

## **Greg Kolodziejzyk's 13 year ARV experiment**

***Summary of the paper that was published in the Journal of Parapsychology***

### **ABSTRACT**

For thirteen years from 1998 to 2011, Greg Kolodziejzyk has been conducting an experiment studying the role of intuition as a trading methodology. During that time period, Greg used a protocol he invented called "associative remote viewing" which uses a form of intuition to predict the future direction of random financial markets. Greg was able to generate nearly \$150,000 in profits over this 13 year period resulting in a success rate of 60% correct trades. The chance that Greg's success is due to chance expectation is less than 1 in 31,000.

### **SUMMARY**

I would like to start by asking you a question: "do you believe in intuition? And if so, what do you think it is?"

I think our subconscious minds recognize patterns that our conscious minds aren't sensitive enough to notice. And when we are faced with making a decision based on that pattern, our subconscious intervenes with these 'intuitive' gut feelings and we act on them.

In the book "The Hidden Brain" by Shankar Vedantam, Shankar tells of an experiment where people in an office environment were taking coffee and not putting the correct amount of change into the coffee fund cup. The experimenters solved the problem by simply putting a photo of two eyes above the coffee machine. In interviews with the office workers after, not one single person could recall actually SEEING this image of the spying eyes - but their subconscious minds did, and the subconscious did not know they weren't REAL eyes. It actually prevented them from stealing the coffee by providing them with an intuitive nudge. Someone's watching... pay for your coffee.

I think that kind of thing happens all the time. I think our subconscious recognizes a subtle pattern that it has observed before - maybe a few times. Maybe it's a complex mix of different observations. Your subconscious is nudging you to take action in the form of an intuitive feeling, and that can certainly be very valuable.

However, I the subject of my study is about a different kind of intuition - one in which your subconscious mind certainly plays a very key roll in, but the level and quality of information that it provides to you, doesn't fall within the realm of our current understanding of physics. I

think our subconscious minds are FAR more powerful than simply good (albeit unreliable) pattern recognition algorithms.

I believe that your subconscious mind can actually predict the outcome of a random, unknown future event more often than chance would permit. Which is impossible, according to our current physics models.

Let me ask you another question. Do you believe in LUCK? I mean pure luck, not the kind where you make your own luck by making smart decisions, etc, but pure, roulette wheel, las vegas kind of luck. ESP kind of luck. Do you believe in extra sensory perception, predicting the future, psychic powers - call it what you want? Do you believe that our human minds are capable of perceiving a tiny bit of information about an unknown, possibly random event from the future?

According to a recent survey, about 50% of americans believe in ESP (although, 75% of americans profess at least one paranormal belief which include witches, astrology and ghosts. - go figure).

One half of you right now are going to accept what I am about to present to you, and the other half will have a very difficult time. Prior to the start of my research in 1998, I was certainly part of the 50% who did NOT believe in stuff like ESP.

During a lunch conversation with a friend one day, a way back in the late 90's, I was discussing how I always seemed to know what the DOW Jones industrials average index price would be when I got back to the office and looked at CNBC running on my TV. And that I wished I could develop a trading strategy based on that because I felt that my intuitive impressions would probably be more profitable than my trading system was at the time.

He told me about some scientific research into ESP, and I didn't believe him. But, I was interested enough to look into this myself, and boy - was I absolutely blown away. It turns out that ESP is real, it exists, and it has been scientifically studied in universities like Princeton, and research labs like Stanford Research Institute for over a century. As you can imagine, the effect size (that is the actual amount of ESP effect) is very, very small - but summed up over thousands - even millions of trials, it amounts to an extremely - statistically significant result.

Dr. Dean Radin formerly from UNLV, conducted a META study of all ESP experiments (ie: card guessing, coin flip guessing, etc) consisting of over 5.5 million trials conducted by universities, research labs from around the world over the last 100 years. His meta study

showed an astounding overall effect size (objective method of evaluating experiment results as compared to what could be expected by chance) that resulted in odds against chance of ten million to one. Some individual studies actually resulted in odds against chance of over 100 billion to one!

So you see.. there is a component of intuition that has access to some pretty valuable information. Information about the outcome of an unknowable future event.

Now - through all of this research, I discovered two very important facts about ESP:

1. The effect size PER TRIAL is very, very small. That means that participants in these experiments had to correctly guess the outcome of, say, a random coin toss thousands of times before the researcher could measure that this ability was not due to chance. This makes sense because if the effect was big, then we would all be cleaning out the casinos in Vegas.

2. To produce a measurable ESP effect, researchers found that it is necessary to TURN OFF the THINKING part of the participants brain. In other words, it doesn't work if you are THINKING about the answer. Our conscious calculating brains interfere with true intuitive, ESP-like impressions about the future.

Guessing the outcome of a completely RANDOM event should NOT involve THINKING. Unfortunately, our brains are used to being exercised and even if it's obvious that the brain can't 'think' out an answer to a random choice, it still does - or at least tries to. For example - the coin flipped two heads in a row, so the third flip will be tails. Obviously, that kind of 'logic' wrecks ESP.

So - I figured out a way to LEVERAGE the small effect size by using consensus from multiple ESP trials to increase the success per prediction to a level that I felt would be worth risking capital on. And, I figured out a way to HIDE what I was trying to predict from my conscious mind, in order to produce a true ESP intuitive impression about the future event.

To be fair, I later discovered that someone had already invented that the same protocol about a dozen years before I thought of it! It already had a name, and it was called "Associative Remote Viewing".

And so this was 1998, and thus began my 13 year experiment in which I used my ARV method to predict the outcome of random futures markets over random periods of time,

where I actually risked my own capital on those predictions.

My goal was certainly to find out if ARV could be used to do something useful - to MAKE MONEY, but I was also very concerned about mixing the ARV strategy in with conventional TRADING strategies - because in the end, if I was profitable, how would we know for sure that my success was due to the ARV, and not the trading strategy.

So - the trades that I took were always picked RANDOMLY by a computer program written by myself, out of a basket of a dozen different futures and commodities like Corn, Wheat, S&P 500, Bonds, Oil, Gold, and a few currencies. And I never used a stop or a target or any other conventional trading management strategy. I would randomly select a trade holding period in advance - like I will enter this trade on Monday at the open and exit on Friday at the close, holding for 1 week. After I completed my ARV analysis, and generated a bias (Buy or Sell) - and we will get into exactly what that ARV analysis was in a minute, my computer app would enter the trade for me on Monday morning without a stop and I would NOT know what market was being traded. And my app would exit that trade on Friday and I would then get to see the result - very simple and pure. No stops, no target, no moving averages, no charts, no indicators of any sort.

And just to make doubly sure that I wasn't picking markets that I thought had a good chance of going up or down, or might be due for a breakout or something, the market to trade was typically chosen AFTER I had already generated a prediction with the ARV process ie: Buy or Sell, and the actual market traded was kept HIDDEN from me even DURING the trade. I wrote a computer program to automate the order entry through my broker, and I was able to get it such that I did not know what I was buying or selling until AFTER the trade was closed. I didn't even know if I was profitable until AFTER the trade was closed.

Some trades I held a month or more, and some I held for a day, some were held for a few hours. The time periods that I traded over the years were varied.

I distinctly remember one particularly nerve wracking trade. I had spent a month generating four predictions for four futures contracts that I was going to hold for a full month. The day I entered the four trades (I think there were two longs and two shorts), my program randomly selected the four futures contracts from a basket consisting of a dozen or so - I think it was gold, oil, wheat and maybe the CDN dollar - I forget now. But I didn't know what I was trading. I waited for the 1 month period to end, and on the day that my 4 trades were closed I remember being VERY nervous as I accessed my account statement to see what the result was. ALL 4 trades were HUGELY profitable! I was thrilled. I think I made like \$30,000 or something like that.

At the end of the thirteen year period, 60.3% of my trades were profitable generating \$146,587 in profits for me. The amount of capital in my trading account varied over the years, but was generally around \$50,000.

Since all of those trades were essentially dart throws while blind folded, we can compare my results to what chance expectation would permit. A success rate of 60.3% from 285 intuitive predictions results in a highly statistically significant Z score of 3.5, which is like saying that the probability of my result being due to chance is 1 in 4299

In other words, in order for chance to be considered a reason for my success, I would have to repeat the entire 13 year experiment, 4299 times in order to find 1 result of 60% success.

So - chance CANNOT be considered the reason for my success.

And here is another important statistic for you: Remember I was telling you that I used consensus from a large number of individual trials in order to increase the success rate per prediction (or per trade)? Well, those 285 trades actually consisted of 5677 'trials'. Considering all of the individual trials (and we will get to what a trial was in a minute), 53% of those were correct in predicting their respective questions which results in a Z score of 4 which is EXTREMELY significant. In fact, a Z score of 4 equates to a probability of less than 1 in 31,574 that the result was due to chance. Thats huge.

That weird, paranormal, ESP component of Intuition is real. I have demonstrated that, and I have also demonstrated that it can be used to do something useful - like to make money in the futures markets.

So - would you like to know how the ARV protocol works?

This is how a single ARV trial works. As I said before, I use many ARV trials to form a consensus before making a trade prediction, but I will start by describing a single ARV trial. This was all managed by my computer program, but to explain it to you, I am going to use a manual process.

Together, we are going to predict the direction of the E mini futures contract from it's open on Monday morning at 7:30 am to it's close on Monday afternoon at 2:15 pm. If it closes higher, and we had bought a contract, then we would be profitable, if it closed lower and we had sold short a contract, we would be profitable, etc - you know the drill.

I have 2 sealed envelopes for you here - each containing a random photograph. The photos were chosen from the universe of photos, so you have no idea what the pictures are. They could be anything. They are hidden in the envelopes and you can't see them. For the purposes of this example, let's say one photo is a picture of a starfish, and the other is a picture of an egg. On the back of each envelope, I have randomly printed either the word "BUY", or the word "SELL". You cannot see the back of the envelope. Lets say "BUY" was printed on the starfish, and "SELL" was printed on the egg.

I am going to show you one of these two photos at exactly 2:16 pm on Monday afternoon. The photo that I am going to present to you to look at will be the photo that corresponded to the outcome of the E mini futures contract for Monday - ie: if the market closed UP for the day from the open to the close, then I will show you the photo with "BUY" marked on the back, which would be the image of the starfish - and the "SELL" photo if the market closed lower for the day which would be the image of the egg. But, you don't even have to know that. All that is important at this point, is that you will be shown a photo at exactly 2:16 pm on Monday afternoon.

Now, I will ask you to close your eyes, relax and imagine yourself in the future, on Monday afternoon at around 2:15 pm. Imagine that you are sitting at your desk, and you are looking at this sealed envelope that I have handed you. Now, imagine looking at your watch, or a clock, and imagine seeing the time click over to 2:16 pm. Now imagine opening the envelope and pulling the photograph out. What do you see?

Write down, sketch, or print any thoughts you have about that picture. Since you have no idea what it could be, you MUST access your true intuition - your ESP if you want to call it that. I have found that the more random the thought about what the picture is, the more accurate it will be - so during this process, as you record your random perceptions about this photo, be sure to emphasize those which came as a surprise to you - ie: you might ask yourself "how on earth did I think of that? Where did that come from". Like maybe a memory of a toy you used to have as a child, or something way out of left field. The more random the better. So for the purposes of this example, let's say you thought about your grandfather who was a 5 star general, and you draw a picture of a five pointed star.

When you are finished recording your perceptions onto paper, you will give the transcript to me, and I will look at both photos for the first time. I will compare your drawing of a star to both photos, and attempt to pick which one of the two photos which best matches your transcript. I select the photo of the starfish - of course. Then I look at the back of the envelope that contained the starfish photo, and I see "BUY" printed there.

In this case, I have a pretty good feeling that you will be shown the photo of the starfish tomorrow at 2:16. And since the deal is that I will show you the photo that corresponded to what direction the E mini contract closed tomorrow, I know that the E mini needs to go UP in order for you to be shown that photo. So, I can make a prediction that the E mini will go UP tomorrow, and I sell all of my assets and bet the farm and BUY thousands of ES contracts.

Then tomorrow at 2:15, I check to see what direction the E mini futures contract went from the open to the close. If it closed higher, then I will show you the photo of the starfish, and we will have been correct, and much richer. If it closed LOWER, then I will show you the photo of the egg and we will have been incorrect, and I will be poor.

And that is basically how one ARV trial is conducted. The difference between that example and what I actually do, is that I use a custom computer program to manage the entire process which uses digital stock images rather than paper photos, and I repeat the above ARV trial many, many times in order to develop a consensus prediction before capital is risked on a single prediction. In fact, some trades have consisted of over 200 trials! That would have taken me nearly a month of perceiving images and recording my perceptions, and comparing the drawings to computer photos, etc, then having the computer program calculate the consensus and make the trade. A LOT of work as you can imagine!

But in the end, it has been worth it. I think more for what I have learned about this power of intuition than using it as a trading methodology. Since I didn't use stops, the volatility of my equity curve was crazy. Not a very sensible approach to making money trading.

I don't use ARV in my trading currently mostly because of how much work is involved. It is also very mentally taxing doing so much of the meditative visualization process.

I am currently trading ES and Gold futures contracts intraday using an indicator that I developed myself based on market profile. It's basically a histogram of price and volume plotted on an intraday bar chart as areas of possible congestion. I use it to determine likely intraday trading ranges for reversion to the mean trading, and breakouts. It is a mechanical system, but taking trades and determining exit points is somewhat discretionary. I do use a quick and informal form of ARV to help with the intuitive discretionary aspect of my trading.

I think it is important for people to be open to accepting that the human brain is capable of some pretty incredible things, and that just because our current physics models that describe our universe don't allow for this kind of information transfer from the future to the

past, doesn't mean that it doesn't exist. It means that our models are wrong. And just because we have no idea HOW something like EPS actually works, also does not negate that it exists as a real phenomenon. ESP is a powerful component of intuition, and I think it is important to be aware of that, and open to it's possibilities.

My personal belief is that we don't predict, we CREATE. And that is a subject of another conversation.