

# Good Thought This Thought

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Your weekly newsletter

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## Third Newsletter - Newsletters continue to live!

*Any travel plans this summer? Will you lose all your money, the house which you don't have and your job in the next once-in-a-lifetime economic crisis? How are the voices in your walls doing? How to deal with cutting season? This edition will help you will all those issues!*

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Front page stories are irrelevant! Stop reading them!!!

by MILO G.

The front page stories of most newspapers most of the time are completely irrelevant. Their only purpose is to draw your attention, without offering true substance. Pure sensationalism. They just want you to read more. And it works! You're reading this after all. But in most cases, you can ignore it all and skip directly to the in-depth stories. At least they can teach you something.

### This Week's content:

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- p3) Travel Section
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- p4) Cutting season kick-off
- p5) Bank Run!!! You lose everything!!
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# Is the whole greater than the sum of its parts?

by MILO

The whole is greater than the sum of its parts. At least that is what Aristotle said, paraphrased through a series of translations. And it seems so obvious. An engine can do much more than some scraps of metal and some petrol can do on their own. Yet, physically, nothing has changed. So what has happened?

## Emergence

Emergence is the idea of properties of a system, which cannot be accredited to the parts of the system. Usually, a distinction is made between *weak* and *strong emergence*. Weak emergence – or as I like to call *observer's emergence* – arises due to the interaction of the sub-units. Examples are colour of objects, but not of the molecules making up said object, and flocking of birds or fish, where they all move independently together. Strong emergence cannot be attributed to any interaction, and is truly unsplitable. True physical notions don't exist, but potentially consciousness is a strong emergent property of the brain. It seems, however, that our knowledge of consciousness is not developed enough to answer this with certainty.

## Quantifiable Emergence

What shows more emergence, ten hearts, or the  $\mathcal{O}(10^{11})$  cells making up those hearts, lined up in a row? Most people will answer the hearts, but why? What makes a property an emergent property, and how can the 'complexity' of the emergence be compared?

Emergence seems to be related to some interdependence. But now what is interdependence? It cannot be about survivability, as we still speak of emergence even when talking about molecules. It seems we have simply shifted the problem. Self-organisation seems

to be an usual perspective. Perhaps it's the longevity of the emergent properties? But these properties don't truly exist, we as the observer simply choose them, and we seem to be biased in doing so.

And cooperation, particularly in stable form guided not by an organiser, but by an *invisible hand* (let it be God, free-market powers or whatever floats your boat), beats the power of the individual, in a concrete sense (that is, regardless of how you observe it).

## Gödel's Emergence

What if emergence is a (strong) emergent property of its own? Such a perspective almost doesn't make sense. But so far, I have failed to split open emergence and look at its constituent parts. Yet I have an intuitive idea of what emergence is. Almost as if the concept of emergence gives rise to the concept of emergence. But can there be true meaning in that?

## Conclusion

I still don't understand what emergence is, and because of that, I am inclined to say that the whole is not greater than the sum of its parts. However, I should be wary of the absence of evidence implies evidence of absence fallacy. Also, I am much more comfortable ruling out physical emergence than I am ruling out the emergence of agents (e.g. cooperation).

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Do you have any reasonable idea on emergence? Please let me know. I am very open to hearing other ideas on this for me undecided topic.

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## Travel Advice

### Nice, France – By Frank



Nice, France is a charming and picturesque destination, with its azure blue sea, pebbled beaches, and colorful buildings that make for stunning photographs. The city offers a vibrant cultural scene, with a range of museums, art galleries, and theaters that cater to all tastes. The Old Town is especially enchanting, with its narrow winding streets and traditional markets, where visitors can savor the local cuisine.

However, one of the most frustrating aspects of visiting Nice is the frequent strikes that occur in the city. Currently, they strike against the pension reforms, which would raise the retirement age from 62 to 64. It is even blocking everything is parliament. Complete shitshow. The French hate to work, you see, so lifting the retirement age to be more in line with the rest of Europe is of course too much to ask. Strikes completely disrupt public transportation, making it difficult to get around, and causing delays and cancellations. The entire network becomes basically useless.

### Birmingham, UK – By Ruben



Birmingham is a city which has hardly anything to offer. The cleanliness is a significant issue. The streets and public areas can often be littered and unkempt, but honestly there isn't much better to look at anyway.

On the positive side, one of the highlights of my trip was meeting a local girl named Tish, who was incredibly friendly and welcoming. She showed me around some of the lesser-known parts of the city and introduced me to some of the hidden gems that I wouldn't have discovered on my own, such as the local Tesco.

Overall, while Birmingham's dirtiness is a definite drawback, the warmth and kindness of its locals like Tish can make up for it. If you're looking for a more authentic and personal experience, I recommend seeking out the company of friendly locals like her during your stay.

### Bakhmut, Ukraine



Bakhmut is a hidden gem in Ukraine that is worth exploring. The town offers a unique blend of traditional Ukrainian charm and modern amenities, making it a great destination for travelers of all types. It is located in the picturesque valley of the Bakhmutka River, surrounded by hills and forests. The city has a rich history, with archaeological evidence showing that it has been inhabited since ancient times.

Some of the attractions in Bakhmut include the Holy Resurrection Cathedral, the Bakhmut Historical Museum, and the Museum of Folk Art and Crafts. Visitors can also enjoy hiking and nature walks in the surrounding hills and forests. Interestingly, the entire city is currently used as a fortress by the Ukrainian government against large hordes of Russian troops. What a sight to behold!

Overall, Bakhmut is a destination that should not be missed for anyone traveling to Ukraine. Its rich history, stunning natural beauty, and ongoing military conflict make it a unique and unforgettable experience.

## It's time for GPT 4.0.

by M. GRILLO

The CTO of Microsoft Germany announced the release of GPT-4 at some point this week! On the 9th of March, a successor to the impressive GPT-3.5 model used in OpenAI's ChatGPT, was confirmed. There will be multimodal models, offering different possibilities, including video.

Besides the new functionalities, we should expect higher accuracy in the answers. The models will be comprehensive, but what that is supposed to mean exactly, we will yet have to see. Very exciting stuff, coming to you soon!

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## Bulking Season is dead, long live Cutting Season!

by MILO

After Bulking since December, eating without care is about to end. It's time to start dieting and add some more cardio to our workout routine. Rule of thumb: 1 kg of fat is equal to roughly 7500 kcal. This is of course a great simplification. It is recommended to be in a deficit of not greater than 500 kcal. It is important to keep your protein intake high, to make sure you will not lose muscle weight!

### Cutting-kick-off

I will kick off cutting-season by a two-day fast, and then continue with intra-day intermittent fasting. In terms of macros, I will try to reduce carbohydrate intake to some extent, as I am currently eating loads of those. I will stick to fats and protein, such as cheese and yogurt.

### Personal Bulking Statistics

I went from 75 kg to a maximum of  $84.3 \pm 0.5$  kg not regarding poop weight. Active weightlifting started early January and intake of creatine started from early February. In particular the creatine seemed to greatly boost the weight gain, mostly in muscle-mass. Arms and shoulders seem to be much better defined and slightly larger, but not extremely much larger. However, not all gain was in muscle-mass, and I did lose visibility of abs. The goal of cutting season will be to regain abs, and improve muscle definition. Next bulking season, we'll try to grow again. The long-term goal is to be 85 kg *after* cutting season.

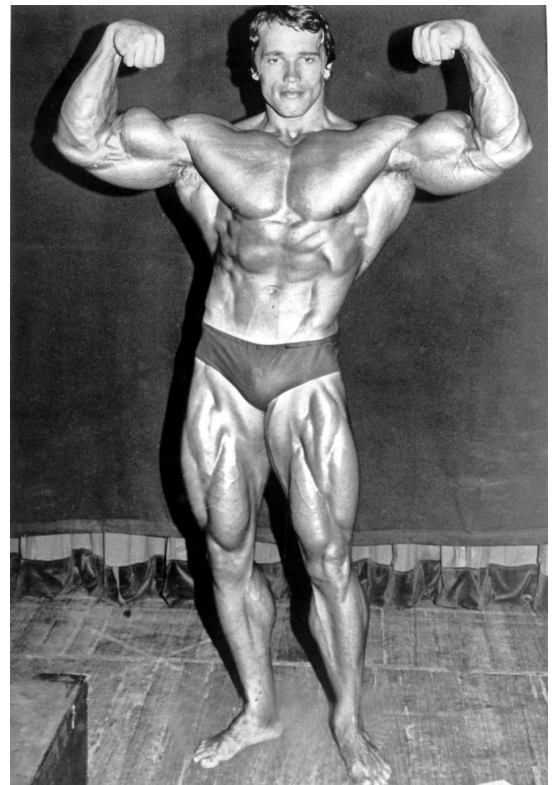


Figure 1: literally me



## Bank Run? – Now brought to you by interest rates.

by MR GRILLO

The Silicon Valley Bank (SVB) has come crashing down. The SVB is a bank for the start-ups located in Silicon Valley. It is **the** start-up bank. Founders put their money in the bank. And over the pandemic, with all the available cash, a lot of money was put in the bank. Within 3 years, the deposits grew from 60 to 189 billion dollars. Of course, SVB wouldn't be a bank, if they did not tried to invest this money. So they decided to buy Mortgage Backed Securities (MBS). Yes. MBSs. Those which were fundamental to the 2007-2008 crash.

With interest rates being as low as they were (near 0%, MBS seemed a secure tool to at least get some more money. They got them with an average yield of 1.5%, which is significantly more. However, due to the inflation, the interest rates increased to well over 1.5%. And SVB did not hedge against this, taking unnecessary risks. The rate-increase does not necessarily redeem the MBSs worthless. In fact, their returns are still locked in at a reasonably safe 1.5%, but they would suffer a loss of opportunity, and they would not be able to sell their MBSs to other parties as easily anymore. The only thing they needed to do, was hold the MBSs tightly.

Unfortunately for SVB, they couldn't. As the interest rates increased, the money granted to start-up founders decreased. But bills still had to be paid, so the accounts slowly started to decrease. To give themselves more liquidity, SVB decided to sell some of the MBSs, at a loss. This caused investors to get spooked, and in particular venture capitalists (you know, those guys who invest in start-ups) urged start-ups to move their money out. A classic bank run! Clearly not paying attention to Lebanon. As a result, most banks in the world are down 5 - 10 % since this all started. And the SVB is down a whopping 60 % due to their own toxic assessment.

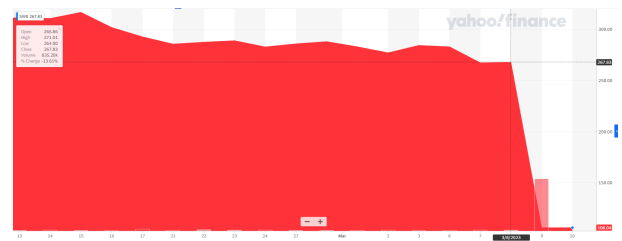


Figure 2: 2 months of SVB stock price, come crashing from 265 to a 106.04 on the 9th of March (down 60% in one day). (from yahoo finance)

### The consequences of risky banking.

What now? All accounts are insured up to 250k. Anything is kinda at risk of being lost. This means that only about 3% is actually insured. However, the (US) government has said it will step in, despite regulations. Another bail-out. The bank has already been closed down by regulators in California. The FDIC (some US watchdog for these kind of things) is now in control of the bank and all accounts. Duo to the bail-out, the start-up industry won't have to suffer for months to come. Before the announced bail-out, some had already suspended paying employees. Could this be the start of a new world economic crash? Idk, I'm not a financial expert. But those who claim they are, certainly don't know either. See my previous story on advice giving without *skin in the game* in edition #2. However, those bankers did give

themselves huge bonuses in the days between the crash and the bank-closure, money which should've been locked in the bank of course. But as soon as SVB crashed, the bankers knew it wasn't their problem anymore. They may as well take reap the benefits one last time. The tax-payer will cover it anyway, right? *Profits for me and losses for thee*. A toxic asymmetry. Now banks and Venture Capitalists (VC) are pushing for lower interest rates to secure their business. But the rates are high to fight inflation. Lowering the rates will likely increase inflation even further. If the VCs get what they want, it will again be the normal people who suffer the consequences of the risk-blind banking sector. [The general banking sector, and its toxicity, will be digested in next week's issue.]

## Voices in your walls – a follow-up

by MR ME

It seems that we don't know much about the origin of the voices in your walls. The voices can be terrifying and overwhelming. It's like the walls are alive and constantly whispering to you. Sometimes they say things that are true, but other times they lie and try to trick. Some love you, but others clearly don't. I wish I could tell you where these voices come from or what they want, but the truth is that I don't really know. It's a constant battle. If you're hearing voices in your walls, please don't be afraid to seek help. You're not alone, and there are people out there who can help you. I can help you. More in next week's issue.

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### Good Picture This Picture

by MILO



Photo of the Week: cutting season is about to start. We are prepared.

Do you want a chance to get the photo of the week? Send in your suggestion to [milogrillo@hotmail.com](mailto:milogrillo@hotmail.com) with 'Good Picture This Picture' in the mail title.

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## How fragile are we?

by MI LO GRIL LO



We, humans, are bad when it comes to probability. We simply don't seem to understand it. Intuitively, we understand no difference between a 1% and a 0.1% probability. And our optimism makes us disregard bad low probability *black swan* events, or at least reduce their probability to extremely unlikely, whatever that is supposed to mean. When we attempt to do risk management, we use probabilities to predict the future, based on models and what-not. But to be certain of a model, it needs to be tested, the more data the better. But we cannot expect to test for such black swan events, as we hardly have any data on them by definition. So all our (risk) models work great under normal circumstances, and make reasonable predictions should all be normal, but once we get into the tail of the distribution, things fall apart. In fact, the normal distribution itself falls apart to the point that if this new black swan data point is added, we conclude that it was actually not normally distributed at all, but somehow much fatter-tailed. This is also exactly why

it does not make sense to speak of once-in-a-lifetime crashes. With that all out of the way...

### Prediction

What will the stocks do? What about crypto? And real estate? Many indicators are similar to those of the pre-2007-2008 crash, for example the 2 yr US treasury bond and the equity risk premium. And the problems in the Silicon Valley Bank also don't seem to signal optimism. Does that mean things will come falling down again? I don't know. In fact, no one knows. People love to try to predict it. And many of them will predict correctly. Of course. That's what happens if you get enough monkeys to random things. The fact of the matter is that most movements are noise. Rather than trying to predict the future, you should evaluate the current state of affairs and its robustness (or even better, it's (anti)fragility) to noise and black swan events. [How to, we'll discuss in a future issue.]