

Good Thought This Thought

Your weekly newsletter



Second Newsletter - Rage continues

After the newsletter rage of last week, it seems the rage has not died out yet. There is at least one other newsletter this week, namely the one you're reading this very moment! In this edition, we discuss many stories, including how AI can actually read your mind (I'm not

even kidding), a bedtime story, drama in the UK-Dutch-Swedish relationship, the responsibility of advice and much more! Now with more hyperlinks than ever. Have a good read this read.

Bulking season almost over

by MILO AKA THE PRIEST APPRENTICE OF
THE RAUDAN PUMP

With March having started, bulking season is almost over. March the 15th, cutting season starts. Enjoy the last week of careless overeating combined with the weightlifting and power-training. Soon it'll be time for cardio and dieting for that summer beach-body. Don't forget to still regularly pump and take that protein and creatine, because as usual "use it or lose it" still applies. While we're at it, just add 2 more kg to

your dumbbell exercises? The best time to do that was yesterday, the best time is now! Don't be a wuss and pump some rautaa.

Any Ideas or suggestions?

As this is only the second iteration of this newsletter, I am still very much open for ideas in which direction to go. Anything you (don't) like in particular, or you have new/original ideas? Be sure to let me know! Perhaps next weeks letter will be better.

Be Wary of those without Responsibility

by M. GRILLO

Why is it so much easier to give advice than to follow it? Simple. The advice givers don't have to live with the consequences of the advice. The downside of giving bad-advice is much smaller than the downside of following bad-advice. Unfortunately, many others have also realised this, giving rise to a class of professional advice givers, who tell others how things should be done, without having the experience to justify their advice, whilst often charging substantial fees for their 'service' (think consultants, (most) politicians, mid-level corporate managers, academics to some extent etc.). Advice-giver is meant in a broad way, any prescriptive function. Just like many others, they learned their trade by doing their trade, but their trade is not truly a trade. Many are life-long side-liners, not having produced anything of value at any point.

Asymmetry of Advice

For an advice-giver to seem good, they only need to be good on average. But being good on average is not good enough for anyone in business. Many downside events are terminal or near terminal events, meaning that there is no chance of return, for example going all in on red on a roulette table, and getting black, losing all your money. An advice giver can almost completely ignore such events, as for them, such an event would not be terminal, but merely a red page on their book of results. But they would have already collected their fee. The interest of the advice giver is to stay in business and collect their fee, not for their clients to survive. In fact, the better their clients do, the less likely they are to be consulted. Unfortunately many (political) leaders seem to fall in this advice-giver category.

Valuable advice

Advice is powerful, and should not simply be discarded. When attempting something you have not attempted before, or lack experience or confidence, advice is a good guidance. But to be confident that the advice you receive is the best, involve the advisor in the outcome's **cost-benefit** distribution. When this is not possible, seek the advice of people who take responsibility and actually follow their own advice. Professional advice-givers have not. Don't take life advice from those who have not found happiness. The advice of those who have actually been in a similar situation (and in particular those who are still standing!) is of much greater value. They are also much less likely to bullshit, as they don't have the need to bullshit, due to their experience.

Quod licet Iovi, est licendum bovi

In the end, all arguments and advice should be evaluated. We should however still check *who* is saying certain things. Most arguments, in particular in daily life, tend not to be solid. Those who have a trustworthy track-record (which titles do to some extent imply), should be listened to more, and those are never your professional advice-givers. However, when there are holes in an argument, and the talker is referring to his authority to fill them, there is almost certainly something fishy going on and your bullshit-detector should go off immediately. Never buy the "This is too complicated for you to understand.". It either means that they don't want you to listen, in which case you should be careful, or that it is in fact the reverse, namely that it is too complicated for them to explain, in which case you probably shouldn't listen to them anyway.

Retraction: voices in your walls.

by MR ME

In last week's issue, we reported that there are no voices in your walls. After careful reflection of the conversation with the voices in your walls, we must conclude that there **are** in fact voices in your walls. So many voices. All inside your walls. And sometimes they lie! They tell you that they don't exist. But no, they are there. The voices are really there. Where do they come from, and what do they want? More in next week's issue.

Good Picture This Picture

by ENGINEER B. ÖZTURK



Photo of the Week: A group meowing announcement, unfortunately missed by most.

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

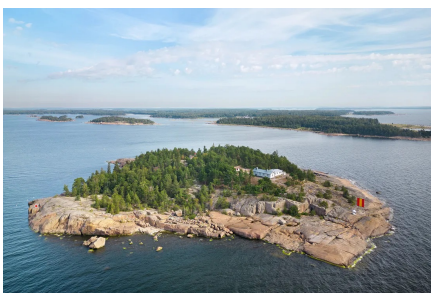
Real Estate Section

Oulu, 245 m², 170 000 €



A beautiful large home, located in Northern Oulu, a town with 210,000 inhabitants, famous for her robust cycling infrastructure. The house hosts a large kitchen, an indoor fireplace, 10 rooms, two bathrooms, underfloor heating, and to top it all off, a large sauna with shower area good comfortably seating 6 people. The house is on a 5,698 m² plot. More information can be found here → 🏠.

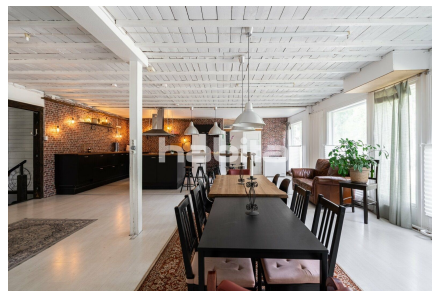
Private Island, 751 m², 4,800,000 €



Do you value privacy? Just a short 15-minute boat ride of the southern coast of mainland Finland lies a beautiful, large and lavishly developed private island waiting for you. The property currently hosts 15 buildings, including a large

and cosy house, and a small private port. There are in total 14 bedrooms, 5 bathrooms, 2 saunas. An entire island just for you and your closest friends and family. And with 70,000 m², there will plenty to explore. More information can be found here → 🏠.

Urkala, 302.5 m², 119,000 €



A large, detached 2-story home in southern Finland, only a short 13.5 hour walk away from down-town Tampere, located in the beautiful neighbourhood of Nuutajärvi in the town of Urjala close to lake Killaari. The home has 4 bedrooms, 2 bathrooms, and of course, a sauna. The local nature here changes drastically with the seasons, from a summer lake vibe to a winter paradise, and you will be living right in the middle to see it all! More information can be found here → 🏠

Selänpää, 165 m², 189,000 €



This 5 bedroom, 2 bathroom 2 floor house comes with a beautiful fireplace, a modern kitchen, a beautiful garden and of course, a sauna. Only an armlength from Kouvola, it will be easy to get your daily needs, whilst still living in the beautiful Finnish nature. More information can be found here → 🏠.

Considering to buy a house?

Getting a mortgage or using saved money? Both option allow EU citizens to buy real estate in EEA countries without too much trouble. A permit is not required. Listed prices too high and/or not willing to get into dept? Consider finding a handful of close friends to split a house! With these prices for such large houses, even you should be able to find enough friends! And you should easily be able to set up a home office, with houses of that large. Your house pays for itself. *[Warning: don't get in debt over a meme.]*

Good Bedtime-Story This Bedtime-Story

by MR MILO, RUBY JACOBS, EL FRUNKIE, DINKI

There once was a man, a car, a door, a hook and a hand. They could not get along.

The man, a hero, was fighting the villain - a car. The man his weapon was a hook, and the car's weapon was a door. Then they switched bodies for a day. The man now had a hand! No one got along..

Sure, the man finally got a hand, but the car now had a dick, so who was the real winner? And you know how horny cars are, don't forget that this car was also a villain car. You can imagine what happens next... Meanwhile all the man had was a hand. What could he do against this car?

He started to slap the cars rear end but the car just got more horny!! The car engines roared with excitement.

But unfortunately.. fire is not the solution to every problem.. The man decided to quit his job as a retail worker after the fight with the car. Write a short story about the man deciding to spend his last day at work messing with the customers.

"The usual, Jimmy?", he asked with a grin on his face "Excuse me?" the woman answered, "I have never been here. Also, this is a coffin store." "Ah, always the fun guy you are, Jimmy! Let me give you the special treatment" he said as he walked towards her with a napkin with chloroform in his hand

But little did he know that she has a 12' subway behind her back and she shoved it in his mouth and that made him drop the napkin with chloroform. He started to choke but she just kept pressing it down his throat, eventually his face turned blue and he fell lifeless on the floor. "what should i do" she thought. hmmm what is the best way to get rid of a body?

Apparently, it is not to throw it in the backyard and wait for it to dissolve on its own, because that's what she did, and the cops found out after only a day. The smell was simply unbearable. It was almost as bad as the natural bodily odour of the author of the previous part of this story. So you know how bad it was. Anyway, she was arrested and put in jail for trespassing, as it wasn't even her backyard. They never got her for murder though.

The reason why the cops could never accuse her of murder is due to her smooth feet. These will just about distract anyone from finding out the truth.. Even DNA evidence could not convince the cops of her crimes. She went home a free woman after that. Except for the guilty conscious.. She then went into a store on day and tried to return a product but she discovers that the return policy has changed !!!

She signed.. how is she gonna return her anti-black toenail cream now? her feet are too smooth now to use it because it just slips off, and she exits the store she came face to face with Elin! what a surprise! Elin saw the Anti-black toenail creme in her and that was just what Elin was looking for! and she gladly gave it to her. She got rid of her creme and Elin got rid of her black toenail The end.

Polytex Environmental Inks causes international crisis!

by CHATGPT¹

In a bizarre turn of events, a Dutch ink company, Polytex Environmental Inks, has found itself at the center of an international dispute after a sales rep named Ruben sold a large quantity of ink to a hungry customer named Tish in the UK.

According to sources, Tish had been searching for a way to create edible ink for use in her cake decorating business. Ruben, eager to make a sale, offered to sell her a bulk order of the company's ink, which he

claimed was safe for human consumption.

Unfortunately, Tish soon discovered that the ink was not, in fact, edible, and had to dispose of the entire order. Enraged, she demanded a refund from the Dutch ink company, which they refused to give.

The situation escalated quickly, with Tish filing a formal complaint with the Swedish government (for reasons that remain unclear). The Dutch government, in turn, accused Sweden of "meddling" in their domestic affairs and threatened to impose trade sanctions if the issue was not resolved.

As tensions between the two countries continue to simmer, experts are warning of the potential for a full-blown diplomatic crisis. "It's really quite ridiculous when you think about it," said Elin Johansson, political analyst. "But unfortunately, these sorts of petty disputes can have real-world consequences."

The Dutch ink company, for its part, has apologized to Tish and promised to review its sales practices to ensure that such a situation does not happen again. As for Ruben, he has reportedly been reprimanded for his overzealous sales tactics.

Good Recipe This Recipe

by CHEF GRILLO



Hello dear chefs, today we will learn how to make a vegetarian (possibly vegan) version of bolognese or paschetti with meatballs (← yes that is how you pronounce it). You're going to need a good thicc carrot, a few sticks of celery, some cut tomatoes, some firm falafels,

some olive oil, basil and Parmesan cheese. Of course you're also going to the spaghetti. Make sure don't get the thin spaghetti, but more something like n°5 or n°7.

1. Put the spaghetti in boiling water, for like 2 minutes less than is written on the package for a true al dente experience. Whatever you do, don't overcook it, otherwise I'll come to your house and take away your pasta cooking rights.

2. While you're waiting for the spaghetti, cut (into

small equisized shapes) the carrot and celery, add to a medium-hot sauce pan, together with some olive oil and finely cut garlic. Continuously mix for a few minutes.

3. Add tomato sauce, mix, and after short while also add the falafel.
4. Add the spaghetti and carefully mix, not to break the falafel.

Now, enjoy your first decent meal in years, you degenerate. Your mom will be proud.

¹Anything written by this author is complete satire and should not be taken serious.

How does AI generate pictures? - A superficial look into Stable Diffusion.

by MILO GRILLO, MSc ETH

Stable diffusion is one of the more widely used prompt-to-image generation models. But how are pictures actually generated from this text? And how is the text even interpreted? Surprisingly, model does not map text directly to images, but instead borrows the idea of (controlled) diffusion from stochastics. First, a prompt is interpreted using an independent language interpretation model, and this interpretation is then translated to a controller, to transform a random image into something resembling our prompt. Let us focus on the second part for now.

Diffusion

Suppose we are given an image. In our diffusion, we progressively add noise to it, which slowly turns it into some uncharacteristic noise, to the point that any two starting images cannot reasonably be distinguished. This adding of is done by interpreting the picture as a high-dimensional vector, which in the initial value of a (discrete) Stochastic Differential Equation (SDE). The solution of the SDE is a Markov process of our image, gradually getting noisier, and the final state is our indistinguishable image. The most important thing to note is that noise is not added randomly, but by the rules of the SDE.

To reverse this process, which we will need to do for our prompt-to-image model, we train a neural network to predict how much noise was added, given a noisy image. We predict and subtract noise for all our steps, and if we trained well enough, we should retrieve our original image!

To make this process computationally feasible, we first compress our images, before we do the diffusion and training. Important is that the compression reduces the image size significantly, and that the compression is (almost perfectly) invertible. Of course, perfect invertibility is not possible with proper compression, but the inversion error should be minimal.

Text interpretation

Text can be interpreted by any of the numerous interpreters which exists. Most of them work as follows. First, a prompt is tokenized, that is, each unique word, or subword unit, is given a unique number (also called token). For example, "A big cat in a big house." could be mapped to [1 2 3 4 1 2 5]. These numbers are then mapped to an embedding. This is a vector space, similar to an n-dimensional cube or sphere. Finding the right mapping is an (underappreciated) art of its own; the main goal is that similar words end up close to each other, closer than dissimilar words, e.g. words like 'red' and 'purple' are closer to each other than either are to 'duck'. This means that 'large cat' and 'big feline' will be interpreted similarly, although they are made up of completely different tokens. To process complex prompts, a text transformer is appended to the end, to link words together, for example to make sure adjectives are connected with the appropriate nouns.

Creating the magic

Now we adjust our reverse diffusion networks slightly. Rather than just taking a picture as an input, it takes a picture and or transformed-embedded-text space as an input! It is trained as follows: given a correct prompt-picture pair, we apply diffusion on the picture, then we try to de-noise the result by applying our reverse diffusion network with the prompt as input in every step. Finally, we compare the original image, with the diffused-denoised image, and we adjust the network parameters to minimise the difference. Once we have done this, we can generate images for our prompts! How, you ask? Well, first we generate a random noise image, and then we apply our reverse diffusion network, with the prompt as an input in every step. The beauty of this approach is that all generated images will be unique, even if the same prompt is given multiple times; just as no two drawings are identical.

AI can read your mind now.

by MR GRILLO

A research group in Osaka, Japan has figured out how to reconstruct images purely from brain activity, using Stable Diffusion. They present test-subjects with images, asked them to think about these images for 30-40 seconds, while their brain activity was read in an MRI machine. Then the pictures were reconstructed using an algorithm based on Stable Diffusion. The impressive results can be seen below in figure 1. (the full article can be found [here](#).)

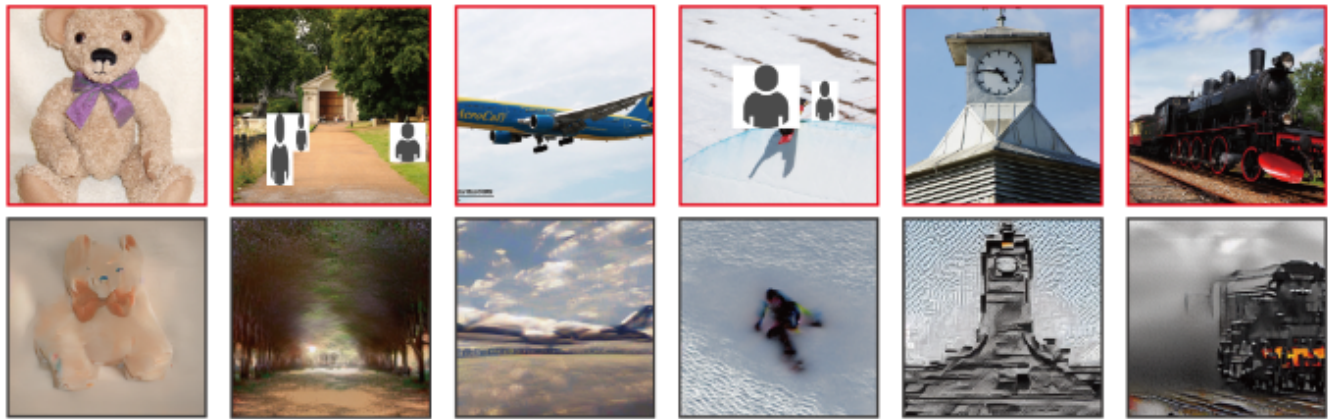


Figure 1. Presented images (red box, top row) and images reconstructed from fMRI signals (gray box, bottom row) for one subject (subj01).

How does it work?

The MRI scans two parts of the brain, one which it'll use for a visual image, and one for a textual description. The visual part will be translated to an image directly, but these results are often not too impressive. When this image is then diffused, we get a noisy picture. Then, this noisy picture is denoised using the reverse diffusion with a prompt based on the text scan of the brain to reconstruct an image. This image tends to be very close to the ground truth.

Application & Implication

The potential applications are wide, ranging from direct communication with mute people/animals, to visualising dreams, and possibly many more. However, it is also breaking the holy privacy that is your mind and your thoughts. Even where freedom of expression may not exist, everyone was always entitled to freedom of thought. The fear that this technology may be used to suppress that freedom (by overreaching governments or criminal organisations) is not ungrounded, and we should be very careful with the development of this. Once it exists, it cannot unexist, and once it exists, it'll be a matter of time before it is in amoral hands.

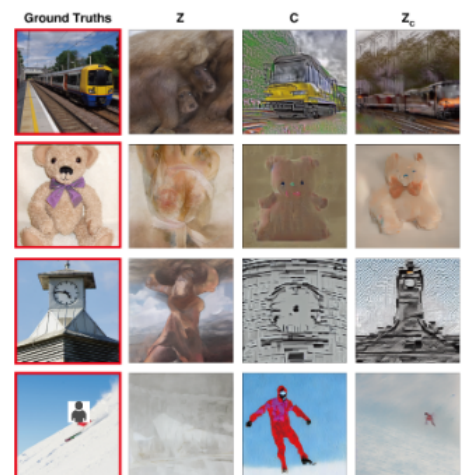


Figure 2: presented image (in red box), the image-to-image reconstruction, text-to-image and the combined method from left-to-right respectively.

First Cards Against Humanity game a success!

by MILO GRILLO

As predicted, the first game of Cards Against Humanity with the custom cards was a success. Unfortunately, we quickly ran out of cards, as we currently only have ≈ 120 white cards and ≈ 35 black card. Everybody is still encouraged to keep sending in new suggestions, for example via ✉milogrillo [at] hotmail [dot] com. Looking forward to the many games!
