

Multivariate Critical Thinking (MCT)

“Our knowledge can only be finite, while our ignorance must necessarily be infinite.” ~ Karl Popper

One of the more profound trading insights I’ve had over the last five years is the value of multivariate critical thinking (MCT).

MCT is the practice of considering multiple hypotheses and outcomes and dispassionately applying critical judgement to each. It requires updating their probabilistic weighting as new information becomes available — practical bayesian analysis.

This seems simple and easy, and on the surface it is, or at least should be. But the difficulties come in its application. Specifically concerning the “dispassionate” part.

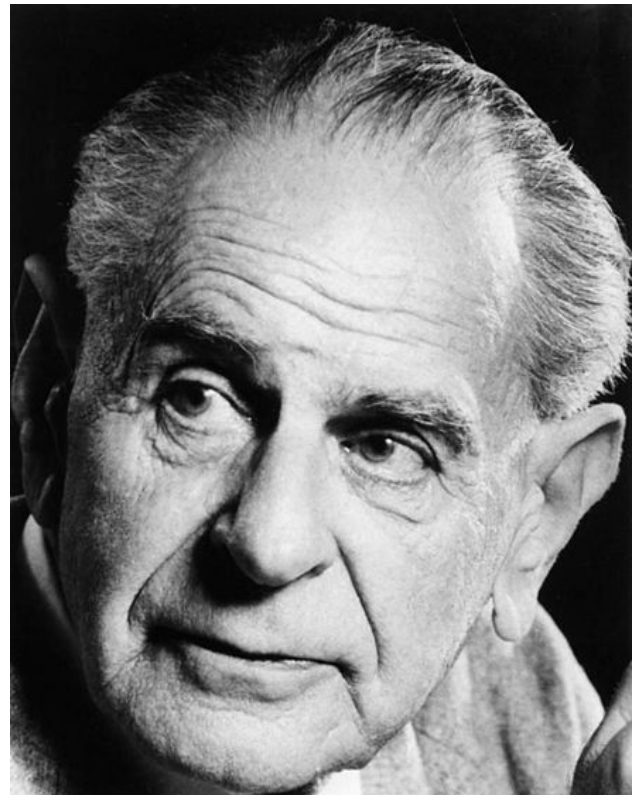
The problem is, at least it was for me, is that we’re naturally linear thinkers inhabiting a non-linear world. And to top things off, we have a stubborn ego-sensitive brain that wants simple answers and to always “be right”.

It’s a tough circle to square for sure. But not impossible.

If you wonder if you suffer from ego dominated linear thinking (let’s call this EDLT), just think back to the last time you were wrong on a trade or a market call. And ask yourself, did you get upset? Did you not enjoy the process of “being wrong”? Did the most dangerous four letter word in trading, “HOPE”, become a part of your thought process? If the answer is yes, and it will be for the majority of people, then you’re practicing our instinctual EDLT.

When operating in EDLT mode the brain latches onto a hypothesis and then focuses in on “being right”. It doesn’t do this through objective assessment but rather by employing a tool kit full of anchoring, biases and heuristics to cherry pick information that supports it in “being right”.

The irony is that by focusing on “being right”, it more often than not ends up “being wrong”.



This is an important habit to break. Doing so will lead to better outcomes.

Practicing MCT is invaluable because it focuses the brain on finding the errors in its own logic. Because the brain no longer has to defend a single thesis, but instead is analyzing and weighing numerous theses, its focus switches from trying to “be right” to figuring out how it’s wrong. This makes you better at “being wrong”. And being better at “being wrong” is vital to making money.

The trader who most fully practices MCT is George Soros. He said the following about this process:

The Secret to my success is that I'm always wrong. I'm ALWAYS wrong. And I try to correct my mistakes. That's the secret of my success.

And

My approach works not by making valid predictions, but by allowing me to correct false ones.

Most read these statements from Soros and think he’s being glib. That’s because they’re playing the “being right” game. They’re too busy looking for some “secret” that’s going to help them “be right” more. But all they need to do is “invert, always invert!” their thinking process.

Soros adopted this unnatural mode of analyzing the world from philosopher Karl Popper. Popper established the epistemological philosophy of critical rationalism. He took these ideas from David Hume, who took them from Pyrrhonian skepticism, which evolved out of the ancient school of Indian Philosophy, Carvaka. At the foundation of all of these schools of thought is that “nothing can be known for certain”.

Since nothing can be known for certain we need to be good at being uncertain. The practice of MCT is the framework that does just that. The *Philosopher* from Drobny’s [The Invisible Hands](#) discusses how this works (emphasis mine).

I try to develop a hypothesis about how the world is working and how it could work in the future. Therefore, information to us is a collection of theories and ideas, together with evidence that either supports or falsifies these theories and ideas. Information can come from fundamental economic drivers, such as growth, inflation, and other variables, or it can come from more technical, market-based factors such as flows, liquidity, etc.

We are not engaged in what I describe as “vision macro,” whereby one tries to work out some kind of single truth about how the world works. Rather, we form a probabilistic set of hypotheses about how the world could look and what might

drive markets going forward, focusing on the market impact in all scenarios and looking for good risk-versus-reward trades around these hypotheses.

“Vision macro” is standard EDLT. Current examples of EDLT are people like Raoul Pal and John Hussman. These are guys who are locked onto a “single truth” and have taken up the torch of “being right”. They have made themselves champions for their “truth”. As a result, they’ve blinded themselves stupid and have been horribly wrong.

The old Wall St. adage that it’s not about being right but about making money is an adage for a reason. You only need to be “right” at the right time and the way to do that is by being good at “being wrong”. Critically assessing multiple hypotheses with MCT is the way you get there.

EDLT is centered around seeking out confirming evidence. MCT looks for disconfirming information. EDLT is fragile while MCT is robust. Most people utilize the former because practicing the latter is tough.

If you find yourself latched onto a “single truth”, Karl Popper would ask you “how would you disprove yourself?”

Invert your thinking.