Advanced Fibonacci Techniques & Studies

Transitioning Out of Trading's Old (and failed) Paradigm

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In large numbers, Forex traders *(who have been conditioned by the existing {old} and failed trading paradigm)*, have used only just a fraction of the reality of Fibonacci in their trading. Here, you will learn valuable information regarding Fibonacci retracement levels, projections, expansions, Fork-Fibo's, extended retracements, and Fibonels. Combined, they provide an arsenal of trading resources which when adopted, can truly transform a trader's technical chart skills.

"I thought I felt a paradigm shift, but it was just my undershorts riding up."

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Objectives

There are two principal objectives for this paper. The first, is to introduce a complete set of Fibonacci levels / values that the serious trader should be using *(most traders are only using portions of the reality of Fibonacci in their trading).* Secondly, to provide an overview of the various ways Fibonacci reality can be brought to the chartist or technical trader, as again, most traders are under-performing when it comes to the potentiality of Fibonacci-based, technical analysis in their trading. In the end, this should be the one-stop-shop *(all things Fibonacci)* for the intermediate to advanced trader in regards to Fibonacci in their trading.

Please note that I am not going to provide the personal history of Leonardo Pisa Fibonacci *(though I find it very interesting and would encourage every trader to investigate such history on their own)*. I am also not going to discuss seashells, flowers, or bunny counts to illustrate the origin and pervasiveness of Fibonacci in our world. There are other complete and readily found sources for such information. I personally believe the following site will contain more information than one can digest on the topic of Fibonacci …
http://www.maths.surrey.ac.uk/hosted-sites/R.Knott/Fibonacci/fibBio.html

Introduction

When I was first introduced to currency trading, I was totally clueless. I mean, there's clueless and then there's clueless. I'll spare you the detail here (but bare it all, in depth, in my forthcoming book, *“Harmonic Wave Convergence – Leaving The Old Forex Paradigm Behind”* Fall 2010 …), but just understand my comprehension of the Forex and my trading, when I first started, was as naive and primitive as one could be. But, I was driven and I wanted to learn, as the brief introduction I had to currency trading gave me a sense of empowerment.

With the Forex, and for the first time in a long time, I felt I had found “the every-man” solution. That is, the opportunity for financial gain that was promised in so many other areas … real estate … multi-level marketing … and other home-based businesses, was actually seemingly “possible” with the Forex. All one needed was a computer, an Internet connection, and a little knowledge. Of course, that “little knowledge” was the tricky part. I was hungry. I wanted it badly. Unfortunately, this desire on my part had a timing issue.

The retail spot Forex market didn't really open up until 1998. So between then and 2004, it was still truly in its infancy. The continued explosion of the Internet, combined with the typical early adopters *(greedy marketeers),* led to a reality that is even worse today. And that is, if I saw it, I believed it. My strong desire to succeed as a currency trader essentially blinded me. Unfortunately, this is in large part, the principal contributor to the old-paradigm itself. Let me explain. As a quick example, if I were to say, fill in the blank in the following … *“Despite the abundance of training materials, the reality is __% of all traders fail”*, your answer would most likely be “95%”. And it would be that because you have seen it, read it, heard it. Unfortunately, it's quite incorrect. Yet, you have believed it, internalized it, and filed it away for your subconscious to play with as it desires. So, here's the first reality-check we'll introduce … the reality is, it's not the traders that fail. You can take the most ambitious, dedicated and committed trader, who puts in the time in professional training, does his practice trading, has specific study times, and uses the best *(of known)* strategies taught, but if he is on a dead-end road, he's not going to get anywhere. *Are you following?* The reality is, it's not the trader that fails, it's the road that he is put upon that fails. On the other hand, you can take an average Joe, put him on a road that does lead to somewhere, and most of the time, he will find his way.

To advance as a trader today, you must be willing to let go of much of what you have been taught *(or thought)* was real, as it was presented from the perspective of a failed paradigm. It's like the existing paradigm has an ego of its own. It's not going to admit it is the failure; it will try to make itself feel better by blaming incompetent traders. But let me reassure you, ***if the existing paradigm was worth a salt, there wouldn't be a 95% failure rate***. That's the ONLY proof we need to discuss at this point. Of course, this existing paradigm, ego in tow, is going to try to convince you that nothing is guaranteed, and that you just have to rise above the others to be successful. If you were going to visit an old college friend in a distant town, and saw a sign that read, *"95% of the travelers on this road do not make it to their destination"* … would your response be that you should fight hard and be a better driver than 95% of all drivers, or would you simply say, *"It's time to get off this road and find a different way to my friend's house"*? So for me, it was obvious, if 95% of the people fail on the road I'm traveling, I need to travel down a different road. *What do you think?* So, my efforts the past few years have been based upon helping traders that want to succeed to move out of the failed, existing *(old)* paradigm, and transition into the new paradigm of Forex trading. *Are you ready to get on board that train?*

As humans, we have this incredible, physiological reality known as the Reticular Activating System *(or "RAS")*. There are many ways to look at RAS, but the one I would like to address here is how RAS can allow us to have incredible focus when necessary and important. Picture yourself walking through a busy, large metropolitan airport terminal. You have thousands of people moving about; there's the guy floor-polishing just 50 feet away; the pastry kiosk has loud music playing; little carts carrying elderly travelers are beeping their horns in an attempt to navigate the crowds; and yet you hear, *"Attention SouthWest Flight 1874 to Sacramento passengers, your gate has moved and you will now be boarding at Gate 21".* Your inner brain knew you were on Flight 1874, and RAS somehow allowed you to hear that public-address announcement over all the other noise present. In fact, if you were on a cell phone talking to a friend, they would be totally overwhelmed with all the noise they hear, as cell phones don't have an RAS capability and cannot filter out one particular sound over another.

Another great example of RAS can be recognized by almost every parent who was ready to have their first child. There's the expectant mother, 8 months and 3 weeks pregnant, so anxious for the big day to come, and whether she goes to the grocery store, the mall, or just down the sidewalk to walk the dog, every other woman she sees is 9-months pregnant. The reality is, the percentage of women 9-months pregnant in the general population did not statistically change to be timed with this new mother's pregnancy, but her RAS was so attentive to her situation, that's where her focus was, and that's what she saw.

Unfortunately, RAS has its downsides, especially in the learning process, and especially in the trading realm. Right now, many of you are missing the foundation of my discussion on RAS, merely because your RAS is so focused on getting to the information about Fibonacci.

Circling back to my personal journey with the Forex … I was so hungry to learn that anyone who appeared to say anything about the Forex *(above and beyond that which I thought I knew)* was, to me, a credible source. The reality was, because of my RAS, their credibility wasn't even questioned. My RAS was so focused on sponging-up the required knowledge to be a great Forex trader I just assumed, if someone was talking, they knew about what they were talking. That RAS was so strong, that it didn't let logic prevail. I wasn't thinking about the Internet explosion or greedy marketeers exploiting folks like me.

The bottom line … our RAS, designed to protect and help us in most situations, can operate in direct conflict with the learning process. Combine that with a market so ripe for exploitation, and you have a disaster in the making. One of the ways I have gained fulfillment in the Forex, outside of my personal trading, has been in the area of myth-busting. By that, I mean, taking pieces of what is portrayed as trading wisdom and totally debunking it into the nonsense that it is … sometimes to the shock of traders, who now feel embarrassed that they could have been suckered into believing that tidbit had anything to do with wisdom in their trading.

And I feel compelled to be this Forex trading myth-buster, merely because the general marketplace continues to be not as I entered it, but now, even worse.

The birth of the spot Forex market created opportunity. There are always those that know the best way to learn a life-skill are to be mentored. Yes, there are books on martial arts at the library, *but how many really great black belts were self-trained?* There are great DVD's on playing tennis, *but how many of the Top-100 players in the world are self-taught tennis players?* All of the Top-10 ranked players have their personal coaches. So the newly birthed Forex market needed teachers. *So where did the first Forex teachers come from?* The stock market, that's where. I remember my first printed Forex training materials, and large portions of them were pulled directly from stock market trading teaching materials. While there are some foundational similarities, much of the wisdom being passed on was just not relevant.

The proliferation of the Internet led to the increased popularity of message boards, public forums, and other forms of accessible communication to which anyone could post. Most of the posts from my early days to those which I see today are from either the least experienced traders or experienced traders who are so entrenched *(RAS)* in their methodologies that they have no mind for other possibilities. Yet, this is where the masses go for their insight. If I didn't see it for so many years now, I wouldn't believe it myself. Now, I surely am not attacking such forms of information ... there are dedicated forums which serve great purpose ... so I am generalizing a tad here. But the reality, the challenge for the driven, *"I want more...."* trader, is that the "real" wisdom they seek is often hidden, not available, or completely over-shadowed by partially or completely inaccurate information. Unfortunately, this reality is true at all levels, from the shadiest Forex teaching academy, to the regulatory bodies that oversee the Forex trading realm. We'll provide solid proof of this later.

For now, you are here to gain advanced knowledge on the use of Fibonacci in your trading. You are fortunate to have found this document (partial chapter from "*Harmonic Wave Convergence – Leaving The Old Forex Paradigm Behind"* Fall 2010 …), as it contains a gold-mine of information. I don't say that in a boastful manner. Well, actually, maybe I do. Let me rephrase that …. you won't find the information you find here in one location anywhere else in the world today. And that's because it has been compiled from my personal trading pursuits over a six-year span during which I have stayed deeply entrenched in the research of Fibonacci.

Here's a simple test … go Google *"Fibonacci retracement levels"*, or *"Fibonacci levels"* or however else you may wish to word your search. Write down all the levels you discover. There will be plenty of 38.2%, 50%, and 61.8% *(and at that repeated and repeated over and over again)*. *But seriously, what numbers do you come up with?*

What I reveal in this chapter on Advanced Fibonacci offers great enhancement to most traders' abilities. However, not everything I discuss will be able to be adopted, for one reason or another, by all traders. Additionally, this is just one chapter of a larger work, so I just do not have the space to reveal all of the "hooks" into some of what I discuss here *(such as the relationship between Harmonic Wave Convergence™ and Fibonacci levels)*. But while I cannot completely transition you *(in just this document)* out of the existing, old-paradigm thinking in regards to currency trading, we can at least start.

Here's a *"smack-you-in-the-face"* reality … there are more numbers *(Fibonacci levels)* than what you discovered with your Google search! And those numbers are in and on your charts right now. Just because YOU don't see them, does not mean they are not there. And more so, just because you do not see them, does not mean they do not dictate and follow price movement with equal power to 38-50-62.

In other words, the power of this document is that you will now have the ability to see those other lines that do impact price and to understand deeper relationships within the world of Fibonacci and technical trading. In summary, I wish someone handed me this document when I was in my first-year of trading! Enjoy! I always welcome and enjoy feedback, so feel free to provide me your thoughts, comments, criticisms, and compliments!

Paradigms

To ensure we are on the same page, **a paradigm is nothing more than the perceived knowledge of a given time dictating the beliefs of those in that time**. Case in point, at one time, the earth was perceived to be flat, or like a cube. Sail far enough, you fall of the edge. That represents a collective paradigm. There are also individual, vested paradigms. An example of this would be the professor who has preached and taught a particular theory for , 40 years into his career, only to have some younger scientist discover and prove a different reality. It's very hard, consciously and subconsciously, for that older professor to jump on the newly discovered paradigm, as his entire lifetime of work was vested in the old paradigm.

Just realize the same reality exists today in the Forex arena. Many trading foundations *("the trend is your friend", "you must have at least 2:1 reward-to-risk", "the Euro session is the best time to trade", and so on)* exist merely because that is what is heard and repeated. *If it is said, it must be ... right?* That's the problem with a paradigm, especially the failed ones … it has a strong tendency to be self-promoting and therefore, self perpetuating.

Sage Marriage Advice

Before we fully immerse ourselves in all-things-Fibonacci, I want to review some sage marriage advice passed on to me by some elders when I was getting married. It's tongue in cheek in some ways, but also now represents my personal approach to trading. And this can become complicated pretty fast, which is why it is hard to separate one chapter out of a book and still be successful with the message. Nonetheless, that sage wisdom, initially given to a man in regards to his new bride *(but of course, equally applicable in the reverse consideration)* …

"Would you rather be right, or would your rather be happy?"

Again, no offense intended, so please minimize the complaints. In terms of a relationship, this merely says one may be better off to place their ego on the shelf in order to keep balance in their relationship … to not micro-manage the detail for the sake of being right. We've all had those experiences. *"There, I showed her"* … only to end up sleeping on the couch that night! *Was that personal "victory" really a victory after all? What's more important in terms of the relationship?* Okay, maybe that wisdom, jokingly passed on to me, wasn't that tongue-in-cheek after all.

I've taken that wisdom and applied it to my trading. I really don't care WHY things work, *as long as they work consistently and generate winning trades, I will be happy.* This was not my story early on. I had to know WHY something worked in my trading. I spent countless hours attempting to figure-out formulas, or rationalize this or that. Wasted time. You see, at the end of the month, the bills don't get paid by the depths of the minutia in my trading trivia, but by the pips compounded in the bank. *Are you with me?* I hope so. If you are a Type A personality *(first born, doctor, lawyer, fighter pilot, etc.),* this is going to be a bit of a struggle for you. Just trust me, certain things are better just to accept. This does not mean to be gullible *(referencing the learning process discussed regarding the old-paradigm)*, but rather if something is working, just use it to your advantage instead of trying to figure out how it works. A cursory understanding is just fine, but to reinvent the wheel is not your objective as a Forex trader. This does not mean to just blindly accept things, but if you try them and they work, then adopt them and move on.

To this end, what I do with Fibonacci may not be understood by all. Don't struggle with it. Just accept it rather than trying to re-invent the wheel, and just apply it to your trading and get great results!

The Existing, Failed, Paradigm

Okay, I'll just come out and say it. While there is merit and some reality to many aspects of the existing paradigm being taught and traded in the Forex market, most of the "truths" are about as valid as the belief the earth was flat 500 years ago. But there is reason for some of this. Let me try to explain.

As an example, the reason the prevailing *"the trend is your friend"* mindset is there is merely because the tools are not there to measure the precision of price movement … at least as available in the prevailing technology. The vast majority of technical studies and resources have a strong lagging attribute. Even attempts to get creative on this issue, such as Jurak or Hull MA's, still have lag. The reality is, if they were more precise, there would be no need for 50-pip, 75-pip, 100-pip, 200-pip, or even larger, stop-losses. And puh-lez, do not go to down the road of, *“You have to increase the size of the stop as you increase time frames because the fractals grow in size, too”* … that would be a most-incrimenting comment directly attributable to the existing, failed paradigm … and again, stated merely because the tools are not there *(in the existing paradigm)* to measure with any degree of precision.

Here's the bottom line on the influence of the existing, failed paradigm on Fibonacci. Because the existing paradigm does not generally have the tools to measure precision, the need for additional Fibonacci levels may seem questionable. I would agree, if one accepts the premise. But that's a large reason why you want to leave the existing, failed paradigm.

The new paradigm trader understands the realities of price movement. It is not random. Price moves in very precise and measurable harmonics. And every *(EVERY)* trend move exhausts at a point of Harmonic Wave Convergence™ … for which there ARE real-time indicators to precisely measure that trend exhaustion … all of which empower the trader in ways not understood by the existing, failed paradigm trader.

Fibonacci Levels

What I am framing as Fibonacci levels are merely a set of percentage-numbers that, for the most part, have some sort of Fibonacci relationship *(being a mathematical derivative thereof),* but when applied to price movement create potential support and resistance points in future price movement. I have not “created” or “derived” any of these values. I merely did an exhaustive search of those who have and then “compiled” a set of Fibonacci values *(levels)* that at various times turn price *(or cause price to breath, retrace, etc.).* I use these values in my personal trading just because they turn price. That's ALL I need. *I am HAPPY with that alone.*

In this sense, I am talking about “being happy” versus “being right”. I really don't care HOW the original use of a particular Fibonacci level that I use was being implemented. I saw it was used in one way, I put that line on my chart, and I see hard bounces on/from it over and over. That's all I need to know to continue to use it. Let's make some sense of this …

In 1922, Gartley published a book on patterns he saw when charting financial price movement. Many have heard of “Gartley patterns”. In the late 1990's and onward, a trader by the name of Scott Carney greatly improved the traders' potential use of these patterns. With Carney's research, charting, trading, and publishing[1], several new retracement/projection values were made available. I truly believe the industry owes Carney a lot more credit than he probably has received for sharing his research and trading results.

I have also studied some of Jim Kane's works[2] and can report that he definitely goes through the math of the derivation of both retracement and projection numbers. Personally, I think he

1 Harmonic Trading of the Financial Markets: Volume One by Scott M. Carney. HarmonicTrader.com LLC © 2004
2 Advanced Fibonacci Trading Concepts by Jim Kane. KaneTrading.com © 2003 James J. Kane

should be held up there with Fibonacci himself for some of his derivations that truly nail price movements. Any serious student of Fibonacci trading *(or trading in general)* should at some point become a student of Kane's works (see http://www.KaneTrading.com). Carney and Kane both directly acknowledge their working together to derive additional Fibonacci levels to explain price movements they have observed on the charts.

The bottom line, what Carney did was statistically demonstrate high probability mathematical relationships for the various reversal points of those harmonic chart patterns. Some of these termination points utilize values most traders are familiar with … other values come merely from Carney's own trading experience *(and work with Kane)*, but prove themselves as pattern termination points.

I am not advocating one having to master Carney's complete work of harmonic chart pattern techniques in order to access advanced Fibonacci levels and values; however, a reading of Carney's work may indeed interest you in pursuing his strategies. What is contained in this chapter will surely only compliment Carney's harmonic chart pattern trading, if it is something you do elect to pursue. As with Jim Kane, I do think traders like Carney who have contributed so much to our industry should be recognized. I fully appreciate the aspects of my trading that I can attribute to Carney's and Kane's efforts. For more information on Carney's Harmonic Chart Patterns and Fibonacci relationships, or information regarding Carney's books, visit http://harmonictrader.com.

What I loved about finding Carney's work, is that it validated something I had been doing for years. Carney no doubt discovered forms of these techniques years in advance of me, but sometimes finding all the research that exists can be a challenge. Nonetheless, I had a "Fibonacci experience" *(discovery)* that has introduced new ways of using Fibonacci levels. I took this discovery to some of the leading traders in the industry, folks with 20 to 35 years of experience, and they too agreed it was rather intriguing. More to come later on this subject.

Before we get to the numbers *(Fibonacci levels / values)*, the reader must first recognize that my use of the Fibonacci levels and that of the typical trader may be a little different. Of course, I understand most traders are stuck in the old, failed paradigm, and I am trading in the new paradigm … so I don't expect the same use of Fibonacci levels across the board.

Again, the main reason I will have MORE levels/values is because I have precise, real-time indicators that allow me to have more detail in what I can see on the charts. Better said, in short distances, lagging indicators are essentially useless. Because of that, there has been little work to advance the Fibonacci levels dragged-over from the stock market traders who initially where trading and teaching currency trading.

But with the added values that Carney and Kane have contributed to the realm of Fibonacci values / levels, I have a complete suite of numbers that accurately define price reversal points.

Types of Fibonacci Studies We'll Discuss …

There are several different types of Fibonacci studies *(application of Fibonacci to create potential support and resistance price points on the charts)* we will discuss in this chapter:

- Standard Retracements
- Projections
- Expansions
- Fork-Fibo's
- Extended Retracements
- Fibonels

Some of these studies carry different names elsewhere. I have adopted the names I use because I believe they best describe the studies I am using. And since I introduce a few more than commonly found *(or better said, have combined several, different studies)*, I needed to have names that made sense when comparing one type of study against another.

A Quick Note Regarding Charts

Over the years, because I was a vested trader, strong researcher, and persistent coach to many, I had a continuous search for the most comprehensive professional trading charts. I will note every trader has their favorite, but I personally use a white-label version of FX Trek's Intellicharts, known at PipClub ProCharts *(available at PipClubProCharts.com).* The ProCharts have the ability to implement all of the Fibonacci studies I desire to use in my trading, and do it in a very powerful fashion. I personally created the implementation for Auto-Fibonels in PipClubProCharts to accommodate these advanced Fibonacci levels *(well, it was my design, the good folks at FX Trek did the implementation).*

If you are stuck with MT4 charts for the simple reason they are free, you are missing the boat at the larger picture level in regards to success as a Forex trader. Better said, if you use MT4/ MT5 only because that is what your budget will allow, you should not be trading currency.

There are many great attributes to the MT4 platform and trading community *(much of which comes from the large volume of custom-indicators readily available). But has having 527 CI's on your charts produced the income you desire from your trading?* I view my efforts in the Forex as my own trading company. In my head, I am CEO of Steve Gregor Forex Trading. To that end, I would not have sought or accepted that CEO position without realizing I had the potential to head a $5M or $10M *(or even larger)* company! I also have enough wisdom *(the grey hair sprouting on the temples has to be good for something!)* to know that $10M companies do not get to that size without some expense. Personally, I have had companies and projects in my past that had to make $10,000 before I could put food on the table *(that was their monthly break-even based on expenses to float the business).* So if you are looking at achieving greatness as a trader, just realize forcing yourself to go the “free” route may also limit the success you may achieve. If your generalized response is, *“I cannot afford professional charts”*, then you are not ready to be trading the Forex.

Lastly, I will state I used to be on MT4. I traded it side-by-side with other charts. There are numerous inherent issues with MT4 which I won't detail here, but there is a reason I went to IntelliCharts *(and then later enhanced those Intellicharts creating PipClub ProCharts)*. And that is they provided much more accuracy. When you want to have precision, accuracy is important. And the reason I wanted precision, is it would allow tight stops *(and using tighter stops without decreasing the win percentages)*. And the reason I wanted those tight stops … more profits than my peers in the very same trades. And when you compound “more profit”, it becomes staggering pretty fast.

I desperately wanted my complete trading environment on MT4 for many reasons *(particularly because it was market dominant, I felt I could reach more traders).* I spent a lot of money in an attempt to have it run there. And while I was able to duplicate the system … indicators and all, the differences in various brokers' price feeds rendered it less-than-optimal. Again, I am not out to prove right or wrong, I just go where the pips are. You make your own decisions. After all, you are CEO of your own trading company, too!

So, with the charting platforms discussion out of the way, let's graphically look at the use of each of the various types of Fibonacci studies one can do, starting with a standard retracement.

Standard Retracements

Nothing new here, this is Forex Trading-101. There's a pronounced move, starting with a swing-low and going to a swing-high *(or swing-high going to a swing-low)* and so we grab our Fibo-tool and stretch out the trend from start to finish. We then look at the pull-back possibilities, with typical emphasis on 38%, 50%, and 61.8% retracements. There are tons of strategies based on these Fibonacci levels, but the over-riding thinking is the retrace will end in this area and the move then continue in the original direction of the trend.

From an Elliott Wave perspective, there are assigned statistical percentages to the degree *(percentage)* of pull-back based on the wave count. I'm not covering Elliott Wave in this chapter *(but will reference it, for sure)*, but as an example, Wave 2 is known to pull-back swiftly and deeply, and has a higher percentage of moves retracing to the 50% to 62% mark. We also know the EUR/USD often will pull back to 78.6% on a Wave 2. Wave 4 pull-backs will statistically be shallower and slower *(compared to Wave 2's)* and more prevalent in the 38.2% to 50% range, except in hyper-extended Wave 3's, where the Wave 4 pull-back may struggle to reach even 23.6%. If you haven't guessed, I'm hinting that a minimal knowledge of Elliott Wave will indeed help you better understand, with higher probability, where pull-backs may terminate.

Chart by PipClub ProCharts (white-label FX Trek IntelliCharts)

Some Elliott Wave retracement insight from eSignal[3]...

- We typically expect only 12% of Wave 2's to hold 38% retracements of Wave 1
- We anticipate 73% of Wave 2 retracements between 50% and 60%
- We anticipate 15% of Wave 2's to retrace beyond the 62%
- We can anticipate only 15% of the time Wave 4 to retrace between 24% to 38%
- We can anticipate 60% of the time Wave 4 to retrace between 30% and 50%
- We can anticipate 15% of the time Wave 4 to retrace between 50% and 62%

While these kinds of statistics are indicative that a little Elliott Wave knowledge may be helpful to the trader, there still remains the challenge of knowing which time a particular retracement is falling into which statistical category. In my personal trading, this is resolved with the use of Harmonic Wave Convergence™, wherein I can measure a wave termination point, typically to within a 3-pip to 5-pip zone.

Projections, Extensions, and Expansions

Having coached literally hundreds upon hundreds of traders, I have observed that the use of Fibonacci in projections is probably one of the most under-used trading techniques by the average Forex technical trader. We find ourselves so fascinated when we see a trend pull-

3 Overview of Fibonacci and Elliott Wave Relationships by Marc Rinehart. Advanced GET Trading Strategies. 27-Jan-04

back, to-the-pip, during a retracement (part of that, *"Oh yea, you really think the market is completely random"* sarcasm in the depths of our minds), yet we fail to realize that Fibonacci is no-less accurate when looking at projections. *So put those projections on your charts!*

A projection is merely analyzing the possibility that price movement, after a retracement, will proceed in the original direction of the trend, moving up past and beyond the original point of retracement.

From a mechanical aspect, this means that a future, potential price point, has a direct relationship to a previous price point, but more so, to the swing-low to swing-high *(or swing-high to swing-low)* wave. And so, to implement a projection on our charts *(depending on charting platform)*, we simply use our projection tool and apply it to the wave which has completed, and project a future price beyond the wave which has Fibonacci relationships based on the length of the wave. These future prices then become excellent potential support and resistance, as price will often stall or reverse at these points *(and can then be used for profit-taking, stop-loss advancement, etc.).*

For the average trader, I've come to learn that a good wave candidate for a projection is one that has had at least a 38.2% retracement.

Now's a great time to talk just a little about my personal perspective regarding Elliott Wave. I am absolutely convinced there is great merit *(in terms of compliance with rules and guidelines)* with Elliott Wave Theory when applied to technical analysis. I am also absolutely convinced I will never be an elliottician, immersed in the depths of wave counts at multiple levels at any given time. I'll bow and give homage to those traders and analysts who have amassed the 10, 15, and 20 years of experience that I believe is necessary to be a consistent Elliott Wave analyst; it's just not the path for me. I won't go as far as to dismiss the potential of Elliott Wave and rest on those laurels because the entire Elliott Wave thing is purported to merely be a "theory". I've observed way too much in my trading for Elliott Wave to merely be a theory. If some of the nay-sayers would just truly listen to what I have say, their thinking regarding Elliott Wave may change *(for the better).*

However, I DO use pieces of Elliott Wave in my trading. Recall as I started this chapter, I talked about being right or being happy. And, in terms of trading, being happy meant "pips-in-the-bank". I apply this thinking to my personal use of Elliott Wave, as well. I am not going to get hung up on wave counts. I am not going to get discombobulated in my thinking because a wave count gets corrected, or flips, or "is confused" at the moment. But I will use the pieces of Elliott Wave that make sense to me in a general trading way. And that includes both retracements and projections and more so, the values for those retracements and projections.

I'll just flat-out state that a solid research of the prevailing technical analysis material regarding Elliott Wave projections falls into two camps, with substantially different approaches for the projected prices in each of those camps.

As in the case of a completed Wave 1 being used to project a Wave 3, the methodology we covered above would prevail in one of those camps. Wave 3 would be seen as 100%-based upon the length of Wave 1, and nothing else.

But there is another camp, and this camp refers to such a projection as an “expansion”. In some ways, this makes sense to me, but it's frequency of reference in available material is maybe one-fourth that compared to projections.

An expansion also uses the length of Wave 1 to project a Wave 3, but then applies that length and resulting projection to the termination point of Wave 2. Again, I like the logic of this. It says that the impulsive nature of Wave 1 has a corresponding relationship with Wave 3, yet that Wave 3 will also be dependent on the depth of the pull-back in Wave 2. When you listen to it, see it, and think about it, it does make some sense.

So, some traders are taught an Elliott Wave 3 is typically 1.618% *(as an example of one of several potential Fibonacci levels)* of Wave 1. Others are taught that Wave 3 is indeed that 1.618% of Wave 1, but applied to the termination of the pull-back in Wave 2. Obviously, these two projections lend themselves to different, future price points.

This is where I can care less about who is right. All I know is there are two potential methodologies for determining points where price may stall or be turned-away. To me, it's more data to help me potentially better understand where price will turn. To be honest, in my observation of applying it all together *(Elliott Wave, projections, expansions),* I have found times where the Wave 3 structure was better forecasted by projections, and times where the Wave 3 structure was better forecasted using expansions. Again, I really don't care which camp is technically right. Personally, I use both. You can choose a camp, or you can do as I do.

Recall earlier I mentioned that I have given names for some things based on what they are. This represents one of those times … where I have commonly seen “projections” referred to in the literature I have left as “projections”. Sometimes they are called “extensions”. To me, they are both the same, and so I refer to them both as “projections”. However, it can be confusing after that. As an example, MT4 specifically labels “expansions” just as we have defined it in our explanation of expansions above. But when FX Trek refers to “projections”, they are doing expansions. Just don't let the terminology confuse you. The technical analysis, be it using just Wave 1 or including Wave 2, to help project Wave 3, is what it is.We've used some Elliott Wave here merely to illustrate there can be different ways of approaching projections. If you cannot speak Elliott Wave, don't worry. I personally don't care what a wave is labeled *(the “count”)*, or even if I have the wave structure perfectly absolute *(again, I am not desirous of meeting the perfection or compliance for which an elliottician may demand)*. I just find a nice-looking wave structure, look for a 38% retracement, and apply BOTH a projection and expansion to derive potential, future support and resistance barriers in the direction of the original trend. But what I will use from Elliott Wave, is the projection level values. Those percentages are indeed in my Fibonacci tool settings. The likelihood of any one of those projected values will increase with additional studies, creating what I call a high-probability reversal (HPR) zone. We'll cover this later.

Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

While there are numerous sources for specific Fibonacci levels/values, for the minimally-educated Elliott Wave enthusiast I will again reference a work from eSignal that talks to frequency.

Some Elliott Wave projection insight *(for Wave 3)* from eSignal[3]

- Only approximately 2% of the time will a labeled Wave 3 be less than Wave 1
- We anticipate 15% of Wave 3's trade between 1.00 and 1.60 of Wave 1
- We can anticipate 45% of the time Wave 3's will push to between 1.60 and 1.75%
- We can anticipate a third, or 30% of the time, Wave 3 pushes to approximately the 1.75 to 2.62 range
- We can anticipate 8% of Wave 3's will extend beyond 2.62 or higher Fibonacci numbers

Again, for the non-Elliott Wave trader, I suggest that such statistics should not present any challenges.

For me, it's simple. I have a Fibo tool that lets me input settings *(values).* I place that tool on a trend move *(swing-high to swing-low ... or ... swing-low to swing-high)* and project-out *(and expand-out)* a number of future, potential support and resistance lines.

Fork Fibo's

A Fork Fibo is something I stumbled upon back in 2007. I was seeing more and more price prediction-ability with my advanced uses of Andrews Pitchforks *(also, generically called “median sets”).* I cover pitchforks extensively in another chapter, so I won't get into too much detail here. If you already understand and are applying pitchforks to your charts, you will no-doubt be intrigued with my Fork Fibo's. But as I mentioned earlier, the reality is, my Fork Fibo's work is really a sub-set of something else, which I give credit to Scott Carney for documenting approximately 10 years earlier *(even though I was not aware of that fact)*. I also really don't know if Carney is the one who defined it, but I have not seen it referenced elsewhere before Carney defines it. We'll talk about Carney's work here in a moment, but for now, let's continue with Fork Fibo's.

If you are not yet utilizing the power of pitchforks on your charts, yet you believe Fibonacci rules the charts, you may want to reconsider your decision to not be working with pitchforks. In quick review, a *(traditional)* pitchfork utilizes combinations of swing-high's and swing-low's to form the base of the pitchfork *(the trend line for which we actually bisect and create the median itself)*. But if you look at charts hard, and have done enough Fibonacci study, you'll quickly realize that those swing-high's and swing-low's which determine the basis for the pitchfork, are indeed almost always a Fibonacci level retracement or projection from a previous wave move. You then realize that a median-set becomes very powerful because it's entire foundation is Fibonacci-based. Despite my years using them, every time price makes a big reach and puts the brakes on to-the-pip on a pitchfork parallel, I am totally amazed. Sometimes, it's just outright scary. But pips-in-the-bank, I don't mind being scared!

3 Overview of Fibonacci and Elliott Wave Relationships by Marc Rinehart. Advanced GET Trading Strategies. 27-Jan-04

So we know pitchforks already contain incredible amounts of Fibonacci DNA *(by the nature of the discussion above)*, but there's still even more power in them via the Fork Fibo.

A Fork Fibo uses the swing-high/swing-low combination that creates the trend and rather than projecting in the direction of the trend, we project, backwards, into the new trend defined by the pitchfork. In my first use of these, I called this a “reverse-Fibonacci”, as I would use my Fibonacci projection tool on them, but backwards. Today, I call them Fork Fibo's and they are lethally accurate at projecting exhausting and reversal points.

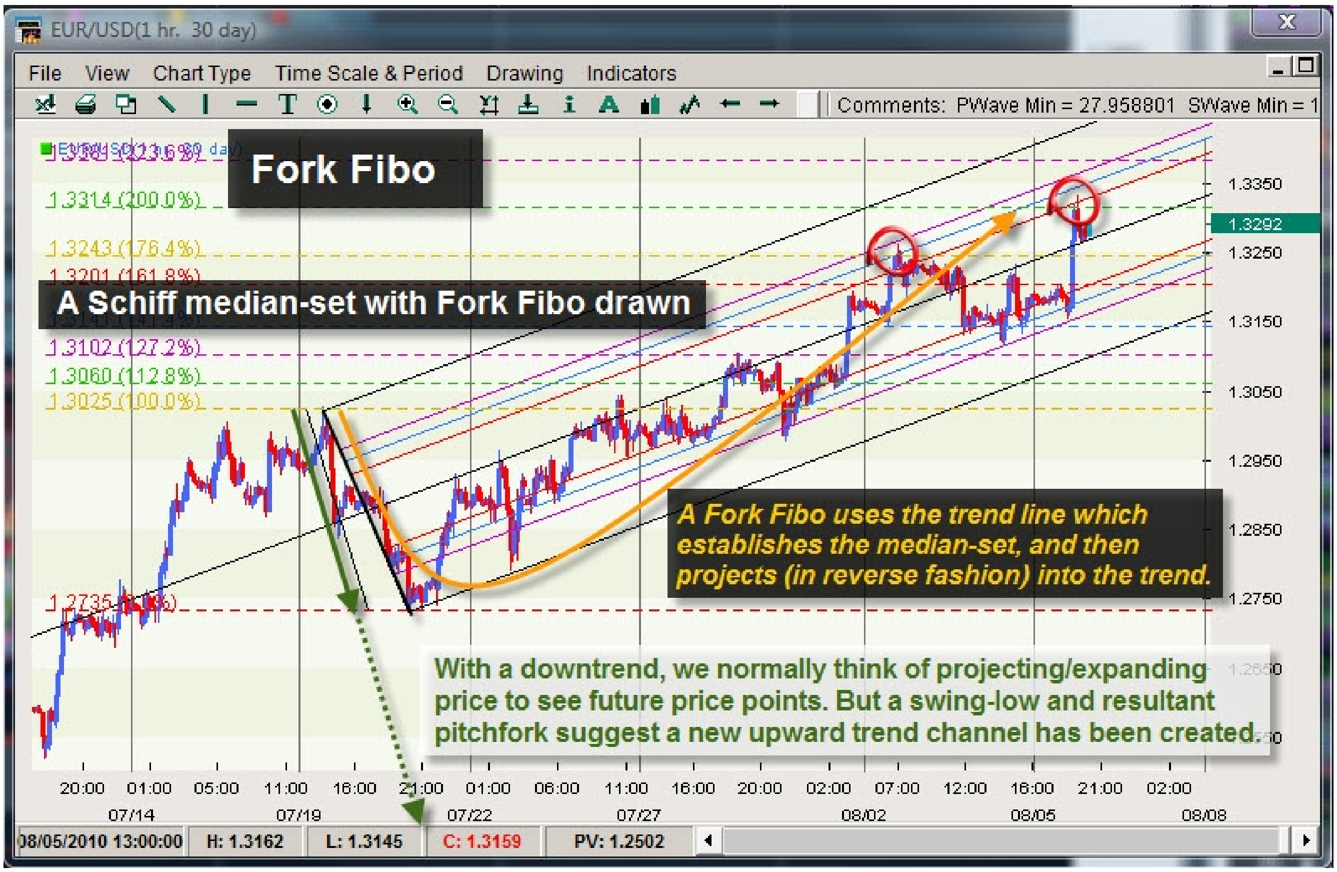


Chart by PipClub ProCharts (white-label FX Trek IntelliCharts)

The above chart illustrates exactly how Fork Fibo's define reversal points. Note the red-circled areas on the chart. We had a 176.4% Fork Fibo, then 200% Fork Fibo, precisely identify turn-arounds. Though not circled, you can see the magenta 127.2% Fork Fibo creates a retracement, as well. Very, very powerful.

The lines internal to the median-set are called Fibonels. We'll discuss them later.

Extended Retracements

I mentioned that I stumbled-upon reverse-Fibonacci's *(now Fork Fibo's)* with my median-set work back in 2007. At that time, I was confused with the discovery. It's not covered anywhere in the available median-set literature. *But could me, Joe Average trader, really have made* *some sort of discovery regarding median-sets?* I mean, there have been tens-of-thousands of traders before me, in many markets. *How could this be?* I didn't waste too much time. I went straight to *(what I considered to be)* the pitchfork guru of our day, with more than 35 years of trading experience, Timothy Morge[5]. I sent Morge several of my pitchforks with "reverse Fibonacci's" drawn, and asked what he thought. I believed this to be a fair question, as I had not seen it mentioned in his training materials on pitchforks. His reply, in part … *"I think you have identified a verifiable and useful tool and measurement methodology".* Those words told me we were doing something cutting-edge. He continued, *"... I would say you'd be hard pressed to find anyone out there using it or even having seen it. It was great insight on your part to notice it, define it, and refine it in your own trading."*

I've continued the past several years to see if anyone else has done anything like this and have found nothing. Of course, who knows what truly lies in the depths of Internet.

In most recent times, I have looked at others who have done extensive studies of pitchforks and median-sets and are publishing their findings *(such as Greg Fisher[6])*, but still, no reference to this reverse-Fibonacci reality.

In a twist that can only be termed "Law of Attraction", or even "butterfly effect", a trader who was considering trading my Harmonic Wave Convergence™ sent me information about Carney's Harmonic Chart Patterns. I guess "harmonic" being in both names, he thought I might want to see this stuff. I had seen references to chart patterns before and it just wasn't my gig. But, this time, with this referral, I took a closer look. And I am so glad I did.

What I saw in Carney's work brought big smiles, as it completely validated what I was doing with Fork Fibo's in median-sets. Even though Carney does not use pitchforks with his harmonic chart patterns, his observations that defined chart patterns shares a common element with Fork Fibo's.

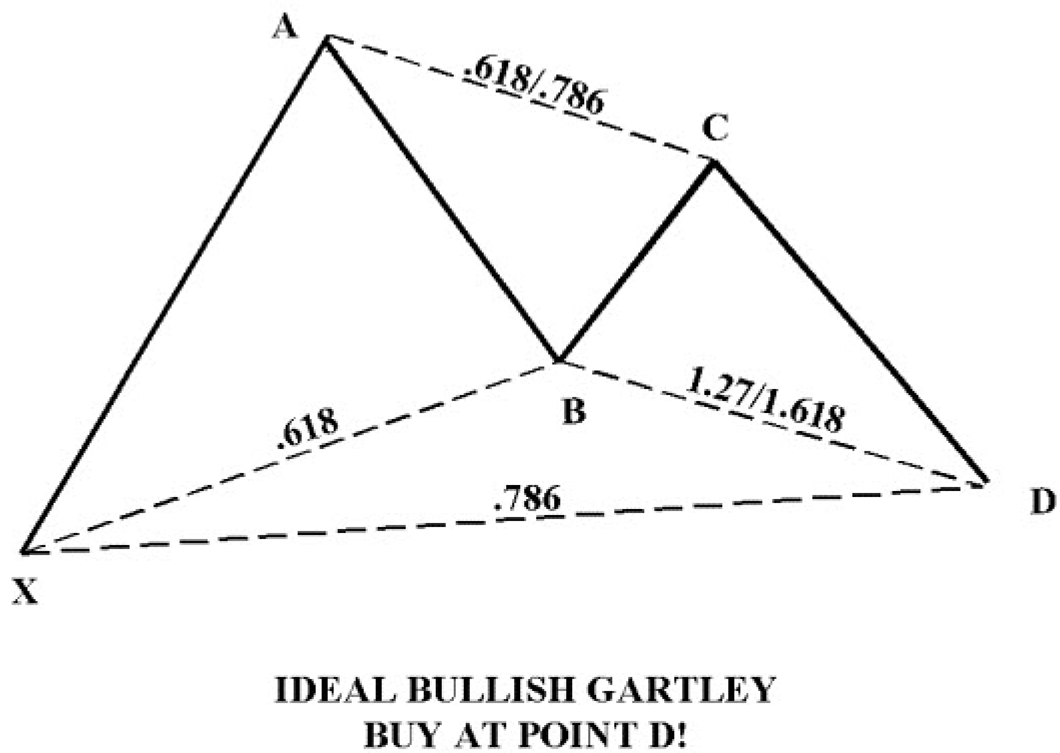
When we discussed retracements, we talked about the expectation of price pulling-back and then bouncing off a Fibonacci level and then continuing in the direction of the trend. We could measure those pull-backs with our retracements. When we discussed projections, we talked about a trend move potentially continuing and our looking for future, potential targets based on that trend move. Well, what happens when price retraces … 38%, 62%, and continues? What happens when price retraces beyond the origin of the original trend? In essence, a 100% retracement brings us back to the origin of the original move.

Typically, once past 100%, we then start using that move as the new trend direction, and base projections in the direction of the trend. What Carney showed me, and I think very few others have picked-up on, is that price can retrace past 100% … AND be very predictable at showing future support and resistance by merely continuing that retrace with Fibonacci values greater than 100%. In Carney's work, he terms this a "projection". Obviously, I am not fond of calling it that, because to me, a projection goes in the direction of the trend, and here we are merely looking at retracements. So, for me, it makes more sense to think of this as an "extended retracement" *("extended" because it goes past 100%).* Jim Kane also discusses these retracements which progress beyond 100%, and admits he prefers calling them "expansions"

5 Trading With Median Lines – Mapping the Markets by Timothy Morge © ???? http://www.MedianLine.com
6 Finding High Probability Lines by Greg Fisher. www.Median-Line-Study.com Median Line Study © 2009

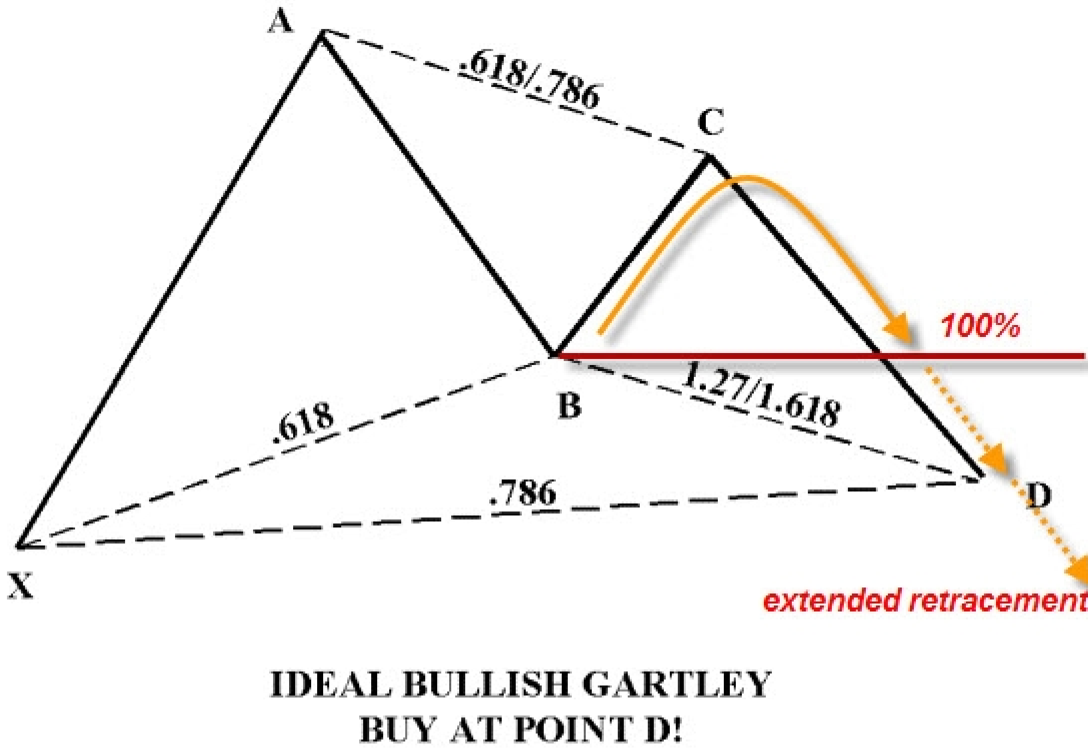
(as in "expanded" retracement), but because of that name used elsewhere and not wanting to confuse traders, he references them as "external" retracements. I personally think "extended retracement" describes the situation exactly as it is, so I like my name for them the best *(not biased one bit, either... lol).*

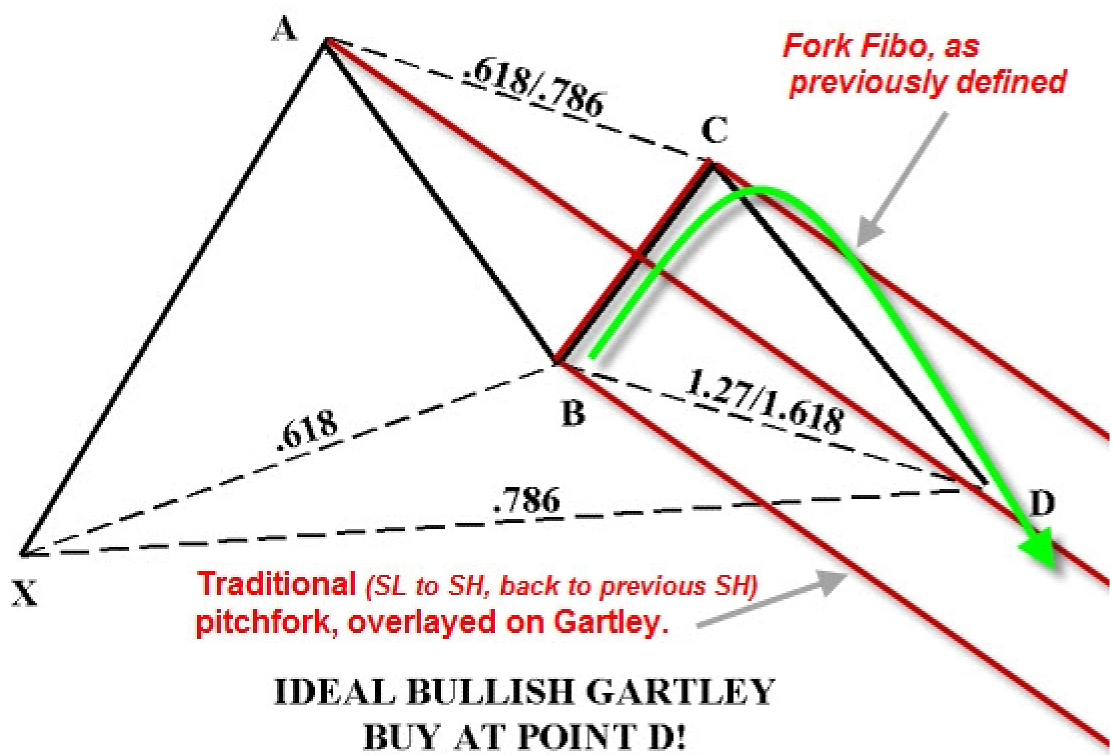
Let's use one of Carney's defined *(with Fibonacci levels)* chart patterns to illustrate some key points … in this case, a Bullish Gartley. Note that this is a bullish pattern, because at Point D price is expected to reverse. Note that Point D is defined, in this case, by two different pull-backs. First, the bigger pull-back from XA to D as a 78.6% retracement … and secondly, D is the 127.2% / 161.8% pull-back *("extended retracement")* of the BC move.



source: HarmonicTrader.com

Now, look at the same pattern, first with me adding a few elements to Carney's diagram and placing our focus on the extended retrace, then by overlaying a traditional pitchfork with a Fork Fibo on top of the Gartley pattern.





What hit me was that what I was doing with Fork Fibo's … doing those Fibonacci's in reverse … was exactly the same thing Carney had been doing for a decade with harmonic chart patterns. In my eyes, this brought complete validation to the concept of the reverse-Fibonacci. And, in reality, demonstrates the absolutely incredible dynamics of Fibonacci, by illustrating how a completely different technology *(an Andrews Pitchfork)* can validate what Carney had been doing for so long with harmonic chart patterns.

While I personally will continue to make a study of harmonic chart patterns, I will never be as comprehensive as Carney or one of his devoted followers. As with Elliott Wave, the value I see in Carney's contribution to the market *(strictly from my personal trading perspective),* is that we have more Fibonacci-based values that are proven trend exhaustion points and that an extended retracement is as precisely accurate as a standard *(less than 100%)* retracement.

I don't have to do a 10-year study for Fork Fibo's, validating the reality of their projections and accuracy, as Carney has essentially done that with his harmonic chart pattern efforts. And Kane with his expanded retracements, did the same. *Thanks Scott and Jim!*

For me, the value of the extended retracement *(or Fork Fibo)* is that they give me the direction and values of future, potential support and resistance. And as previously discussed, this becomes even more powerful when combined with other existing support and resistance, and I get multiple price points in the same, small zone, creating High Probability Reversals (HPR).

For the users of Elliott Wave or Harmonic Chart Patterns, just understand that when you combine those technologies with Harmonic Wave Convergence™, you have reversals narrowed to within 3-pip to 5-pip zones. ***This allows me to put my risk into substantially much-smaller stop-losses than my peer traders, which translates into me making 3x, 5x, even 10x the profit they do, pip-for-pip, in the same trades.*** That last sentence is the complete reason I wanted to move from the existing *(old)*, failed paradigm and move to the new, more profitable paradigm.

Fibonels

Fibonels are a name that showed up one day in my labeling of a pitchfork on a chart. I've been using them for so long, I don't recall how I came up with the name, or maybe I dreamed it, or maybe I read it somewhere. I truly don't recall. But after some strong searching, I have not seen them referenced anywhere else. So at this point, I'll continue to use "Fibonel" to describe a boundary for a Fibonacci-based price channel in or outside a median-set, containing the same slope as the median-set.

For those that use trend lines, it's understood that price has to reach a high or low before that point can later be considered as a pivot for the trend line. It's only upon the second occurrence of a touch to that trend line that the trend line can be useful in trading.

The power of median sets is they are drawn in-advance of price reaching that first high-or-low *(once the pitchfork has been drawn)* which the trend line chartist would consider as a pivot. In other words, the trend line chartist misses opportunities because the trend line requires that first point for the second point to be a valid pivot. The pitchfork chartist has the median set drawn already, so the first time price reaches a boundary *(the median itself, or upper or lower parallel)*, the trader has a solid potential pivot in place.

What makes Fibonels extremely powerful, is they carry that same, “predictive” attribute. They sit there, sort of like a price trap, just waiting for price to reach them and exhaust, bounce, reverse, etc.

Chart by PipClub ProCharts (white-label FX Trek IntelliCharts)

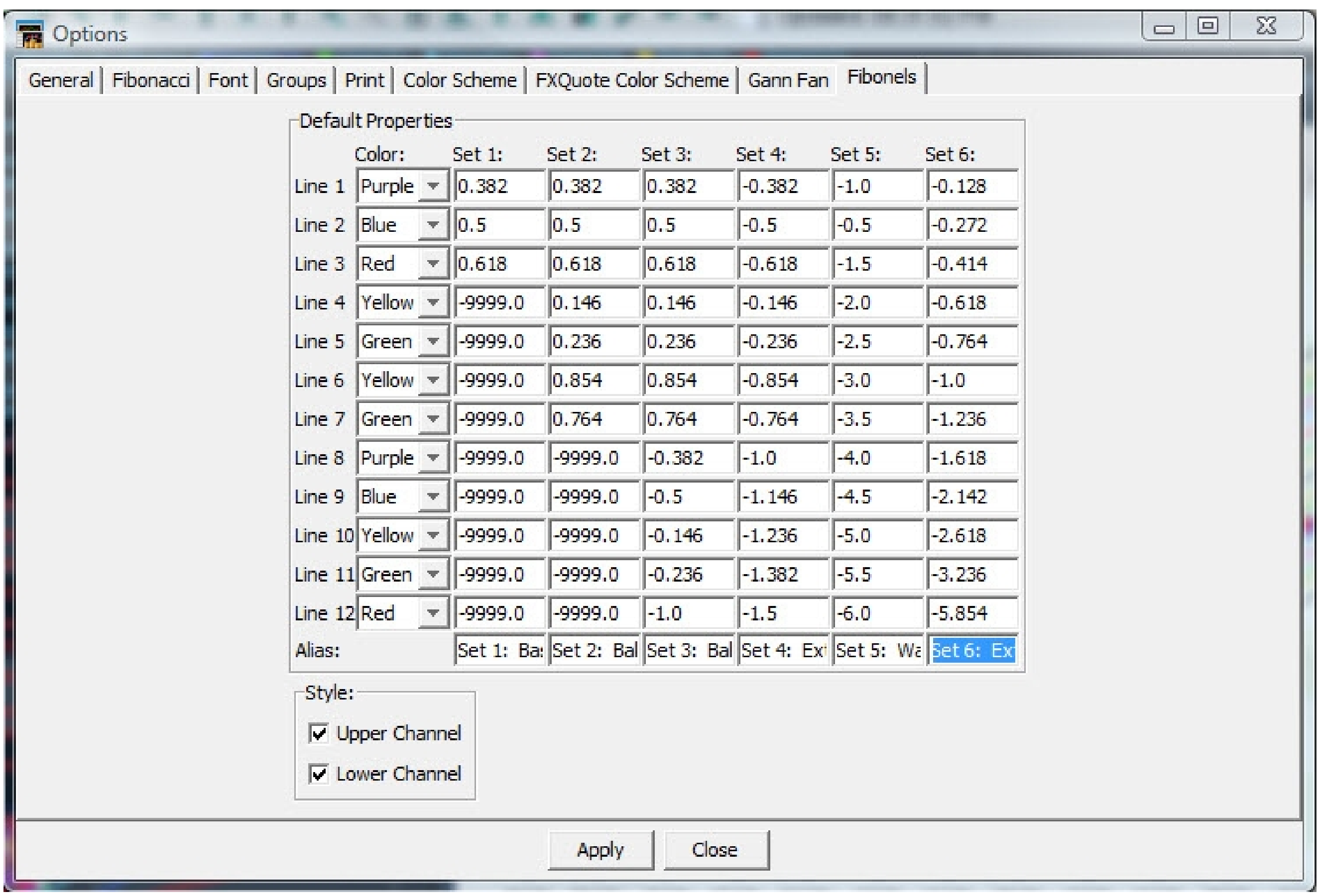
For years, I have drawn Fibonels manually. To do so, you merely draw a Fibonacci retracement in the upper or lower channel of the pitchfork, on a vertical point, such as a day marker. Then duplicate lines *(parallel to the median or upper or lower boundary lines)*, and place them at the intersection of the various Fibonacci levels. This is tedious work, but as you can see with the above figure, provides bountiful results in terms of support and resistance inside the median set. The challenge with manually-drawn lines is they don't pivot when the median-set's angle is changed *(such as in a “best fit” median set)*. Of course, then there's the issue of screen-clutter, Fibonels external to the median sets, and testing various levels of Fibonacci values.

In early 2010, I designed a specification for “auto-Fibonels” in the PipClub ProCharts. To my knowledge, this is the first place that allows the diversity in applying Fibonacci-based price channels to the extent that I do. Much thanks to the good folks at FX Trek for taking that specification and implementing it in the pitchfork tool of PipClub ProCharts. With this particular implementation of Fibonels, I have up to six, different settings - each with up to 12 values/levels that I can change *(and save)* and call on-the-fly any time I want, with any of them all moving in-sync with the pitchfork as I move it around.

Understand, many charting platforms do not even allow anything other than a traditional median set. To draw a Schiff, or modified-Schiff, or even a best-fit median-set is impossible on many charts. Not only can the ProCharts I use draw all the possibilities for median-sets, they have the Fibonels attached and move in whatever direction I move the median-set. The pips one can make by using median-sets combined with Fibonels cannot be described adequately in a chapter like this. I will just state that my personal trading went through a star-gate of sorts, and into not just the next level, but a level magnitudes significantly above where I was, once I started using median-sets and Fibonels. I cannot place enough emphasis on using median-sets with Fibonels for any trader who is attempting to be serious with their efforts.

And pitchfork purists please understand, Fibonels are perfectly defined by Andews, they are merely sliders drawn in advance, and based 100% on Fibonacci relationships.

In summary, I have a tool which is 100% Fibonacci-based to begin with *(Andrews Pitchfork having the basis being a SL-SH or SH-SL combination, for which the SH and SL are Fibonacci retracements themselves).* Then, we apply another level of Fibonacci to create Fibonels in the median set. If you believe "*all things Fibonacci*", Fibonels will surely deliver.



Sample Fibonel Settings Panel in PipClub ProCharts (white-label FX Trek IntelliCharts)

Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

Static Chart Support (and Resistance)

After my rookie year in trading, I ran across a trader / Forex trainer who introduced me to the concept of a Fibonacci-derived grid residing on the charts. This "grid" was static. That is, it did not fluctuate with price movement. This grid was always at the same price points on the charts, and always will be on the charts at those same price points. The trader who derived this Fibonacci-based grid is Tim Cameron. I first ran into Tim in the prehistoric FX Trainer days, where he was trading longer term periods and was using standardized S&R on 3-hour and daily charts. I loved the concept of Tim's "Fibo Grid", but more so, liked the amount of hits it produced *(Note: Fibo Grid discussed here is not the same as the Fibonacci Grid from TraderHouseDemo.com)*. It just hit me hard that there were permanent price points on the charts *(that did not move with price, of waves, and was not impacted by the size of the trends)* and that they would always be at the same prices. Call that my own RAS, call that me living in an old and failing paradigm, whatever. Tim's Fibo Grid concept uses two grids, a 1000-pip grid and a 500-pip grid, in order to accommodate intra-day to position trading. He divides them up creating static chart support and resistance using a specific Fibonacci-based approach[7].

I've only seen one other study/application of Fibonacci like the Fibo Grid, wherein there is a Fibonacci-based grid on the charts. This one was derived by Lewis Evans[8] and uses an "Absolute Fibonacci" as the static Fibonacci S&R.

Fibonacci Clusters, High Percentage Reversals (HPR), and Energy Points

A "Fibonacci cluster" is a name given to several price points which were derived via retracements, projections *(extensions, expansions)*, extended retracements, Fork Fibo's *(below)*, etc., and which are done on various (read *"different"*) waves before and around the current price, all showing future potential S&R, and all of which provide some areas of over-lapping price points *(typically in a fairly tight, 0-pip to 3-pip zone).*

Thus, we might have a larger, 4-hour retracement showing a 38.2% retracement and a smaller, 30-minute wave projection, whose 161.8% projection lands on top of, or within a few pips of, each other. We have this hot-spot, where two different Fibonacci analyses have points at the same spot. Get another Fibonacci-based study to land on or near that same spot, and you have a pretty good "cluster" of Fibonacci-based price points that typically will translate into something of significance.

In terms of my trading, I use a combination of existing support and resistance components *(Pivots, Fibo-Pivots, Camarilla Lines, Static Fibo price points, Andrews Pitchforks, etc.)* and get excited when I see these S&R points overlap my Fibonacci retracements / projections / expansions. When these, or various Fibonacci studies, land on top of each other, I refer to them as High-Probability Reversal (HPR) zones. In essence then, by definition, a Fibonacci Cluster is a subset of my HPR's *(as an HPR can contain multiple Fibonacci points, or other*

7 The Fibo Grid was created from intense study of socio behavior. It and other Fibonacci trading techniques can be learned in depth by contacting Tim Cameron at **timcameron61@gmail.com**

8 Left Brain Trading by Lewis Evans and Olga Sheean. Inside Out Media. © 2005 **http://www.leftbraintrading.com**

S&R components, or one Fibonacci point and other S&R, and so on).

In terms of pitchforks and their potential for support and resistance, there is one unique attribute which is unparalleled when compared to most other standard support and resistance. And this is the fact that they are not horizontal price points. By being diagonal, they create a unique circumstance in regards to timing. If you consider a traditional median-set, there is an upper parallel, median, and lower parallel. When those lines intersect any other support and resistance lines *(including any Fibonacci-based study),* you have something very powerful. Consider the fact that pitchforks are Fibonacci-loaded *(as their foundation points, those swing-high and swing-low points, are all Fibonacci-derived to begin with)* … well, when you then overlay a Fibonacci-based study *(retracement, projection, etc.)* on top of a median set and have a point of intersection, that creates an HPR with some strong Fibonacci-energy.

A comment I really should have added back when talking about Carney and harmonic chart patterns confirming Fork-Fibo's … the fact that we can overlay a pitchfork on most harmonic patterns and have a Fork-Fibo be the same as one of Carney's extended retracements does not mean that is the only place Fork-Fibo's are valid. We merely have Carney's work to validate the extended retracement and to establish some of those unique extended retrace values. In Carney's use of harmonic chart patterns, he has specific extended retracements for different harmonic chart patterns as potential reversal zones. With Fork-Fibo's, what we are saying is that anywhere you have a pitchfork, not just on top of a harmonic chart pattern, *but anywhere you have that SH-SL-SH or SL-SH-SL combination and a valid pitchfork can be drawn*, you have the opportunity to have any number of termination points via that Fork-Fibo. So whether it's a Fork-Fibo and a component of the median-set, or a Fork-Fibo and another type of Fibonacci relationship *(retracement, projection, expansion, extended retrace),* an energy point for a HPR is created when the two intersect.

In terms of Andrews-speak *(pitchfork purists)*, we consider an intersection of a pitchfork component *(parallel or median)* of two, different median-sets to be an “energy-point”. For me, I can expand that definition of an energy-point to include a median-set which has any component intersecting not just another median-set component, but also any Fibonacci-based study or projected value.

We have added to that ability by having Fibonels inside *(and outside)* our median-sets … meaning I can have a Fibonacci-study having projected values which land on Fibonels *(not just the upper and lower parallels and the median itself)* creating an energy point. So there are more HPR's with energy that are thus defined when having pitchforks with Fibonels drawn.

While these higher-probability (HPRs) wave exhaustion points do not guarantee a turn-around, they have much higher probabilities of doing so than when they are just hanging out by themselves. But again, for my personal trading, I compliment these high-probability reversal zones with my use of Harmonic Wave Convergence™, using new technology to determine trend exhaustion. When Harmonic Wave Convergence™ shows wave termination at the precise time price engages one of my HPR's, I have a great trade set-up.

Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

The above chart was pulled from ForexPitchfork.com. It illustrates a great trade entry *(marked as the red-circled #1).* This entry was a HPR comprised of the pitchfork median *(center green line)* AND the 141.4% Fork-Fibo *(extended retracement)* from that pitchfork meeting at the same price point.

Fibonacci Precision Using Harmonic Wave Convergence™

A challenge for most existing paradigm traders is that their indicators do not offer the precision to utilize more than a handful of Fibonacci levels for retracements and projections. It's hard to include precision regarding a bounce when most of the tools are lagging in their interpretation of the data.

However, as more traders transition to the new paradigm of trading, there will be more and more tools available to measure, in real-time, much more precisely than traders left in the existing *(old)*, failed paradigm. Thus, the new paradigm traders will be able to utilize more robust settings in their Fibonacci tools when trading *(and may also require some chart vendors to increase the number of allowable Fibonacci values / levels in their settings)*. However, to illustrate the combined use of Fibonacci and Harmonic Wave Convergence™, let's take a peak at the previous chart again. This chart also includes a view of the real-time *(and multi-time period)* MultiWave™ indicator, showing Harmonic Wave Convergence™ *(purple wave breaking blue wave at yellow line) at the* precise time price exhausting at the HPR. Convergence takes place when the last of a lower-level wave in its sequence *(in Elliott*

Wave speak, an example would be the 4 to 5 wave of a 5 wave move) terminates at the same time an upper level wave terminates *(such as the 2 to 3 wave of the next wave level up)*. Again, you don't need an understanding of Elliott Wave to understand convergence or to read MultiWave™, because it is a visual indicator. In the above example, the lower level *(purple wave)* goes to extreme *(yellow line)* at the same time the upper level *(blue wave)* goes to the same extreme. We thus have a convergence of those two different waves at the same moment. When that occurs at a HPR, there is a powerful entry. This is EXACTLY how I make most of my trade entries.

Get Free EUR/USD PitchFork Set-Ups

My Forex training partner and I have a website that is a great resource for the trader who recognizes the value of trading using the "Fibonacci loaded" pitchforks. Both Bryan "PipSlam" Edwards and I post pitchforks with detail at http://www.ForexPitchfork.com. There is no charge to use this site or the pitchforks. If you want to have real-time notification of the charts being posted, just follow us at twitter.com/stevegregor and twitter.com/bryanpipslam. We post pitchforks that will help both the beginner and advanced pitchfork trader.

The "Rolling" Fibonacci, Market Turnover, and Shadow Bands

Most traders use moving averages to track historical price movement and to project *(via a cross with another moving average)* the point at which they may consider a change in direction of price movement. Unfortunately, most traders have are not educated on understanding multiple time frames and their interdependence upon each other.

In my early trading days, I spent considerable time plotting ALL moving averages *(seriously, pick a moving average, I researched it)* in respect to how they modeled price. What I discovered after looking at four currency pairs, in over 2,000 trend moves, over a 2-year period, was that the 62EMA was THE turn-over point on a 30-minute chart. By turn-over, I mean the point wherein the Buyers and Sellers do their battle and a winner is pronounced. This is the same battle which occurs at prevailing Fibonacci levels *(the standard 38.2%, 50%, and 61.8%)* wherein we either bounce and resume the original trend, or have a trend reversal.

What I observed was that the 62EMA was at that point nearly every time … almost seemingly having it's own AI *(artificial intelligence)* as to determining whether that turn-over would be at 31.8%, 50%, or 61.8%. When I say the 62EMA is that turnover, I mean by MAGNITUDES compared to other moving averages. Again, I tested them all, without bias. ***The 62EMA was the defacto champion by magnitudes.***

As time and the years went on, I also observed that the 62EMA was not just the turn-over on the 30-minute chart, but on all time-periods *(easily observable from 1-minute up to 8-hour).* You may note that Rob Booker[9] published a paper many years ago, with his first use of the 62EMA in his trading, as well *(the original 5-13-62 strategy)*. There's a reason that 62 is so very powerful. I challenge you to put that 62EMA on various time frames, and let it run for a week. You'll be incredibly amazed *(especially if you then draw fibo's on the visible trends).*

9 RobBooker.com or Piptopia.com.

Now without getting too much into Math-8 here, I will state that I know some well-known celebrity traders use the 34EMA *(in a tunnel of High-Low)* as the market turn-over. The reality is, this is just using the 62EMA from a lower time period.

If I want to see the 62EMA from a 30-minute chart on a 1-hour chart, I merely plot it as a 31EMA on that hourly chart *(there are ½ as many hourly candles as there are 30-minute candles in the same amount of time being reviewed, so we can use a 31EMA on the hourly to plot the exact same price/time points we would see with a 62EMA on a 30-minute chart)*.

So here's the test. Plot a 34EMA on a chart, then plot a 31EMA. You will typically see many more touches to that 31EMA than you will the 34EMA, and yes, they are quite close to each other most of the time - being just 3-points away from each other. And yes, the 34EMA will have some touches, but just look at the touches to the 31EMA. So my conclusion... the 34EMA is close enough to the 31EMA that its use will provide very similar results. And the reason that it works is we are really looking at a 62EMA from the next ½ lower time period *(meaning 15-min when looking at 30-min, or 30-min when looking at 1-hour chart, etc).* Thus, the 34EMA as market turn-over is really the same as the 62EMA as market turnover. I am not trying to bring confusion here *(so if you are, just move on),* but illustrating that the proverbial elephant can be seen from many different perspectives … and that the 34EMA tunnel is in reality just missing the boat by a few *(non-distinguishable)* pips here and there, and that it is really mimicking the reality of the 62EMA as the turn-over on all time periods.

Bottom line here and the real significance of the 62EMA …. it does act as that “rolling Fibonacci”, giving the trader good indication as to which Fibonacci levels may indeed be THE level to pay close attention to as you do your trade set-ups.

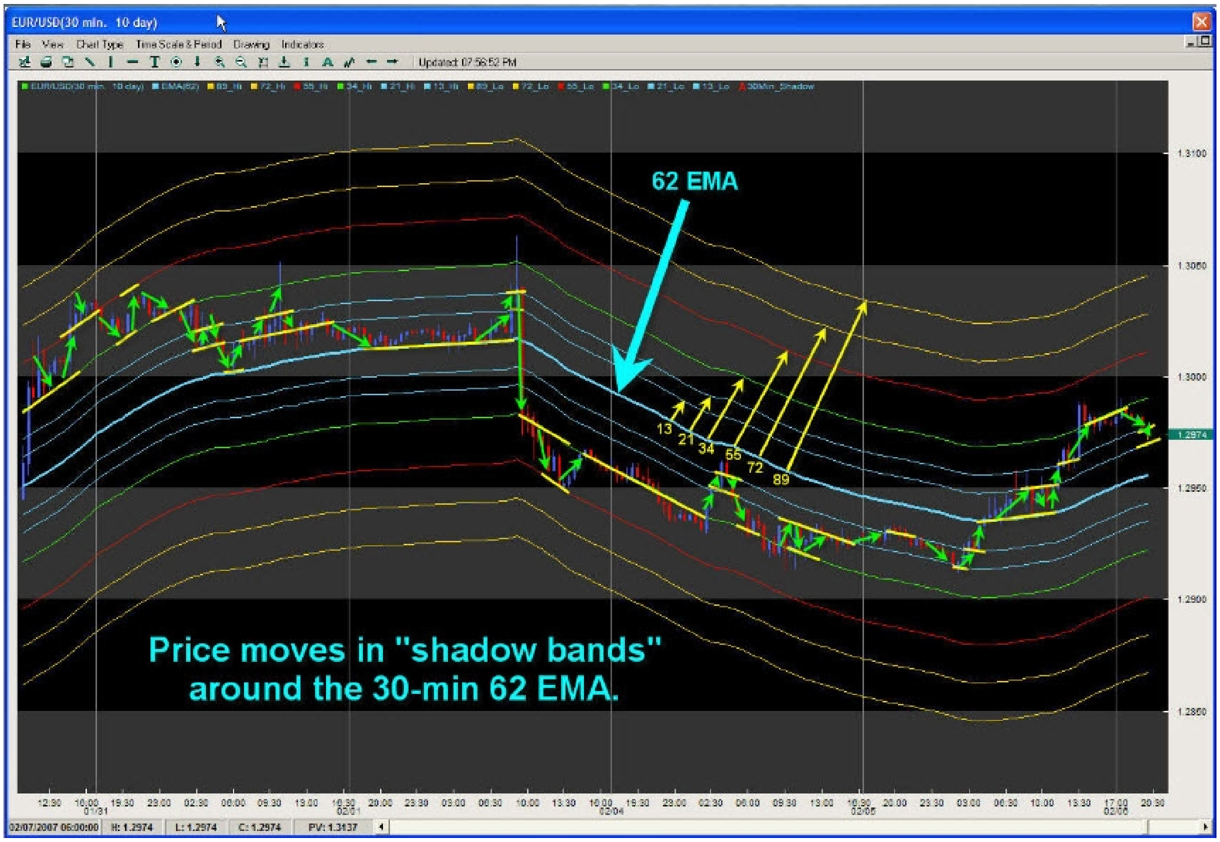
If you took my advice, and plotted some 62EMA's, there will be no question the 62EMA determines the market turn-over. Now, having seen this for quite some time, I realized that if it was the true turn-over point, it must also be the middle-of-the-road, so to speak, for price movement. If it was going to be the middle of the road, then I was willing to bet that price would move in Fibonacci relationships in accordance with that middle of the road. And indeed it does.

In one of the classes I teach, I demonstrate this with Shadow Bands. Shadow Bands are Fibonacci-based “shadows” of the 62EMA based on the Fibonacci sequence. They are not Bollinger Bands, or Standard Deviation Bands, or Moving Average Envelopes, or Booker Bands, or anything else you have probably seen. They are simply Fibonacci sequenced bands relative to the 62EMA. *But, WOW, do they ever define price movement.*

Look at the chart below and see if you can see any price patterns that might dictate price movement. Stay on that chart for a few moments.

Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

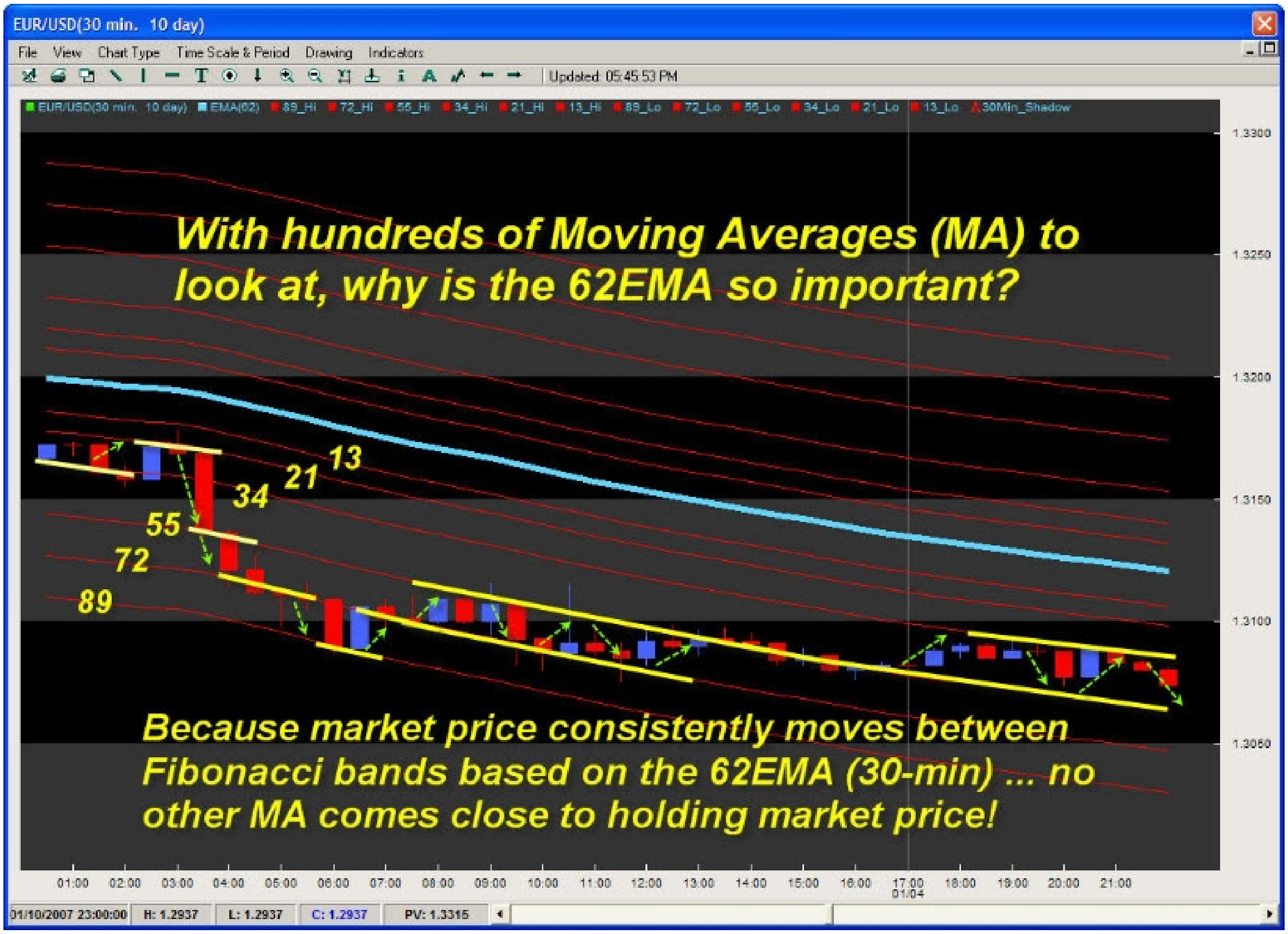
What do you see? Are there any price patterns that truly define price? Does price seem to be honoring (from left of chart to right of chart) any particular support and resistance?



Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

Now look at the chart above, showing the same price movement as the previous chart *(a little crunched because of lines, but exact same chart and time frame)*, but now with Shadow Bands on the turn-over (62EMA). You will note price stays in the channels defined by the boundaries of those bands.

Finally, on the following page, there is the same chart “zoomed-in” to bring more clarity. When I first saw this, I had chills up my spine. Nearly 6 years later, I still do. Price is not random or arbitrary at all. Fibonacci realities control price movement without question. Obviously, a trader witnessing such incredible support & resistance can apply this to their trading in many different ways.



Charts by PipClub ProCharts (white-label FX Trek IntelliCharts)

Candle Wick or Candle Close?

When I was first taught to use my Fibonacci retracement tool, I was always instructed to go from absolute high to absolute low *(or low to high)* in a trend move, in order to show the retracement levels. Typically, that meant wick-to-wick.

Over the years, I have learned that some moves are better defined by using the candle close, versus the candle high or low wick.

The easiest way to validate leaving the Fibo tool on the wicks versus moving one or the other end to the closed candle price, is what I call “compliance”. Once I put on a Fibo retracement, I look at the move after the run, and before the run, and see if any of the tops or bottoms inside the trend I am measuring rest on Fibonacci retracement levels. You'd be surprised sometimes what moving the Fibo tool end-point to a closed candle can do. All of a sudden everything matches up precisely. I typically only look at moving from wick to closed candle when (a) there is a wick of more than a pip or two" and (b) if there is no compliance with price and the retracement values when the Fibo tool is using the wick. This is one of those things I don't question.

The difference in wick vs closed candle might be data feed, chart interpretation of the data feed, etc. *I don't really care*. I know if price is going to “honor” the Fibonacci retracement values *(have highs and lows touch on various retracement prices with the Fibo tool at that location)*, I have a good placement of my Fibo tool. If I don't see price honoring those retracements, I will move the Fibo tool to the closed candle and observe. If the subsequent prices honor the Fibonacci retracement levels now, I keep the Fibo tool on the closed candle. I don't ask, *“Why the wick sometimes and why the closed candle other times?”*... I just look for compliance and bank the pips based on that simple fact.

What is the Deal with the 50% Value?

The Fibonacci 50% value is not really a Fibonacci level per Fibonacci, but rather via trading convention. When price leaves the 38.2% level and is headed to the 61.8% level, as with most S&R systems, the mid-point has its power. It's where price decides to continue the journey or to turn around to the previous values. So the reality of the 50% level is that it is really just the mid-point of such a move in correction, but that does give it the bounce continue/reverse attribute that the other Fibonacci levels have, as well.

However, that 50% is so powerful in that regard, you will see some folks just simplify their Fibonacci levels to 25% (*versus 23.6%)*, 50%, and 75% *(instead of 76.4%)* because the 25 and 75 levels are really just mid-points themselves.

And if you think that is sloppy and not precise, try this when you have some spare time. Go grab a EUR/USD 10-year Daily Chart. Go from the bottom *(October 26, 2000)* to the highest point *(at the time of this paper)* of July 15, 2008 and do a retracement.

The process from here on out, will be to use the HALF of the 50% retracement which contains the current price. In other words, in that 10-year retracement, draw a NEW retracement, using the same high, but for the bottom use the 50% price from the first, large 10-year retracement. Don't worry about WHERE that original 50% retracement landed *(wick, close, or in the middle of a candle).* Just use the 50% level *(but to the pip) as the bottom point for the retracement.* That will result in another Fibonacci retracement, for which you will continue to just choose the 50% for which current price resides. Do this several times, and you end up with the current price channel. Now do a top to 50% bottom *(or bottom to top)* Fibonacci retracement on the that channel, and you will see swing-high's and swing-low's and all the standard Fibonacci retracement levels. Simply magic in many ways. Yes, proving *(while some will argue 50% is not a true Fibonacci level)* that 50% carries some powerful insight into trend movement. Thus those using those simplified 25-50-75 values are not as *“out there”* as some may perceive!

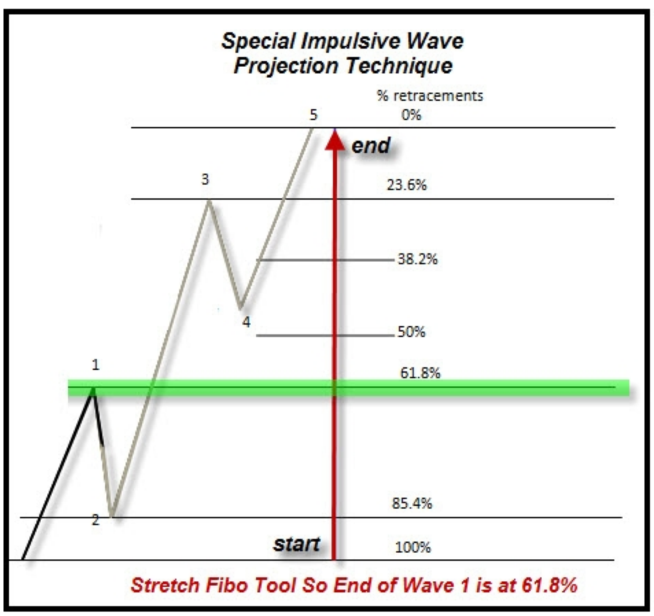
Special Elliott Wave Projection Technique

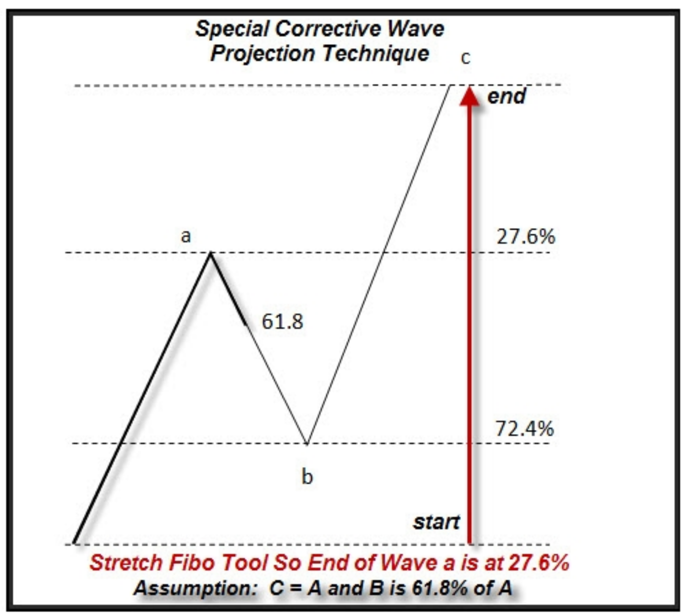
While students of Elliott Wave learn various projection/expansion techniques and values/levels for projecting waves, there exists a little known technique for projection which utilizes an interesting application of the Fibo Tool and some understanding of absolute lengths and relative length relationships.

I have used the Fibo tool like this previously in consolidation periods *(non Elliott Wave),* but this is a great tip for those *elliotticians-in-the-making* who want something extra. Instead of measuring a wave at 100% and then projecting, we are going with the premise that we know the wave is some percentage of the total, but we don't know the total. *Does that make any sense?* As an example, if we know that Wave 1 is 61.8% of a total 5-wave move, we can then just put our Fibo tool on the bottom of the wave and stretch it out to where 61.8% is at the tip of the wave 1. We then have a projection *(originally unknown)* for the top of Wave 5 by where-ever our Fibo Tool top now resides.

Let's consider the 5-wave impulsive move first *(left)*. Per Elliott Wave guidelines, there are several possibilities for a Wave 5. But this is a very simple approach for the entire 5-wave structure. We can use this method once Wave 1 starts to pull-back. If we measure Wave 1 from it's end and project out another 161.8%, we end up with a “typical” Wave 5. So to reverse engineer this use of Fibonacci, when we then look at the total projected move, we can see that Wave 1 is 61.8% of of the entire move (project out 161.8% and then use that as the top of the Wave 5. If we then measure from X to Wave 5, we see that Wave 1 is 61.8%/

We know Wave 1 is 61.8% of the total pull back as we stretch the Fibo tool, we then know that the absolute length of 1 wave *(relative to wave 5)* is 38.2% *(simple math, if the Fibo rests on 61.8% for Wave 1, then it's length is 100.0% - 61.8% or 38.2%)*. We then know that wave 2 pulls back 61.8% of Wave 1 *(or .61.8% of 38.2% = 23.6%).* Thus, to measure the end of 2 relative to the full length to Wave 5, we have to add 23.6% *more* beyond wave 1 at 61.8% and end up at 85.4% *(61.2 + 23.6 = 85.4)*. That math is really quite simple.





On the corrective side *(right)*, we have to make some “standard” assumptions again. Assuming A will equal C, we can then project/expand 100% from the pull-back in B *(B pulling back 61.8% of A)* and end up with a projection for C off the tip of A at 1.382% *(if B pulls back 61.8% from A, that means there is 38.2% more to the origin of A* … when we add 100% to 38.2, we end up with 138.2% for the full length of X to C). To then measure either A or C as a percentage of the total move, we have 1.00 / 1.382 = .724. So from the tip of the top at C at 1.382 … 72.4% back would be B, and from X (bottom) up .724 to A would be .276 down from the top *(100.0% of total move – 72.4% of total move = 27.6% of total move).*

Don't worry if you can't truly follow the math *(but work on it, it's good to see the relationships with percentages, absolute lengths, relative lengths, etc).* Just know you can stretch-out your Fibo Tool and use these percentages to project “typical” wave termination points.

I've seen these types of measurements *(not defined as I have here)* passed in circles among elliotticians, but as you can see, Fibonacci and math is simply just that. We can make any number of such “stretch” projection measurements using different projected expansions, different pull-backs, etc. In the end, it's all just math. But I think it's great when one works through the math to see the relationships behind such uses of the Fibo tool.

Fibonacci Homework Assignment

I would be remiss without mentioning that as a Fibonacci trader you have a homework assignment if you are to be taken seriously. *Have you ever wondered why a currency's price can put on the brakes, to-the-pip, say at a 38.2% retracement? Is it because all active traders are playing that price, or is it something larger?* You decide, but first, be sure to watch “History's Hidden Engine” at http://www.Socionomics.com. It's a great download and will open your eyes regarding Fibonacci.

Putting It All Together … Trading With Fibonacci

I've covered many subjects in this paper, all based on Fibonacci. The typical old *(failed)* paradigm trader is still trying to find the Holy Grail. They look for that one indicator or study that will tell them WHEN to get into a trade. From a chartist perspective, fundamentals are meaningless. If anything, they get in the way. Remember, I don't care WHY price moves, I only care that I know when to see it make that move.

Mastering Fibonacci and the techniques described herein will change the way the typical trader thinks. I have seen forums where there are arguments, backed with great fundamental and technical analysis, about where the next top will or will not be. The reason for much of that is that in the old *(failed)* paradigm, you won't know when you are there. Using techniques as described in this paper, you can find the current trend, find the first waves that created it, and project / expand. You can find the last bigger move before the reversal, and do retracements. You might draw a median-set and draw a Fork Fibo. The bottom line, you can have a series … 2, 3, maybe more, of Fibonacci cluster High Probability Reversal *(HPR)* zones on your charts. They may be 25 or 100 pips apart. It doesn't matter. When price gets to that zone, you will see something happen.

For me, because I use Harmonic Wave Convergence™, I know when there is a pull-back at that HPR zone, whether it is a reversal, or a retrace, or about to take off impulsively in the original direction for another 50 to 150 pips. Without a *real-time* tool to tell me, I wouldn't know that. I highly encourage your consideration for moving to the new paradigm, with the proper tools, for successful trading. The motivation for learning the sound techniques presented in this paper truly come down to application. If you cannot apply what is here, the motivation to master them will surely wane. *So are you going to step-up to the new paradigm, where the process of price movement is understood and measurable with real-time indicators, pointing out what to do when price reaches the "price traps" you set (HPRs), or are you going to remain stuck in the old (95% failure) paradigm, hoping someday that road will take you somewhere?* Trust me, that's a dead-end road. If you are serious about your trading, you need to take it to the next level.

Harmonic Wave Convergence™ is the basis for the new paradigm. But HWC alone is not enough, you have to have an indicator that measures it. I use MultiWave™ to see the convergences and the trend exhaustion points. The power in MultiWave™, besides being real-time, is that it is the market's first true multiple-time period indicator. This means I can put MultiWave™ on my 5-min chart, and see the waves progression and termination on a comparative basis from 4-hour, 1-hour, 30-min, 10-min, 5-min, and 1-min ALL at the same time, on one chart, in real-time. *Now that's trading power. That's a chart on steroids.* And all that translates into me being able to get into the same trades other traders do, but with extremely tight stops. And that means, I can make 3x, 5x, even 10x the profit they make, in the same trade, pip-for-pip. If that isn't enough to have you take a serious look at Harmonic Wave Convergence™, I don't know what else could.

I've included a quick-peek at Harmonic Wave Convergence™ (HWC) at the end of this paper. HWC is a piece of the new paradigm, the foundation for the future of Forex trading.

Fibonacci Levels … The Values

This is what it comes down to ... using a good set of Fibonacci levels / values. I wish this table was given to me when I first started trading. These are the values to use in your Fibo tool for retracements, projections, expansions, Fork Fibo's, extended retracements, and Fibonels.

RETRACEMENTS

Value / Setting	Calculated As	How it is Actually Derived or Used
0.000		
0.146	0.14592	$(.382)^2$
0.236	0.23603	obtained by dividing one number in the series by one three places to the right; also $.618^2$
0.276		For Special Elliott Wave Projection Technique only
0.333		
0.382	0.38192	divide one number in the fibonacci series by one two places to the right; also $.618^3$
0.447	0.44722	1/(2.236)
0.486	0.48579	the square-root of .236; also (.618) * (.786)
0.500	0.50000	not "technically" Fibo-derived. But is the mid-point between .382 and .618 … ((0.618 - 0.382)/2)+0.382
0.577		
0.618	0.61803	Phi - The Golden Ratio: the ratio of one Fibo number with the next in sequence (89/144); also [1 + sqrt(5)] / 2
0.707	0.70711	the square-root of .500
0.724		For Special Elliott Wave Projection Technique only
0.764		used when balancing against .236
0.786	0.78613	the square-root of .618
0.854		used when balancing against .146; Also For Special Elliott Wave Projection Technique
0.886	0.88657	the fourth-root of .618 … also the square-root of .786
1.000	- - -	- - -

PROJECTIONS / EXPANSIONS / FORK FIBO's / EXTENDED RETRACEMENTS

Value / Setting	Calculated As	How it is actually derived
0.000	- - -	- - -
1.000	- - -	
1.128	1.12783	the fourth-root of 1.618 … also the square root of 1.272 … also 1/(.886)
1.272	1.27201	the square-root of 1.618
1.382		
1.414	1.41421	the square-root of 2.0
1.618	1.61812	1.00/(.618)
1.732		
1.764	1.76400	not sure. Some folks consider .764 (1.0 - .236) to be a Fibo derivative; so I think 1.764 is similar in nature
1.902	1.90210	The Pythagorean Theorem diagonol of a 1.0 and 1.618 right triangle
2.000	- - -	- - -
2.058	2.05761	1/(.486)
2.236	2.23607	the square-root of 5.0
2.382		
2.618	2.61792	$(1.618)^2$; also 1/(.382)
3.142	3.14159	Pi = 3.14159265358979 …….
3.330		???
3.382		
3.618	3.61792	2.618 + 1
4.236	4.23605	1.618 + 2.618 (often used in Elliott Wave projections); also 1/(.236)
6.854	6.85397	2.618 + 4.236

Note: Fibo values for this table come from a variety of sources. Some have been just accepted as general Fibonacci numbers derived from Phi. Other numbers can be found when doing Fibonacci retracement / projection searches in Google, such as http://www.tic2tic.com/help/retracements.html Or http://www.forexfactory.com/attachment.php?attachmentid=69215&d=1196222294 While these numbers can be found in an open Internet environment, I still believe many of them result from the research and work of Kane and Carney *(see previous footnotes and resources listing at end of this paper).*

Summary

It was my intention to show the typical trader that there are many uses for Fibonacci levels in their trading. Most traders only incorporate a few of the techniques I mention. For sure, very, very few traders will have a compiled list of Fibonacci values / levels as presented in this paper. There is one thing of which I am absolutely convinced … the more I use Fibonacci in my trading, the less convinced I am that the market has any randomness to it. And when a trader knows the market is not random, that provides an opportunity for gaining a sense of control. No, we won't dictate where and when price moves, that's not what I mean when I say “control”. But we can predict potential places it will stop along the way … and on the non-technical side, over time, that provides a strong confidence that helps the mental game more than one can imagine.

About Steve …

I live in California *(an east-coast transplant)* and have four children *(2 adult, 2 teens)*. I love the seashore, mountains, hiking, and anything for which the kids have an interest. I've been active in the technology arena most of my adult life. I've earned a PC Magazine Editor's Choice Award, an INC500 Fastest Growing Company Award, A Compaq Distinguished Dealer Award, and truly enjoy technology *(without being a geek)* and how it can impact our lives. I've been trading the Forex since 2004, and have helped coach *(directly, or indirectly)* thousands of traders in their pursuit of becoming successful currency traders. I discovered Harmonic Wave Convergence™ and created the real-time, multiple-time-period MultiWave™ family of indicators to measure HWC. I've innovated many aspects of trading, including the use of Fibonacci-based Fibonels. Currently, I am Chief Strategist and Founder of PipClub.com, where my training partner, Bryan “PipSlam” Edwards, and I help move traders from the old, failed trading paradigm, to the new trading paradigm based on the precision of how price really moves via Harmonic Wave Convergence™.

Resources Mentioned

http://www.eSignal.com
http://www.HarmonicTrader.com
http://www.KaneTrading.com
http://www.MedianLine.com
http://www.median-line-study.com
http://www.LeftBrainTrading.com
http://www.PipClubProCharts.com
http://www.ForexPitchfork.com
http://www.RobBooker.com
http://www.Socionomics.com

A Quick Introduction to The New Paradigm: Harmonic Wave ConvergenceTM

(best viewed by zooming in to the 200% level)