

## Contrast-Caused Distortions of Sensation, Perception and Cognition

“The sensation apparatus of man is over-influenced by contrast – it has no absolute scale but it has a contrast scale. And it’s a scale with quantum effects too – it takes a certain percentage chance before it’s noticed. Here the great truth is that cognition mimics sensation. People are manipulating you all day with contrast. If it comes to you in small pieces you’re likely to miss it.” –Charlie Munger

*This article is part of a [multi-part series](#) on human misjudgment by Phil Ordway, managing principal of [Anabatic Investment Partners](#).*

- Cialdini’s bucket of water experiment
- A magician removing your watch
- Real estate brokers who dupe clients by first showing two awful, overpriced homes and then a moderately overpriced home. “It works pretty well, and that’s why the real estate salesmen do it. And it’s always going to work.”
- Women who enter into bad marriages because they grew up in even worse homes. Ditto for second marriages.
- The proverbial frog in a pot of water that is slowly heated to boiling.

### Update

“Few psychological tendencies do more damage to correct thinking. Small-scale damages involve instances such as man’s buying an overpriced \$1,000 leather dashboard merely because the price is so low compared to his concurrent purchase of a \$65,000 car...One of Ben Franklin’s best-remembered and most useful aphorisms is ‘A small leak will sink a great ship.’ The utility of the aphorism is large precisely because the brain so often misses the functional equivalent of small leak in a great ship.”

Other examples of contrast-caused misperceptions abound.

- The marketer’s or pollster’s habit mandate to “**simplify, then exaggerate.**”
- Corporate profits/markets, valuation, absolute returns in corporate markets
- **Relative valuation** – fixed income as priced over Treasuries, or a Triple-A tranche against a triple-BBB tranche. Who cares if the relative valuation is correct if the absolute valuation is garbage? Is an extra 40 bps of spread worthwhile when comparing a Treasury and a structured subprime RMBS?
- **Non-GAAP accounting** – we’ve all seen the explosion of “non-GAAP” or “adjusted” figures in company financial reports. That’s part of why it’s so important to start with standardized reporting first – what the company has to say – before they can try any magician tricks with your watch by using “look over here instead” non-GAAP numbers. And it doesn’t stop with reporting – it’s come to dominate incentives too. The term “non-GAAP” appeared in 58% of proxy filings for S&P 500 companies reporting so far in 2016, up from 27% of those same S&P 500 constituents five years ago.<sup>[\[37\]](#)</sup>
- **Perceptions of human progress and poverty** – Extreme poverty (less than \$2 per day in real terms) has been cut in half between 1990 and 2015, but in a survey just 1% of respondents correctly guessed that. More than 70% of respondents said extreme poverty had increased by

25% or more during that time.<sup>[38]</sup>

- **Anchoring to recent market prices - “I missed it”**

- Consider Buffett’s preferred valuation method (i.e., not even looking at the market price until he has his own opinion of valuation)
- Investment measurement periods - quarterly, monthly, weekly, daily investment results...
- Real estate purchases
- Companies that go bankrupt slowly...then suddenly
- Climate change
- **Stock splits** - obviously pure noise, but no matter how simple the concept of one pie being cut into a different number of pieces, the contrast phenomenon and anchoring to the previously higher price briefly drove a frenzy of stock splits among tech companies in the dot com boom. Now - perhaps thanks to Berkshire - even tech companies seem to have finally swung the other way, with four-figure stock prices even emerging as a status symbol now. By my count on FactSet, there are at least a few dozen companies whose share price exceeds \$500. Amazon, Markel, Alphabet/Google, Priceline, Seaboard, NVR, Constellation Software, Cable One and Graham holdings, White Mountains, and of course, Berkshire itself all have refused to split their stocks despite a price over \$500 per share. And behaviors, as always, spread. Alphabet/Google’s founders explicitly consulted Buffett and modeled aspects of their IPO, strategy, organization, and culture after Berkshire, despite relatively few similarities on the surface. Others like MKL, CABO, GHC, and WTM have even more direct intellectual ties to Buffett.
  - One way to avoid some contrast-related problems of cognition in investing is to focus on market capitalization and enterprise value, not the stock price. One of my favorite tests to see whether a person is really thinking like an owner of the price or a predictor of the stock price is when I hear someone start pitching an idea - usually with multiple references to current, past and future stock prices along the way - I’ll let him go for a while and then casually ask what the market cap is. I would say at least half the time the stock pitcher has no idea, and in about half of those cases they stumble for a bit before offering a number that isn’t even in the right ballpark. That’s the worst case - it’s one thing not to know, but it’s a whole other thing to not know and try to fake it.

“Risk means more things can happen than will happen.” - Elroy Dimson<sup>[39]</sup>

<sup>[37]</sup> Audit Analytics

<sup>[38]</sup> <https://www.gatesnotes.com/2017-Annual-Letter>

<sup>[39]</sup> <https://www.bloomberg.com/news/articles/2007-04-08/philosopher-of-risk>