INTERVIEW

The Legend And The Lore

Richard Dennis

Perhaps no one in the world of commodity trading has more lore attached to him than the legendary Richard Dennis, the founder, along with William Eckhardt, of the original Turtles and the system they established. Dennis's stunningly successful involvement with mechanical systems came about when he realized that whatever worked for him in his trading could be reduced to and defined as a trading rule. Today, he pretty much eschews the public investment arena, confining himself to an exploration of mechanical trading ideas for personal use. A self-described "computer-illiterate," he nonetheless has worked steadily with a handful of programmers for the last quarter century.

To separate the myth from the man, STOCKS & COMMODITIES contributor Art Collins spoke with Richard Dennis in October 2004 at Yoshi's, a restaurant in Chicago.

How's the current trading environment compared with your high-profile days?

It's 10 times harder than it used to be. It *should* be. The market's job is to derail the systems traders. Some of them are going to make money, but that can't go on forever.

Why not?

Because the market is changing more dramatically than it would have 15 or 20 years ago. I think that's because there are a lot more trend-followers involved in the market than before. It's a game where you're forever chasing your tail.

Anticipation doesn't have a lot of place in the mechanical trading world, does it? The adage is that systems react rather than predict, and traders should have no input at all once they're beyond a certain stage.

There's something to be said for the dumb bunny approach of "I'm just looking at numbers." I've done my share of talking myself out of systems that would have worked for years. You pays your money and you takes your chances. But ideas help if you're thinking about what the market is likely to be like two years from now.

Let me give you an example. It seems to be increasingly true that volatility screens are a good idea; the trades with the lowest volatility for trend-following are best. You might decide to push that envelope even further by taking only a quarter of the trades that are the least volatile instead of half. That part wouldn't be based on data, but on your idea that low volatility is good and the rest will be worse.

There's got to be something different about the future. Otherwise, everyone will make money, and we know that can't happen.

Any other reasons behind the change?

People should marvel at the difference between the returns of hedge funds and Commodity Trading Advisors (CTAs). The hedge funds have been much better over the years, with more money, which is a reason they *should* be worse. It's harder to perform with huge amounts under management. I think it's because hedge funds exploit trend-following systems to a large extent. A lot of the hedge funds are just trading on inside information. They're not trading. They're shooting fish in a barrel.

Think about what we had 20 or 25 years ago. The paradigm was that unknown information seeped into the market and gradually moved price.

You go to a currency market, and there's the same fundamental forces but you also have this tremendous flow of inside information. It isn't unknown inside information, but it's bureaucratic. It's bureaucrats at the Bundesbank telling the hedge fund guys what they're going to do. Now as a trend starts, it explodes immediately so that the trend-followers can't get in until it's over. It isn't slow. It isn't indirect. It's all at once.

System followers see a signal in financials that they think is the same as a soybean signal, but it's not. The structure of the trend changes. Let's face it, if you're running any kind of a fund, 90% of your trades are in interest rates and currencies. It throws all the data of more than 10 to 15 years ago into question because it was generated a different way.

So your old bellwether trend-following systems don't work anymore?

Nine out of 10 things that worked 20 years ago don't work now. In the last year, only a subset of those breakouts worked relative to the 20 to 40 ranges that worked previously. I'm always looking at *n*-day trajectories — 10, 20, 40, up to maybe 280 days. Twenty-day trajectories worked for a while, but that started going downhill 15 years ago. If you go out to the longer-term ones, like a few years' worth, they started out worse than the 20-days and maintained themselves nicely until last year. That's what makes it tough.

> **I've done my share of talking myself out of systems that would have worked for years.**

Since you don't regard any systems as likely eternal perform-

ers, do you anticipate only x number of probable profitable years before you have to switch?

That would be hard to know before the fact. What I try to do now may be a little subjective. I like to find something that worked in the last year when markets were bad, but also worked in the previous five when markets were mediocre, and also worked 15 or 20 years ago. That doesn't mean you're trading the optimal variable for any of those periods, but rather, something that has been passable in the good old days, the recent past, and in the very recent bad period.

Would you say a big part of what you're doing now is* not *trend-following?

I like to take something countertrending — maybe something that worked well this year but not so well 10 years ago — and pair it with a trend-following system. I like to make the trades depend on each other so that if you get one of one kind, you also get one of the other kind. It's not the easiest thing to do. Part of the solution is to have a balance.

Are you still long term in your approach?

Currently, I'm running an online system that incorporates six different elements, the longest about 30 days. It isn't behaving. I might have one mega–countertrending system that might be for 60 days, which only makes money in periods like the last year. It's balanced to make money when the trend-following stuff doesn't work.

Do you agree with the old saying that simple is best at a system's core?

I don't. If you're talking about risk-adjusted return, exclusion's important. The way to make a system optimal is to throw things out. If it's a trend-following trade and the market's too volatile, throw it out. If you've had the trade too long, throw it out.

I've heard you don't do your own programming. Do you understand the full significance of the results, and various components like standard deviation† and Sharpe ratio†?

Yeah. I've been doing it for 24 years. The math guys set it up and helped me understand it. I can't type, much less program, but I understand the output.

I spend most of my time talking to programmers and waiting for results. I've been working with these people for 20 years, so I can get into that intermediate zone between computerese and real English. I tell them my idea of how it would go in the program, but they're the guys who are going to program it. It's quite an adventure, because even a good programmer will get the first iteration wrong half the time.

Can you trust them to not make poor optimization decisions?

I pick all the parameters. I'll say, "We have seven [variables], here's the range. If anything shows any promise, go through it 10 times and try to narrow down the optimization." It's all my decision. They never just say, "Oh, let's try some numbers." My real interest is trying to figure the damned thing out.

You've been quoted as saying you could print your methodologies in the newspaper and no one would be able to follow them.

An individual trend-follower isn't going to have people trying to mimic or corrupt him. But take the Commitment of Traders' report, in which everyone can see how many contracts are committed, for example. It's not just a straightforward accounting of the relationship of the number of contracts and how the market is behaving perversely. But knowledge of the report does give people an opportunity to change the trend at crucial moments.

Whatever crude oil's price is now—and whatever it's going to be one, five, or 10 years from now—won't have much to do with speculation. Those using patterns of the past will encounter enough manipulation in the market to the point where their systems that worked before won't work now.

So psychology affects the short run.

It's less ethereal than that. There are contracts that have to be liquidated after a big trend. If you have some idea of what fundamentals will make a difference, you've got a big edge. If crude breaks the important levels, everyone's got to sell it from there. If something fundamental can make that decline happen, countertrend funds will make it happen.

I'm an advocate of something most people don't like, which I call "special situations." I research keeping the countertrend element in mind. Here's an example. We used to trade *n*-day breakouts. If I were creating the system now, one of the filters I would use is whether the *n*-day breakouts were winning or losing. I would only take the trades if they were losing. Suppose you want to buy at the 100-day high. I'd run a system in the background that showed me how a system is doing that buys at the 20-day high and sells at the 20-day low. I would only take those trades at the 100-day high if the 20-day trade in the background was losing.

Why does that work?

Because, first of all, the losing trade in the background guarantees a certain number of people with losses who have to liquidate. It also defines the market to be more in a consolidation than in a trend when you enter. If the last 20-day breakout has a profit, the market is not in a consolidation. So if the market is choppy and the 20-day breakout is losing, when you get to the 100-day breakout you know you were in a consolidation and people have been whipsawed. You know that people are less likely to go with this trend than they would have many whipsaws ago. That behavior tends to make a trade work.

Interesting. Is that a lot of what you're doing now?

I actually use it as a filter. Another filter I use is raw volatility—how big the ranges are relative to how big they've been in the last year or two. If the ranges are big, trades ought to be oriented to the countertrend. If you have something that works as a countertrend, go more for the markets where the ranges are big relative to what they were. If it's trend-following, go for the small ranges.

Have you been doing this straight through? There were stories that you retired for a time.

I went six months without making a trade, but I never went six days without doing research. Some people like to wake up in the morning and figure out how they can get to be President of the United States. I wake up wanting to figure out a system that really worked well in the past, really works well now, and will continue to work in the future.

Regarding that initial argument you had with William Eckhardt that led to the formation of the Turtles — was it inspired by the movie **Trading Places?**

Oh God, no! I think the movie came after. At least I hope so! We did the turtle thing because everyone believed in intuition, including Bill, who is a very logical guy. I thought about intuition and trading and it didn't seem right. It seemed like it should be rules.

Legend depicts the whole thing as kind of a playful whim. Did you in fact have a percentage of the Turtles? Did you make money off the endeavor?

Tons. I think they grossed $150 million and we made $110 million. We started out paying them 10%. Why give them a lot? It was our money, we took all the risk.

What kind of trading were you personally doing?

We'd traded systems for five or six years. I realized that the things I'd been doing that worked best were rules. The majority of the other things that didn't work were judgment calls.

At the risk of drifting off into Japanese mysticism, when you're not using rules, action still has to come out of some inspiration — something you're doing with the spontaneous part of your mind. You can't wake up in the morning and say, "I want to have an intuition about the market." You're going to have way too many judgments.

The adage is you need money to trade mechanically because you can only expect to earn a certain percentage of your capital. It would seem that the nonsystematic elements of what you were doing played a key part in your success.

When I started out, I had a system called "Having no idea whatsoever." For four years, I was just taking edges. Every day, I focused on the fact that I knew nothing. If someone gave me a quarter-cent edge to buy an oat contract, I didn't think he knew anything either. I just knew I was getting a quarter-cent edge, and at the end of the day, the edges would approximately equal my profit. I tried to be like the house in the casino.

This was the MidAm [Mid-America Commodity Exchange] and it was tough sledding because nothing offset anything. You'd buy wheat and sell cattle. This didn't reduce risk: It just gave you the edge on each. When you make a lot of trades, you can drown the risk of those edges and come out with the residue of whatever the edges were to start with. [Initially] that was pretty much the system.

Which you pretty much intuited, right?

It wasn't that novel—people at the Board of Trade had been doing it forever. But for the MidAm, it was revolutionary because no one would understand that you could balance your risk with a lot of volume. Other MidAm traders weren't willing to bother with odd-lots or things like that. That's how I started. It wasn't like there was a lot of money in it. My first year I made something like $35,000, which wasn't so bad back then. Over the years, I've drifted back to that approach, but the safe harbor for me has been coming back to the rules.

But you couldn't have amassed the money you did just being mechanical, could you?

Sure. Even making 30% a year over a long-enough period. The truth is, once I went to the Board of Trade, the edges weren't there in the same respect, so I had to develop some judgments and subjectivities.

That might have been the best thing that I've done, but in terms of going forward, it was an albatross because I'd learned to trust my intuitions. On the floor, you see people and know that they're wrong nine times out of 10 at crucial turning points, which then confirms with near certainty any ideas about what you have to do. Nothing like that exists when you're trading mechanically off the floor, but you'll still feel similar impulses every now and then. I think my pit experience hurt my mechanical trading. People trading in the pit are generally very bad systems traders. They learn different things. They react to the tick in front of them. That's nothing like looking at numbers on a screen.

You've suggested that the success of the Turtles was somewhat related to their personal makeup — that you selected them through an explicit screening process. In theory, couldn't **anybody** ***follow a mechanical approach?***

You could make the case it didn't make much difference who we picked. The people who could sustain trading after the Turtle program did so according to their abilities. While they were under our control, it didn't make much difference how intrinsically smart they were.

But shouldn't it make no difference at all? Or is there something beyond people being too scared to follow system rules?

The more somebody is creative, the more chance they have of sabotaging their performance. Good trading is boring trading. Successful trading requires a kind of intelligence that can realize and enforce its own limitations. Successful system traders apply every ounce of intelligence they have into the creation of their systems, but they're dumbbells about following them. You've got to have a schizoid approach. Work like hell to make it good, and then ignore it. President Bush would be a great trader if he had a system.

Ultimately, you have to be on board to enjoy the bounty of your system. Otherwise, none of it means anything.

That's why you need to have the discipline not to overrate your own judgment. You have to think of your systems as being beyond improvement once you've done the best you can with them. You improve them every minute you're researching them, but the idea of improvising during trading has been the ruin of many.

After your confidentiality period with the Turtles expired, didn't some of them start breaking the news on the system?

There were one or two who will remain nameless. The majority was exemplary. The truth is, if you talked to *those* people, you would find they're way more upset with certain people than I am.

You know your system is available for free on the Internet now, right?

Yes, but it's not *my* system now. Actually, one thing that's a little bothersome is that a lot of people probably think I had something to do with posting my discarded system. Once I was walking down Michigan Avenue and I heard somebody talking about it. It was clear that they thought it somehow had my blessing. I hope people realize that it hasn't been a system that I would have advocated trading for a long time now.

I've changed things a lot. A lot of people don't even like to optimize anything. Bill Eckhardt stays in a very tight range, although he does reoptimize like a maniac. I, on the other hand, change the concept to the point that if you knew what I was doing three years ago, you probably wouldn't have any clue what I'm doing now. I have to admit it's subjective. It has to do with trying to anticipate what systems the markets are going to accommodate. I try to come up with novel ideas, ideas that others haven't run to ground.

From what I've heard, you didn't thrive in fund management anywhere near as well as in individual trading. Is that right?

Customers and I didn't have a meeting of the minds. The problem was that a money manager rarely sits down with the person with the money. There's always a representative of a firm of a firm of a firm. There are these levels of misdirection where everyone wants something that's passable, but no one wants something that could be spectacular. It's difficult to explain to the end user. The only objective is to keep the customer in the game, which means that breaking even is seen as doing okay.

I've had some bad performances that had nothing to do with that. I don't want to make that be an explanation, but this variance of interests has been a problem, so I tend to not want to do it.

Why do systems work? What market characteristics do they exploit?

Historically, systems have worked because of serial correlation. There was an implication that the price would continue to move in the same direction. If a price moved up for a day, you could predict it would move up for another day. If it moved up a week, you could predict another week. That's an underlying principle of why there are trends. A clever trend-following system just tries to overlap these momentum segments so each of these signals reinforce the others, so that you get a prediction with more force. It works better because it incorporates more than one time frame.

Fundamentals seep into price series. There's a corrupting element to trends when markets get overwhelmed by government action, or officials leaking information. That's when the patterns get muddied. If you look backward in time, the patterns tend to suggest more of a pure trend-following. This other kind of price movement is based more on short-term information known to a few trader groups. It makes a *big* difference in the price series. It distorts the natural formation of trends.

You haven't generally been big on fundamentals, though, have you?

This is probably the year of the fundamentals. I turn on the TV and see T. Boone Pickens grinning every time crude's up five bucks. He's been on TV since crude was at the $30 level, saying: "$40's more likely than $20. $60's more likely than $40." That ebbs and flows, of course, and people get their head handed to them along the way, but overall, he's been right. You would expect it to be a bad period for technicians. Fundamentalists would say crude is bullish whether it's at a 10-week high or low. They're more likely than the trend guys to want to buy at a 10-week low, which means if they're right, the trend guys are out of luck.

I'd have a better chance of being a fundamentalist preacher than a fundamentalist trader. Fundamental information just isn't accessible to a lot of people. Sometimes, the market actually does what's predicted, but still, it's an untenable long-term paradigm — to watch TV and then know what's going to happen. If the universe is structured like that, I'm in trouble.

Suppose someone wants to trade mechanically for a living. Say he has $50,000 for startup and will need to earn an average of $50,000 per year to survive.

I hope he's willing to risk the whole $50,000, because that's about the only way you can make that. Most decent systems build in about a 20% loss, which hopefully you don't hit right off the bat. A 20% drawdown off $50,000 is one thing, but you also have to withstand the possibility of a 20% drawdown from zero. A decent system only makes one to one and a half times a maximum drawdown. If you have $50,000 to lose, you can probably make $50,000 to $75,000 with a decent system. But I would think that's about the upper limit.

Please weigh in on the following: a single system should perform the same across an array of markets. Or a certain amount of custom tailoring per system per market is possible and maybe even inevitable.

With the exception of the S&Ps, they're all the same. You have to treat them the same, for no reason other than sample size. You can optimize each system in each market individually or you can optimize them all together. It's better to optimize them together.

What makes the S&Ps different?

They're averages of stocks and if

you're going to do any research on them other than day systems, it's hard to get enough of a sample. There's a cottage industry of short-term S&P systems that just died the minute they were implemented. There were an immense amount of what I assume to be trend-following index systems available three to five years ago. The market figured out how to arbitrage out that expectation.

How do you stay above all that?

That's where you need ideology. People would come to me with systems. They were pretty simple and it was hard for me to see how they could keep working the way they had on paper. The minute people actually started trading them, they just fell flat.

It's not surprising. I use short-term systems too, but they're very selective and don't trade very often. Compared to other methodologies, I've got to say they don't work as well. My impression is that that kind of trading is driven by margin considerations.

Another problem is that these short-term things are easier to find. There are fewer parameters. There's a ton of data. It's not a place where you find much subtlety.

You want the difficult approach.

You should be trying to do something different. I really am a contrarian at heart; for example, the easiest task is avoiding overnight risk. In fact, I thought it would make more sense to do what's harder—*take* the overnight risk. Up until three years ago, it seemed to me that the most reliable statistics were follow through from the close to the open. If you knew something about the close — it was higher for the day, for example— you had about a 55% chance of being in the right position for the next open.

That approach helped me a lot in my early days, especially when I was in the pit. I would be brutalized sometimes, but I would make myself go back and take a position at the end of the day.

Back in the days when there were no overnight electronic markets, what you got was the 1:15 close and the 9:30 open price the next day in the grain pits. You had no recourse.

People started making those bets. I know a guy who used to trade a hundred bonds every night and make $1 million a year, so the market adjusted. When I was doing it, it was the hard thing to do. I thought the risk of it was illusory because I knew what risk you had during the day. Sure, the overnight trade seemed to have more intrinsic risk, but it also had more reliability.

I'm a big proponent of "Do the hard thing." It's hard to squeeze that into a mechanical paradigm, because you never make judgments. People are so trend oriented now that they don't mind biting off anything. It's harder now to know what the harder thing to do is. But if you can figure it out — you probably have something.

Art Collins is a trader and author, and he is writing a book from which this interview was taken in part.

RELATED READING

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†*See Traders' Glossary for definition*

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