

Technical analysis: Science or Art?

Markets are undoubtedly fascinating to watch. Furthermore there is rich reward, monetarily and psychologically, in making accurate predictions about the future direction of markets. However this is not easy to achieve because markets are interactions of human beings who operate in the pressure of the moment to contribute to and react to the intrigue and deception inherent in markets. Markets travel through ever changing cycles and that is what makes them so interesting and lucrative.

Systematic analysis is required to help the player to make sense of the market and to extrapolate into the future. Technical analysis is one approach greatly aided by the power and speed of modern computers. As well as chart analysis it is possible to select from hundreds of indicators that can be applied over thousands of different market indices and securities. Personal analytical algorithms can be constructed. Masses of back data can be tested. But does the use of this arsenal of technical analytical tools mean that our analysis is scientific or more of an art? And does it matter?

I was always interested in charting. When I bought my first Metastock Pro on a floppy disc for my 186 Amstrad in 1989 I thought that my preferred suite of indicators allowed me to be like a jumbo jet pilot flying safely on instruments. How wrong I was: I learned the hard way that technical analysis is not a science.

Science reflects nature whose secrets are out there ready to be revealed to the inquisitor asking the right questions and with the right tools. Nature doesn't change. If experiments on nature aren't repeatable and verifiable by other scientists then the outcome is not included as new scientific knowledge. Furthermore, not only is science universal but also it allows precise and infallible predictions. The jumbo jet pilot knows that when the indicator shows take off speed has been reached the plane **will** fly. A stop loss is neither possible nor needed.

Technical analysis is not a science because it fails the test of repeatability and predictability to determine the exact market outcome in the future. Science interprets nature but technical analysis interprets markets that are not like nature. Markets are fickle and change, partly in response to the very analysis that attempts to make sense of it. With nature the future is knowable: the sun will come up tomorrow, the jumbo jet will fly, bacteria strains will become resistant to antibiotics. With markets the future is uncertain because fresh information and new participants can make buying or selling more ascendant irrespective of what our analysis shows about what has happened to this point in time.

So if technical analysis is not a science is it an art? Let me share how the Concise Oxford dictionary defines an art. "Skill, especially human skill as opposed to nature. Magic, practical application of any science, those in which mind and imagination are chiefly concerned; knack, cunning, stratagem, design and/ or execution." Does technical analysis share the criteria above? Yes it does because, with the possible exception of magic, it reveals the ingenuity, creativity and individual qualities that technical analysis requires.

As an art, technical analysis is personal and subjective. Don't be fooled that because you apply different inputs to an indicator, say the time period for an oscillator, that you are being objective. What you are doing is fitting your perception into the indicator to fit the market action: perfectly legitimate if you remember that you are skillfully exercising your artistic preference.

Indeed some individuals are gifted with the knack of interpretation and extrapolation of current market patterns. As an art, technical analysis can be more responsive to changes in market cycles. But there are drawbacks to considering technical analysis to be merely an artistic endeavour. As an art the analysis necessarily involves the personal selection and attention to the criteria for analysis, and any interpretation can be out of whack with the market and what it does in the future. Even if the analysis is only intermittently correct it can still seem to give a level of confidence that is unwarranted.

If technical analysis is not conducive to scientific verity, and if as an art form it has limitations then is it really all that useful as a tool in speculation? For analysts that don't trade this is a moot question because analysis out of kilter with the market can't hurt you. You will probably feel that your analysis is good most of the time while enjoying the pleasure of spectatorship.

The answer to the question is a resounding yes: technical analysis is a very useful tool of the trader if applied appropriately.

Although technical analysis is not a science, the scientific method, that is the process of doing science, has much to offer technical analysts. The role of a scientist is to develop hypotheses and then test them by experiment against nature. Science progresses by the elimination of those hypotheses that do not reflect nature. Good scientific work is not always right, far from it. Furthermore a scientist is skeptical, creative and skillful but at the same time and as much as possible is unemotionally detached from personal bias and resistance to new ideas. Scientific work is an amalgam of disciplined operating procedures and art.

The conduct of technical analysis for a trader is similar to the practice of a scientist. The analysis presents testable hypotheses that are speculations about the future, which the trader tests in the market by executing orders based on it. If the speculations are in tune with the market, the speculations pay off and the trader is rewarded. But the trader knows that not every speculation will pay off and has a predetermined point when to exit this position and to go on to the next one. Good speculation is not always right, far from it. A speculator like the scientist is questioning, creative and skillful but at the same time and as much as possible unemotionally detached from personal bias and resistance to new ideas. Trading based on technical analysis is an amalgam of disciplined operating procedures and art.

Markets go through ever changing cycles. It seems that when your analysis provides the key to this market cycle, the lock changes. Technical analysis will not pay off for the trader unless it is responsive and readily adapts to change. A useful metaphor here is the art form of dance. If your analysis is in harmony with the market and you have the wit and skill to trade it then you will be handsomely rewarded. But you have to dance to the tune that the market is currently playing.

