

Glossary

A *dramatis personae* of sorts for the ideas, organized by intuitive, non necessarily logical order.

Triad: The triplet Antifragility, Robustness, Fragility —all explained in book.

Fundamental Asymmetry in Life: When someone has *more upside than downside* in a certain situation, he is antifragile and tends to gain from a) volatility, b) randomness, c) errors, d) uncertainty, e) stressors, f) time. And the reverse.

Barbell: A dual strategy, a combination of two extremes, one safe and one speculative, deemed more robust than a monomodal strategy; often a necessary condition for antifragility. For instance, in biological systems, the equivalent of marrying the accountant and having a fling with the occasional rock star; for a writer getting a stable sinecure and writing without the pressures of the market during spare time. Even trial and error are a form of barbell.

Procrustean Bed: Procrustes got a perfectly fitting bed by cutting or stretching the limbs of people. Corresponds to situation in which simplifications are not simplifications.

Fragilista: Someone who causes fragility because of his naive rationalism. Also usually lacks sense of humor. See *Iatrogenics*. Often fragilistas fragilize by depriving variability-loving systems of variability and error-loving systems of errors.

Iatrogenics: harm done by the healer, like the doctor doing more harm than good. **Generalized Iatrogenics:** By extension, applies to the side effects of policy makers and academics.

Nonbarbell Class: An economic condition of making more than minimum wage *and* wishing for more wealth. Workers, monks, hippies, some artists, and English

aristocrats escape it. The middle class falls squarely into it; so do Russian billionaires. The only way to be independent is to escape the nonbarbell class.

Nonpredictive approach: Building stuff in a manner not based dependent on perturbations — hence robust in changes in future outcomes.

Ludic Fallacy: Mistaking the ecological complex real world to the well-posed problems of mathematics and laboratory experiments.

Antifragile Tinkering, Bricolage: a certain class of trial and errors.

Lecturing Birds How to Fly Effect: inverting the arrow of knowledge academia → practice, or education → wealth

Touristification: Attempt to suck randomness out of life. opposite: *flâneur*.

Hormesis: when a bit of a harmful substance, or stressor, in the right dose or with the right intensity, stimulates the organism and makes it better, stronger, healthier, and prepared for a stronger dose the next exposure. (think of bones and karate).

Naive Interventionism: Intervention with disregard to iatrogenics. The preference, even obligation, to “do something” over doing nothing. While this instinct can be beneficial in emergency rooms or ancestral environments, it hurts in others in which there is an “expert problem”.

Naive Rationalism: thinking that the reasons for things are, by default, accessible to you. Also called the **Soviet-Harvard** illusion.

Turkey and Inverse Turkey: The turkey is fed by the butcher for a thousand days, and every day the turkey pronounces that the butcher “will never hurt it” with increased statistical confidence —until thanksgivings when it is a “Black Swan” revision of belief for the turkey. The inverse turkey is the mirror confusion, not seeing opportunities —pronouncing that one has evidence that someone digging for gold or searching for cures will “never find” anything.

Doxastic commitment, or “soul in the game”: You can only believe predictions and opinions by those who committed themselves to a certain belief, and had something to lose, in a way to pay a cost in being wrong.

Agency Problem: When the manager of a business is not the true owner, so he follows a strategy that cosmetically seems to be sound, but in a hidden way benefits him and makes him antifragile at the expense (fragility) of the true owners or society. When he is right, he collects large benefits, when he is wrong, others pay the price. Typically these lead to fragility as it is easy to hide risks. These also affect politicians and academics. A major source of fragility.

Hammurabi Risk Management: The idea that a builder has more knowledge than the inspector and can hide risks in the foundations.

Skin in the Game/Captain and ship rule: Every captain goes down with every ship. This removes the agency problem and the lack of doxastic commitment.

Empedocles’ Tile: A dog sleeps on the same tile because of a natural, biological, explainable or non explainable match, confirmed by long series of recurrent frequentation. We may never know the reason, but the match is there. Example: why we read books.

Cherry Picking: selecting from the data what fits one’s point to prove and ignoring disconfirming elements.

Ethical Problems as Transfers of Asymmetry (fragility): Someone steals antifragility from others, getting the upside and sticking others with the downside. “Other’s skin in the game”.

The Robert Rubin problem: Getting upside from a strategy without downside for oneself, leaving the harm to others. Rubin got 120 million dollars in salary from Citibank; taxpayers are paying for it retrospectively.

The Alan Blinder problem: 1) When someone uses privileges of office retrospectively 2) When someone violates moral rules but complies perfectly with the law. Confusion of ethical and legal.

The Joseph Stiglitz problem: Mental cherry picking, leading to contributing to the cause a crisis while being convinced of the opposite –

and thinking he predicted it. Applies to people with opinions without skin of the game.

Ethical Inversion: fitting one's ethics to actions (or profession) rather than the reverse.

Protagoras Problem: engaging in consequentially distorting assumptions "ifs" and calling it "science" and "evidence" —typical in social science modeling. The French call it "using ifs to put Paris in a bottle". The key is sincerity in assumptions.

Narrative fallacy: our need to fit a story, or pattern to series of connected or disconnected facts. The statistical application is data mining.

Narrative discipline: discipline that consists in fitting a convincing and well-sounding story to the past. Opposed to experimental discipline. In medicine, epidemiological studies tend to be marred with the narrative fallacy, less so controlled experiments. Controlled experiments are more rigorous, free of **cherry picking**.

Rational Optionality: Not being locked into a given program, so one can change his mind as he goes along based on discovery or new information. Also applies to rational *flâneur*.

Subtractive knowledge: You know what is wrong with more certainty than anything else. An application of *via negativa*.

Via negativa: in theology and philosophy, it is the focus on what something is not, an indirect definition. In action, it is a recipe of what to avoid, what not to do —subtraction not addition, say, in medicine.

Subtractive prophecy: Predicting the future by removing what is fragile from it, rather than naively adding to it. An application of *via negativa*.

Thalesian v/s Aristotelian: Thalesian focuses on exposure, payoff from decision; the Aristotelian focuses on logic, the True-False distinction. For Fat Tony, the problem is all about sucker-nonsucker*. (Also see convexity effects).

Lindy effects: A technology, or anything nonperishable increases in life expectancy with every day of its life —unlike perishable items (such as humans, cats, dogs, and tomatoes). So a book that has been a hundred years in print is likely to stay another hundred years.

Neomania: A love of change for its own sake, a form of philistinism that does not comply with Lindy effects and understands fragility. Forecasts the future by adding, not subtracting.

Heuristics: Simple and practical easy to apply rules of thumb that make life simple. These are necessary (we have no mental powers to absorb all information and tend to be confused by details) but they get us in trouble as we do not know we are using them when forming judgments.

Opacity: You do not see the barrel when someone is playing Russian roulette. More generally, some things remain opaque to us, leading to illusions of understanding.

Mediocristan: a process dominated by the mediocre, with few extreme successes or failures (say income for a dentist). No single observation can meaningfully affect the aggregate. Also called “thin-tailed” or member of the Gaussian family of distributions.

* **Technical Stuff** (the motivated reader should skip, this is a rewording of material discussed in English). Mathematically, the Aristotelian focuses on a variable, say X ; the practitioner on a function of that variable $F(X)$. The dynamics of $F(X)$ can be markedly different from those of X , particularly when $F(X)$ is nonlinear. We may never understand X , or be marred with perceptual errors, but we can control $F(X)$. The fool thinks the Black Swan problem resides in better prediction of X , rather than mitigation by controlling $F(X)$. $F(X)$ is asymmetric. Optionality is “convex” exposure, i.e., for $H(X)$ convex. Jensen’s inequality is the property of some systems allow them have a different average for $F(X)$ than X .

Extremistan: province where the total can be conceivably impacted by a single observation (say income for a writer). Also called “fat-tailed”. Includes the fractal, or power-law family of distributions.

Nonlinearities:

Convexity effects: An extension and generalization of asymmetry. The technical name for fragility (negative convexity effects) and antifragility (positive convexity effects).