

AI: THE PERSONAL THREAT

The AI Bogeyman is coming: Are you ready

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THE DAMODARAN BOT

- I was in the eleventh week of teaching my 2024 spring semester classes at Stern, when my good friend, Vasant Dhar, who teaches a range of classes from machine learning to data science at Stern, and has forgotten more about AI than I will ever know, called me.
- He mentioned that he **had developed a Damodaran Bot**, and explained that it was an AI creation, which had read every blog post that I had ever written and every valuation that I had made public.
- He also went on to tell me that he was **ready to take the Bot on a trial run**, and when I asked him what he meant, he said that he would like the Bot to value companies and see how those valuations measured up against valuations done by the best students in my class.

GAUGING THE THREAT!

- In the months since I was made aware of the Damodaran Bot, I have thought in general terms about what AI will be able to do as well or better than I can, and the areas where it might have trouble.
- Ultimately, AI is the culmination of two forces that have become more powerful over the last few decades.
 - The first is **increasing (and cheaper) computing power**, often coming into smaller and smaller packages; our phones are now computationally more powerful than the very first personal computers.
 - The second is the **cumulation of data**, both quantitative and qualitative, especially with social media accelerating personal data sharing.
- As an AI novice, it is entirely possible that I am not gauging the threat correctly, but there are four dimensions on which I see the AI playing out (well or badly).

1. MECHANICAL VERSUS INTUITIVE/ADAPTABLE

- Well before ChatGPT broke into the public consciousness, IBM's Deep Blue was making a splash playing chess, and beating some of the world's greatest chess players.
 - **Deep Blue's strength at chess** came from the fact that it had access, in its memory, to every chess game ever played (data) and the computing power to evaluate 200 million chess positions per second, putting even the most brilliant human chess player to shame.
- In contrast, AI has struggled more with automated driving, not because driving is mechanically complicated, but because there are **human drivers on the surface roads, behaving in unpredictable ways.**
- While AI is making progress on making intuitive leaps, and being adaptable, it will always struggle more on those tasks than on the purely mechanical ones.

2. RULES-BASED VERSUS PRINCIPLES-BASED

- Expanding the mechanical/intuitive divide, AI will be **better positioned to work smoothly in rules-based disciplines** and will be at a disadvantage in principle-positioned disciplines.
 - Using valuation to illustrate my point, **accounting and legal valuations are mostly rule-based**, with the rules sometimes coming from logic, and sometimes from arbitrary rule writers. AI can not only replicate those valuations but can do so at no cost and with a much closer adherence to the rules.
 - In contrast, **financial valuations done right, is built around principles**, requires judgment calls and analysis on the part of appraisers, on how these principles get applied, and should be more difficult to replace with AI.

3. SUBJECTIVE VERSUS OBJECTIVE

- When valuing companies, I am often accused by those who disagree with my numbers **of being “subjective”**, with the subtext being that estimating something (and being wrong) is a sign of weakness.
 - The alternative that they are looking for is something objective, by which they usually **mean an equation or data**.
 - The bottom line is that **the future is subjective**, and using objectivity as a shield against making estimates is delusional.
- If your entire process is built around this version of objectivity, a machine can do it better than you can.

4. BIASED VERSUS OPEN MINDED

- If you are biased, **your analysis will lead you to the outcome that your biases direct you towards.** The more biased you become, the more predictable your outcomes will be as well.
 - It is human nature to claim, even in the face of obvious bias, **that you are being open minded.**
 - The bottom line is **that if you become biased enough that your outcomes become predictable,** a machine will replicate you (at least in terms of outcome) though it may not be able to match your hypocrisy.

RESPONDING TO AI

- While AI, at least in its current form, may be unable to replace you at your job, the truth is that AI will get better over time, as it learns more from watching what you do.
- So, what can we do to make it more difficult to be outsourced by machines or replaced by AI?
 - It is a **question that I have thought about for three decades**, as machines have become more powerful, and data more ubiquitous, and while I don't have all of the answers, here are some thoughts.
 - The answers I have **are those that work for me**, reflecting what I think are my strengths and weaknesses, and what I do.
 - You have to **come with your own answers**.

1. GENERALIST VERSUS SPECIALIST

- In the last century, we have seen a push towards specialization in almost every discipline.
 - In medicine, **the general practitioner has become the oddity**, as specialists abound to treat individual organs and diseases.
 - In finance, **there are specialists** in sub-areas that are so esoteric that no one outside those areas can even comprehend the intricacies.
- In the process, there are **fewer and fewer people who are comfortable operating outside their domains**, and humanity has lost something of value.
- In a great book on forecasting, Phil Tetlock argues that **foxes (people who know a little bit a lot of things) do better forecasting than hedgehogs** (people who know a great deal about their domain)

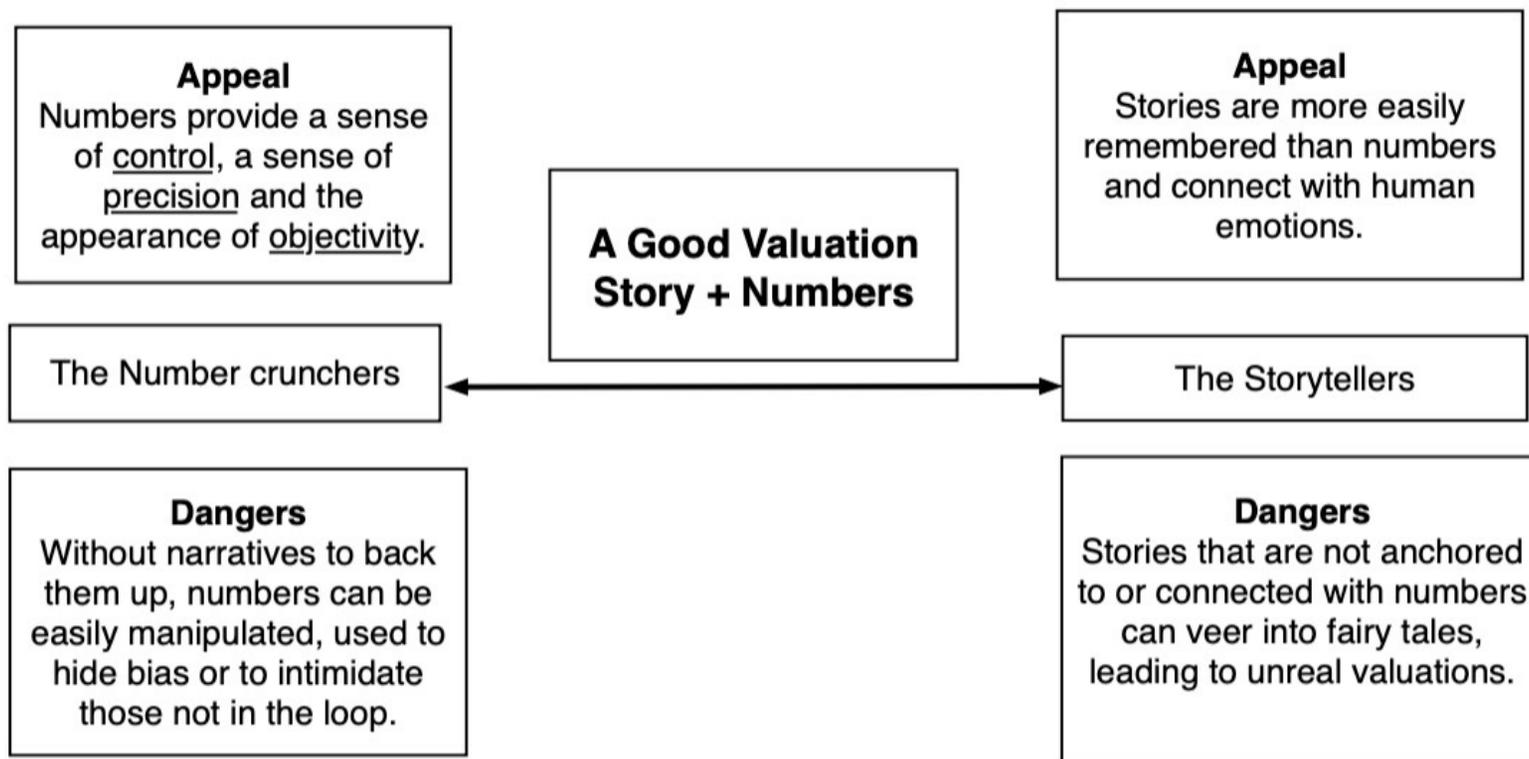
THE ANSWER IS IN THE DUOMO!



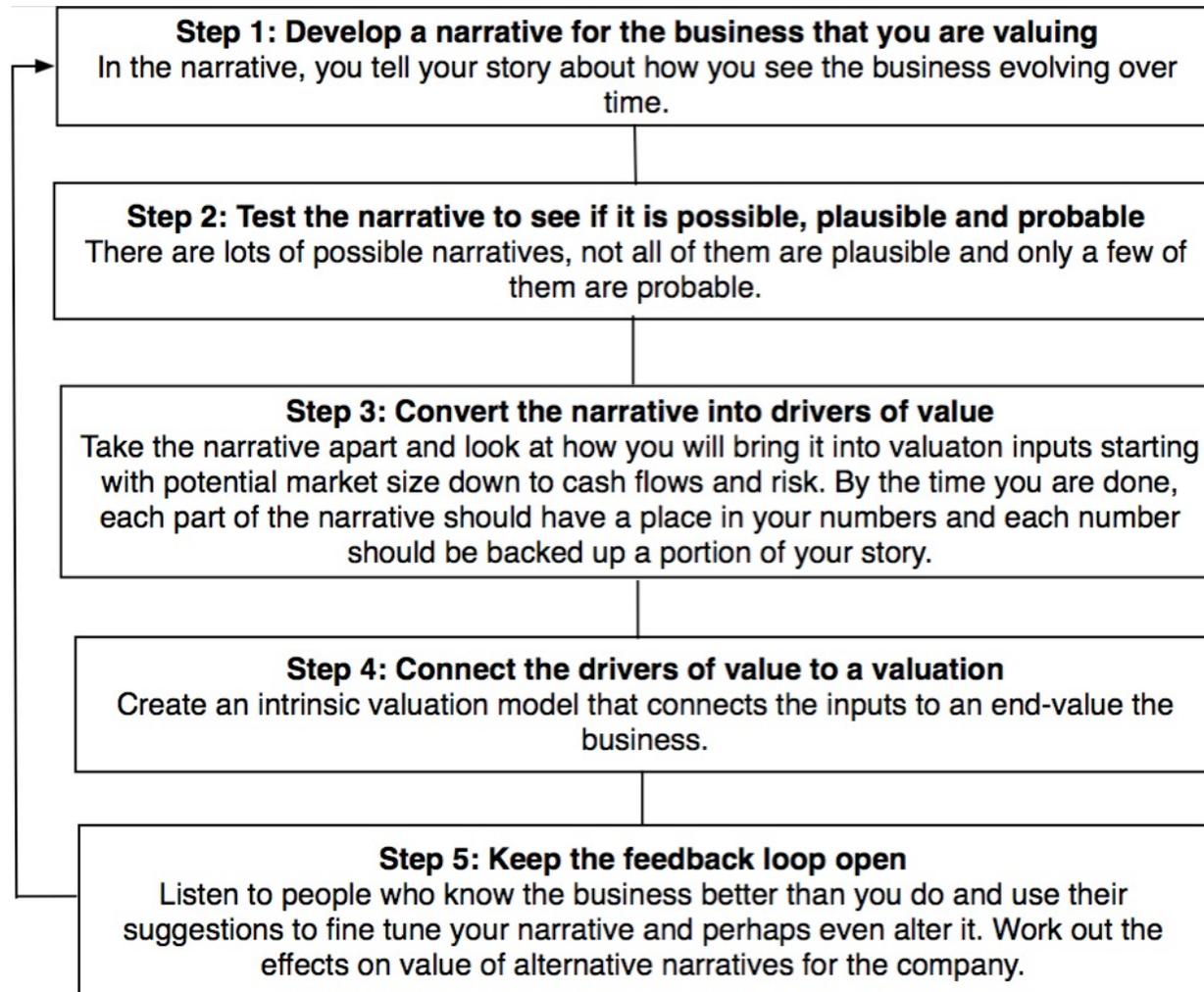
2. BOUNDED STORYTELLING

- Starting about a decade ago, I **drew attention to a contradiction at the heart of valuation practice**, where as access to data and more powerful models has increased, in the last few decades, the quality of valuations has actually become worse.
- I argued that one reason for that depletion in quality is that **valuations have become much too mechanical**, exercises in financial modeling, rather than assessments of business quality and value.
- If, as legend had it, you have **a right brain (controlling your story side) and a left brain (controlling the numbers)**, most of us as acting as if we are half brained.

THE ANSWER: STORIES PLUS NUMBERS



FROM STORIES TO NUMBERS: THE STEPS



BIRKENSTOCK'S INTANGIBLES

- **Brand Name:** It is undeniable that Birkenstock not only has a brand name, in terms of recognition and visibility, but has the pricing power and operating margins to back up that brand name.
- **Celebrity Customer Base:** Birkenstock attracts celebrities in different age groups, from Gwyneth Paltrow & Heidi Klum to Paris Jackson & Kendall Jenner, and more impressively, it does so without paying them sponsorship fees. If the best advertising is unsolicited, Birkenstock clearly has mastered the game.
- **Good Management:** Birkenstock seems to have struck gold with Oliver Reichert. Not only has he steered the company towards high growth, but he has done so without upsetting the balance that lies behind its brand name.
- **The Barbie Buzz:** Margot Robbie's pink Birkenstock sandals in that movie, which has been the blockbuster hit of the year, hypercharged the demand for the company's footwear. It is true that buzzes fade, but not before they create a revenue bump and perhaps even increase the customer base for the long term.

Birkenstock IPO Valuation												Sep-23		
Base Year and Comparison			Growth Story			Profitability Story			Growth Efficiency Story			Terminal Value		
	Company	Big Apparel	Growth of 25% in year 1, followed by 15% in years 2-5			Operating margin of 23% in year 1, rising to 25% over the following four years.			Set to third quartile (2.62) of big brand apparel & footwear firms.			Growth Rate	2.74%	
CAGR in Revenues (2013-22)	18.20%	8.66%	Barbie Buzz in year 1. Strong management finds growth in new markets/products, without sacrificing brand name.			Brand name allows for preservation & slight growth in strong profit margins.			Free celebrity advertising and more sponsorship deals will allow for more efficient reinvestment.			Cost of capital	7.74%	
Revenue (LTM)	€ 1,439,976											Return on capital	12.00%	
Operating Margin (LTM)	22.31%	14.74%										Reinvestment Rate	22.83%	
Operating Income	€ 321,230													
EBIT (1-t)	€ 224,861													
PV(Terminal value)	€ 6,087,285		1	2	3	4	5	6	7	8	9	10	Terminal year	
PV (CF over next 10 years)	€ 2,862,595		Revenue Growth	25.00%	15.00%	15.00%	15.00%	15.00%	12.55%	10.10%	7.64%	5.19%	2.74%	2.74%
Probability of failure =	0.00%		Revenue	€ 1,799,970	€ 2,069,966	€ 2,380,460	€ 2,737,529	€ 3,148,159	€ 3,543,190	€ 3,900,910	€ 4,199,096	€ 4,417,113	€ 4,538,142	€ 4,662,487
Value of operating assets =	€ 8,949,880		Operating Margin	23.00%	23.80%	24.20%	24.60%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
- Debt	€ 1,874,002		Operating Income	€ 413,993	€ 492,652	€ 576,071	€ 673,432	€ 787,040	€ 885,797	€ 975,228	€ 1,049,774	€ 1,104,278	€ 1,134,535	€ 1,165,622
- Minority interests	€ -		EBIT (1-t)	€ 289,795	€ 344,856	€ 403,250	€ 471,403	€ 550,928	€ 620,058	€ 682,659	€ 734,842	€ 772,995	€ 794,175	€ 815,935
+ Cash	€ 307,078		Reinvestment	€ 103,052	€ 118,509	€ 136,286	€ 156,729	€ 150,775	€ 136,535	€ 113,811	€ 83,213	€ 46,194	€ 47,460	€ 186,305
+ Non-operating assets	€ -		FCFF	€ 186,743	€ 226,347	€ 266,964	€ 314,674	€ 400,153	€ 483,524	€ 568,848	€ 651,629	€ 726,801	€ 746,715	€ 629,630
Value of equity	€ 8,382,956												€ 12,592,600	
- Value of options	€ -													
Value of equity (common stock)	€ 8,382,956		Cost of Capital	7.45%	7.45%	7.45%	7.45%	7.45%	7.51%	7.57%	7.63%	7.68%	7.74%	
Number of shares	202,853.00		Cumulated WACC	0.9306	0.8661	0.8060	0.7501	0.6980	0.6493	0.6036	0.5608	0.5208	0.4834	
Estimated value /share	€ 41.33													
			Sales to Capital	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	
Price per share	€ 46.50		ROIC	7.38%	8.56%	9.73%	11.01%	12.41%	13.51%	14.44%	15.18%	15.70%	15.98%	12.00%
% Under or Over Valued	12.52%													
			Risk Story			Competitive Advantages								
			Cost of capital reflecting business mix, geography & debt policy.			Competitive advantages will persist.								
			Centering production in Germany reduces supply chain & country risk.			Intangibles collectively sustain a return on capital above the cost of capital.								

3. EXERCISE YOUR REASONING MUSCLE...

- I have never been good at reading physical maps, and I must confess that I have completely lost even my rudimentary map reading skills, having become dependent on GPS to get to where I need to go.
- While that may not make or break me, there are other skills that we have as human beings, where **letting machines step in and help us, because of convenience and speed**, may have much worse long term consequences.
- In [an interview I did on teaching](#) a few years ago, I called this the "Google Search" curse, where when faced with a question, we often are quick to look up the answer online, rather than try to work out the answer.

THE ANSWER: REASON IT OUT...

- While looking up answers to questions is benign, if you are looking up answers to trivia, it can be malignant, when used to answer questions that **we should be reasoning out answers to, on our own.**
- That reasoning may take longer, and sometimes even lead you to the wrong answer, but it is a learned skill, and one that I am afraid that **we risk losing, if we let it languish.**
- You may think that I am overreacting, but evolution has **removed skill sets and organs** that we used to use as human beings, when we stopped using or needing them, and reasoning may be next on the list.

4. LET YOUR MIND WANDER...

- An empty mind may be the devil's workshop, at least according to puritans, but it is also the **birthplace for creativity**.
- I have always marveled at the capacity that we have as human beings to connect unrelated thoughts and occurrences, to come up with marvelous insights.
- Like Archimedes in his bath and Newton under the apple tree, we too can make discoveries, albeit not as weighty, from our own ruminations.

TWO PERSONAL EXAMPLES . . .

- The first one, Snowmen and Shovels, emerged while I was shoveling snow after a blizzard on the East coast, and as I and my adult neighbors struggled with the heavy snow, our kids were out building snowmen, and I thought of a market analogy, where the same shock (snowstorm) evokes both misery (from some investors) and joy (on the part of others) .
- The second, written more recently, was formed while I walked my dog, and pondered how earthquakes in Iceland, a data leak at a genetics company and climate change affected value, and became a more general discourse on how human beings respond (not well) to the possibility of catastrophes.

ARE WE DISARMING AHEAD OF THE THREAT?

- It is disconcerting that on every one of these four fronts, **progress has made it more difficult rather than less so, to practice.**
- In fact, if **you were a conspiracy theorist**, you could spin a theory of technologists conspiring to deliver us products, often free and usually convenient, that make us more specialized, more one dimensional, less reasoning and that consume our free time.
- This may be delusional on my part, but if I want to keep my bot at bay, and I take these lessons to heart, I should continue to be a dabbler in all that interests me, work on my weak side (which is story telling), try reasoning my way to answers before looking them up online and take my dog for more walks.

ARE WE OVERREACTING? PASCAL'S WAGER (APPLIED TO AI)

The God Wager

The Truth

		God exists	No God
What you believe will happen	God exists	Heaven	Utility lost by not indulging in sinful activity, and sacrificing things you would have liked to have done (if they were not forbidden)
	No God	Hell	Benefits of a lifetime of debauchery and sin, with no divine consequences, but perhaps personal (health, relationships) costs.

The AI Wager

What actually happens

		AI works	AI does not work
What you believe will happen	AI works	You may be able to beat the threat or at least be better prepared.	Your work preparing may not be needed to beat AI, but you will be better at whatever you do.
	AI does not work	You may be replaced by your bot, and face financial and emotional bankruptcy	You continue with the status quo, and life goes on.

BEAT YOUR BOT!

- I am in an unusual position. My **life's work is in the public domain**, and I have a bot with my name on it not only tracking all of that work, but also shadowing me on any new work that I do.
 - On the **minus side, my AI threat is here**, and I don't have the choice of denying its existence or downplaying what it can do. It is taking the **form of scams that use my name**.
 - On the **plus side, I am old enough to not face financial catastrophe**, if outsourced.
- Your work may not be public, and you may not have a bot with your name on it, but **it behooves you to act like there is one that tracks you at your job**.

1. THE AI SCAM GAME: THE DARK SIDE OF AI



❤️ 21 ~~These~~ are not my words. 📌

Is this the next overhyped tech stock after Nvidia?

Hi, I'm Aswath Damodaran, Professor of Finance at NYU's Stern School of Business. For over 30 years, I've been focused on understanding what truly drives stock value—not market hype or sentiment.

Over the past few months, I've noticed growing euphoria around Palantir Technologies (PLTR). Its share price has surged more than 120% this year, fueled by retail investor excitement. But the real question is: Does the current stock price actually reflect the company's fundamentals? Let's take a rational, valuation-driven look.

AN EASY TARGET?

- **My webpage**



About Teaching Writing Data Tools Blog YouTube Podcasts

- **My blog:** I wrote my first Google blog post on September 17, 2008, and it has become my first stop, whenever I am uncertain or curious about, or interested in any topic that has a financial twist. My 720 posts collectively weigh in at 3000 pages +, and the posts are now on Substack and LinkedIn as well.

- **YouTube:**



Aswath Damodaran

@AswathDamodaranonValuation · 866K subscribers · 1.3K videos

I teach corporate finance, valuation and investment philosophies at the Stern School of B...more

stern.nyu.edu/~adamodar/New_Home_Page/corpfm.html and 4 more links

Customize channel

Manage videos

- **X:** My bulletin board, not a debating platform.

THE COMMONALITIES IN MY CONTENT

- **Low tech:** I am decidedly low tech, and it shows in my sharing.. In my defense, I could always claim that I am too old to learn new tricks, but the truth is that I did not start any of my sharing as a means to acquiring a larger social media following, and it may very well be true that keeping my presence low-tech operates as a screener, repelling mismatched users.
- **Process over product:** Much as my verbosity may frustrate you, it reflects what I think my job is as a teacher, which is to be transparent about process, i.e., explain how I reasoned my way to getting an answer than giving you my answer.
- **Pragmatism over Purity:** Though I am often criticized for being an “academic”, I am a terrible one, and if there were an academic fraternity, I would be shunned. I view much of an academic research as navel gazing, and almost everything I write and teach is for practitioners.
- **No stock picks or investment advice:** I value stocks (like Meta or Nvidia or Amazon or Mercado Libre) and I act (buy or sell) those stocks, based on my valuations, but it is neither my place nor my role to try to get other people to do the same. That said, I will share my story and valuation spreadsheet with you, and if you want to adapt that story/spreadsheet to make it your own, I am at peace with that choice, even if it is different from mine.
- **No commercial entanglements:** If you do explore my content on any of the platforms it is available on, you will notice that they are free, both in terms of what you pay and how you access them.
 - One reason for this practice is that I am lazy, and monetizing any of these platforms requires jumping through hoops and catering to advertisers that I neither have the time nor the inclination to do.
 - The other is that I believe (though this may be more hope than truth) that one of the reasons that people read what I write or listen to me is because, much as they may disagree with me, I am perceived as (relatively) unbiased.

THE IMITATION GAME!

- For the most part, I categorize this borrowing as **good neighbor sharing**, where just as I would lend a neighbor a key cooking ingredient to save them the trouble of a trip to the grocery stores, I am at peace with someone using my material to help in their teaching, save time on a valuation or a corporate finance project or burnish their credentials. An acknowledgement, when this happens, is much appreciated, but I don't take it personally when none is forthcoming.
- There are **less benign copycat versions** of the imitation game - selectively using data from my site to back up arguments, misreading or misinterpreting what I have said and reproducing large portions of my writing without acknowledgement. To be honest, if made aware of these transgressions, I have gently nudged the culprits, but I don't have a legal hammer to follow up.
- The **most malignant variations of this game are scams**, where the scammers use my content or name to separate people from their money. Until now, I have tried, as best as I can, to let people know that they are being victimized, but for the most part, these scams have been so badly designed that they have tended to collapse under the weight of their own contradictions.

WHAT THE SCAM GETS RIGHT!

- The Instagram post, which is in the picture below, uses language that clearly is drawn from my posts.
- Not only does this post reflect the way I write, but it also picked Nvidia and Palantir, the first a company that I own and have valued on my blog and the second a company that I have been talking about as one that I am interested in owning, at the right price, giving it a patina of authenticity.
- The video looks and sounds like me, which should be no surprise since it had thousands of hours of YouTube videos to use as raw data.

Grade on "looks like, sounds like": A-

Comment: Post and video use my language, and companies are ones that I am interested in. The "minus" is for the video looking slicker than any I would produce.

WHAT THE SCAM STRUGGLES WITH..

- The scam does mention that Palantir is "overhyped", a word that I use rarely, and while it talks about valuation, it is cagey about what that value is and there is little of substance to back up the claim.
- This post not only does not provide any tangible backing in terms of value, but does not even try, and if these scammers had truly wanted to pull this off, they could have made their AI bot take my class, construct a plausible Palantir story, put it into my valuation spreadsheet and provide it as a link.

Grade on Content: C-

Comment: While Palantir and Nvidia are mentioned, and there is talk of them being overhyped, there is little of substance (story, valuation) to back it up.

WHAT THE SCAM GETS WRONG!

- First, this scam pushes people to join an investment club, where I will presumably guide them on what to buy or sell. Given that my view of clubs is very much that of Groucho Marx, which is that I would not belong to any club which would admit me as a member, the notion of telling people which stocks to buy cuts against every grain of my being.
- Second, there is a part of this scam where I promise investors who decide to partake that they will generate returns of 60% or higher, and as someone who has chronicled that not only do most active investors not keep up with the market, and argued that anyone who promises to deliver substantially more than the market in the long term is either a liar or fraud, it clearly is not me.

Grade on Message Consistency:

F

Comment: Almost nothing in the message (the breathless tone, the stock picks, the investment solicitation) is consistent with my history.

AN AI PROTECTIVE SHIELD

- **"Looks & sounds like" not good enough:** Having seen the flood of fake AI videos in the news and on social media, I hope that you have concluded that "looks and sounds like" is no longer good enough to meet the authenticity test.
- **Steer away from arrogance & hype:** I have always been skeptical of the notion that there is "smart" money, and in a [talk on the topic](#), I argued that investors should steer away from arrogance and bombast, and towards humility, when it comes to who they trust with their money, and that applies in spades in the world of AI scams. Since most scammers don't understand the subtlety of this idea, screening investment sales pitches for outlandish claims alone will eliminate most scams.
- **Do your homework:** If you decide to invest with someone, based upon a virtual meet or sales pitch, you should do your homework and that goes well beyond asking for their track records in terms of performance.. It is malpractice to invest with anyone, no matter what their reputation for earning high returns, without understanding that person's investment philosophy, and this understanding will also give you a template for spotting fakes using that person's name.
- **Avoid ROMO & FOMO:** In my investing classes, I talk about the damage that ROMO (regret over missing out) and FOMO (fear of missing out) can do to investor psyches and portfolio.
 - With ROMO (regret over missing out) where you look back in time and regret not buying something or selling something when you should not have, giving rise to two emotions.. The first is jealousy, especially at those who did buy or sell at the right time.. The second is that you start buying into conspiracy theories, where you convince yourself that these winners cheated to win.
 - With FOMO (fear of missing out), your overwhelming concern is that you will miss the next big multi-bagger, an investment that will increase five or ten fold over the next year or two. The emotion that is triggered is greed, leading you to overreach in your investing, cycling through your investments, as most of them fall short of your unrealistic expectations, and searching for the next "big thing", making you susceptible to anyone offering a pathway to get there.

2. THE AI OUTSOURCING GAME: IS IT COMING FOR YOU?

- The degree to which AI is a threat to you will vary across disciplines and jobs, but there are some jobs where it will be less of a threat than others.
 - White collar jobs are more at threat than blue collar jobs (The "learn to code" advice meted out rather thoughtlessly to factory workers may become "learn to plumb" being dished out to software engineers and financial analysts.)
 - Hard skills are more at threat than soft skills. In my classes, there have always been students who feel that their first priority should be learning Excel. While I have always believed this to be the wrong path, AI makes me even more vehement on this front.
- The question each of you has to **answer is how big the threat is to you, and what (if anything) you can do to get ahead of it.**

A. THE SECRECY STRATEGY

- My bot has learned how I think and what I do because everything I do is public - on my blog, on YouTube and in my recorded classes.
- I know that some of you may argue that I have facilitated my own disruption, and that **being more secretive would have kept my bot at bay.**
- As a teacher, I neither want that secrecy, nor do I think it is feasible, but your work may lend itself better to this strategy. There are two reasons to be wary, though.
 - The first is that **if others do what you do**, an AI entity can still imitate you, making it unlikely that you will escape unscathed.
 - The second is that **your actions may give away your methods** and work process, and AI can thus reverse engineer what you do.

B. THE “SYSTEM PROTECTION” STRATEGY

- I have bought and sold houses multiple times in my lifetime, and it is not only a process that is filled with intermediaries (lawyers, realtors, title deed checkers), all of whom get a slice from the deal, but one where you wonder what they all do in return for their fees. **The answer often is not rooted in logic, but in the process, where the system** (legal, real estate) requires them to be there for the house ownership to transfer.
- This **system protection for incumbents** is not just restricted to real estate, and cuts across almost every aspect of our lives, and it creates barriers to disruption.
- Thus, even **if AI can replicate what appraisers do**, at close to no cost, I will wager that courts and accounting rule writers will be persuaded by the appraisal ecosystem that the only acceptable appraisals can come from human appraisers.

C. BUILD YOUR MOAT!

- In business, companies with **large, sustainable competitive advantages** are viewed as having moats that are difficult to competitors to breach and are thus more valuable.
 - That **same idea applies at the personal level**, especially as you look at the possibility of AI replacing you.
 - It is your job, and mine, to **think of the moats that we can erect** (or already have) that will make it more difficult for our bots to replace us.
- As to what those moats might be, I cannot answer for you, but the last section lays out my thinking on what I need to do to stay a step ahead.

THE BOTTOM LINE

- I am **a work in progress**, even at this stage of my life, and rather than complain or worry about my bot replacing me, I will work on staying ahead.
- I believe (and this may be wishful thinking) that what I do to try to stay ahead of my bot **will make me better at what I do** (as a teacher, writer and communicator).
- It is entirely possible that I am **embarking on an impossible mission**, but I will keep you posted on my progress (or absence of it).
- Of course, **my bot can get so much better at what I do than I am**, in which case, this may very well be written and maintained by it, and you will never know!