## The Mystery of Trading Intuition

Traders and portfolio managers recognize that some among their crowd have a seemingly outsized talent for predicting the direction of the markets. On one hand, it's common to cobble together good performance through managing risk but the consistently great performers appear to possess some sort of otherworldly gift for seeing where price will go.

The Bloomberg Tradebook Trader Exercise has been designed by The ReThink Group to assist traders in practicing the thinking style that research indicates is the power behind this mysterious "X-factor." Ironically, brain and behavioral research shows that the markets only masquerade as a numbers game. In actuality they are a game that neuroeconomists have labeled "intentional social risk".

As such, this trader brain warm-up leverages classic psychology research into the perception of social meaning. If indeed the brain works a bit like muscle, engaging with the exercise can be expected to help bring a trader into the right mindset to make his or her best trades.

## Exploring the Nature of Trader Intuition

In 2010 *The Journal of Finance* published a startling study by Cal Tech researchers Bruguier, Quartz and Bossaerts. Through brain and behavioral experiments, they demonstrated how social cognition, *rather than mathematical and logical reasoning*, underlies the otherwise little-understood X-factor in traders. Those legendary portfolio managers and traders who seem to have a special talent for predicting markets unconsciously rely on a dimension of thought known alternately as theory of mind, cognitive empathy or mentalizing. This social thinking style appears to be the power behind that exceptional pattern recognition ability that enables great traders to infer meaning from the signals relayed through the dance of price action.

The researchers first ran an experiment to create virtual market data that included intentional buying and selling (which they somewhat unfortunately termed as "presence of insiders"). Next, they performed brain scans to identify which parts of the brain were active when individuals subsequently viewed the development of price action in this virtual market. In other words, the researchers took pictures of active human brains as they were thinking about price movement and identified which regions and structures were most involved in contemplating the price movement. Last they ran a third experiment which tested for a correlation in the ability to predict price direction with scores on three traditional tests of social cognition and mathematics.

The findings in this complex experimental design include:

1. Subjects were quiet successful (46-78%) at forecasting the direction of price changes.
2. Correct forecasts correlate with two social cognition tests with the strongest evidence being for the classic Heider-Simmel test discussed below and used as a basis for the Bloomberg Tradebook Trader Brain Exercise.
3. The mathematics test results showed no correlation with the ability to predict price.

## The Classic Heider-Simmel Experiment of 1944

More than 70 years after Fritz Heider and Marianne Simmel published their now classic study of perception and geographical shapes, their idea remains the most widely referenced investigation of the thinking style known as "theory of mind". Using only geometric shapes, they determined that almost 100 percent of subjects watching such shapes move impute human meaning and a story to the movements. Even when their shape video played in reverse, all but two of the studies' subjects reported a detailed story being played out. Or, to use the original language "interpreted the picture as action of animated beings, chiefly of persons". In essence, Heider and Simmel successfully demonstrated that humans tend to perceive the meaning of others' intentions even without seeing their faces or associated emotional expressions.

Traders who consistently and correctly predict others' future needs to buy or sell through observing the behavior of changing numerical symbols reveal the same type of social thinking. In fact, if we think about it, we can see that all a trader or PM actually cares about is "knowing" who will pay more tomorrow for something they are buying today. Price prediction, no matter what form of analysis a market participant might favor, might look like a numbers game but is in fact a people game.

## Conscious or Unconscious Mental Processing?

As academics have become better able to explore brain activity through brain images and other advanced techniques, it's become widely accepted that most of our mental processing occurs below the level of consciousness. The neuroscientist David Eagleman, whose PBS series, *The Brain* (2015) explores his brain research, stated in his book, *Incognito* that "*most of what we do and think and feel is not under our conscious control. … The conscious you is the smallest bit of what's transpiring in your brain*." He continued,

> *"Brains are in the business of gathering information and steering behavior appropriately. It doesn't matter whether conscious is involved in the decision making. And most of the time, it's not."*

Hence, traders for the most part don't truly recognize consciously that they are predicting other traders' future perceptions when they predict price. They may realize that they talk about the market in terms of people with statements like "who is pounding this bid?" or "they are coming for them now" but the majority of traders rather blithely accept the widespread misperception that their price predictions stem from some sort of probabilistic thinking. Although they often recognize the similarities between poker and trading, generally the human prediction aspect remains unnoticed or at least severely underappreciated.

## Expert Knowledge, Unconscious Pattern Recognition and Trading Intuition

It's also relatively fashionable to discount the value of unconscious pattern recognition or felt knowledge. Behavioral finance research has convinced us to doubt the type of expert knowledge which we commonly label as intuition. In contrast however, leading scholars in judgment and decision making say things like: "intuitive thinking underlies the most advanced thinking" (Reyna, 2012).

Research points to evidence that more sophisticated thinkers rely on the gist or essence of a situation rather than the literal, verbatim recounting of the factors to make choices. They cull the essence of the questions at hand rather than itemize and prioritize each possible outcome. As such this is what the exercise is aimed at, the basic question of which way price might move as opposed to a more detailed analysis of all of the factors that may be influencing price movement. An expert trader who listens for and parses their internal voice actually accesses their years of watching the dance of price.

## The Bottom Line

In summary, engaging with the Bloomberg Tradebook Trader Exercise can reasonably be expected to tap into a trader's the most useful neuronal "muscles". Consciously working with the actual skill underlying performance – social cognition – should in effect warm-up the trader's brain in a way that makes it more facile and effective in anticipating the likely development of price action. We hope you enjoy this exercise and we believe that with practice, it will benefit your trading.

## References


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