Epsilon Theory

BY RUSTY GUINN

What is it, really?

Hygiene Inspector: If I may begin at the beginning? First, there is the cherry fondue. Now this…is extremely nasty. But we can't prosecute you for that.

Mister Milton, Owner and Proprietor of Whizzo Chocolate Company: Agreed.

Inspector: Next, we have Number 4: Crunchy Frog. Am I right in thinking there's a real frog in 'ere?

Milton: Yes, a little one.

Inspector: Is it cooked?

Milton (confused): …No?

Inspector (disgusted): What, a raw frog?

Milton: We use only the finest baby frogs, dew-picked and flown from Iraq, cleansed in the finest quality spring water, lightly killed, and sealed in a succulent Swiss, quintuple smooth, full cream, treble milk chocolate envelope, and lovingly frosted with glucose.

Inspector: That's as may be, but it's still a frog!

Milton: What else would it be?

Inspector: Well don't you even take the bones out?

Milton: If we took the bones out, it wouldn't be crunchy, would it?

Inspector: Constable Parrot 'et one of those!

Milton: It says "Crunchy Frog" quite clearly.

Inspector: Well, never mind that. We have to protect the public. People aren't going to think there's a real frog in chocolate. The superintendent thought it was an almond whirl! They're bound to think it's some kind of mock frog.

Milton (offended): Mock frog? We use no artificial preservatives or additives of any kind!

Inspector: Nevertheless, I advise you in the future to replace the words "Crunchy Frog" with the legend "Crunchy Raw Unboned Real Dead Frog" if you want to avoid prosecution.

Milton: What about our sales?

***— Monty Python Live at the Hollywood Bowl,* "Crunchy Frog" sketch (1982)**

It has been pointed out to us that we write rather a lot about philosophy and psychology for a website/blog/newsletter about investing.

Is this surprising? This should not be surprising. All of us are in the business of prediction. Thankfully, not all of it is explicit prediction, like saying that we think that the price of Walmart stock will be $120 in three years, or that Tesla will be bankrupt in four years. Most of it is implicit prediction, like the way that investing money in something risky implies all sorts of things about the returns we expect from it. Predictions all the same. And any activity like this relies on developing confidence in some basis for creating (or assuming) those predictions.

Philosophy, and specifically epistemology, asks how we can know the things we need to make those predictions. Are conditions, traits, features of the thing we're predicting observable? Are their responses observable? With what confidence may we infer traits from similar things we have observed? Further, may we reason how those traits might interact with other things to allow prediction? Psychology asks how accurate those human observations might be. It asks what evolutionary processes may have colored or influenced what we know, and what we think we know. It posits heuristics that might substitute for empirically-driven reasoning, whether helpfully or harmfully. Furthermore, in a field like investing that is responsible for making predictions about human behavior itself, psychology is recursively relevant, in that it studies both the tool of the **observer and the observed**.

Psychology and philosophy are critical tools for the investor. But in addition to being particularly ripe fields for bullshit, they also suffer from one of the same tendencies that plagues investors: people get so hung up on terminology and conventions that they start saying and doing dumb things. As always, the shrewd investor avoids that behavior himself and for his clients and capitalizes on it in others.

The Tyranny of Terminology

Of course, that gasbag introduction was just a way to tell you that I got into a little debate about Jordan Peterson.

If you don't know much about him, Peterson is a professor of psychology at the University of Toronto, a cultural commentator and a bit of a rabble-rouser. As a psychologist and academic, he is heavily cited and as far as I can tell (which is not very far, but judging by citations alone), well-thought-of in his field. As a cultural commentator, he is thoughtful and incisive as a proponent of self-control, advocate of free speech, and opponent of what he characterizes as Neo-Marxism and Postmodernism, especially in the American university. As a scientific historian of philosophy? Well, this is where things get a little more controversial.

You see, the piece I was discussing with a very thoughtful senior staffer at a large U.S. university endowment (don't tell my salespeople I'm getting into philosophical debates with clients and prospects, please and thank you) made the argument that Peterson was the wrong choice for a public conservative intellectual. The argument, if I may summarize, finds fault with him because (1) he attracts an audience of mostly young white males, (2) the traits he ascribes to Postmodernism are cherry-picked and not entirely correctly as derived from the history of the movement, and (3) he uses the terms "Neo-Marxist" and "Postmodern" seemingly interchangeably despite the different heritage and intellectual evolution of the terms and associated philosophical movements. The piece is a rousing little number, and almost enough to make you want to sit through that whole documentary on Jacques Derrida. (No, not really. Good Lord.)

Guess what? All the claims are pretty much true. Guess what else? None of them matter. I'll get back to why, but first, I want to talk about another very current example.

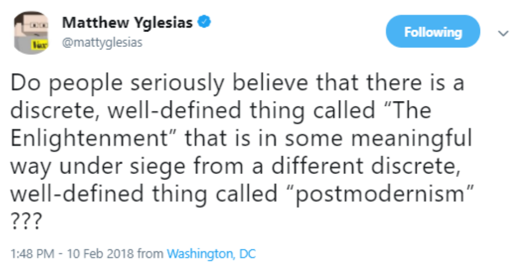
You may have seen that Steven Pinker, cognitive pyschologist scientist at Harvard, published a new book called *Enlightenment Now.* Now, the reality is that the book doesn't really undertake much discussion of the specifics of schools of enlightenment thought per se, but rather tells the story of human progress over the last 200 years. It makes the argument that these improvements are vastly underestimated and underappreciated. It also connects those achievements to specific influences of science and reason, sometimes very compellingly and sometimes somewhat less so. It is an encouraging and energizing read, even where its contentions are less well supported. I, for one, think there's rather a lot in the 20th century alone that a purely scientific approach to curing society's ills has to answer for. But much of the criticism has little to say about that, instead grousing that the science and reason the book discusses aren't really about *THE* Enlightenment, but about principles of the Scottish Enlightenment specifically, and even then only about a subset of principles that Pinker particularly likes. After all, Marx was just a natural extension of the French Enlightenment!

Are you detecting a pattern here?

There are a lot of different kinds of talk about Enlightenment Principles right now. Ben and I write about them a lot. Ben wrote about them back in 2016 in **Magical Thinking**, and later in **Virtue Signaling, or…why Clinton is in Trouble**. I wrote about them in short last year in **Gandalf, GZA and Granovetter.** The remarkable new web publication **Quillette** provides a platform for writers who are thinking about them. The **Heterodox Academy** is building a strong core of support for them in universities. Pinker is talking about them. Chomsky has been speaking about them for decades. Hitchens, too, before he passed. In his own way, Taleb is talking about them (although he'd dislike the company I've chosen for him thus far). Peterson won't shut up about them. Many of these same people — and some others — are simultaneously issuing criticisms of what is purported to be a diametrically opposed philosophy. In the early 2000s, the scandalous moniker applied was "Cultural Marxism." Today this opposition is usually generalized into references to "Neo-Marxism" and "Postmodernism."

But here's the biggest shocker. Get out the fainting couch: they're not all saying the exact same thing.

These are thinkers focused on many different areas, and so there are all sorts of topics where they disagree, sometimes vehemently. All would say that they believe in logic, truth and rationality, I think, but would define those things very differently. Most of the folks in the list above, for example, believe in a rationalism that inherently excludes faith. They are among the most prominent atheists of our time. They typically adhere to empiricism and the scientific method as the primary — even sole — method for transforming observations about the world into predictions. For two of them, Taleb and Peterson, rational thought means also incorporating evolved heuristics, intuition, instinct and long-surviving human traditions. This is not fringe stuff, but the logical conclusion of any serious consideration of Hayek and spontaneous order. It also means particular sensitivity to scientific techniques that end up equating absence of evidence with evidence of absence. All this means when you see many of the above names together, it's…**not always friendly**. Like, **stuff you can't really walk back**. Even among the two primary authors of this blog there are differences in how we see these things. I haven't talked to Ben about it, but if I gave him the list of the above, I'd guess he'd hitch his wagon to Hitchens. Me? I'm probably closer to Taleb or Peterson.



What I doubt you'd find much of from this group is navel-gazing about terminology on the issue of postmodernism. While Voxsplainers and science historians quibble (very justifiably in the latter case) about whether there is a "discrete, well-defined thing called the Enlightenment" or whether it is fair to use "Postmodernism" in reference to a movement to esteem individual experience as peer or superior to free inquiry and free expression, the rest of us know **exactly** what people are talking about when they talk about this issue.

Don't believe me? Fine. Go Full Cosmo and ask people you know these four questions:

> Should governments and other important institutions abridge or allow (e.g., through Heckler's Veto) the abridgement of some speech to protect people from speech which we think may be harmful to society, especially to historically oppressed groups?
>
> Should we restrict the examination or evaluation of certain topics, especially when allowing them would prop up harmful social structures (especially power and class structures)?
>
> Should we be skeptical that certain features and traits of the material, cosmological and biological world can ever be objectively true or important, considering the biased social lenses through which they are observed?
>
> When making predictions about the world, should we consider personal experience and truths as equal or superior to whatever is uncovered through rational evaluation of the empirical merit or survival of a fact, idea or principle?

If you don't think there's a real thing happening in academia, in the public sphere, in politics and in creative media between those with three or four responses on opposite ends of the spectrum, I don't know what to tell you. But I do know that this intuitive, arbitrary, subjective scale that I made up right just now is going to do a lot better job telling you about what people are referring to as a conflict between "Enlightenment" and "Postmodernism" than any etymologically thorough review of the terms themselves. How do I know this? Because it asks the question we should all ask any time that we see prediction or analysis oriented around terminology, categories, benchmarks, titles and jargon:

"Yes, but what is it, really?"

What is it, really?

There isn't a question I can think of that an investor ought to ask more often, especially when it comes to any interaction they have with a representative of a financial services company trying to sell them something. And as Ben has **written**, all financial innovation is either finding a new way to sell something (securitization) or a new way to borrow money on things (leverage). The name of the thing being sold isn't always a very good representation of what the thing is, sometimes for innocent reasons, and sometimes because crunchy, raw, unboned, real, dead frog doesn't sound very appetizing.

Now, obviously the origin of most investment terminology, conventions, and even jargon IS innocent. Usually their purpose is to reduce complicated or large sets of data or principles to like dimensions. This is pretty helpful for communication and analysis. If we were constantly redefining the generally accepted conventions for a concept like "U.S. Large Cap Stocks", for example, we would find it difficult to do a great many things with much efficiency. Economic constructs like sectors and common investment styles also have their appeal for this reason.

The problems, however, come in one of two flavors: first, as terminology becomes convention within an industry, we get further and further removed from a fundamental understanding of what the thing *actually is*. When we talk about U.S. Large Cap Stocks as a sort of monolithic entity unto itself, we forget that there is a lot going on underneath the hood. Sectors are changing. Companies, even entire industries are born and dying. New IPOs, companies slipping out into small cap land, companies bought out by private equity. We forget the nature of our fractional ownership, and the limited mechanical reasons why a stock's price might rise and fall. The nature of what you own at any given time and the underlying risks attached to it really does change rather a lot, and that's without getting into the massive sentiment-driven influences on price variation.

One of my favorite analogues to this is the ubiquitous reference to the "Top 1%" of wage earners. The concept is interesting and useful as a simplifying term, but like an asset class, it is by no means a static construction. Consider, for example, that **more than 10% of wage-earners** will, at some point in their lives, be among the Top 1%! Perhaps more impressively, more than 50% of Americans will at some point be in the Top 10%. Consider the impact that this has on a wide range of policies considered and rhetoric used — not invalidating, to be sure, but relevant.

The second class of problems stemming from the long-term path from terminology into convention is the inevitable realization by market participants that they can — and once enough people do, that they must — game the system. That's where the coyotes and raccoons come in, but also your garden-variety professionals justifiably worried about career risk. But all of these folks hope you're hungry for some delicious Crunchy Frog.

Fight Fiercely, Harvard!

What do I mean? Well, sometimes it's obvious. Let's consider the curious case of the Harvard Endowment.

A week ago, multiple media outlets reported that alumni from the Class of 1969 ("an artist, a clergyman, and two professors" **one article** reports, but disappointingly does not finish the joke) wrote incoming Harvard University President Lawrence Bacow to encourage him to force HMC to move half of the $37.1 billion endowment out of "hedge funds" and into ETFs tracking the S&P 500. The reason? This **passive management** strategy would have worked better over the last several years, and would have saved a bunch of money in fees.

It goes without saying that the alumni recommendation is just really, really terrible. Like, Fergie-singing-the-anthem terrible. It's terrible because it would arbitrarily change the risk posture of the endowment by a massive amount. It's terrible because it would shift what has historically been a well-diversified portfolio into a woefully underdiversified portfolio with extraordinarily concentrated exposure to the performance of common stock in large U.S. companies. It's terrible because the confluence of those two changes would massively increase the drawdowns of the endowment, its risk of ruin, and potentially impact the long-term strategic planning and aims of the greatest research university on the planet.

But mostly, it's terrible because the proposal isn't *passive at all*. Not even a little bit. It's a massively active roll of the dice on a single market! While alumni, executives and investors bicker over whether the portfolio ought to be "passively managed", the origin of the term and the nonsense they're proposing couldn't be more at odds.

Now, you may be saying, "It's a silly alumni letter. Most people get this." No, they really don't. Remember, the goofy letter was covered throughout the financial media, and they are the same media who triumphantly report the annual difference in return between *literally anything* and the S&P 500, regardless whether it is the return on a completely different type of security or vehicle with vastly different risk and diversification characteristics. **This is how most of the world thinks about investing**. This is how the damned **Center for Economic Policy and Research** thinks about investing, for God's sake. People who are otherwise very smart think they're making an intelligent point about *fees* when they're really making a dumb point about *asset allocation* — about **quantity** and **sources** of risk. Even the aforementioned Steven Pinker contracted Gell-Mann Amnesia and retweeted an article attributing the Buffett bet between S&P 500 and hedge funds to a question of cost rather than the dominating risk differences between the two.

How do we cut through terminology confusion on an issue like this?

We ask: "What is it, really?"

If you're being sold a portfolio based on principles of "passive management", does your advisor or manager mean "low-cost", does he mean "not making active bets against a global market portfolio", or both (or, y'know, neither)? If it's a low-cost story, what is it, really? Does it have a low headline fee, but with expensive underlying implementation using **swaps** or external funds that don't get included in the stated fee? Does it have a low headline fee that your advisor is layering high additional costs on top of? What is the asset allocation you're being sold on? Is it implicitly **making an active bet against a global portfolio of financial assets**? Is it the right amount of risk? Is it taking sufficient advantage of the benefits of diversification?

If you're being asked by a client or prospect about "passive management" or "indexing", are you sure they're asking you about low-cost investing? Are you sure they care whether the portfolio is avoiding making bets against market cap-weighted indices? Are you sure they care whether you're in-line with some measure of a global market portfolio? **Or are they asking you why you weren't invested 100% in the S&P 500?**

Because whatever the "real" definition of passive management, we all know that we all know that this is almost always what people mean.

Deeper down the Rabbit Hole

The fact that people *really* mean, "why don't you just buy the S&P 500" when they say, "why don't you just invest passively" tells us something else about most investors. When it comes to what they buy and what they own, and especially when it comes to conventions that manifest in indexes and benchmarks, they frequently haven't given much thought to *what it really is*.

Try this yourself, with your boards, your financial advisor, or with your clients. Ask them, "What is it, really, that you invest in when you buy a stock?"

I've done it, so I'll give you a preview: you'll get a huge range of answers, usually relating to "ownership" of companies or businesses. So what is an investment in a stock, really? It is a fractional, juniormost claim on the cash flow of a company, usually denominated in the currency of the country where it has its headquarters, the price of which at any given moment is determined by the investor out there who is willing to pay you the most for it — and nothing else. It has **no "intrinsic value", no "fundamental" characteristic** that can be evaluated without knowing how a hundred million others will value and perceive it. It is a risky and inherently speculative investment.

In my experience, this is not what most investors mean when they say to their advisor, "just buy me a portfolio of stocks." What they really mean is "I want to own things I understand." They believe that investments in businesses are simple and straightforward. Unfortunately, while the businesses and how they make money may seem perfectly sensible on the surface, the forces influencing the returns from ownership of a common stock are anything but simple and straightforward. Sure, diversification helps a lot, and there are decades of relevant data to help us build some confidence about some range of likely outcomes. There are also theories of varying quality about rational behavior in that spontaneous order we call a market. But what you really own is something whose value may confound any attempt at analysis or linkage to economic fundamentals over your entire investment horizon.

Think this is just a misunderstanding of individual investors? Think again. This is a systematic problem. Consider, for example, that every Series 7-trained professional — by which I mean most of your brokers and financial advisors — **is told that** alternative investments tend to be "riskier" than traditional investments. In isolated cases this is true, and it's certainly true that there are strategies by which the complexity of so-called alternative strategies introduces new dimensions of risk — usually as a way for financial intermediaries to confuse people into paying them more. But by and large, it's an unequivocally false statement. Still, the dimension of complexity vs. perceived simplicity dominates how investors think about risk, even though the relationship is rarely strong. Don't believe me? Ask a client, or better yet, your financial advisor to rank the following in terms of their riskiness: (1) $100 invested in an S&P 500 index fund, (2) $100 invested in centrally cleared financial futures contracts on German bunds, (3) $100 invested in fully collateralized, centrally cleared credit default swaps on U.S. IG credit. My guess is that nearly all individual investors, a majority of financial media members and a plurality of financial professionals would put #1 somewhere other than the top of the risk list. And it's Not. Even. Close.

As it intersects with familiarity bias/availability heuristics (i.e., we are biased in our analysis toward things that we think that we know), the tyranny of terminology becomes less insidious and more obvious in its influence. Terms like stocks, bonds, commodities or real estate have readily ascertainable meanings and definitions but mean something very different when they come out of the mouths of most investors. They mean *familiarity* or *foreignness.* Whether we are individuals working with advisors or advisors ourselves, we must understand that when most investors say risk, they mean complexity. When most investors say simple — or something they think of as simple — they mean "low risk." These are dangerous misconceptions.

Crunchy Frogs

And friends, any time there's a dangerous misconception, there's someone in the financial services industry poised to weaponize it. Plenty of Crunchy Frogs to go around, you see.

In every sub-field of money management, the name of the game is benchmark arbitrage. It's a game played in three parts: risk layering, benchmark selection and multi-benchmarking. In each case, the affinity investors have for the comfort of indices makes them susceptible to marketing and fee schemes that have the potential to cause them harm.

Risk layering is the oldest of the three games. I wrote about it last year in **I am Spartacus**. The basic premise here is to select a benchmark that will feel attractive, familiar and conventional, and then to take additional risk on top of it to either (1) earn a better fee for the return generated by that risk or (2) generate better-looking performance to improve marketing potential. This IS the business model of private equity buyout funds, who since the massive fund raises and valuation increases of the mid-2000s, now take your cash, buy a company at a premium, layer on debt and sell it a few years down the line without having really done much of anything else. They're not alone. Keying on the intellectual attraction of an "absolute return hurdle", many so-called hedged and market neutral funds take on credit, equity and other risks beyond what exists in the benchmark, happily collecting incentive fees on garden-variety sources of return. Long-only funds do this too, of course. Most actively managed funds tend to buy higher beta, higher volatility stocks, and nearly all are smaller capitalization than the benchmark they are measured against.

Benchmark selection is often just a variant of risk-layering, but where the fund manager tries to control both the measurement and the measuring stick. Think of this like "venue-shopping" in the criminal justice world. Have you hired an international manager benchmarked to the MSCI EAFE Index? They do this. I don't know who you hired, but they do this. They always have 5-10% in emerging markets stocks, don't they? There's a reason they didn't select the MSCI World ex-US benchmark, folks.

As for multi-benchmarking, well…I hate to tell you, but if you have ever hired a money manager, a financial advisor or even an in-house investment team, you've seen this one, even if you didn't notice it. It's very simple: you pick two benchmarks, and then you make sure you're always positioned between them. And that's it. Sometimes one of the benchmarks is a peer benchmark (e.g., Morningstar, Lipper, eVestment peer group, Wilshire TUCS, Cambridge for the alts folks), or sometimes it's a "style" benchmark (e.g., Value, Growth, High Dividend, Quality, Low Vol, etc.). But the objective is to *always* be able to point to something that you're outperforming. A lot of this is wellintentioned and human, and there's often a good reason to do it. But if you're not looking out for it, it can confound.

And that's kinda the point.

We can't avoid convention, or the taxonomy that emerges naturally from an industry like ours. Nor should we want to. It helps us have conversations with each other. It helps us focus on **Things that Matter** instead of getting bogged down in details. But if we are to be successful, we must recognize the influence it has on us, our clients, our advisors and other investors. My advice?

> Try to understand what your clients *really* think their investments are. Know what they really mean when they ask why you are or aren't doing something.
>
> Know what your advisors and managers think something is. Ask questions. Don't assume based on terminology, and don't be steamrolled by jargon.
>
> Know what the things you own *actually are*, and build a risk management program to ensure that the baser temptations of people in this industry don't cost you or your clients money.

As we delve further into alpha in a "Three-Body Market", this last point will come up a lot. You can't seek alpha if you don't really know how to measure it. Except for the Postmodernists. Y'all can still tell us how it makes you feel.
