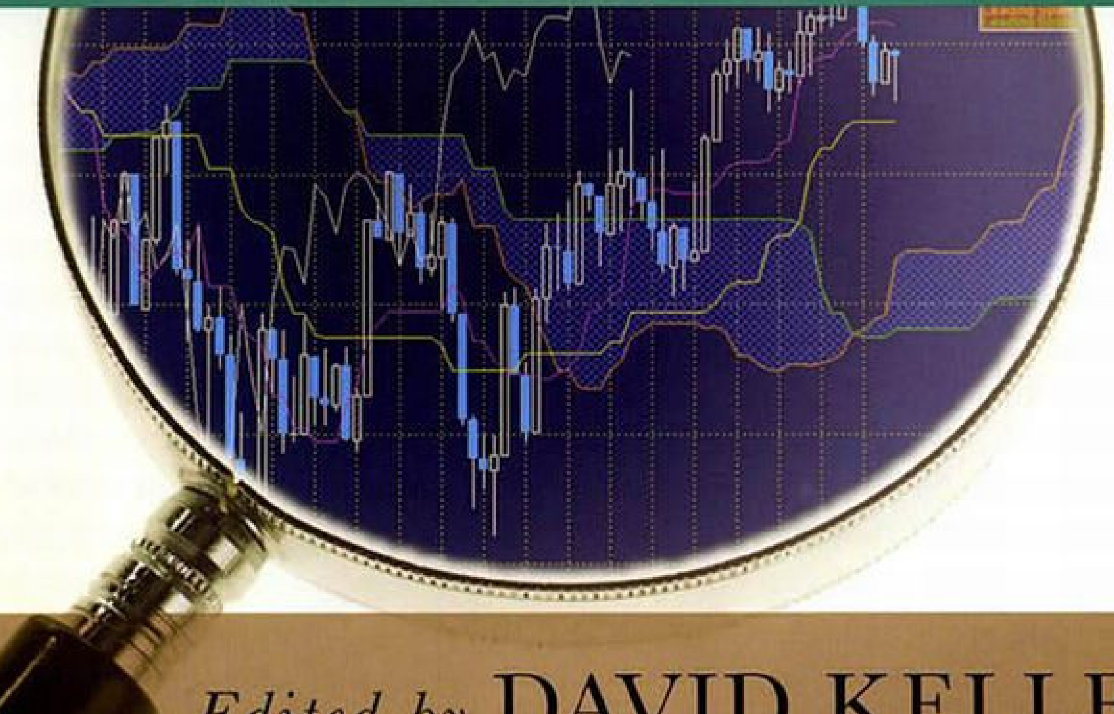
Bloomberg

BREAKTHROUGHS IN TECHNICAL ANALYSIS

New Thinking *from the* World's Top Minds



Edited by DAVID KELLER

Praise for

Breakthroughs in Technical Analysis

New Thinking from the World's Top Minds

Edited by David Keller

"Mr. Keller went to great lengths to collect diverse methodology in technical analysis from around the globe. For over forty years I have seen interest in technical analysis wane and wax as markets change and practitioner skills change. *Breakthroughs in Technical Analysis* offers commentary from the leading experts in the newest quantitative methodologies as well as old reliable techniques. I recommend the book to established professionals as well as bright newcomers."

Philip J. Roth, CMT
Chief Technical Market Analyst, Miller Tabak & Co., LLC
Past President and Board Member of the Market Technicians Association

"Navigating financial markets can be a hazardous exercise. In *Breakthroughs in Technical Analysis*, Dave Keller has assembled contributions from an experienced crew of established technicians and market timers to ease the journey and demystify the arcane world of technical analysis. The book features a number of approaches (as diverse as DeMark and Ichimoku), which challenge conventional wisdom and are sure to form an invaluable part of your trading arsenal, whether you're technically or fundamentally oriented."

Jason Perl
Global Head of Fixed Income, Foreign Exchange and
Commodities Technical Strategy, UBS Investment Bank

"The concepts and experiences shared by the ten global contributors in David Keller's book embody the precept that supply and demand for technical analysis is indeed a universal language. These varied topics are very timely and extremely useful in trading and investing in all markets around the world."

Ralph J. Acampora, CMT
Managing Director, Director of Technical Research
Knight Equity Markets, LP

Breakthroughs in Technical Analysis

Also available from

BLOOMBERG PRESS

New Insights on Covered Call Writing: The Powerful Technique That Enhances Return and Lowers Risk in Stock Investing
by Richard Lehman and Lawrence G. McMillan

Tom Dorsey's Trading Tips: A Playbook for Stock Market Success
by Thomas J. Dorsey and the DWA Analysts

Wall Street Secrets for Tax-Efficient Investing: From Tax Pain to Investment Gain
by Robert N. Gordon with Jan M. Rosen

New Thinking in Technical Analysis: Trading Models from the Masters
edited by Rick Bensignor

Option Strategies for a Directionless Market: Trading with Butterflies, Iron Butterflies, and Condors
by Anthony J. Saliba
(November 2007)

Technical Analysis Tools: Creating a Profitable Trading System
by Mark Tinghino
(December 2007)

A complete list of our titles is available at
www.bloomberg.com/books

Breakthroughs in Technical Analysis

New Thinking from the World's Top Minds

Edited by David Keller

Bloomberg Press
New York

First edition published 2007
3 5 7 9 10 8 6 4 2

Library of Congress Cataloging-in-Publication Data

Breakthroughs in technical analysis : new thinking from the world's top minds / edited by David Keller.
p.cm.
Summary: "Breakthroughs in Technical Analysis explains the new trading methods used by the world's top technicians, encompassing in one volume the investing approaches of ten proven practitioners. More important, some of these techniques have never left their country's borders before and are not known or used in other parts of the world."--Provided by publisher.
Includes index.
ISBN 978-1-57660-242-3 (alk. paper)
1. Investment analysis. I. Keller, David, date.

HG4529.B725 2007
332.63'2042 --dc22 2007021051

Acquired by Sophia Efthimiatou
Edited by Mary Ann McGuigan and Janet Coleman

Contents

About the Contributors

David Bowden is the founder of Safety in the Market, one of Australia's longest-running investment training organizations. Through his courses and seminars and with a clientele that spans the globe, Bowden has trained many people to understand the markets and trade them with safety. Bowden began his trading career in 1985 by studying and researching the methods of W.D. Gann, a legend in the world of stock and commodity traders. Using Gann's unique style of forecasting and technical analysis, Bowden quickly established an impressive track record with his market forecasts. He called the market top for 1987, to the day. Catching the eye of many fellow traders and associates, he was thrust into the world of trading education in 1988. In 1995, Bowden authored the first nationally accredited Diploma of Technical Analysis course.

Constance Brown, CMT, founded the global investment company Aerodynamic Investments Inc. (www.aeroinvest.com) after working for more than twenty years as an institutional trader in New York City. She continues to actively trade from her equestrian estate in South Carolina and advises numerous financial institutions and banks around the world via the Internet. She now has more than seventy students who have moved on to manage assets themselves or work for major institutions. Seminars and lectures are viewed as an important part of contributing to the further development of technical analysis. Brown's second book, *Technical Analysis for the Trading Professional* (McGraw-Hill, 1999), was selected by the Market Technicians Association (MTA) as required reading to prepare for CMT Level 3, the final examination that awards professionals the industry's Chartered Market Technician (CMT) accreditation. She is also a member of the American Association of Professional Technical Analysts (AAPTA). Brown currently has six books in print.

Tom DeMark is the president of Market Studies Inc., a provider of proprietary market timing indicators to Bloomberg and other financial services companies. He also serves as a consultant to multibillion-dollar hedge funds. Currently, DeMark is special consultant to Steve Cohen and SAC Capital. Previously, he was special adviser to Leon Cooperman and Omega Advisors and executive vice president of Tudor. DeMark was also chairman of Logical Information Machines (LIM), a supplier of high-technology software services for sophisticated market research. He is a former partner of Charlie DiFrancesca, the largest trader on CBOT. From 1982 to 1988, DeMark was president of DeMark Investment Advisory, Inc., a consultancy to large fund managers, including Goldman Sachs, Loews Corp., Union Carbide, Citibank, Morgan Bank, IBM, Minnesota Mining, Steinhardt Partners, Soros, Trust Company of the West, and Atlantic Richfield. DeMark's systems and indicators have been the subject of numerous feature articles in many highly regarded and widely read financial magazines and papers, and he has appeared regularly on television and radio, as well as at seminars, both domestically and internationally. He is also the author of three best-selling books, *The New Science of Technical Analysis* (John Wiley & Sons, 2001), *New Market Timing Techniques* (John Wiley & Sons, 1997), and *DeMark on Day Trading Options* (McGraw-Hill, 1999).

Jeremy du Plessis, CMT, FSTA, is head of technical analysis at Updata PLC, based in London. He is a member of the Market Technicians Association (MTA) and the American Association of Professional Technical Analysts (AAPTA) in the United States, as well as a fellow of the Society of Technical Analysts (STA) in the United Kingdom. Du Plessis sets the syllabus for the point-and-figure module of the International Federation of Technical Analysts (IFTA) certificate and lectures on point and figure for the STA. A regular speaker on point and figure at international conferences and seminars, du Plessis has dedicated the past twenty-five years to the field of technical analysis and in particular to developing technical analysis software. In 1983, the company he founded, Indexia Research Limited, released one of the first PC-based technical analysis systems available, with point and figure as its cornerstone. Du Plessis's book *The Definitive Guide to Point and Figure* (Harriman House, 2005) is regarded by many as the bible of point and figure analysis.

Nicole Elliott is Mizuho Corporate Bank's senior analyst in London and covers the foreign exchange, interest rate, commodity markets, and equity indexes. Elliott has worked in the City of London for twenty-five years. Technical Analysis has always been the backbone of her trading methodology, in sales and as an analyst within the Treasury departments of major international banks. She is a member of the Society of Technical Analysts and a graduate of the London School of Economics.

Robin Griffiths is one of the world's most senior technical analysts, having published technical research for forty years and coauthored three books. He has been head of asset allocation at Rathbone Brothers PLC since 2002, overseeing $20 billion of investments, and is adviser to two hedge funds, ECU Fund and Rathpeacon. From 1986 to 2002, he was chief technical strategist at HSBC James Capel. Prior to that, Griffiths was technical analyst and Japan specialist at Grieveson Grant (1983–1986); technical analyst and partner at W.I. Carr in Hong Kong, Tokyo, and London (1971–1983); and equity broker at Phillips and Drew (1966–1971). Griffiths is a member of the Market Technicians Association; former chairman of the International Federation of Technical Analysts (1994–1997); and former chairman (1990–1993) and now fellow of the British Society of Technical Analysts.

Ted Hearne is a private trader and the president of a consulting firm with expertise in market analysis, trading software, mass psychology, and economic behavior. Hearne has been an active trader and student of the markets for two decades. In 1991, he became acquainted with point-and-line theory and in 1993 met Charles Drummond, with whom shortly thereafter he formed a business and writing partnership. Together over the last ten years they have created a landmark body of theoretical and educational writings about the trading methodology now known as Drummond Geometry. Major writings include work on the Pldot.com Web site and The Lessons, an extensive instructional series about market structure, market analysis, and trading practice. Hearne's Web site is www.tedtick.com.

Robin Mesch, founder and CEO of Robin Mesch Associates, enables professional traders and money managers to consistently maximize profitability and optimize their portfolios using her proprietary trading models and software. Mesch is a pioneer and educator in the field of technical analysis and market theory. She has been building market models for more than twenty years and has been profiled in numerous books such as Bloomberg's *New Thinking in Technical Analysis*; *Bulls, Bears and Millionaires*; *The Outer Game of Trading*; *The Day Trader's Advantage*; *The Tao of Trading*; and *Women of the Pits.*

Bernie Schaeffer is chairman and CEO of Schaeffer's Investment Research, Inc. and author of *The Option Advisor: Wealth-Building Techniques Using Equity and Index Options* (Wiley, 1997). He has edited the *Option Advisor* newsletter since its inception in 1981, and it has since grown to be the nation's leading options newsletter. Schaeffer is widely recognized as an expert on equity and index options, investor sentiment, and market timing. *Timer Digest* has been monitoring him since 1984 and ranks him as the No. 2 Gold Timer for the past ten years running and the No. 5 Bond Timer for the past ten years. In 2003, Aaron Task of TheStreet.com selected Schaeffer as the market "Guru of the Year." Schaeffer is the proud recipient of the 2004 Traders' Library Trader's Hall of Fame Award for his numerous contributions to the field of trading. In addition, Schaeffer received the Best of the Best Award from the Market Technicians Association for his contributions to sentiment/psychological analysis.

Yosuke Shimizu is the general manager of the investment information department at Monex, Inc., which he joined in 2003. His work is devoted to investor education through the explanation and analysis of market activities for individual investors. Shimizu is also well known for his practical technical analysis techniques acquired through his sales and trading experiences at major securities firms. Previously, he worked at Daiwa Securities. Shimizu is a member of the Security Analysts Association of Japan and the Nippon Technical Analysts Association. He holds a BA in law from Keio University.

Acknowledgments

This book was a collaboration of many people, each lending their expertise to create a final product in which we can all take pride. I would like to thank the following individuals for their specific contributions:

My wife Carrie, for challenging me, encouraging me, and sharing this journey.

My family, for always reminding me to "relax and let it flow."

The hardworking people at Bloomberg Press: Sophia Efthimiatiou for her enthusiasm and careful planning, Mary Ann McGuigan and Janet Coleman for their tireless work in editing the content, and the production team: Mary Macher, Dru-Ann Chuchran, and JoAnne Kanaval.

Steve Araki of *Bloomberg Markets* magazine for his gracious help with the Japanese translation.

The ten contributors who took time out of the trading day to lend us powerful insight into market dynamics.

And finally, the technical analysts and traders I have met over the years, who have taught me to always be a student of the markets.

Introduction

One day back in early 2001, I called an equity salesperson in Chicago to ask whether he would be interested in meeting to discuss some technical analysis techniques. He quickly declined, calling technical analysis a "voodoo science" and arguing that it was fundamental analysis that truly drives the markets.

Two years later, I received a call from that same salesperson. He had had a major change of heart. He invited me to visit him so that we could talk about technical analysis. I wondered what had made him change his mind. He said that his clients had started observing charts, and that if he wanted to keep their business he had to learn how to speak their language.

Traveling around the United States and Canada to discuss technical analysis with traders, fund managers, analysts, and investors, I have come to two conclusions: Market participants today are using technical analysis more than ever before, and most of them are struggling to identify which techniques they should be applying to their markets of interest.

Every year, I find myself spending increasingly more time talking to portfolio managers who are using a hybrid of fundamental and technical analysis to identify potential investments. As a result, I get more and more calls from salespeople and sales traders, all scrambling to understand how to incorporate technical analysis into their conversations.

Here's how I introduce technical analysis to those newly converted to the technical approach: Fundamental analysis tells you the "what" and the "why," whereas technical analysis tells you the "when" and the "how." Analyzing a company's financial statements, the broad economic picture, and other fundamental factors helps investors identify which securities should be moving based on market environment. But when you look at a price chart, you're peeking into the minds of millions of traders to gauge their collective psychology. What's more, you're studying trends and momentum to see how traders have reacted to historical events and news flow. That's why investing without looking at a chart puts you at a major disadvantage.

One of the questions I pose at the beginning of seminars is "Does technical analysis work because people use it, or do people use it because it works?" The first part of that question positions technical analysis as a self-fulfilling prophecy—if enough people expect a certain price movement and make trades in anticipation of that movement, then the price will move as a result of their own actions. The second part suggests that there is in fact value in technical analysis as a method of breaking down investor sentiment and market psychology over time.

All of the authors in this book have developed certain techniques that have helped them to successfully trade and analyze various global markets. This book is designed to bring their ideas together and help you draw on their experiences and incorporate their concepts into your own trading.

In planning the book, I realized that although more and more investors had broadened their approach to allow for international markets, the existing technical analysis literature was still quite localized. In meeting with technical analysts and traders from around the world and from organizations such as the Market Technicians Association, I've learned that each region has its own experts who have successfully tailored their technical strategies to the local markets.

The goal for the book was to assemble some of the top minds in the field from all parts of the world and have them share their insights into how price and volume analysis can help investors identify profitable trading opportunities. The end result is a powerful illustration of how interrelated the financial markets really are; it's also a testament to the global reach of technical analysis as a language of the markets.

Each chapter in *Breakthroughs in Technical Analysis* is intended to stand independently. You can study a single chapter, and then apply those concepts to your own charts and markets before you move on to another. Keep in mind that although the author may be writing about, say, Australian index futures or U.S. Treasury spreads, the concepts discussed can be readily applied to *any* market, and often on different time periods than those discussed in the chapter.

We start with Ted Hearne's discussion of a technique called "Drummond Geometry" as applied to the foreign exchange markets. You'll find it's a great breakdown of how open/high/low/close data can be used to identify support and resistance, meaning levels at which the price tends to reverse. His examples demonstrate the value of studying different time frames (that is, daily, weekly, monthly, etc.) to see how short-term price moves fit into the long-term trend.

Tom DeMark goes to great lengths to analyze price trends and ways in which markets reverse direction. In his chapter, DeMark discusses one of his market-timing techniques, TD Combo™. Although many traders have worked with TD Sequential™, one of DeMark's other indicators, this chapter shows when and why TD Combo's more conservative approach to trend exhaustion can help an investor identify low-risk trading opportunities. He also presents methods to tweak both these techniques to make them more aggressive, methods that can often give an early warning of a trend reversal.

Nicole Elliott breaks down a traditional Japanese technique called Ichimoku Kinko Hyo, in which price data is used to create a series of indicators to measure the strength of a trend, as well as potential support and resistance areas. This trend-following technique is used heavily by Japanese investors and has grown in popularity in the United States and Europe. Many people who see this technique for the first time are overwhelmed by the amount of information the chart provides. Elliot does an exceptional job of cutting through that noise to explain the true value of Ichimoku charts.

Yosuke Shimizu takes us through the world of candlestick analysis from a Japanese perspective. Many of you may have heard of or even used patterns with peculiar names such as "abandoned baby" or "hanging man." Shimizu-san explains why these names are used and how they can add great value to your investment approach. His chapter, translated from Japanese, provides original insight into why traders have used these techniques for centuries, in a language that evokes the spirit of the region.

We return to a U.S. perspective with Constance Brown, who in her chapter shares with us her powerful charting acumen. Incorporating Gann analysis, Fibonacci retracements, and her own proprietary indicators, she has developed a sophisticated methodology for trading market moves more effectively. Brown graciously includes the formula behind her unique indicator, the Composite Index, and demonstrates how to efficiently combine technical approaches.

David Bowden takes us to the Australian markets through his own trading experiences using Gann analysis—a series of technical indicators that are often misunderstood because of their mystical nature. Walking us through his successes and failures in anticipating tops and bottoms, Bowden's discussion of the cyclical nature of the markets is a rare treat. Reading this chapter, you'll rediscover the value of the relationship between time and price and its importance in market fluctuation.

Traditional equity investors are increasingly including options in their portfolios as a way of managing risk and of raising returns by the power of leverage. In his chapter, Bernie Schaeffer gives a well-written overview of options strategies and then moves on to analyzing volatility to identify profitable options plays. If you've been considering incorporating options into your investment approach, you'll want to read this chapter first.

From Europe, we have Jeremy du Plessis with a chapter on point and figure charts, which are frequently used in futures and commodities exchanges. Du Plessis shows how these charts have evolved to better identify support and resistance levels, breakout points, and price objectives for any market. He wraps up with a discussion on applying conventional technical indicators to point and figure charts, a concept that even longtime point-and-figure devotees will find compelling.

Robin Mesch is one of the leading experts on Market Profile™, a method of analyzing the distribution of trades throughout the day to identify where supply and demand will come into play. Investors who use this technique are familiar with how price action often forms a bell curve by the end of the day. Mesch describes how to apply this technique to price spreads, showing how anyone trading security pairs can effectively gauge when a spread is poised to widen or tighten.

We conclude with Robin Griffiths's presentation of cycle-related investment strategies, from multiyear and seasonal cycles in the global equity markets to stop-losses, scaling trades, and money-management techniques. He presents his ten commandments for trading, a solid guide to intelligently tackling the game.

The title *Breakthroughs in Technical Analysis: New Thinking from the World's Top Minds* truly captures what we tried to accomplish in bringing the insights of these experts together. The ten contributors are among the leading technical analysts in the world, and they all demonstrate specific techniques they've used with great success over time. Some of our contributors present new techniques that they've developed or refined in the last couple years. Others take methodologies that have been used for decades and show how they can be adapted to today's global financial markets. Regardless of their geographical location, professional background, or preferred trading strategies, these experts make one central theme clear in every chapter: Technical analysis is a vital component of any trader's tool kit. An informed investor is defined by his ability to incorporate all available market data into his daily trading routine, and, most important, he has to take into account the investor psychology inherent in price charts.

We believe this book is a useful resource for identifying techniques that can add tremendous value to your investment strategy, and we're convinced that you'll enjoy reading it, too.

—David Keller, CMT
February 21, 2007
New York

Breakthroughs
in
Technical
Analysis

CHAPTER 1

Drummond Geometry: Picking Yearly Highs and Lows in Interbank Forex Trading

TED HEARNE

What if you could predict the yearly high and the yearly low in a major currency? If, at the start of the year, you could have a definite idea where the high will form in the Japanese yen or the Canadian dollar or the euro? Or if you knew where the market was headed many months ahead of time? Making an educated, accurate forecast of next year's high and low in every currency is surely the dream of every trader—a fantasy of omniscience and unlimited power over the markets.

In trading, as in war or building suspension bridges or performing transplant surgery or creating a new auto design or any complex undertaking, success is a function of many different elements—a combination of having the proper tools, the necessary knowledge, and the appropriate personal characteristics. If you would like to be one of the few who make accurate, high-probability, long-term forecasts about market highs and lows, then read on, because there are some little-known tools and a coherent body of knowledge that can help you.

Drummond Geometry

The practice of technical analysis has a few commonly accepted assumptions. Drummond Geometry builds on these with its own unique point of view:

1. Charts have patterns that can be identified and will reoccur.
2. Similar chart patterns exist in different time frames.
3. Prices in a given time frame will center on a consensus value, and when price moves away from that consensus, it will tend to revert to a mean. But this mean itself will be moving and changing as the market unfolds.
4. Support and resistance are real phenomena, and can be measured, predicted, and projected.
5. Time frame charts are interrelated, move simultaneously, and can be visualized as existing within each other.
6. Historical price charts of freely traded financial markets are the visual

representation of human crowd psychology in action.

7. Support and resistance in different time frames react to price in predictable ways. The shorter time frames will react first, and then progressively longer time frames kick in.

These statements are simple, but when logically applied to the broadest context, using a coherent set of analytic tools, the implications are staggering. The trading theories and methodology I discuss here are based on the writings of Charles Drummond, the legendary Canadian trader who is emerging as one of the major market theorists of the twentieth century. He is not only a major theorist but also a hugely successful private trader who has the personal track record to back up the theory.

Drummond's substantial body of writings, privately published and distributed under nondisclosure agreements to his growing body of students, constitutes a major step forward in technical analysis. Many aspects of the work remain proprietary and not accessible in a public medium, but some of the main principles and underlying concepts, as well as their application to the long-term Forex markets, are free to be discussed in forums such as this chapter.

The methodology has come to be known as Drummond Geometry and consists of three main elements, or components:

The identification of resistance and support and their projection into the future

A description of the market's current state and its next anticipated state

Multiple time period analysis, coordinating the first two elements in two, three, four, or more time frames

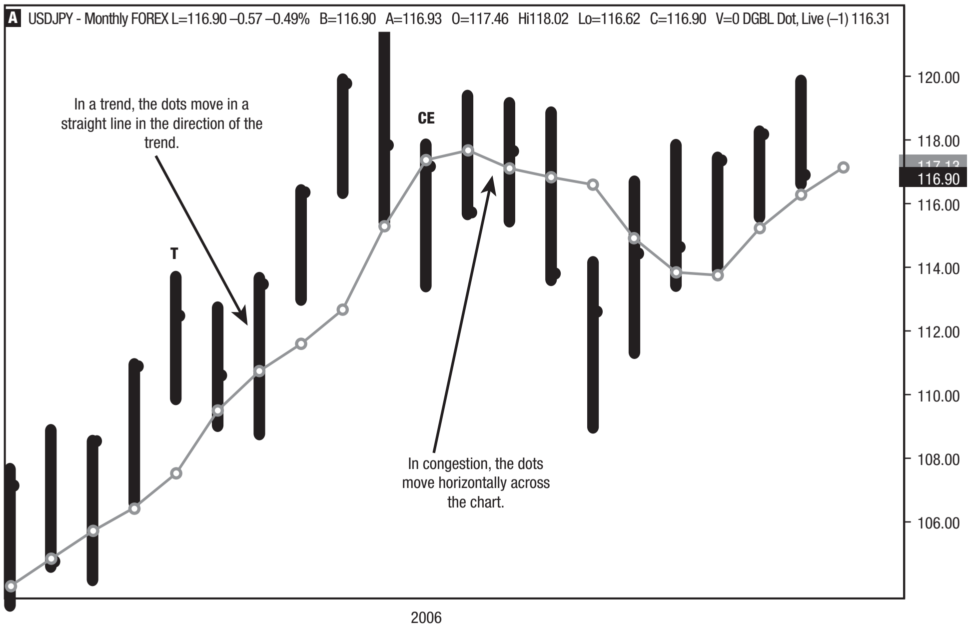
In Drummond Geometry, these three elements are combined into a coherent whole with specific rules for entries and exits, a methodology for monitoring and evaluating market moves, and a way to project viable turning points and targets within each time frame.

Projecting Resistance and Support

The idea of resistance and support is a key concept of technical analysis. Resistance is when buying peters out and selling increases, stopping and reversing an upward move; support is the reverse, when selling abates and buying begins, forcing price upward. Conventional technical analysis looks backward at where resistance and support have been located in the past and suggests that the

FIGURE 1.1

The PLdot



Source: Ted Hearne Associates, Inc.

same levels will be used in the future.

Drummond Geometry takes a different approach. Although it constructs these levels out of conventional tools such as moving averages and trend lines, it projects constantly evolving resistance and support areas into the future and watches how price reacts to these levels as the market moves forward.

The core building block of Drummond Geometry is a short-term moving average called "the PLdot" (see **Figure 1.1**). The PLdot was developed in response to the search for a tool that would distinguish between trend and congestion and run in a straight line sloped upward or downward in a trend but that would quickly and responsively indicate changes in market situation. The tool was empirically derived, and investigations resulted in the moving average known as the "Drummond Dot," or the PLdot.

The PLdot (PL stands for point and line) is a short-term moving average based on three price bars of data, which captures the trend/nontrend activity of the time frame that is being charted. The PLdot from the last three bars is plotted as a dot, or line, on the space where the next bar will appear.

The PLdot has a simple formula: the average of the average of the high, low, and close of the last three bars.

$$\text{PLdot} = \frac{\{\text{Avg}[H(1),L(1),C(1)] + \text{Avg}[H(2),L(2),C(2)] + \text{Avg}[H(3),L(3),C(3)]\}}{3}$$

The PLdot can be applied to any chart of any commodity, future, or stock. The first thing to note is that the dot is always there. It is a polestar in a constantly shifting universe, something that bears a constant relationship with the immediate past, capturing the recent energy of the hour, of the day, or of whatever period the trader is looking at.

What is so special about this particular moving average, the PLdot, that sets it apart from other moving averages? The characteristics of the dot prove to be useful in analysis. It moves across the chart horizontally in congestion, and when a trend develops, it immediately changes into a straight line slanted in the direction of the trend with very little lag. It is extraordinarily sensitive to trending markets; very quick to register the change of a market out of congestion into trend and sensitive to a trend that is ending, as well.

The PLdot captures the heart of market activity on the last three bars. In Drummond Geometry, this point would be thought of as the center of energy and represents the consensus of the crowd. But additional tools are needed to gauge the strength of moves away from this consensus. For this, other moving averages are added. To give the methodology greater muscle, Drummond added a simple envelope system constructed of a constant mathematical relationship based on the components of the dot. The resulting structure is illustrated in **Figure 1.2**.

Unlike many envelope systems, the objective here is not to contain all price activity within the envelope but to offer a constant, or a matrix, against which market moves can be measured. This turns out to be of great value when trying to tailor trading techniques to different market conditions.

The envelope system is also useful as a constant against which to measure the strength of recent and current market energy. When the market is in congestion, price tends to oscillate from one side of the envelope to another; thus, the trader has a pretty good idea of where the buying and selling zones will be placed in the market. But when the market is in a strong trend, the envelope functions dif-