



Epsilon Theory

# The Half-Happy Horror

June 21, 2019

---



*The Judgment of Solomon, Gaspar de Crayer (c.1620)*

## ***Optimization is a scourge.***

I say this as someone who is as addicted to efficiency as anyone I know. I have a chart - not a mental chart, but an actual on-paper chart - of which of the three specific routes I should take to my office by day and time. I almost never schedule same-day meetings because I find it disruptive to planned periods of work on certain projects. I set up a *mise en place* for making Kraft Mac & Cheese for my kids, for God's sake. My biggest average allocation to public markets in non-taxable accounts for several years has been to risk parity. Much of the rest has sat in systematic trend-following and behavioral premia strategies. I am an optimizer, y'all.

Yet I have also spent my career as an allocator to investment strategies observing what both explicit and implicit goal-seeking does to investors and their processes.

I'm not *really* talking about the robustness of objective-function optimized portfolios to changes in key variables or estimation methodologies, although just a shred of epistemic humility in portfolio construction would go a long way with *some* quants. I'm also not really talking about the mean-variance frontier-plotting and JP Morgan GTTM-driven Monte Carlo slides I see being put in front of clients (and which I have, from time to time, put in front of them myself). Feel seen? Throw a rock in the air and you'll hit someone guilty.

But what I *really* mean is this:

**Our need to manage common knowledge about multiple competing objectives in an optimization-centric framework makes us into professional cartoonists.**

## The Lip-Service Cartoon

I'm not saying anything outlandish here. If you're a professional investor, you'll be familiar with this - especially the lip-service cartoon. This is the one where we pretend - and ask everyone else to pretend - that our secondary and tertiary objectives or constraints are conveniently totally achievable without impacting our primary pursuit, even when they're not.

I have [written about this recently](#) in context of post-secondary education, where optimization's effects are obvious. The stories we tell about college are that it ought to serve three objectives, usually all at once:

- College should broaden horizons, providing a foundation of historical, philosophical, aesthetic and scientific knowledge and the critical thinking needed to process problems raised by or answerable using that knowledge;
- College should prepare students to enter and be successful in a profession; and
- College should provide an environment for the socialization, personal growth and independence of young adults.

In practice, by any realistic measure of revealed preferences American universities don't really optimize for any of these things. As we have argued, we think they mostly target maximizing the signal sent about the underlying intellectual, temperamental and <at a low whisper> socioeconomic and demographic </at a low whisper> traits of their degree-holders, because, well, that's what our culture has permitted and what alumni donors demand.

Is it true that critical study of history, philosophy and language can improve the quality of thinking? Of course it is! If you've been reading Epsilon Theory very long, you will know that we believe the same Big Ideas tend to permeate almost every area of human activity, and that identifying those variants and their memetic attachments in the wild can be a meaningful advantage to our thinking. You'll also know that we are passionate about the *human* importance of art and creation. The cartoon isn't in recognizing the *importance* of these things. It isn't even in recognizing that they may have *some value* for multiple objectives. The cartoon is in our pretense that coursework in music theory and the emergence of proto-Celtic language and cultures from other Beaker societies will be just as important to professional pursuits or personal growth of young adults as it is to living an enriched life. By corollary, however many hours you spend studying Kant, it won't make you as good at your job as spending the same amount of time doing that job or preparing more directly for it.

**To maintain the cartoon, we must pretend that it will.**

Our pressure to create these cartoons can be traced to our sensitivity to common knowledge about those secondary and tertiary objectives that we are 'balancing'. It is untenable - unacceptable - to be seen as *not* seeking out those objectives, and it is desirable under almost every governing narrative of the Zeitgeist to be seen as pursuing them. The inevitable result is that they get only as much of our energy and attention as is necessary to maintain the cartoon.

If you want to see this in financial markets, look no further than the methods your value managers provide for avoiding value traps (which will, I assure you, be disregarded as not being relevant in *this particular case* when it suits them), most ESG overlays, and almost every risk report provided by a non-integrated risk team to the portfolio management team. Pro-tip: the more a PM you are interviewing goes on about how much having daily access to these risk statistics has really changed their thinking, the more full of shit they are.

**In fairness, it isn't that they're lying - it's that the cartoon permits them to act as if the balancing of multiple objectives is serendipitously bereft of any tradeoffs. Their process is just that good.**

## The Measurement Cartoon

Sometimes our cartoon isn't that we wave our hands at potential tradeoffs between our objectives, pretending that some magical alignment of our ideas permits the kind of synergy never found in nature. Instead, the cartoon is the pretense that we have the capacity to measure what those trade-offs are, even when we don't.

The most inevitable cartoons of this variety, I think, are those built around liquidity. Our industry gets the occasional reminder that liquidity matters, such as with the recent Woodford business in the UK, or the Third Ave blow-up a few years back. After those events, there's usually a 12-18 month cycle in which people Really Care about it. They add a few more questions to their DD questionnaires, and once the answers from fund managers congeal around some standardized answer, the questions largely stop, other than in the most perfunctory way. That is, until the SEC passed 22e-4, a rule establishing the requirement for a liquidity risk management program for open-end investment companies. It requires the mapping and publishing of position liquidity in four different categories.

In this case, we have a rule *requiring* the creation of a cartoon, and lest anyone is laboring under any delusions here, that's exactly what investors will get. I've provided below a helpful example of the rule, its standards, the cartoon responses investors will receive and the real response investors would get if the industry were concerned about telling them the truth:

Rule 22e-4 Category	Rule 22e-4 Standard	Cartoon Response	Real Response
Highly Liquid	Converted to cash in <3 days without significantly changing market value	79%	No bloody idea
Moderately Liquid	Converted to cash in 3-7 days without significantly changing market value	5%	No bloody idea
Less Liquid	Sold in <7 days without significantly changing market value, but settling >7 days	7%	No bloody idea
Illiquid	Cannot be sold in <7 days without significantly changing market value	9%	No bloody idea

The point, of course, is not that liquidity isn't important. When it matters, it matters *a lot*. And when it matters *a lot*, things are happening that are often not quantifiable in ways that will make sense under any objective quantification scheme in a normal environment. Asset class flows, manager-specific flows, market direction and available position-level liquidity are all pro-cyclical. As has almost always been the case, these cartoons will tell a happy story about liquidity to investors...until it's too late. In other words, the value ascribed to a liquidity bucket is an ephemeral, practically useless figure that gives false comfort and context to manager and investor alike.

There are other examples of how we optimize for multiple objectives by turning a complicated secondary objective that deserves our respect into a cartoon we hand over to ALPS, BNY or our internal risk management team. Highly leveraged funds whose managers have ever uttered the words 'Cornish-Fisher expansion' to a client, you are correctly detecting side-eye. In all such cases, there's nothing disqualifying

or wrong about using guideposts or systematic measures, but **when we optimize for some key objective (return or volatility-adjusted return) and explain away others (maintaining adequate liquidity) by constructing a cartoon to 'measure' them away, we're gonna have a bad time.**

## The Mitigant Cartoon

In still other circumstances, we know that we can't measure a secondary thing we care about, so the hand-waving takes a different form. We don't have measurements. We have *mitigants*.

To be fair, *mitigants* are real things. AND they are often the basis of cartoonish abstractions that allow us to dismiss important things we ought to honestly, fully consider. We know that excessive leverage and concentration in this strategy creates potentially outsized risks to the portfolio, but worry not: in portfolio transparency we have a powerful mitigant. We know that there's an unusual capital structure which could permit the intentional impairment of our class of interest, but the principal is a public personality with long-term clients in the same class. These are strong mitigants, you see.

The problem with mitigant cartoons - and what distinguishes them from actual mitigants, is that they are among the most basic tools of confirmation bias. They provide ready answers to our concerns which, like our other cartoons, miraculously seem to support the unbridled pursuit of whatever our primary objective was in the first place.

**When we build too much of our thinking around optimization instead of good-faith, knowingly messy, honest evaluation of conflicting facts and circumstances, we will inevitably find that all of our problems become just-so stories. They will perfectly explain, measure or mitigate away the things we have to be seen to care about but don't. They will perfectly support our single-minded pursuit of the things we do care about.**

## The Half-Happy Horror

Look, the idea here isn't that we can't walk and chew gum at the same time. An incredible share of life is obviously about finding balance between conflicting things, priorities and ideas - **whenever it's possible** to do that, that is. The idea also isn't that we shouldn't adopt systematic methodologies -quite the opposite, as I frankly think these tendencies to optimize are *stronger* for those who don't constrain their processes to rules (yes, it is clearly quite possible to systematize predispositions in such rules, too).

The idea is simply that optimization of decisions involving multiple objectives and constraints - whether fully systematic, rules-based or discretionary - is the kind of thing that should always cause the responsible investor and citizen to step back. Especially when the alternative is often a solution that will make everyone half-happy, which in a zero-sum game is no solution at all.

What **can** that person do?

- **We can (try to) be honest with ourselves.** If we have a constraint, a risk, or a secondary objective in our strategy we're trying to balance with another, are we giving them lip service? Are we draping them in unwarranted quantification so that we can consider them 'solved'? Are we clothing them in 'mitigants' so that we can check the box and move on?

- **We can focus on ANDs.** The language we use to talk about multiple objectives often betrays our attention and the considerations we would just as soon wave our hands at. In my experience, it is critically important to start from a place that considers all facts as ANDs, rather than presuming their relationship to one another.
- **We can try to simplify our decisions.** Where possible, simplifying decisions and our responses to them so that we truly can focus on a narrower set of objectives - not through abstraction, but in truth - can help a great deal. With portfolios, maintaining a lens to conceptualizing pools of capital as serving discrete objectives can be an effective management tool.

---

## DISCLOSURES

This commentary is being provided to you as general information only and should not be taken as investment advice. The opinions expressed in these materials represent the personal views of the author(s). It is not investment research or a research recommendation, as it does not constitute substantive research or analysis. Any action that you take as a result of information contained in this document is ultimately your responsibility. Epsilon Theory will not accept liability for any loss or damage, including without limitation to any loss of profit, which may arise directly or indirectly from use of or reliance on such information. Consult your investment advisor before making any investment decisions. It must be noted, that no one can accurately predict the future of the market with certainty or guarantee future investment performance. Past performance is not a guarantee of future results.

### **Statements in this communication are forward-looking statements.**

The forward-looking statements and other views expressed herein are as of the date of this publication. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements, and there is no guarantee that any predictions will come to pass. The views expressed herein are subject to change at any time, due to numerous market and other factors. Epsilon Theory disclaims any obligation to update publicly or revise any forward-looking statements or views expressed herein.

This information is neither an offer to sell nor a solicitation of any offer to buy any securities.

This commentary has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. Epsilon Theory recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial advisor. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives.