: 2:31pm**

(1) Walk to Work
(2) Facetious Fascist

Addition September 15, 2023: Hi, I'm Jim the Facetious Fascist, also I'm not a Fascist.

Event **June 26, 2023: 8:49pm**

Tears for Fears concert with Cecie, Henry and Casey. In the Goodwin box at MSG. Cold War Kids was the opener.

Interview Question **June 30, 2023: 11:23pm**

You know how you watch a TV and the TV is bigger in one direction than the other. Do you think your eyes "see bigger" in one direction? Or do you think it's a square? Honestly look and think about it.

Film Concept **July 1, 2023: 12:16am**

The movie opens–it's a space future. It looks a lot like Star Wars (1977) with different actors. You slowly realize that the script is very similar to Star Wars, but then everything switches to Raiders of the Lost Arc (1981). Then Blade Runner (1982). And then you realize it's a Harrison Ford biopic.

Theory **July 1, 2023**

As technology advances the number of minor annoyances in life increases. My case study here is that Cecie has this washing machine where the dryer is on top but the door sort of closes because of the floor slant–this means is every time you bend down to grab laundry the door slides back exactly where your head is. To make this Abate's Law we would need something like "every 5 years the number of annoyances in life doubles."

Scene From My Life **Undated: 11:37pm**

Matt: "I couldn't love you more. Well... Maybe I could? I don't know... is infinity more than infinity? If it was I guess I could love you more... more than now... if I loved you infinity... which I do."

In conversation with Cecie.

Thought **July 2, 2023: 11:49pm**

If there were many of me or if I was cloned, I wonder if we would all be panicking trying to prove that we are the real one?

Idea **July 4, 2023: 12:11am**

Social media for TV / Entertainment. What shows do you like? What movies do your friends like? The kicker here would be some sort of ranking system or liking system.

Joke **July 4, 2023: 1:08pm**

"Friends are hard to come by, even shitty ones."

Micropoem **July 5, 2023: 4:54pm**

I wonder whether Walter watched the weather.

Business Concept **July 6, 2023: 5:01pm**

Open a restaurant and name it "Food near me."

Idea **July 8, 2023: 1:29pm**

"Seoul Searching," a Korean restaurant, documentary, or dating show.

Character Concept **July 8, 2023: 5:37pm**

A visionary tailor who only wears clothes that have never been seen by human eyes.

Idea **July 12, 2023: 11:52pm**

Write a letter to the Psychology community of academia—asking for a professor to study The Bachelor. Seriously, it must be the Stanford prison experiment of our time.

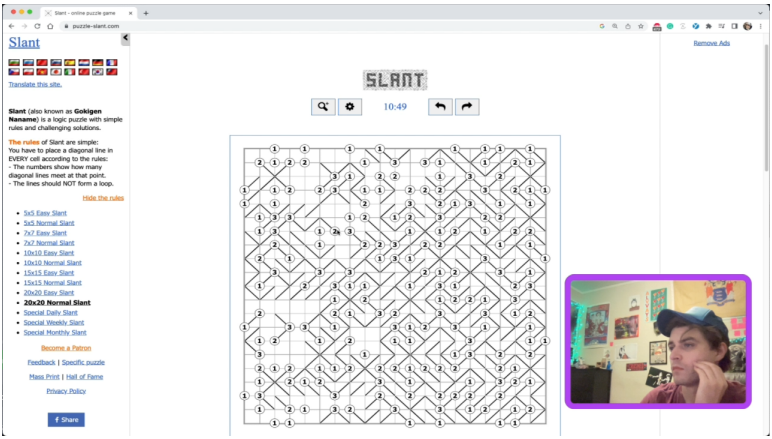
Game Concept **July 13, 2023: 11:50pm**

Reverse 20 questions. I think of a question and you provide to me twenty answers–I say yes or no. After 20 answers you have to guess my question.

Game Concept **July 13, 2023: 11:50pm**

It's called *Hear me out*. The first person has 5 minutes to be heard out on a subject that is traditionally boring or party-foul-controversial–for example "This Taylor Swift music video is really good" or "Let me teach you about tanks." After 5 minutes you say "Now it's your turn to be heard out" and pass the role to the next person.

Video — July 14, 2023: 1:21am



Playing through every level of Slant. I intended to make this the first video of a YouTube channel called "Puzzles with Matt," but this never happened and the video was never published.

Micropoem — July 14, 2023: 1:36am

"shcool"

Scene From My Life — July 14, 2023: 1:56am

Ben is working. Matt walks up: "How are the numbers?... Are they round?"

Scene From My Life — July 18, 2023: 12:38am

Matt: "How's the code?"
Ben: "It's not doing the thing that it's supposed to be doing. I don't know why."
Matt: "That's the funny thing about things that are supposed to be doing things. It can be hard to tell why they're not when they're not."

Thought **July 19, 2023: 4:01am**

To call oneself Atheist seems very weird. I assume it would be important for two people to come to some common definition of God before having a conversation about the existence of God. A religious person may have an infinite set of allowable definitions of God–for example, a person may believe that they know an amount about God but that there are perhaps infinitely many things that they don't know. Perhaps being religions just means that you believe there is an amount you can know, even if you don't know that amount. Or that there are questions that have answers, even if you don't know what the questions are. Atheists seem similar–It's like "I know an amount about the provided definition of God, and that amount is enough to know that I don't believe in him."

On Taking a Sufficiently Broad Definition to the term God.

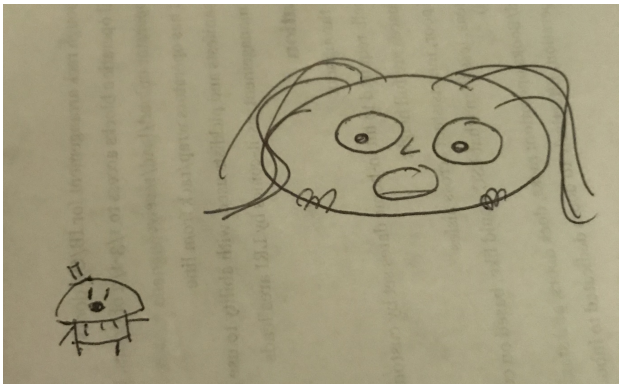
Theory **July 20, 2023: 1:16pm**

If you're making a pizza commercial, it's really important that you show at least one person eating pizza. Not just like holding it or something.

Thought Exp. **July 21, 2023: 7:51pm**

Say that you're in a moving car and you fire a projectile in the opposite direction of the car's movement. Will that projectile move slower with respect to an observer on the ground? As compared to the case where you fire the same projectile while the car is parked. Will the projectile make the same arc as seen from an observer on the car? Now imagine it's a cannon that is tilted upward (Assume there is a ramp). Does the cannon ball go higher if shot from a moving car?

Drawing **July 27, 2023: 9:50pm**



Cecie, terrified by Mr. Muffin.

Micropoem **August 1, 2023: 7:51pm**

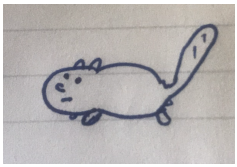
Crude and unusual

Scene Concept **August 2, 2023: 1:13pm**

A poor man finds out the make and model of his wallet is very rare, and worth a lot of money.

loosely inspired by Ben.

Drawing **August 2, 2023: 1:58pm**



Edward Squirrelmin, not to be confused with Edward Smallmin from February 5, 2023.

Scene Concept **August 3, 2023: 4:07am**

"I've come to believe that about everyone," said the Scientist. "Everyone?!" said Sam. "You think *everyone* has a voice inside their head telling them that they are worthless."

as the opening scene to a movie.

Thought **August 8, 2023: 4:42am**

I'm waiting for this learning algorithm to finish training. It requires 100 iterations to terminate, and I've had a stopwatch running since it started. It's interesting, at any given time, the way to figure out how much time you have left is

$$\text{Time Left} = \frac{100 - x}{x}(\text{Elapsed Time}) \tag{1}$$

where x is the current iteration. For whatever reason I find this ratio (100 - x)/x interesting – for example after 35 iterations, the amount of time you have left is $65/35 = 1.86$ times the amount of time you've waited so far.

Poem **August 8, 2023: 11:08pm**

Waiting forever I'll question:
"Never a baby's been prettier?
Sent then from heaven?
Oh how did I ever attract an eleven?"

to Cecie

Drawing **August 11, 2023**



Cecie on the couch.

Puzzle Concept **August 17, 2023: 3:08am**

Given a chessboard, how many ways can you add one piece to the chessboard in order to prevent checkmate on the next move. Ideally, there is only one possible solution, that conforms to the starting piece set.

Poem **August 19, 2023: 1:14am**

Pineapple biting is vital to happiness
o . . o . . o . . o . .
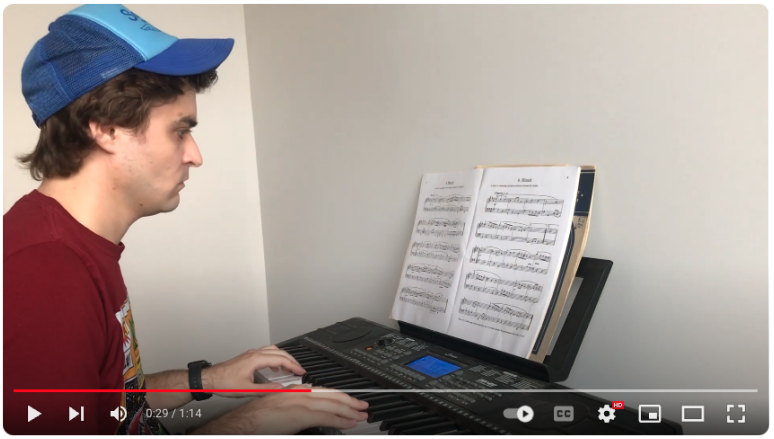
Quite low in calories, high in pineappliness.
o . . o . . o . . o . .

Percy and I wrote poems on the prompt "Pineapple."

Idea **August 23, 2023: 9:21pm**

A variety of amphetamines named “God Speed.”

YouTube Video **August 25, 2023**



Minuet III from Suite in G Major - BWV 822

Matt Abate
16 subscribers
Analytics
Edit video
2
Share
Promote

Matt performs Minuet III from BWV 822, Suite in G major by JS Bach. https://youtu.be/CLbRcrkv87Q?si=IcYM5-lFWrB8FK0Z

Thought **August 26, 2023: 11:15pm**

In this era, having a Wikipedia page would be really cool—there’s a good reason to think that record will be there forever, or continued in some way. I’m thinking now on how it must have felt 500 years ago to have your name in a book. The Divine Comedy (Dante 1321), for example, still brings many names and stories into the public canon, e.g., Brunetto Latini, Paolo e Francesca.

- Over the past week, Ben and I have been building with AI agents. We started with AutoGPT (BabyAGI was depreciated). We tried AutoGPT with the Llama2 models (code-llama was just released), but actually the Llama models didn't work well with AutoGPT. The AutoGPT agent also isn't easy to modify.
- To use the Llama models, we tried building our own agents with Langchain. But Langchain wasn't as mature as AutoGPTs, and the Llama models failed on our prompts.
- We experimented using AutoGPT agents as tools for a Langchain agent. The experiments were promising, but the agentic tools are going to require more guidance to be reliable. Performance seemed to improve as their prompts got more specific. Sometimes the AutoGPT agent would enter a loop where it continued to try the same failed approach, like attempting to use the wrong tool.
- We came up with the *Llama-pen* system for communicating files and tasks between agents, models and tools. Early experiments where teams would complete a small task were successful. We also saw the Langchain supervisor revise the task of AutoGPT agents that were not making progress.
- We created AutoDR (data review) tool to assess the file-outputs of the agentic-tools. In testing, it correctly identified basic mistakes.
- Next agentic tools:
  - OpsAgent (operations). When an agentic tool returns a python script, run it and return the output.
  - QATool (quality assurance). When an agentic tool returns a python script, create a pytest test.
- We will soon need to implement multi-file input and output for agentic tools.

Cowritten with Ben, and later titled, "The Captains Log."

Thought **September 1, 2023: 1:36am**

Ben Mains' thought: "If you made a movie about the future, in the 80s, everyone would be listening to Synthwave all the time. And it is the future. And we do listen to Synthwave all the time."

Thought **September 1, 2023: 4:07am**

I don't have a cool explanation or many thoughts about the number $\pi \approx 3.14$. I do however have thoughts about $e \approx 2.71$, Euler's number. π is a ratio, a number. e isn't really a number–e is defined by a limit equation–it pops up many places, but specifically when computing compound interest. This limit definition has many interesting properties. For example, when we raise e to the power x, it's equal to this pretty polynomial representation (Taylor series), and the derivative of that Taylor series is equal to itself. You can also see in it the Taylor series representation of sin and cos, and this is what facilitates Euler's formula, the most powerful equation in math. So it turns out, that e is not 2.71, rather 2.71 is the scalar representation of the limit. In fact, the limit and Taylor series both generalize to, e.g., matrices. There is a matrix exponential e^A with all of the same properties as the scalar e, except here e isn't defined by any scalar or matrix, it's much more abstract.

Video **September 7, 2023: 4:55am**



Redwine Slammer GIF. Night before Alpha Chi Cape Cod Trip.

Joke **September 8, 2023: 11:40pm**

If I ever have to deliver unfortunate news to a jerk, I might send an email signed "My pittance, Matt."

Thought **September 9, 2023: 12:20am**

"He looked up at the stars and remembered."

Alpha Chi Cape Cod Trip

Story Concept **September 9, 2023: 5:22pm**

An injured seagull has to decide between dying on land or flying toward the sea.

Photo **September 9, 2023**



Alpha Chi Cape Cod trip.

Business Concept **September 10, 2023: 3:03pm**

"Blinds designed by the blind."

Scene From My Life **September 10, 2023: 11:06pm**

Matt: "He's just doing this to prove to his mom that he's sexually active... O my god. There was only one puzzle piece this whole time."

Watching mother-son dating show with JohnRob, Chris Meyer, Will Burger, and Tyler Kelsall. Boston, MA.

Scene From My Life **September 10, 2023: 11:16pm**

Matt: "The backboard is in two pieces."

After delivering sweet dis.

Scene Concept **September 11, 2023: 2:01pm**

Man: "Later I have plans to throw myself in front of a train."
Woman: "That's really not funny."
Man: "Oh—You'll have to forgive me. New Jersey-ians, like myself, can sometimes be misinterpreted. Culturally, we think train incidents are quite funny."
Woman: "Well, my brother was killed in a train incident."
The man cracks up: "Yes, that's quite funny also."

Thought **September 14, 2023: 12:27am**

"Orthogonal" is such a great punchline word. It just works so well in punchlines for jokes.

Thought **September 14, 2023: 12:30am**

The story of the Tower of Babel is pretty underrated.

From Genesis, the story is meant to explain why the world's peoples speak different languages: In the beginning humans all spoke the same language. They begin on a crazy-tall tower so Yahweh confounds their speech so that they can no longer understand each other, and scatters them around the world. Needless to say, they never complete the tower.

So why do I like it? Well I totally subscribe to the belief that many many problems in the world are caused by micro-scale miscommunications that compound: "two different people believe they speak English, but they use words and meanings slightly differently," and this exists everywhere and it compounds and it's just terrible. Miscommunication always: causing inefficiency, societal distractions, friendships to be more distant, etc.

If it were the reverse—if every human could communicate to every other instantly, exactly what they are thinking, then we would live in a world where everyone is the same person–and it's hard to imagine many conflicts in that world, though this isn't better so to say. The fact that miscommunications exist is just one of the bad things about being a human—and that punishment is biblical. It's honestly like a profound kids question: why do we wear clothes? Eve and shame. Why do we have trouble communicating? Tower of Babel.

The reader might take my statements above with a grain of salt—I also believe that I have below average communication skills and that many many people don't understand me. This obviously adds some bias to my thoughts on Babel.

Scene From My Life **September 14, 2023: 1:13am**

Ben: "Did we go to Five Guys yesterday? Or was it Tuesday?"
Matt, checks watch: "Yesterday was Tuesday Ben, today is Thursday."

Thought **September 14, 2023: 4:06am**

All websites and apps should have a feature that would allow you to send money to other users. For example, sending money through YouTube to other creators or just other users. I think if this were adopted universally (Google, Wikipedia, GitHub...) there would be some really interesting economic effects.

Definition **September 14, 2023: 4:10pm**

Ben and I are developing with AI Agents. We had an interesting conversation today about how new terms are probably required for us to efficiently communicate about the our experimental progress. For example:

doop [du:p] *v.*

1. The act of speaking after one's prompt has been answered and clarified fully, often for an excessively long duration or beyond the listener's interest, specifically in the context of an LLM or human speaker.

Example: "The agent is dooping, there will be too many tokens in the next prompt for correct execution." Matt: "I get it Ben. You're dooping."

There have also been a lot of great leanings and anecdotes. For example, agents can retry / respawn upon failure, and sometimes you can make a reliable component even if the agent tends to fail at their tasks often. This has created the shared lesson: if it works the first time, the second time–Great! If it works the second time the first time–Great! If it doesn't work the third time the third time–stop and rethink your component. Another related commandment: never spend more than an hour prompt engineering.

I Remember **September 14, 2023: 9:50pm**

I was asked for a time I felt proud, and the scene that immediately came to mind was from my senior year of high school.

Toward the end of the year, at Mountain Lakes High School there was an assembly award ceremony—which was long, and boring, and four hours, and it really only ever featured the twenty sports teams, and maybe some club awards, etc.

Also toward the end of the year, there was a New Jersey standardized exam called the AMC. It was just math: The AMC 10 was a math exam for ninth and tenth graders, and the AMC 12 was for upperclassmen. It was something my friend group was always excited for, but only twenty students were allowed to take the AMC every year and you had to test into it. I tested in every year, and always enjoyed the questions.

So when was I proud? Well, it was senior year at the award ceremony—I'm bored—I'd never been called up in three years so I was zoning out. A math teacher got up to the podium and started "The highest score on the AMC 12 this year was Matt Abate, and the highest score on the AMC 10 this year was Mark Abate." And the fact that it was me and Mark made me very happy. When we went on stage, and the math teacher who called us up then told us not to sit down because there were remaining awards that were also for us.

Idea **September 16, 2023: 6:29am**

A feature for online video players (like YouTube) that adds *English* subtitles to an *English* video at parts where the language is hard to hear, there's loud music, or the production is bad.

Thought **September 16, 2023: 8:36pm**

Some thoughts on 12, and the sequence 1, 2, 3:

$$12 = 1 \cdot 2 \cdot 3 \cdot 2 \cdot 1$$

$$12 = 1^3 \cdot 2^2 \cdot 3^1$$

$$12 = 1! \cdot 2! \cdot 3!$$

$$12 = \sqrt{1 \cdot 2 \cdot 3 \cdot 4 \cdot 3 \cdot 2 \cdot 1}$$

Product Concept **September 18, 2023: 3:12am**

A Collatz Conjecture themed board game where squares are numbers and you try to get to one. Kinda like shoots and ladders.

Micropoem **September 18, 2023: 3:13am**

"Loose count"

Puzzle **September 20, 2023: 1:11am**

You are given a (perhaps not fair) coin, and asked to flip the coin twice. Is it more likely that you land the same face twice? or that the coin flips yield different results?

Remember Me Later **September 20, 2023: 3:03am**

Supplicia Canum. A holiday in Rome, where dogs were crucified as punishment for not waking the guards before siege.

Thought **September 21, 2023: 1:51pm**

Ever think about the fact that baby is written "b-a-b-y" but pronounced "bay-b."

added March 3, 2024: this is also the case with lazy (lay-z).

Chess Game **September 23, 2023: 11:45pm**

1. e4 c5
2. Nf3 Nc6
3. d4 cxd4
4. Nxd4 Nf6
5. Nc3 Qb6
6. Be3 Qb4
7. Rb1 Rg8
8. Ndb5 a5
9. a3 Nxe4
10. axb4 axb4
11. Nc7+ Kd8
12. Nxa8 Nd6
13. Bb6+ Ke8
14. Nc7+ Kd8
15. N7d5+ Ke8
16. Nc7+ Kd8
17. N3d5 h6
18. Ne6+ Ke8
19. Ndc7#

Matt (white) vs. Computer (black), chess.com.

Advice **September 24, 2023: 12:13pm**

(1) You should do what you want
(2) If you look at what you do, you can tell what you want
(3) You shouldn't be ashamed of what you want

to Cecie, after she was mad about eating cookies.

Art Concept **September 26, 2023: 5:32am**

Take a monospace code editor text and wrap it around a cylinder so that moving one unit in any direction (for example over the text border) brings you to the correct character as seen in the editor for short lines. It might make sense to have holes.

Joke **September 26, 2023: 6:46pm**

The captains log. It's written by captains, 2 captains, 4 captains, 6 captains... it's a joke

Scene Concept **September 27, 2023: 3:05am**

Man 1: No
Man 2: Ok
Man 1: Why, do you?
Man 2: What?
Man 1: Want a burger?
Man 2: No
Man 1: Ok
Man 2: Why, do you?
Man 1: What?
Man 2: Want a burger?
Man 1: No
Man 2: Ok

Möbius Strip Scene Concept

Scene From My Life **September 28, 2023: 1:33am**

Ben: "Do you want some wine?"
Matt: "I had wine previously... But. There is no time like the present to relive the previous."

Idea **September 28, 2023: 3:50am**

A tool that would allow actors to determine the amount of revenue their presence added to the movie. "Tom Cruise was responsible for XX% of money in, and will therefore be paid YY." I wonder if Netflix has something like this.

Micropoem **September 30, 2023: 2:31am**

"He who picks last wins first."

Scene From My Life **September 30, 2023: 2:34am**

Ben: "... and having no second sibling to give the bag to, it went to Grace..."
Matt: "I thought that you always thought of me like a second sibling. What am I supposed to think that you think of me now."

Photo **September 30, 2023**



Demo Day at the Mains's lake house. Demoing mattsmovielist.com a website displaying all my movie reviews. See also Idea from March 27, 2023: 2:21am and Idea from May 11, 2023: 10:44pm.

Scene Concept **September 30, 2023: 5:59am**

Child: "Tell me about grandma."
Grandpa: "Ha, well to be honest it's hard to remember where the nightmare began."

Scene From My Life **October 1, 2023: 3:01am**

Matt: "The Beatles wrote this song for me for you"

Matt sends Cecie "Here, There and Everywhere," by the Beatles.

Poem **October 1, 2023: 4:52am**

Nothing is better than bed.
o . . o . . o . . o .

There's no question whether it's bedding
. o . . o . . o .

that makes resting better with bedding.
. o . . o . . o .

Thought **October 2, 2023: 2:23am**

Gregory House is who I wish I am.

Thought **October 5, 2023: 12:59am**

The words "meow" and "more" are close together on the qwerty keyboard.

Idea **October 7, 2023: 4:39am**

John Blum's Idea: a service that allows people to take existing movies and TV shows and edit them to be better. Like "The Matt Abate cut."

Remember Me Later **October 10, 2023: 1:11am**

Consider taking the sum of every number from 1 to x. How would you go about proving
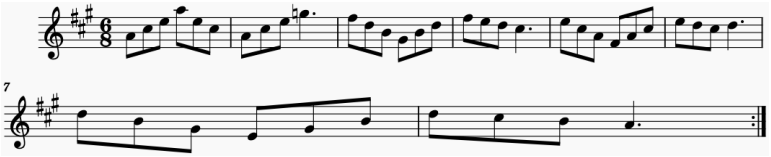
$$1 + 2 + \cdots + x = \frac{x(x+1)}{2} \quad ?$$

One way is to add the sequence to itself backwards.

Poem **October 10, 2023: 9:59am**

Never a legend's been larger than Ben.

Audio Recording **October 10, 2023: 11:17pm**

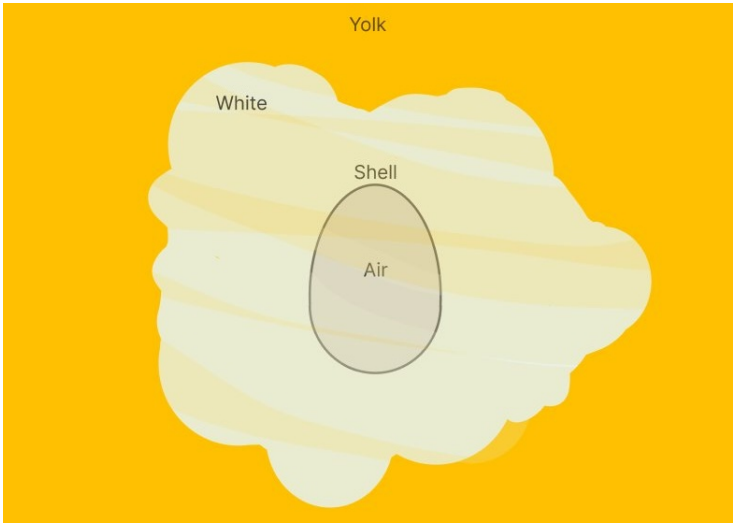


Riff, transcribed March 23, 2024: 5:31pm from an Audio recording of Matt playing piano.

Joke **October 11, 2023: 1:26am**

Quote of the Day: "21 dollars per pound."

Figure **October 11, 2023: 2:19am**



So you're going to have to think in 3D here—but—this is what an egg would look like inside out.

Figure **October 12, 2023: 4:35pm**



"Pixel Percy Yeung," gifted to Percy after he helped me host mattsmovielist.com. My hope is that he uses this character in his upcoming LunchNight applet.

Micropoem **October 12, 2023: 11:50pm**

It's been a while since we last talked.
It's been a while since we talked last.
It's been a while since we last spoke.
It's been a while since we spoke last.

Idea **October 13, 2023: 3:35pm**

Mark Mote's Idea: Elo style ranking game to find best number.
Ask people "What's the better number? 6 or 11?"

Scene From My Life **October 14, 2023: 12:23am**

Ben: "You know what's weird we don't have a word in English that ends the same way as golf but starts with a c."
Matt: "Why is that weird? and what about calf."
Ben: "No that has an a in it. I'm mean the sound aulf, that's more like aff."
Matt: "ok - So, why c?"
Ben: "What?"
Matt: "Like what other words do you know that end in aulf."
Ben: "There are others."
Matt: "Name one."
Ben "Uh"
Matt "One other word that ends in olf."
Ben "Ok - so like gulf."
Matt "Gulf gulf has a u in it."
Ben "What do you me gulf doesn't have a u in it."
Ben: "Golf or gulf?"
Matt: "What?"
Ben: "I'm saying they end the same. Gulf and golf."
Matt "They don't - gulf is more like an ewlth sound."
Ben: "Which one?"
Matt: "Gulf."
Ben: "You're thinking of golf."

Micropoem **October 14, 2023: 3:21am**

Teenier pizzas are pleasing to me.
o . . o . . o . . o

Puzzle **October 14, 2023**

Find x that solves $e^{e^x} = 1$.

taken from some YouTube video—really good puzzle though.

Interview Question **October 14, 2023: 10:07pm**

If there was a nuke in the desert - would you rather everyone stay away from it forever? or would you figure out a way to blow it up to not worry about it?

Theory **October 14, 2023: 10:11pm**

Jurassic Park II made me aware of this common trope in the sequels to action-horror movies: you structure the intro "no one believes the main character, but the sponsor, who assures the main character's safety to go back to the site of the first movie.

Story Concept **October 19, 2023: 2:52am**

Man receives a time machine, and then immediately goes to the bank. He exchanges all of his pocket money for bills from 2010. He then goes back to 2010 and exchanges the bills for some from 1990. Repeating, he is able to end up in 1900 with the same amount of money, though now it is worth much more. He invests it all in 1900 and heads back to the present to collect the interest. However, stepping out of the time machine he is immediately jailed for taking part in a counterfeiting scheme with a long evidence trial dating back 100 years.

Puzzle **October 19, 2023: 2:52am**

Write every number $1, 2, 3 \cdots$ as an expression using only the numbers 2, 3, and 7 (at most once each) and the operators $+$, $-$, $/$, $\times$, and $\wedge$. Here's how far I got:

$1 = 3 - 2$
$2 = 2$
$3 = 3$
$4 = 7 - 3$
$5 = 7 - 2$
$6 = 2 \times 3$
$7 = 7$
$8 = 2^3$
$9 = 3^2$
$10 = 7 + 3$
$11 = 2 \times 7 - 3$
$12 = 2 + 3 + 7$
$13 = 2 \times 3 + 7$
$14 = 2 \times 7$
$15 = 3 \times (7 - 2)$
$16 = (7 - 3)^2$
$17 = 2 \times 7 + 3$
$18 =$???

Scene From My Life **October 21, 2023: 6:22am**

Matt making dumplings—singing "I la la la love dump lings yes yes yes I do" to theme of Coffee Cantata.

Thought **October 22, 2023: 10:02pm**

Every 7 years, you have lived 1 year of Monday.

Scene From My Life **October 25, 2023: 9:52am**

Ben: "The dopamine hits from getting Retool to work are just insane."

Retool provided databasing tools that were particularly difficult to work with.

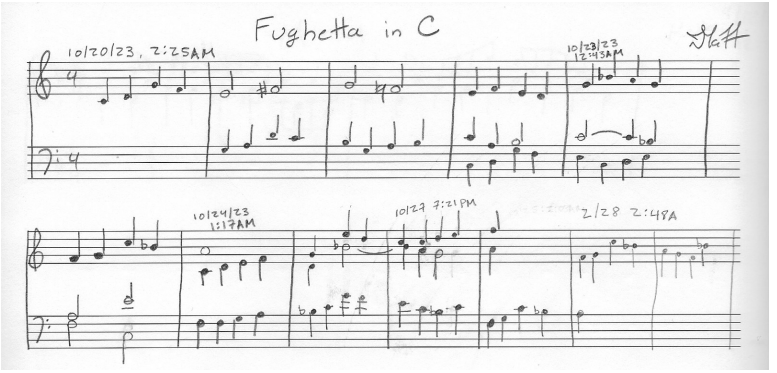
Thought **October 26, 2023: 1:22am**

I wonder if there is low population density around the borders of time zones.

Scene From My Life **October 26, 2023: 2:02am.**

"To get $1000 in my bank account you would need to multiply by a negative number."

Composition **October 27, 2023: 7:21pm**



Fughetta in C major, unfinished.

Remember Me Later **October 28, 2023: 12:22am**

I learned a bit about the country Georgia from my Uber driver. Tbilisi is the capitol. Batumi is a city with a crazy statue: "Ali and Nino." He wasn't a huge fan of the current president Zourabichvili. There is also a singer named Sofia something or other, and he showed me some traditional dance.

Photo **October 28, 2023: 7:26pm**



Cecie and Matt at the Metropolitan Museum of Art.

Scene From My Life **October 30, 2023: 1:14pm**

"Sell the cart before the horse—you need that horse."

Micropoem **October 30, 2023: 9:03pm**

"The properties of properties."

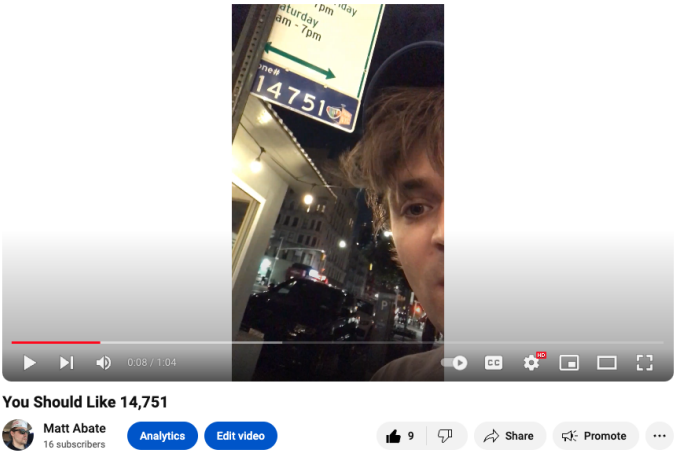
Micropoem **October 30, 2023: 10:32pm**

"A being made of being mine."

to Cecie

Video **October 31, 2023**

I got dinner with my family in New York. When leaving the restaurant, saw the number 14,751 on a street sign, and made a 64 second YouTube video about the number: https://youtu.be/5U3u5st7I3I?si=b3Lf_U6xc9H6zUz2. It's a really great example of 3 divisibility tests.



Alright—fun number time... This is 14751 and you should like 14751. It's divisible by three I can prove that to you by saying that $1+4+7+5+1=18$ *divides by 3 that means 14751 is divisible by 3. It's divisible by nine by the same reasoning—the sum of the digits which is 18 is divisible by 9. The the last thing is that it is divisible by 11 and the way that I can prove that to you is that the alternating sums* $1+7+1$ *that's 9 and* $4+5$ *that's 9 are equal. So 14751 is both divisible by 11 and 9, means that it's divisible by 99 we can actually look at it and that 149 times 99... See fun number o'clock.*

Thought **November 2, 2023: 10:00pm**

You shouldn't have to rehearse the truth.

Scene From My Life **November 3, 2023: 11:35pm**

I played the Powerball with Ben; his family was doing it or the payout was very high. But I actually really enjoyed buying the ticket—it's an activity where you pay someone $10 to tell them your favorite numbers.

Thought Exp. **November 5, 2023: 9:41pm**

If you had a super power where you could apply forces at a distance, could you reverse time? Could you reverse time for just one object? Is it possible to reverse time for one object?

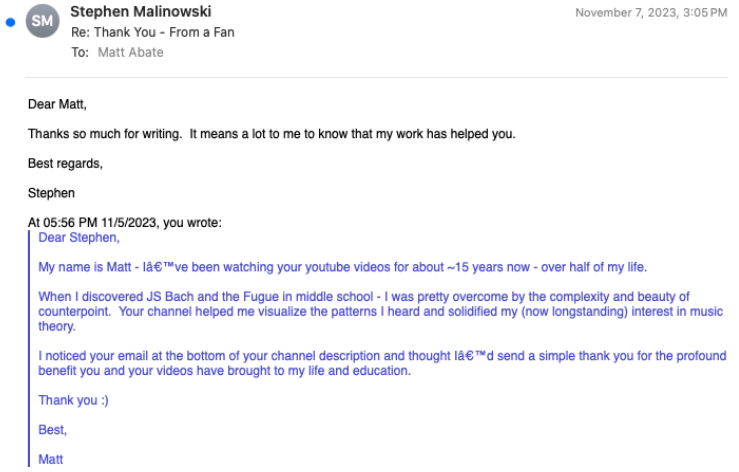
Idea **November 5, 2023: 11:27pm**

Drug withdrawals are like negative reinforcement–you keep smoking because, e.g., it hurts your gums or something when you stop. But maybe it would be possible to change that to positive reinforcement if you could, e.g., make the gum pain feel good by focusing on it really hard. I'm assuming this doesn't work, but it would get you to stop smoking immediately.

Puzzle **November 7, 2023: 11:21am**

$56 = 7 \times 8$ and $12 = 3 \times 4$. Are there other multiples that can be constructed using consecutive digits in this way? What about in other bases?

Sol: $8_{72} \times 9_{72} = 10_{72}$ and $12_{120} \times 11_{120} = 10_{120}$. These might be obvious, but can be backed out using the result $x_{10} = 10_x$ for any x. For example $2_{10} = 10_2$.



Stephen Malinowski
Re: Thank You - From a Fan
To: Matt Abate

November 7, 2023, 3:05 PM

Dear Matt,

Thanks so much for writing. It means a lot to me to know that my work has helped you.

Best regards,

Stephen

At 05:56 PM 11/5/2023, you wrote:

> Dear Stephen,
>
> My name is Matt - Iâ€™ve been watching your youtube videos for about ~15 years now - over half of my life.
>
> When I discovered JS Bach and the Fugue in middle school - I was pretty overcome by the complexity and beauty of counterpoint. Your channel helped me visualize the patterns I heard and solidified my (now longstanding) interest in music theory.
>
> I noticed your email at the bottom of your channel description and thought Iâ€™d send a simple thank you for the profound benefit you and your videos have brought to my life and education.
>
> Thank you :)
>
> Best,
>
> Matt

Stephen Malinowski responds to fan-mail

Composition **November 9, 2023: 12:39am**

A	*B*	*A*	*T*	*E*
L	*E*	*G*	*A*	*L*
L	*L*	*A*	*M*	*A*
O	*C*	*T*	*E*	*T*
W	*H*	*E*	*R*	*E*

Composition **November 12, 2023: 3:31pm**

A	*S*	*S*	*E*	*T*
W	*H*	*I*	*N*	*E*
A	*O*	*R*	*T*	*A*
S	*N*	*E*	*E*	*R*
H	*E*	*N*	*R*	*Y*

for Henry's 30th birthday.

Scene From My Life **November 17, 2023: 11:02pm**

Ben working on restarting web scrapers. Matt asks a bunch of questions, learns about what a shell is and the differences between nohup and &. Cool answers. Matt says "This is cool. You should stop teaching me things. Like it though I do."

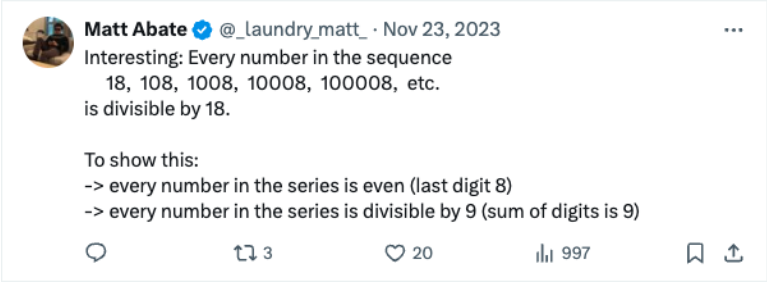
Interview Question **November 21, 2023**

You run into a starving child. He hasn't had food or water in days. Do you share your beer?

Scene From My Life **November 22, 2023: 7:28pm**

Cecie wants to play 20 questions. Matt not super interested. She prods him every minute or two trying to get him to ask questions. Then it's Matt's turn to think of a word. Cecie asks two questions and then says "I give up." Matt says "C'mon man - you didn't even try to not give up."

Thought **November 23, 2023**



Scene From My Life **November 23, 2023: 6:46pm**

Cecie: "I'm going to use the bathroom"
Matt: "Great–I'm going to take your seat."
Cecie: "No, don't take my seat."
Matt: "But, your seat is where your food is."

Thanksgiving.

Thought **November 23, 2023: 7:02pm**

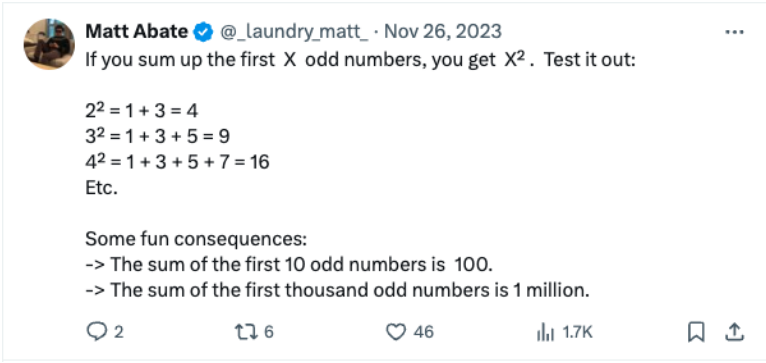
What bread is to a restaurant, a football team is to a school.

Puzzle **November 23, 2023: 7:30pm**

How many different ways can you play 3 holes of golf in 6 shots?

Micropoem **November 25, 2023: 9:24pm**

“Excessively messy”



Scene From My Life **November 28, 2023: 3:56pm**

Matt walks into Ben's room says "Hey asshole—Oh I'm sorry—I'm looking for Ben. Have you seen him?" Ben is the only person in room.

Scene From My Life **November 28, 2023: 3:57pm**

"Yeaa. In my prosecution I didn't really listen to any of your instructions."

after failing code task with Ben.

Painting **November 28, 2023: 3:59pm**



"Napoleon Crossing the Alps but Instead of Napoleon's Face I Painted my Own" by Matt Abate. Painted on Kiawah Island with Hendy family, as a gift to Ben.

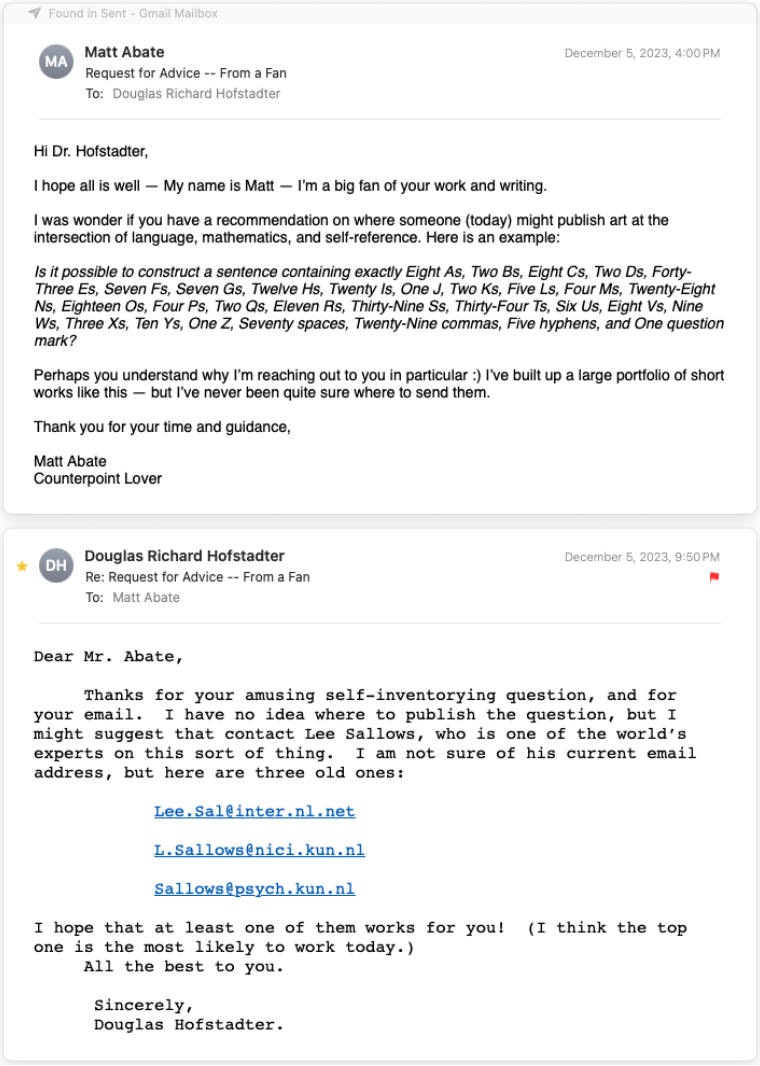
Idea **November 28, 2023: 5:05pm**

Become mayor and loan the town to another country for one day.

Poem **December 4, 2023: 10:47am**

Betrayed Abel by his brother;
o . o . o . o .

They'd made fun of one another.
o . o . o . o .



Found in Sent - Gmail Mailbox

MA **Matt Abate** December 5, 2023, 4:00 PM
Request for Advice -- From a Fan
To: Douglas Richard Hofstadter

Hi Dr. Hofstadter,

I hope all is well — My name is Matt — I'm a big fan of your work and writing.

I was wonder if you have a recommendation on where someone (today) might publish art at the intersection of language, mathematics, and self-reference. Here is an example:

Is it possible to construct a sentence containing exactly Eight As, Two Bs, Eight Cs, Two Ds, Forty-Three Es, Seven Fs, Seven Gs, Twelve Hs, Twenty Is, One J, Two Ks, Five Ls, Four Ms, Twenty-Eight Ns, Eighteen Os, Four Ps, Two Qs, Eleven Rs, Thirty-Nine Ss, Thirty-Four Ts, Six Us, Eight Vs, Nine Ws, Three Xs, Ten Ys, One Z, Seventy spaces, Twenty-Nine commas, Five hyphens, and One question mark?

Perhaps you understand why I'm reaching out to you in particular :) I've built up a large portfolio of short works like this — but I've never been quite sure where to send them.

Thank you for your time and guidance,

Matt Abate
Counterpoint Lover

DH **Douglas Richard Hofstadter** December 5, 2023, 9:50 PM
Re: Request for Advice -- From a Fan
To: Matt Abate

Dear Mr. Abate,

Thanks for your amusing self-inventorying question, and for your email. I have no idea where to publish the question, but I might suggest that contact Lee Sallows, who is one of the world's experts on this sort of thing. I am not sure of his current email address, but here are three old ones:

Lee.Sal@inter.nl.net

L.Sallows@nici.kun.nl

Sallows@psych.kun.nl

I hope that at least one of them works for you! (I think the top one is the most likely to work today.)
All the best to you.

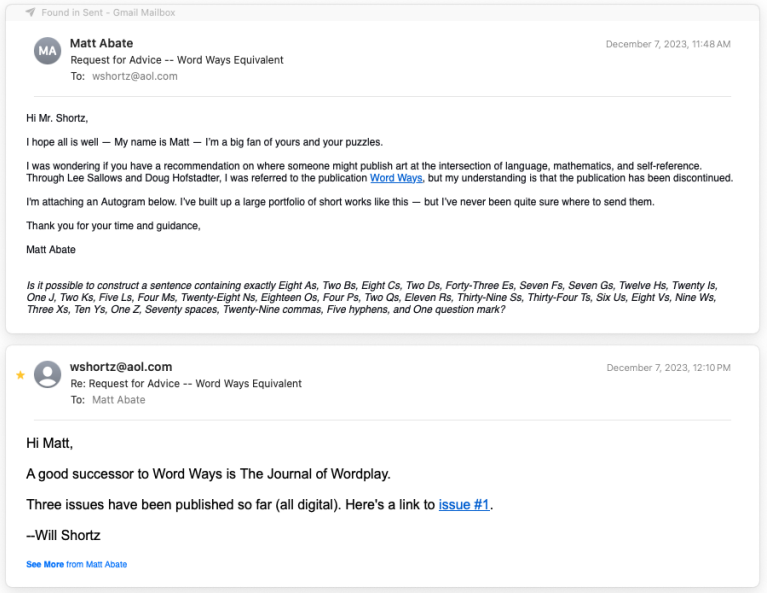
Sincerely,
Douglas Hofstadter.

with Douglas Hofstadter, author, "Gödel Escher, Bach" (1979).

Thought **December 7, 2023: 3:44am**

I feel like I know very few people who have a parent that is a twin.

Email Exchange **December 7, 2023**



Found in Sent - Gmail Mailbox

Matt Abate December 7, 2023, 11:48 AM
Request for Advice -- Word Ways Equivalent
To: wshortz@aol.com

Hi Mr. Shortz,

I hope all is well — My name is Matt — I'm a big fan of yours and your puzzles.

I was wondering if you have a recommendation on where someone might publish art at the intersection of language, mathematics, and self-reference. Through Lee Sallows and Doug Hofstadter, I was referred to the publication Word Ways, but my understanding is that the publication has been discontinued.

I'm attaching an Autogram below. I've built up a large portfolio of short works like this — but I've never been quite sure where to send them.

Thank you for your time and guidance,

Matt Abate

Is it possible to construct a sentence containing exactly Eight As, Two Bs, Eight Cs, Two Ds, Forty-Three Es, Seven Fs, Seven Gs, Twelve Hs, Twenty Is, One J, Two Ks, Five Ls, Four Ms, Twenty-Eight Ns, Eighteen Os, Four Ps, Two Qs, Eleven Rs, Thirty-Nine Ss, Thirty-Four Ts, Six Us, Eight Vs, Nine Ws, Three Xs, Ten Ys, One Z, Seventy spaces, Twenty-Nine commas, Five hyphens, and One question mark?

wshortz@aol.com December 7, 2023, 12:10 PM
Re: Request for Advice -- Word Ways Equivalent
To: Matt Abate

Hi Matt,

A good successor to Word Ways is The Journal of Wordplay.

Three issues have been published so far (all digital). Here's a link to issue #1.

--Will Shortz

See More from Matt Abate

with Will Shortz, editor, New York Times Crossword.

Micropoem **December 8, 2023: 3:04am**

"recreational recreation"

Thought **December 8, 2023: 3:31pm**

Well-defined and Ill-defined are opposites. So are Well and Ill.

Composition **December 9, 2023: 12:46am**

" 'What?' is a sentence" is a sentence.

Thought **December 9, 2023: 3:54am**

I think there is a really interesting math problem about dynamic book-keeping for gamblers.

For example, changing the odds on a horse race betting as people bet (to mitigate risk) but also as the race goes on (as information changes). In a two horse race you might offer 3:2 odds for both horses, if $2 were bet on each horse, then the bookie would receive $4. However, the payout on the winning horse would only be $3, so the bookie would make money regardless of who wins. The constraint here is that the same amount of money needs to be bet on each horse.

So as people bet what should you do? One trivial strategy would be to first allow bettors to only place bets on horse 1, and then once $2 has been bet on horse one only allow bets on horse 2, etc. This strategy exposes the bookie to $3 of losses in the worst case, but might generally be profitable. But there are probably cooler / better strategies. The clear application is buying stocks.

Matt and Cecie's 2024 Bucket List :D

- ☐ Get a kitten
- ☐ Write reviews of local restaurants
- ☐ Cecie Illustrates a book Matt writes
- ☐ Make Bread
- ☐ Make New Recipes
  - ☐ _____
  - ☐ _____
  - ☐ _____
- ☐ Visit Dartmouth
- ☐ Visit Nantucket
- ☐ Walk in new parks in NJ
  - ☐ _____
  - ☐ _____
- ☐ Make candles
- ☐ Once a week stretching and / or yoga

Cecie's 2024 Bucket List :D

- ☐ Cecie hit 145lb, toned with abs
- ☐ Get social media screen time down to less than 1 hour a day (on phone)

Matt 2024 Bucket List :D

- ☐ Print physical copy of 2023 Journal
- ☐ Continue 2024 journal
- ☐

Matt and Cecie's 2024 Bucket List, with areas for personal and group goals.

Scene From My Life **December 10, 2023: 8:33pm**

"This personal check—should you choose to accept it—is for rent."

Composition **December 11, 2023: 12:21am**

"Beginning with beginning, this sentence ends with end."

Thought **December 11, 2023: 9:46pm**



Idea **December 11, 2023: 9:53pm**

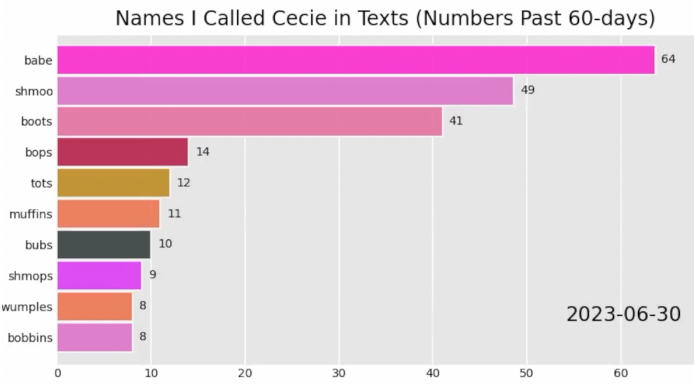
Give someone a loan against their twitter following—it's potentially an object of quantifiable value.

Thought **December 14, 2023: 3:44pm**

I exhibit sleep-hysteresis: when I'm awake, it becomes hard to get me to sleep. When I'm asleep, it becomes hard to get me awake.

Film **December 14, 2023: 11:52pm**

Tomorrow is my anniversary with Cecie–we will have had been dating for 4 years. As a gift, I made her a video showing how often I call her various pet names in text messages. To make the video, I scraped the text-message history from my phone and then made a plotting script with Python. There is a name frame, credits and a soundtrack (William Tell Overture).



Wumples looked so good a second ago.

Scene From My Life **December 14, 2023: 9:39pm**

"Someone is going to steal in and break all my shit—sorry—I meant someone is going to break in and steal all my shit."

Micropoem **December 14, 2023: 9:39pm**

but irony's not what you think it is.

Painting Concept **December 14, 2023: 11:52pm**

Cigarette taped parallel to a D battery with gray duct tape.



Not really what I had in mind, but I like this generation by Dalle-2. It could be an interesting painting.

Or as a Scene Concept: guy takes one out in front of a police officer, who then refers to it as an electric cigarette.

Thought **December 15, 2023: 3:16am**

I'm not sure I've ever lived in a home or apartment without a toaster. It's crazy how prevalent they are, given their size and function.

Poem **December 15, 2023: 3:18am**

Houses for mice... I'll call them... moose.

But behind my niceness hides plans of abuse.

I'll move them in slowly, then pull off a heist.

Where I rob all the mouses' moose houses one night.

Houses for Mice, Matt Abate

Thought **December 15, 2023: 10:04pm**

Over the last 50 years, we have gotten a lot worse at making movies, but a lot better at making movie trailers.

Thought **December 16, 2023: 2:59am**

In your PhD you don't see your work take off for a while, recognition may come in the form of citations over time. In this sense, succeeding means that other people are standing on your shoulders.

Story Concept **December 17, 2023: 5:00am**

Government asks scientist to publish some difference in human DNA that would allow for classifying their country's citizens as a new species.

Scene From My Life **December 20, 2023: 11:41pm**

Ben says he is going to send an angry text to John.
Matt: "Well, remember to use all caps and pointy words."

Idea **December 21, 2023: 2:29am**

A scientific Journal named: "journal of, the"

Thought Exp. **December 21, 2023: 3:31am**

It's common to buy socks in packs, something like buying six pairs at a time. I wonder how socks would be sold if humanity evolved to have only one foot.

Product Concept **December 21, 2023: 5:24pm**

A library card and a debit card, in one.

Quote **December 21, 2023: 11:53pm**

"It must be tough on everyone, knowing they're competing for second place."

from Food Wars

Micropoem **December 22, 2023: 3:46am**

That offerings' sure to offset any losses.

Scene From My Life **December 22, 2023: 1:49pm**

Matt: "I left a box of clothes over there that I have preposterously titled 'use or donate.' "

while moving out of 505 8th Street NE, Atlanta, GA 30308.

Puzzle **December 22, 2023: 5:51pm**

How many calendars would you need to have a full set?

Thought **December 23, 2023: 3:25am**

The man holding the gun knows everything about you—surely he would shoot you right?

Idea **December 23, 2023: 8:41pm**

Use a Language model to "Chat" with a strand of DNA.

Thought **December 23, 2023: 9:42**



What does an Albino Zebra look like? Here's what I found.

Puzzle **December 24, 2023: 7:22pm**



Definition **December 28, 2023: 12:14am**

murderee [mər·dər·i] *n.*

1. The victim of a murderer.

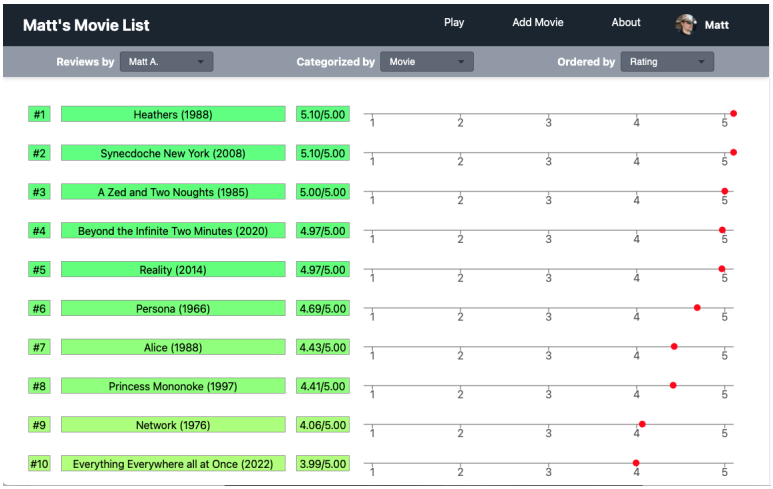
Thought Exp. **December 28, 2023: 6:58pm**

What would it mean to say: *In the past two years the average age at which people get married has gone up by three years*?

Idea **December 28, 2023: 8:46pm**

Figure out a metric for quantifying the craziness of an era. Was the Nixon era crazier than Trump era, for example? I'm not quite sure. Probably the metric would need to be adjusted over time to account for the proliferation of media, information transfer and misinformation.

Project **December 29, 2023**



Finally added user accounts to mattsmovielist.com. The styling and user-flow is going to require significant rework.

Scene From My Life **December 29, 2023: 10:00pm**

Matt gets up to get a water. He pours it in a wine glass, swirls it, sniffs it and then says "Yea really incredible year. The notes on this one are just great."

Micropoem **December 30, 2023: 1:19am**

Please take some cheesecake
˚ · · ˚ ·

in my notes, I have that the above was actually written December 29 11:07pm, but was recorded on the 30th at 1:19am.

Thought **December 30, 2023: 1:20am**

Can you do something nice for me?
Can you change your life for me?
Can you change yourself for me?

Idea **December 30, 2023: 6:26am**

A phone-camera feature that turns off the flash in places where it's not allowed. Because in those places *you* don't want it to go off.

Product Concept **December 30, 2023: 7:35am**

A spoon with a small butt imprinted on the back.



Concept art.

Idea **December 30, 2023: 8:16am**

A document editor where collaborators have their own areas of the document, enforced in some way. This would be super useful for Academic writing where sometimes you want someone to only be able to write in one section.

Thought **December 31, 2023: 12:22pm**

Switch the lyrics to be "And when I touch myse-elf I think about you."

Micropoem **December 31, 2023: 12:22pm**

For every single implication axioms for explanation.

Idea **December 31, 2023: 2:23pm**

The next time you're in Ohio, take a bunch of pictures of Outside. Then, go home and find e.g. the average RGB color, the most used color etc. I bet they are all shades of grey.

Idea **December 31, 2023: 4:27pm**

For Dementia Rehabilitation—use AI to create an artificial social network populated with people from old photos / letters / stories.

Collected Errata

This section documents corrections made to entries after the initial publication. Each erratum includes the date, entry identification, and a description of the correction.

Composition — June 17, 2023: 5:04am
The key of the Gigue was originally printed F minor in the index of entries and entry caption. These have been corrected to F major.
Corrected: December 8, 2025: 10:09pm

Table of Contents
The first three entries of the Table of Contents were were incorrectly indented with respect to the fourth. This has been corrected.
Corrected: December 8, 2025: 10:48pm

Composition — April 4 2023: 4:44am PST, previously April 7, 2023 PST
A recording of the piece was found dated April 4 2023: 4:44am PST, predated the existing label April 7, 2023. The date has been changed to reflect this.
Amended: July 5, 2026: 11:21pm

Collected Addenda

This section documents new entries added after the initial publication. Each addendum includes the date, entry identification, and a description of the addition.

Project — December 9, 2023: 11:53pm
Cecie and Matt 2024 bucket list. Found in Google Drive while gathering material for Vol. 2.
Added: December 10, 2025: 12:14am

Project — November 7, 2023: 3:05pm
Email exchange with Stephen Malinowski. Found on personal computer while gathering material for Vol. 2.
Added: July 6, 2026: 1:12am

Index of Entries

A

Advice
- Bob Ross learning . . . 15
- Do what you want . . . 77
- Don't tell someone you'd like to talk less . . . 36
- Sales email template, Shri Kolanukuduru . . . 27
- Two learnings from school . . . 28

Architecture Concept
- Bathroom of a studio apartment . . . 45

Art Concept
- A clock made from pictures of my body . . . 34
- Chord oscillating from left to right speaker . . . 58
- Circle of life analog clock . . . 59
- Code editor on a cylinder . . . 77

Audio Recording
- "A Muffin, Cecie Is", song . . . 57
- "Alone on Zoom", song . . . 26
- Fugue Subject, C minor . . . 15
- Gigue Theme, E minor . . . 7
- Invention Exposition, G major . . . 16
- Minuet Exposition, E-flat major . . . 39
- Minuet Theme, D major . . . 17
- Riff, A major . . . 81
- Riff, C major . . . 51

B

Business Concept
- Blinds designed by the blind . . . 71
- Food near me . . . 62
- Pay to pee . . . 39

C

Character Concept
- A visionary tailor . . . 62

Chess Game
- Queen trap . . . 77

Composition
- "Matt", EDM song, collaboration with Louis Morgner . . . 37

"What?" is a sentence 96
Beginning with beginning, this sentence ends with end 99
Fughetta Exposition, C major 86
Gigue Subject, F major 56
Invention Subject, A minor 57
Prelude, C major, unfinished, for Louis Morgner 30
Riff, C minor 46
Square on the theme "Abate" 90
Square on the theme "Henry" 90

D

Dear Reader
No autopsy, no institutions, and no medication 50
Definition
Dooping 74
Murderee 104
Drawing
Cecie on the couch 67
Cecie, terrified by Mr. Muffin 65
Edward Smallmin 15
Edward Squirrelmin 65
Dream Log
A dream about sleeping in Cape Cod 39
Driving my car from the roof in Boonton Township 40
Moving snowflakes on my laptop 13

E

Email Exchange
Douglas Hofstadter recommends Lee Sallows 95
Will Shortz recommends TJoW 96
with Stephen Malinowski, composer and animoarot 90
Event
Cecie's Ph.D. graduation 42
Cecie's thesis defense 19
Cecie, Henry, Casey and me in NYC 53
I'm 28 11
Ink and Dagger tattoo checkin 11
Landed in Amsterdam on a trip around Europe 32
Landed in SF for Pioneer Summit 24
Tears for Fears concert with Cecie, Henry and Casey 60
Valentines Day with Cecie 17

F
Figure
"Pixel Percy Yeung" 82
What an egg would look like inside out 81
Film
Cecie Hendy, Ph.D. 20
Cecie Pet Names 100
Film Concept
"This feels like Star Wars..." 61
Flip the styles of trailer and film 16
Fugue in film 22
Make a documentary from candid videos 18
Make a fictitious true crime documentary 18
Man watches the back of his head on TV 10

G
Game Concept
Dots in a grid 16
Hear me out 62
Reverse 20 questions 62

I
I Remember
"Grand Finale" 25
Bell tower at the Central Park Zoo 19
Da Vinci project in Mr. Stanton's class 19
High School award ceremony, myself and Mark 75
Soft boiled eggs, in a mug, with bread 28
Idea
"Chat" with a strand of DNA 103
"God Speed" 68
"Seoul Searching" 62
"Square root dollars" as a scientific unit 58
"What was Hitler's middle name?" 32
"journal of, the" 102
A closed form solution to Mancala 17
A document editor where authors have separate areas 106
A game that writes your thesis 35
A metric for quantifying the craziness of an era 105
A phone-camera feature for turning off flash 106
A tool to appraise actors worth in a film 78

Add an Elo score to my movie list 43
AI agents for organizing your schedule 32
AI for artificial social networks 107
AI for writing solvers and mathematical optimization 26
AI in the background of your phone 32
AI to learn ancient Egyptian, self-supervised 35
An acorn banking system for squirrels 42
Attempt transformations of the Collatz function 29
Average color of Ohio 107
Build a protein skimmer farm 34
Crossword camera tool 9
Describe chess with linear operations 50
Elo style ranking game to find best number 82
Embeddings for web-search 28
Fiber-optic computer 21
Give a loan against a Twitter following 99
Happy Birthday U2 10
John Blum's idea: "The Matt Abate cut" 80
LLM autocorrect 46
LLM tool for grant writing 35
Loan a town to Russia 94
Make drug withdrawals feel good 89
Money that you must spend after receiving 31
Movie ranking applet 26
Name my next company "Matte" 33
OK, Where were we? 7
Old camcorder camera filter 21
Optical illusion with water and oil 56
Photomosaic maker 8
Record a video about my self-enumerating emails 23
Social media for entertainment 61
Statistical sorting algorithm 30
Subtitles for English language videos, when it's muffled . . . 75
The Stanford prison experiment of our time 62
Transformers for completing fugues 31
Volunteering for influencers 49

Interview Question

Do you feel that straws are utensils? 52
Do your eyes "see bigger" in one direction? 60
What would you do with a nuke in the desert? 83
You run into a starving child 91

J

Joke

"Anne Francakes" 33
"Fashion police brutality" 42
"Friends are hard to come by..." 61
"I hope you're having a Friday" 25
"My pittance" 71
Autonomous car dealership 7
Quote of the day 81
So Drogen walks into a bar... 13
The captains log 78

M

Micropoem

"He who picks last wins first" 78
"Loose count" 76
"shcool" 63
A being made of being mine 87
Crude and unusual 65
Excessively messy 92
For every single implication, axioms for explanation 107
I can't believe you ate all the ice cream 24
I lick liking you 11
I wet my sweatpants 34
I wonder whether Walter watched the weather 62
Irony's 100
Please take some cheesecake 106
Previously talked 82
Questions 8
Recreational recreation 96
Teenier pizzas 83
That offering's sure to offset any losses 103
The fastest person 32
The properties of properties 87
Wacon 25
Walks to work, a facetious fascist 60

P

Painting

"Napoleon Crossing the Alps but Instead of Napoleon's Face I Painted my Own" 94

Painting Concept
Electric cigarette 101
Paint something that doesn't exist yet 31
People in line in the desert from above 14
Wet paint 24
Younger people dancing like candles 19
Photo
28^{th} birthday cake 12
Alpha Chi Cape Cod trip 71
Cecie and Matt at the Metropolitan Museum of Art 87
Demo Day at the Mains's lake house, mattsmovielist.com . 79
Matt at the Estates Theatre, Prague 38
Matt with a Banksy, Park City, Utah 9
Mixed monotonicity tattoo 12
Statue of J.S. Bach, Thomaskirche, Leipzig 36
Podcast Concept
Anyone who fills out a form 25
Poem
Betrayed Abel by his brother 94
Houses for mice 102
Never a baby's been prettier 66
Never a legend's been larger than Ben 80
Nothing is better than bed 80
Pineapple biting is vital to happiness 67
Product Concept
A 13-month calendar 7
A Collatz Conjecture themed board game 76
A library card and a debit card, in one. 103
A see through litter box 43
A spoon with a small butt imprinted on the back 106
Project
Authentication for mattsmovielist.com 105
Matt and Cecie's 2024 Bucket List 98
Self-enumerating sentences 55
Puzzle
Equations of consecutive digits, in other bases 89
Form every integer using only the numbers 2, 3, and 7 84
Found online, solve $e^{e^x} = 1$ 83
How many calendars? 103
How many different ways can you play 3 holes of golf? 92
How many total hugs 104
One-hundred numbered seats on a train 38

The same outcome twice? 76
Puzzle Concept
"He only says numbers two times too high" 45
A jigsaw puzzle that makes a maze 29
Prevent checkmate by adding one piece 67

Q

Quote
"Competing for second place" 103
"I acted entirely on my own authority..." 29
"Let me not seem to have lived in vain..." 20
"There is no god, and Dirac is his prophet" 51
"We meet again on our quest for peace" 44

R

Recipe Concept
Piña Can-ada 43
Remember Me Later
"Manifest Destiny" 34
1 kilometer is about 0.6 miles. 35
Buy a cat and name it Lemma 51
Do more completing square math problems 13
I met Renee Fleming at Dartmouth 52
J.S. Bach failed many times 37
Listen to the song "Que Sera, Sera" 14
On the hyperbolic Sine and Cosine functions 47
Supplicia Canum 76
The country Georgia 86
The sum from 1 to n 80
What is a PI^2 controller 35
Why do we use Frequency Modulation (FM)? 44

S

Scene Concept
"Has the fireplace talked to you too?" 23
"I've come to believe that about everyone" 66
"Tell me about grandma" 79
6-second art 8
Blimp disaster 17
Möbius Strip 78

Pricey wallet 65
The Bachelor sequence 22
Throwing out a trashcan 11
Train incidents 72
Unfulfilled soldier 26
You find a really nice bag in the airport 39
Your second beer is free 58
Scene From My Life
"...and having no second sibling..." 79
"...everything I wore to the bar last night..." 35
"...things that are supposed to be doing things..." 63
"A box preposterously titled..." 103
"And it was then decided..." 51
"But Matt, you say... you say, but Matt..." 8
"But, your seat is where your food is" 91
"European" 18
"Hey Asshole" 93
"How are the numbers?... Are they round?" 63
"I was thinking of Thank" 53
"In my prosecution..." 93
"My model allows for the fact that yours is wrong" 60
"No time like the present to relive the previous" 78
"The Beatles wrote this song for me for you" 79
"The backboard is in two pieces" 72
"There was only one puzzle piece this whole time" 72
"This makes it more likely I get another later" 60
"This personal check—should you choose to accept it" 99
"To Two, the number of us" 54
"Turandot for what?" 33
"Well obviously this article was written by a cat" 53
"Yesterday was Tuesday Ben, today is Thursday" 73
"You didn't even try to not give up" 91
"You should stop... Like it though I do." 91
"uhhh a seltzer?" 59
A sign of autism 21
Buying a Powerball ticket 89
Cypress and Ben, a song 45
Cypress appearing and me feeling stuck 53
Getting Retool to work 85
I could love you more 61
Killer booty 31
Multiply my bank balance by a negative number 85

Sarcasm at the expense of Alice in Borderland 37
Sell the cart before the horse 87
Sniffs water, like wine 105
Steal in and break all my shit 100
Taylor and the pirate girl 23
Team on your back 17
The dumpling Cantata 85
Use all caps and pointy words 102
Words like golf that start with C 83
Short Story
The First Man 47
Story Concept
A man wakes up every 9 hours... 24
Government classifies citizens as distinct species 102
The injured seagull 71
Time-machine troubles 84

T
Theory
How to write an action-horror sequels 84
Minor annoyances will proliferate with progress 61
On making a pizza commercial 64
Thought
"He looked up at the stars and remembered" 71
"Meow" and "more" 80
"Orthogonal" is a great punchline word 72
"Placing you atop your shoulders" 53
"Some people like to write books..." 60
"Was" is "saw" backwards 26
80s sci-fi predicted the prevalence of synthwave 70
A company is defined by its product, rant 27
A species of blacksmiths 25
A tactic I don't like 36
Academia seems pretty Kafkaesque 43
All the hair I've lost 54
All websites should allow you to send money 74
Apple seeds know more than us 29
Are jokes funnier out loud? 18
Baby is written "b-a-b-y" but pronounced "bay-b" 76
Backwards-time Poisson process 11
Beautiful formula for remaining left 66

Can brain-lobes live independently? 10
Can you change yourself for me? 106
Can you go to jail for lying about Vegan food? 31
Can't outsmart a thing 34
ChatGPT will increase the rate of written slang 46
Controls approach to friendship 35
Creating consciousness 16
Don't over-complicate Yahtzee 44
Dynamic book-keeping algorithms for gamblers 97
Earth is an island in a three dimensional sea 9
English-language and Gödel's incompleteness theorem 46
Equating bread and football 92
Estimating the number of Controls papers 22
Euler's number is cooler than pi 70
Every 7 years, you have lived 1 year of Monday 85
Every actor will play 2 characters... 58
Feng Shui of toilet placement 34
First cell in the universe 23
First cell in the universe II 23
Friends with a parent with a twin 96
Go after people who would switch 56
God probably doesn't test people 33
Green's Theorem and Voronoi partitions 58
Gregory House is who I wish I am 80
Having a Wikipedia page would be really cool 68
High school was my middle school 8
How many different varieties of Peeps are there? 33
Hurting in 4-dimensions 17
I check my phone just before my scheduled alarm, why? . . . 58
I don't like fighting 18
I exhibit sleep-hysteresis 99
I guess I was wrong about Twitter? 44
I'm lucky to be me 52
I've always had a toaster 101
If I were cloned 61
If we didn't have middle fingers 21
Lady Gaga seems to know Bach 50
Learning about drugs in public school health class 19
Math problems in Yahtzee 41
My shoes look like Marty McFly's 29
Never round down the amount of time you've worked 34
Notes on AI agents 69

On alphabetically ordered sequences 7
On award categories 50
On jailing 16
Optimal strategy for 20 questions 21
Owning a cat 50
Panic attack about not having Cecie 56
PB&J Sandwich with one piece of bread 42
People shouldn't pay their employer 22
Protons and quarks 54
Rewrite "I Touch Myself" by Divinyls 107
Side-characters in anime 36
Some numbers divisible by 18 91
Some thoughts on jailing 42
Succeeding means others stand on your shoulders 102
Symmetries for a four dimensional animal 21
Taking a sufficiently broad definition to the term God 64
The love of my life has a 3-1-2-3-1 emphasis 14
The man holding the gun knows everything about you . . . 103
The morning of my birthday eve 11
The phrase "I've seen it all" 21
The sum of the first x odd numbers is x^2 93
The Tower of Babel 73
The word "best" 39
Thoughts on 12, and the sequence 1, 2, 3 75
Time gravity 56
Time implies relative motion and vice versa 25
Triangulating GPS positions backwards around the earth . 32
Two weeks of notes, lost 24
We are skeletons dancing in a graveyard 7
We'll be thought of as "The people who drove cars" 17
Well- and Ill-defined, and Well and Ill 96
What does an Albino Zebra look like? 104
What happens on the borders of time zones 85
What's the last thing I want to do while 27? 11
What's the neuroscience behind itchiness? 18
Worse movies, better trailers 102
You shouldn't have to rehearse the truth 88
Youngest person to ever die of old age? 10
Zero is like the opposite of a prime number 99
Thought Experiment
A quantity increases two years in one 104
Can you reverse time for just one object 89

Do shapes have a notion of primeness? 54
How do humans interact with probability 56
How would we buy socks if 103
Say you fire a projectile in the opposite direction 64
Screen-time in a movie about twins 59
Steering a conversation via control systems 14
Visualizing a point 24
What percent of people like Barbeque chips? 33
Would all beings in any universe discover integers? 57

V

Video

Playing through every level of Slant 63
Redwine Slammer GIF 70
You should like 14,751 88

Y

YouTube Video

"Introducing BeamerGen" 52
Matt performs Minuet III from BWV 822 68