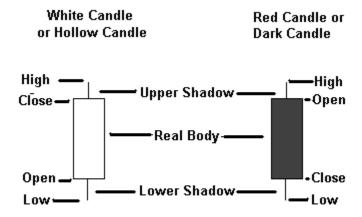
Candlesticks

The Basics

Japanese Candlesticks provide an excellent piece of the Technical Analysis puzzle. Each candle gives you the opening price, the low of the period, the high of the period and the closing price. Because markets are fractal (they display similar properties in all time frames) the "period" of an individual candle may be daily, weekly, monthly and so on. Or with real-time data feeds you can use one, five or ten-minute or hourly candles, etc. What period you choose depends on the time frame you want to trade.

Anatomy Of A Candlestick

Here is a graphic showing a white candle and a dark candle.



The white or hollow candle shows a period that has closed above its opening price. The dark candle shows a period that has closed below its opening price. The fat part of the candle (white or dark respectively) is called the *real body*. The skinny part of the candle is called the *shadow* or *wick* (or sometimes called the *tail*). The real body of the dark candle may be filled in with black or red. We usually like to use red because it's more evocative of danger but in this course we'll be using "dark" to contrast with "white."

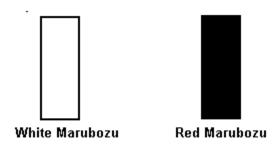
Candlesticks are visually useful and appealing. At a quick glance you can see a lot of information. As the facile flow of buying and selling pressure becomes more obvious and dynamic on a candlestick chart than on a line or bar chart. (A line chart gives you only the closing price and a bar chart gives you only the intraday range and the close.)

Using candlesticks you can see how intense a reaction was to a particular move. For instance, you might say, "The stock opened, dipped a bit, then shot up to the high and backed off only slightly for the close." Or "The stock opened three points above yesterday's close, moved up to

the top of the wick \$.50 higher then plummeted six points and closed at its low, which was \$2.50 below yesterday's low." But now we're getting ahead of ourselves and into two-day patterns...which we'll get to in more detail shortly.

Who Controls The Market?

Candlesticks can give you the answer to this question.

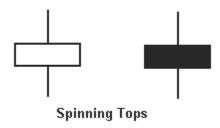


A *Marubozo candlestick* has no upper shadow and now lower shadow. A white marubozu opens at its low and closes at its high. A dark marubozu opens at its high and closes at its low. Who controls the market in each of these cases?

In the white candle above the stock opened and moved up strongly (the candle is a long white one), never penetrating below the opening price and closing at the high of the day. And in the dark candle the stock did just the opposite, never penetrating up through the opening price and putting in a long dark candle, finally closing at the low of the day. Clearly the bulls controlled the white marubozu and the bears controlled the dark marubozu.

A candle with no lower shadow is said to have a *shaven bottom* a candle with no upper shadow is said to have a *shaven head*. A marubozu has both.

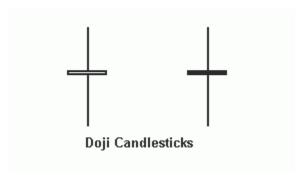
But it's not always that decisive a win for one side or the other.



Who controlled these sessions? The white spinning top shows a slight advantage to the bulls and the dark spinning top shows a slight advantage to the bears. But what's probably more important about these sessions is that they showed some back forth, some churn and didn't net much

movement one way or the other. Spinning tops are smallish candles and show that there was an argument between bulls and bears, and that they had to close the session without a clear-cut winner. It was something of a stalemate. It nets out to indecision, especially if we see light volume.

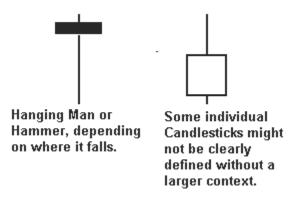
How about these sessions?



These *Doji Candlesticks* show an even more extreme version of what we saw in the spinning tops above. Here we have very long upper and lower shadows and teeny little real bodies with the close virtually AT the opening price. Whether the close was up (white) or down (dark) isn't what's most notable here. What's important is that there was a battle that extended far above and below the open, with one side gaining some large advantage within the candle and then giving it up and retreating just as far in the other direction, before fighting back to a standoff.

Doji Candlesticks can often portend a trend reversal, especially if put in on heavy volume. But again, we're getting ahead of ourselves. Just file that in the back of your mind and we'll pick it up again later in this section.

There are a host of individual candlestick formations. At times, though an individual candle will make a statement, so to speak, that will have ambiguous or context-dependent implications.



The dark candle above shows that a lot of the session's action took place far below the opening price, and the bulls fought back and closed the session just a bit below the open. If this sort of candle shows up in a sustained uptrend, it may signify a weakening of the bulls and it would be

called a *Hanging Man*. (It looks like a man hanging by the neck.). If we see the same candle after a sustained downtrend, it could signify that, while the bulls have not overwhelmed the bears, they have (perhaps for the first time in a while) fought back hard enough to cause downward momentum to abate. In this context the candle is called a *Hammer* (as in hammering out a bottom and you can see it as looking like a hammer).

The white candle above is hard to name in and of itself. It shows some strength on the part of the bulls as it closed nicely above its open. However the session rejected the higher prices (visible in the longish upper shadow) and closed well off the session high. In order to understand the implications of a session like this one, it might be necessary to look at the larger context of the two-day or three-day candlestick pattern.

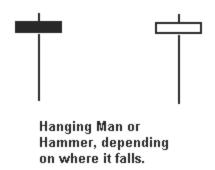
These are just a few individual candlesticks among many. We will discuss a number of other individual candles going forward, as well as some multiple-session patterns.

Section 2: Reversal Patterns

As we discussed there are trending markets and non-trending markets. Candlestick Reversal Patterns primarily apply to trending markets, though they can be meaningful near the tops and bottoms of trading ranges. It is important to note that a "reversal" in the lexicon of candlesticks does not necessitate a diametric change in direction. A reversal here may suggest an abatement of momentum. "Up" may turn to "flat." It won't necessarily turn to "down."

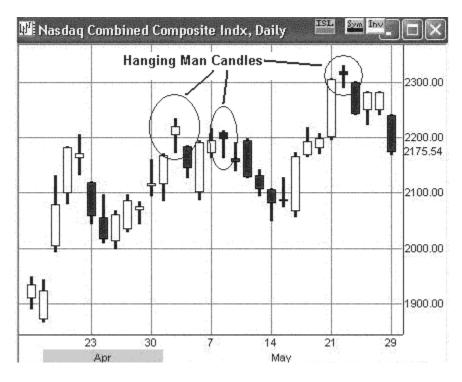
A Reversal Pattern is an indication that the market is ripe to change its behavior. It doesn't necessitate anything. A market may show a Reversal Pattern, a pause and then continue. Or it may show the Reversal Pattern and subsequently confirm that reversal. You have to keep watching and listening to a market. You can't take its word for what it said last week. It may change its mind.

HANGING MAN AND HAMMER



The Hanging Man or Hammer candle was discussed briefly in the first section. These two types of reversal candles look the same on the chart in isolation. They both have small real bodies, short upper shadows (or no upper shadow) and long lower shadows at least twice as long as the real body. Both types of candles suggest a reversal. The difference lies in their respective contexts. A hanging man sits on top of an uptrend while a hammer sits low in a downtrend.

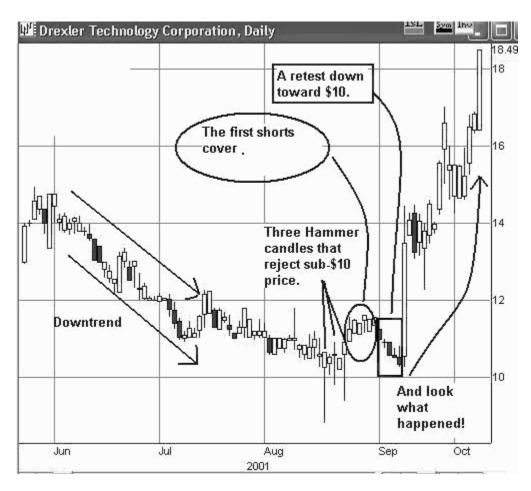
HANG MAN AT WORK



In the above chart you can see three Hanging Man candles. In each case the Hanging Man shows the price opening above the prior day's close, moving down intraday, and recovering to close very near the opening price. The first hanging man has a larger real body than the latter two. It netted some progress in the session, and indeed it was a less decisive reversal signal. The essential idea behind a hanging man is that after the stock has moved up in a trend, the bears sell

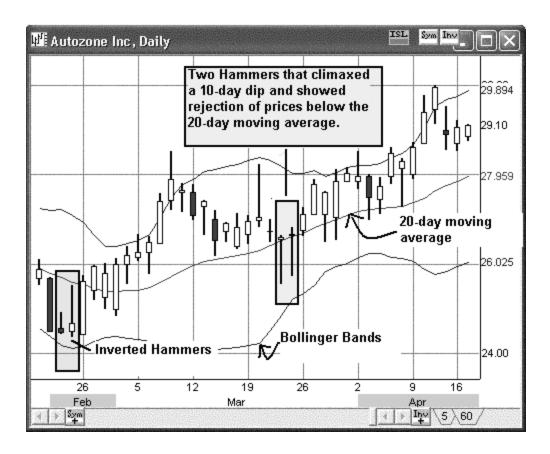
it off, the bulls fight back, but at the end of the day the bulls have not been able to make much if any progress. We learn in a Hanging Man that the bulls' strength is waning.

HAMMERING OUT A BOTTOM



This chart shows a bottom forming. There's a downtrend followed by *three* hammer candles, a bounce, then a retest down and finally a HUGE reversal day. Ultimately Drexler went to \$23.90 before this new trend exhausted itself in November 2001.

THE HAMMER DOES ITS JOB IN CONTEXT



In this chart you can see the two hammer candles highlighted in the March grey box. On two consecutive days the bears pushed this stock below its 20-day moving average (20-dma) and short-term support in the \$26 area, and twice the bulls rallied the stock to close virtually unchanged. It appears that the bears capitulated at that point as the stock rallied from there, never closing below its 20-dma again until the trend had exhausted itself the following August with the stock in the high 40's.

There are also two *Inverted Hammers* in the February grey box on the above chart. Inverted Hammers have implications similar to those of Hammers, and function like upside-down Hanging Man candles. The stock opened low, the bulls pushed it up, then the bears sold it off and the stock netted virtually no change for the session. The bulls had not yet gained the advantage, but the bears were losing theirs.

The bears may have begun thinking, "Wait a minute. We can't push this one down any farther. Maybe it's time to get out of our short positions." And the bulls may have begun thinking, "Hmmm. The bears have sold it off and can't push it lower. Maybe I'll go in long here and put a stop loss under the low of the Inverted Hammer just to manage risk. That looks like a pretty good risk/reward ratio! Look, it's down at the lower *Bollinger Band*, there are two Inverted Hammers. Maybe this one's ripe to bounce!" And then when the stock moved above the 20-dma more longs jumped in, and more shorts covered. And finally, late in March when the 20-dma survived two intraday penetrations, and the stock closed above that line both times, more shorts capitulated, and more bulls gained confidence. That's how the tides turn.

But wait...what's the *Bollinger Band* about? What's this 20-dma?

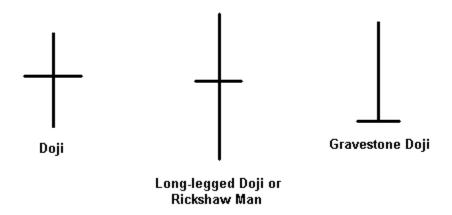
We'll get to that part when we're done with the candlesticks. For now suffice it to say that there are a number of objective measures for determining whether a stock is overbought or oversold, whether it's trending or not, whether a move might be exhausted, and whether interest in the stock is drying up. These sorts of metrics can help in determining whether a candle is a Hanging Man or a Hammer, whether you're looking at a reversal pattern that will change the market's direction or just some momentary indecision. Ultimately you'll be able to use Japanese Candlesticks in conjunction with a number of other indicators, all of which will be "tuned" together to help you hear what the market is saying.

For now, though, let's stick to the Candlesticks themselves and explore some more reversal patterns.

Section 3: More Reversals

DOJI

One of the most important reversal candlesticks is the *DOJI*. A doji is characterized by opening and closing prices that are identical (or virtually identical). The ideal doji, with the same opening and closing price, has a real body that is a horizontal line. However in the real world a difference of a few ticks doesn't diminish the doji's importance. Precisely how large the real body can be before the candlestick is no longer a doji is a somewhat subjective matter. In context, though, a doji is what *looks* like a doji. And the more it looks like a doji the more powerful a reversal signal it is likely to be.



Above are three variations on the doji candle. The Long-Legged Doji is especially powerful because the battle between the bulls and the bears has been all over the map during that period.

They've taken it high; they've taken it low. Each side has pressed the offensive and then retreated with its tail (bovine or ursine) between its legs. And in the end both sides are frustrated.

This frustration is perhaps at the heart of the meaning of a doji, and part of why a high volume doji is especially powerful. In such a session each side throws a lot of money at the issue and neither side comes away a winner. Now, who has more to protect? After a sustained uptrend the bulls have more to protect. After a downtrend it's the bears that have more to protect. The doji represents a stalemate. That is an abatement of momentum. If the momentum of an uptrend stalls out bulls are likely to take some profits (and vice-versa in a downtrend). The doji may represent the exhaustion of the conviction that previously predominated and a rousing of the opposing conviction. That may be why the doji is such a powerful reversal candle.

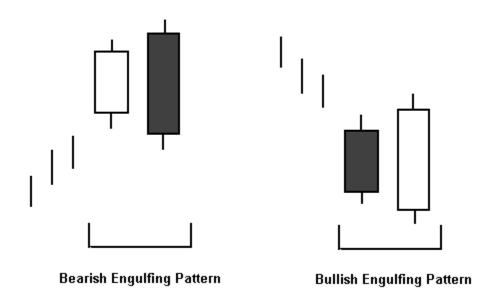
Dojis are all the more powerful when placed in particular overbought and oversold positions, which is to say within two-day and three-day patterns.

Let's look at some two-day reversal patterns:

Two-Day Patterns

There are a number of two-day candlestick patterns that suggest reversals. The most basic ones are the *engulfing patterns*, *dark-cloud covers*, the *piercing pattern*, and the *harami*.

ENGULFING PATTERNS



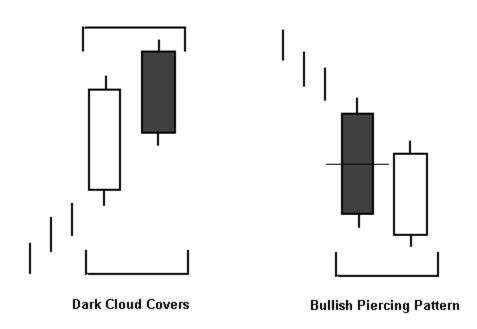
A *Bearish Engulfing Pattern* shows itself in an uptrend. The first candle should be white and the second candle dark. (There are exceptions to this idea, but only if the first candle has a very small real body. In that case a bearish engulfing pattern could have a dark first candle). The real

body of the second candle should "engulf" the real body of the first candle. (Its opening price is higher than the prior session's close and its close is lower than the prior session's open.) This pattern is considered a major reversal formation and indicates that after a higher open the bears have taken control of the session and dominated.

A *Bullish Engulfing Pattern* shows itself in a downtrend. The first candle should be dark and the second candle white. (Exception: only if the first candle has a very short real body can it be white.) The second candle engulfs the real body of the first candle; its opening is lower than the first candle's close and its close is higher than the first candle's open. After a lower open, the bulls have seized control and dominated right into the close.

An engulfing pattern is a strong sign that the balance of power between bulls and bears has reversed and that the "umph" in the prior trend may be waning. Engulfing Patterns become even more powerful if the second candle in the pattern comes on greatly increased volume, which indicates a more powerful interest in the reversal. They are also especially powerful when the second candle engulfs multiple prior sessions.

DARK-CLOUD COVER & PIERCING PATTERN



The *Dark-Cloud Cover* is a bearish pattern that derives from the same dynamic as the bearish engulfing pattern. Dark-Cloud Cover shows itself in an uptrend or at the top of a trading range. The first candle is a strong white one. The second candle in the pattern then opens higher than the first candle's high and sells off so that the close is deep into the real body of the first candle. The deeper into the first candle's real body it closes the more bearish it is. An ideal dark-cloud cover closes more than halfway down into the first candle's real body.

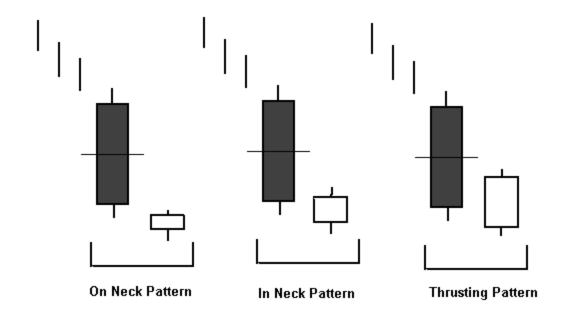
Let's think about what it would be like to trade this situation. Suppose you want to short a stock that has been in an uptrend, and suppose that you see this formation. (Note: Normally you'd rather short a failing trend than a strong one. Countertrend trades are tougher than trading with the trend, but let's put that on the back burner and just the candlesticks for now.) It looks like the bulls are unable to sustain control in the second candle of the pattern and you're thinking they're going to give up some more ground. You could intelligently enter your short with a natural exit price at or near the high of the second candle. This formation provides an excellent natural exit parameter with an appealing risk/reward ratio (the stock hasn't moved too terribly far down off its high). It becomes even more appealing as a sell signal if it's at a resistance level.

The *Bullish-Piercing Pattern* shown in the chart above gives you the same dynamic as the dark-cloud cover but in reverse. The piercing patterns second candle opens below the low of the first candle, then moves up and closes above the midpoint of the first candle's real body. While it doesn't get as far as to "engulf" the first candle, the bears have lost control of the second session and begun to cover. The bulls are gaining confidence. The natural "stop loss" on this bullish signal is at or near the low of the second candle in the pattern.

Trading Notes: Engulfing Patterns vs. Dark-Cloud Covers & Piercing Patterns

Although the Engulfing Patterns are perhaps stronger reversal signals I have noticed that often times the very strength of the engulfing pattern makes it a little trickier to play. Often the stock has moved so far so quickly on the engulfing pattern that it may languish for several sessions as it consolidates the very quick gains. The bullish piercing pattern and the dark-cloud cover have tighter natural exit point and may have more of their short-term gains on the reversal ahead of them rather than behind. Sometimes it's appealing to wait a bit after an Engulfing Pattern, before going long, so that the stock can give up one-third to one-half of the second candle's gain.

OF NECKS AND THRUSTING



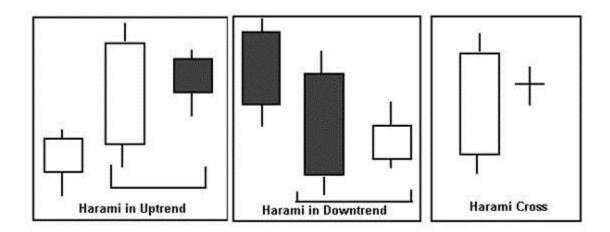
The On Neck, In Neck, and Thrusting Patterns resemble the Piercing Pattern but don't be fooled. They are somewhat bearish rather than bullish. They are not reversal candles, but I've included them here because they contrast so specifically to the piercing pattern and illustrate an important idea that pertains to "Fibonacci Retracements," which we'll cover later in the course. The second candle of each of these patterns opens below the low of the first candle. The second candle of the *On Neck* is a short, white, and the closes near the low of its predecessor. The second candle of the In Neck Pattern is also white and closes slightly up into the real body of the first candle of the pattern. The Thrusting *Pattern* has a long white second candle, but that candle's close is below the midpoint of the first candle. In all these cases we see a market that is unable to regain even half of the prior session's loss. A move below the low of any of these three patterns is an indication that further weakness lies ahead.

Note: A Thrusting Pattern may be bullish in either a rising market, or if two or more of them show up within just a few sessions.

The most important thing to keep in mind here is that the midpoint of the first candle has proven to be resistance to further upside. That's what makes them potentially bearish.

HARAMI PATTERN

Harami is an archaic Japanese word meaning "pregnant." The Harami Pattern is formed when a longish candle that moves in the direction of an existing trend is followed by a candle with a small real body that is contained between the open and close of the longish real body. The long real body is the mother. It contains the small real body, the baby.



In an uptrend a *Harami Pattern* tends to be bearish, while in a downtrend it tends to be bullish. It may not be as powerful a reversal pattern as a hammer or an Engulfing Pattern, and

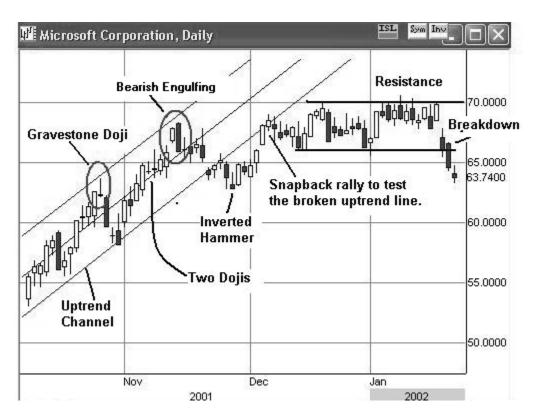
may signify that momentum will abate rather than strongly reverse.

The color of the "baby" may be either the same or the opposite of that of the "mother." More often than not, though, it will be the opposite.

Perhaps the most powerful sort of Harami Pattern is the *Harami Cross* in which the baby is a doji candle. The Harami Cross is considered to be a major reversal pattern because of the power of the doji candle.

Real Live Charts

Now let's look at a real chart and walk through some of the candles in context with some other essential ideas.

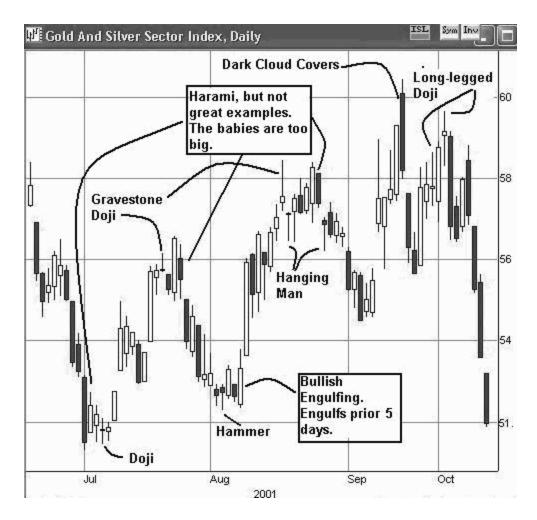


You can see in October-November 2001 Microsoft was in an uptrend channel. It showed a gravestone doji with a high very near to the upper line (the supply line, so called because it represents the upper limit of the trend where there is a supply of stock for sale). The stock then

dipped from the gravestone and tested the lower line (the demand line where there is demand to buy stock) and rebounded up from there to walk up the median line of the trend. In early November we see two doji candles. Those were early warning signs. But they never penetrated below the midpoint of the long white candle that preceded them.

So while they were warning signs there was no confirmation (yet) that the indecision they signaled would turn into a real sell-off. Indeed immediately after the two dojis we see a white candle that closes at a new local high. There are two more days of follow-through and then we see an ominous sign: the bearish engulfing candle shows up with the stock very close to the upper trend line. After that two-day formation the stock is not able to bounce much at all. It hangs just over \$65 for three days in mid November and then on the fourth day it moves up intraday but is harshly rejected by the higher price levels (note the long upper shadow on the dark candle) and closes at its lowest level in a week, just above \$65. The following day there is a gap down. The stock breaks the rising demand line and is never able to close up over that line again in November.

In early December there is a *snapback* rally or *return move*" up to the broken lower line. That move up is foretold by the inverted hammer in late November, and indeed the stock is able to drift a bit higher and plateau at a high level through early January. The momentum in the trend is dead. It would have been possible to trade the stock as it bounced from the mid to high 60s but the power of the trend had dissipated in mid November with the bearish engulfing formation. While the trend did not immediately reverse from "up" to "down" it did reverse in the sense that the word is used in Japanese Candlestick argot in which a reversal can simply mean a "change" from "up" to "flat."



The chart above shows an array of reversal candlesticks in context, some of the best of which are doji candles. (Not all the labeled candles are picture perfect. The "dojis" have real bodies that are a little large. The *babies* in the *haramis* are too big as well. But the dynamics of the candles are right. And this is a good "real world" example that shows how to apply the ideas even if the candles don't strictly conform to each of the definitions).

As my eye runs over the chart I can almost hear what the market is saying. It can get to be like reading music. Those doji candles and hammers and hanging men are almost like questioning moans from my dog as we eat dinner.

On the gravestone candle labeled during the mid to late August top I can almost hear a rising inflection and then a kind of phonemic negation and a descending glide as the Index drops down and forms a hanging man the following day. Then it comes back and asks again, insistent and even goes to a new local closing high, but can never manage to penetrate the intraday high of that stubborn gravestone. The rising inflection wilts in a dark *harami* candle. The harami's close is low in that range and portends the next move down. Thud. The "phase" is over and the Index is down 7% in nine days.

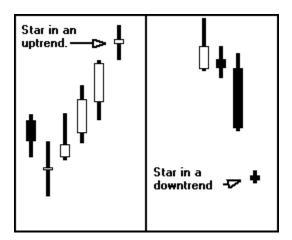
Finally, look what happens following the September long dark-cloud-covers. The index immediately reverses and drops hard under 56. Then it snaps back and rallies up to a late

September long-legged doji and has one more spurt up into the real body of the of the dark-cloud-covers, then shows us another long-legged doji, and then collapses down 7 points or more.

The doji is an extremely powerful candle and becomes even more significant when understood as part of larger 2-day and 3-day patterns.

Still More Reversals--Stars

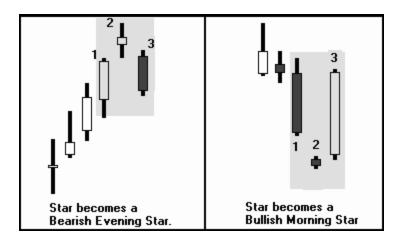
A *Star* is a two-day pattern that warns of a POSSIBLE reversal. It's a glamorous kind of event. The name itself conjures shimmering images, and *Star Patterns* indeed stand out on a chart.



A *Star Pattern* has a small real body that follows after a large real body, and gaps away in the direction of the prior trend. A star can be either hollow (white) or dark (black or red). It must have a small real body and gap away from the prior action. The shadows or wicks, can be either long or short. A star tells us that after gapping in the direction of the trend the stock was unable to make further headway in the direction of that trend. It may indicate that the stock just needs a rest or it may represent the exhaustion of the bulls (in an uptrend) or the bears (in a downtrend). It's not a full-fledged reversal, just a warning that a reversal may be imminent.

The candle that follows star then becomes extremely important.

Following a star in an uptrend, a three-day pattern called a *Bearish Evening Star* is formed by a long red candle that penetrates deep into the body of the first candle in the 2-day star pattern.

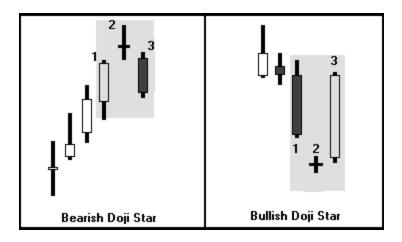


A bearish evening star derives its name by forecasting lower prices (bearish), which candlestick chartists poetically equate with the onset of darkness (evening). The dynamics of the pattern go something like this. The bulls are driving the market higher in candle #1. In candle #2 bullish sentiment gaps the stock up at the open (perhaps climaxing bullish sentiment). During candle #2 the bulls and the bears fight it out and make no significant net progress in either direction. At the close of trade for candle #2 it's a stalemate. Now comes candle #3. Because the chart had been moving up the bulls now have short-term profits at risk. If the market runs out of a supply of bulls at this point the quickest among them will recognize this and look to protect their profits, which could create some selling pressure. If that selling pressure creates downside follow-through, that shows that the bulls have indeed lost the advantage while the bears have been emboldened and seized control of the market. The tide has been turned.

The inverse of this pattern is the bullish morning star. The dynamics are just the opposite. In candle #1 the bears are in control. The failure to make progress subsequent to the gap down between #1 and #2 raises the question of whether the bears have become exhausted. Finally in candle #3 the bears are compelled to close their shorts and take their profits. The bears are in retreat and the bulls take control.

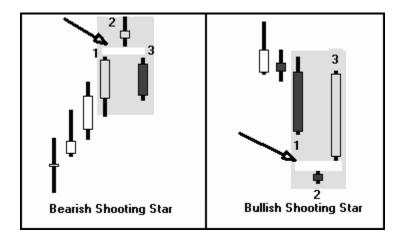
In astronomy the *Evening Star* (which is actually the planet Venus) is the same heavenly body as the *Morning Star* (also Venus). But when Venus appears as the first star in the evening it has one name and forecasts darkness, and when we see it as the last star in the sky in the morning it forecasts the dawn (or higher prices). The subject of the Evening and Morning Stars has been of interest to astronomers, poets and philosophers. In the market it describes a very powerful reversal pattern.

A *Doji Star is* among the more potent of the star formations. When candle # 2 is a doji it adds to the importance of the pattern. Why? The doji, with identical or virtually identical opening and closing prices, indicates that the standoff between the bulls and the bears is completely balanced. The dynamic tension in the conflict is maximal. (And a doji on high volume adds even more tension into the situation. But we'll discuss volume analytics later at more length.)



This chart shows a *Bearish Doji Star* and a *Bullish Doji Star*. These are just versions of the bearish evening star and the bullish morning star with the essentially the same dynamics.

The last star formation we'll cover here is the *Shooting Star*. A shooting star is perhaps the most powerful variation on the theme. What distinguishes this formation is a gap between candles #2 and #3.



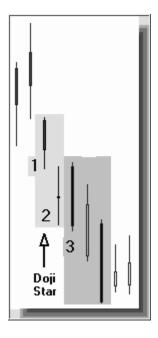
The white band on each of these charts shows you the gap between candles #2 and #3 in this 3-candle pattern. So we have a gap between #1 and #2 and then another gap between #2 and #3. That makes candle #2 an *island*. So the shooting star is an *Island Reversal*, which is a well known pattern in Western Technical Analysis and is extremely powerful. Candle #2 in this formation is "abandoned" by the prior and subsequent market activity. That is, the gaps on either side of #2 are quite meaningful. The gap between #1 and #2 is the market's last, exhausted gasp in the direction of the trend and the gap between #2 and #3 is the market's resounding rejection of the prices achieved by that last gasp. The market races away from #2 as fast as it can with its tail between its legs, and leaving its weapons in the field.

In an uptrend the shooting star now represents formidable resistance. In a downtrend it represents a strong support idea.

(We have discussed *Gaps* or *Windows*, what they mean, and how to interpret them earlier in this book. We'll look at how they are interpreted in candlestick charting in the Continuation Pattern section of this lesson.)

Staying On Your Toes!

A two-day star formation does not always become three-day reversal pattern. It's an alert that the three-day formation may be coming.



Here we have a prime example of a doji star with *Potentially Bullish* implications (#2). And it's a long-legged doji which should make it quite powerful. The conflict between bulls and bears ranged all over the battlefield on day #2, with each side gaining and losing large advantages. That could have "freaked out" the bears, who had profits to protect from the prior downtrend. But on the following day (#3) we did not see the bears exhausted. Quite the contrary. The battle raged on the same field (price range) as it had the prior day. But in the end the bulls caved in and retreated, with the stock closing near the session low.

So, what happened? Did the doji star lie? No. The doji star was a warning. The market could make no further downside progress that day, and that opened up the question of whether the tide might turn from bearish to bullish. But if you'd gone long on that two-day doji star, you'd have been disappointed. Day 3 did not confirm the doji as a reversal candle, but rather told us that the bears were still essentially in control, though meeting some resistance. Once the low of the doji candle was penetrated, further downside continuation was in the cards.

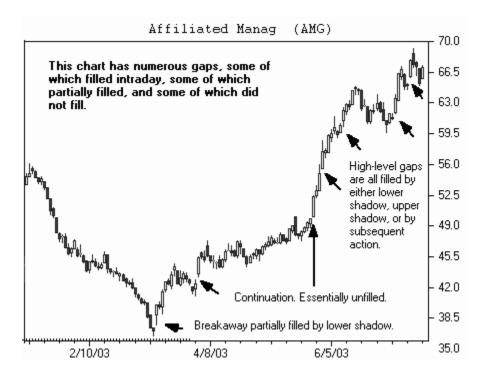
This chart illustrates the importance of two things: First, if you trade on what MIGHT be a tentative reversal signal, you'd better be careful, and you'd better not wed yourself to the reversal you expected. If the market tells you that that reversal just ain't happening, then listen to it. Second, it's important to know the difference between a preliminary or warning signal on the one hand and a confirmed reversal signal on the other hand.

There are a whole variety of trading models and techniques. But the one thing they all have in common is that to do them well, you must remain open to what the market tells you. It's very dangerous to have *too much* conviction in one direction if the market is giving you evidence to the contrary. So if you'd gone long the doji on an expectation of a reversal, you'd better have had a firm notion *before* you went into the trade when you would cut your losses if you were wrong.

As we discussed at length in the Introduction, the most important thing to do when trading is to manage our risk.

Section 5: Continuation Patterns

In this section we looked at gaps on bar charts. Here we'll look at some gaps (also called "windows") and how they can be interpreted using Candlesticks.



This chart is a bonanza of gaps or windows, each of which signals further upside to come. What all these windows have in common is that they are all created by long white candlesticks. AMG is displaying extreme strength visible in its gapping up and never particularly looking back or needing to test back down to in search of buyers until late June. The most recent window created on July 14, was closed four days later. However no further selling ensued. As long as the bottom of that window holds at support (\$65.26) the stock is on solid footing. However if another move down to that level breaks support there, then one would have to be wary of the stock testing and/or closing its penultimate window of July 7 between \$61.76 and \$61.80.

In Candlestick charting, if a window is closed and then further selling ensues, the uptrend is considered to have been negated.

Obviously the inverse applies in a downtrend.



AMR endured a wicked downtrend that took the stock down from the \$43.94 in January '01 (not shown here) to \$1.25 (on bankruptcy fears) in March '03. Note how important the final gap down in January 2003. First, it was an important continuation signal. On the day of the gap, January 22, the stock opened at \$4.30 forming the final downside window (gap). By March 12 the stock had reached \$1.25, down 71% from the bottom of the window.

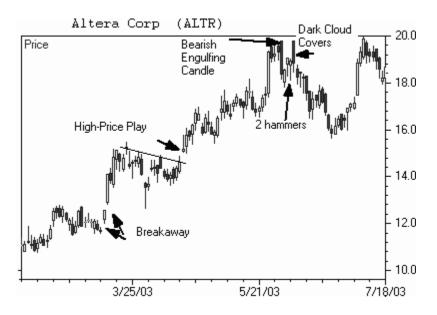
Now note how important the window became once the stock climbed on the up elevator. After popping up on two consecutive windows at the beginning of April the stock spent a month wrestling with the January window. Once that window closed and then further buying came in, the stock was off to the races. And indeed it has broken the first major line of declining tops as shown above.

In an uptrend a stock's opening a new window can be an important sign of strength and often augurs for further upside continuation. (As AMR did in early April above.) Conversely, opening a new window in a downtrend is a sign of weakness, with implications toward further weakness. (As AMR showed in January).

In an uptrend when an old window is tested as support and passes the test, additional continuation upside is likely (as AMR tested its early April breakout gaps above and passed the test). When such an old window closes and further selling ensues that is a sign that the uptrend has likely been negated.

High-Price Gapping Plays

Sometimes a stock rises and then consolidates as a standoff develops between the bulls and the bears. At that time the stock may show a number of smallish candles as it can't decide whether it wants to continue or reverse. If the stock gaps up over that consolidation range that is considered bullish and is called a High-Price Gapping Play.



On April 16 ALTR gapped up over its line of declining tops. That gap is labeled *High-Price Play* above. While the April 16 candle is a gravestone, which could be construed to have bearish implications, I've used this example because I think the gap away from the short-term the line of declining tops is a strong idea and when the following day found no impulse to close that gap (window) the stock was clearly into its next leg up.

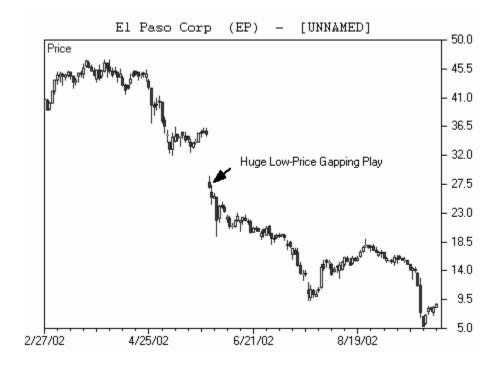
This example is not pristine. One could quibble with saying that the stock had gapped up out of the consolidation range since the closing price on April 16 (the High-Price Gapping day) was \$15.19, a penny below the March 21 close of \$15.20 that shows up as a doji 18 trading days earlier. Despite the example's imperfection it gives you an idea of how the market works. You don't always get crystal clear, pristine setups. But you can learn to take the essence of the idea and figure out if indeed that's what's operating in the market. In this the gapping play led to a run-up as far as \$19.80, up 30% from the closing price on the *Gapping Play* day.

As you can see the ALTR then gave plenty of warning that it would reverse, showing a bearish engulfing candle, two hammers and what I've labeled as a *Dark Cloud Covers Candle*. That last one may not be picture-perfect either. Under perfect circumstances a Dark Cloud Cover should follow a long white candle. This one follows two hammer candles. However, if you again look at the dynamic of the market's action you can see that after hitting \$19.80 ALTR quickly pulled back about 10% to \$17.80. The stock then struggled (two hammers), and finally opened at the prior high of \$19.80 again, only to reject that price fairly resoundingly with that long red candle (dark cloud covers).

If you were unconvinced by the long red candle, well, look at the subsequent candle. The close at \$18.25 validates of the rejection of the \$19.80 area and confirms the bearish implications of the prior day's action.

Low-Price Gapping Play

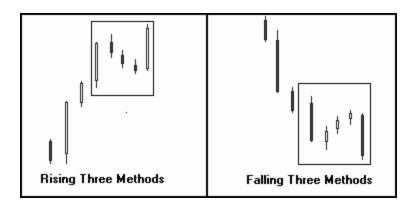
The bearish version of the gapping play is just the inverse of what we discussed above. Here is a mega-example of a *Low-Price Gapping Play* at work.



In this case the stock never even made a twitch toward closing the gap. At this writing the stock is at about \$8.11. It remains to be seen when, if ever, that window will be closed.

Rising Three Methods

This formation occurs when a long white candlestick is first followed by a group of small real bodies that remain "inside" the long white candle, and then by another long white candle that closes above the close of the long white candle.

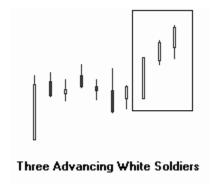


The *Rising Three Methods* has bullish implications. The gains seen in the first white candle are consolidated fairly peaceably with no virulent selling seen. The next impulsive action is to the upside.

Conversely the *Falling Three Methods* has bearish implications as the strong sell-off is met with only modest buying in the three small white candles. The bulls have not gathered any steam and so the bears put their shoulders to the wheel again and drive the stock to new lows. More selling is likely to follow.

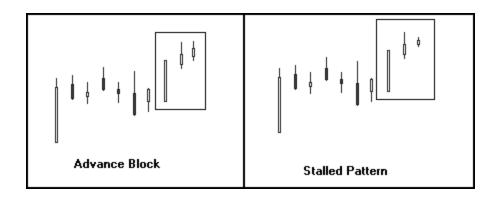
Three Advancing White Soldiers

This pattern derives its name in a fairly obvious way.



A cluster of three white candles that have successively higher closes has bullish implications. In this pattern there are no gaps. Each candle opens "inside" the prior candle's real body and then closes higher and near the top of its daily range. The price appreciation is steady, solid, and well supported like the well-planned advance of an army.

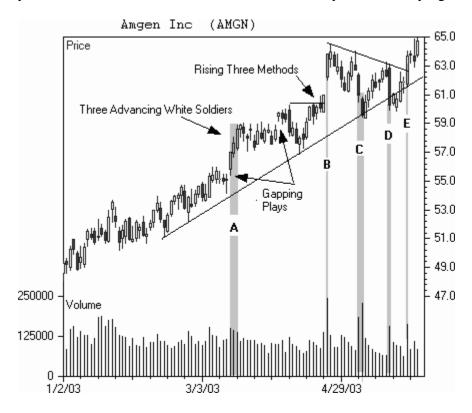
There are two variations of this pattern that express somewhat less confidence and certainty.



The *Advance Block* and *Stalled Pattern* each suggest that the power of the advance is waning by the third day.

In the Advance Block there are signs of weakening by the second candle, and then further uncertainty (long upper shadow in this case) in the third candle.

In the Stalled Pattern the second candle is a long white one, but the third candle is small, making no further significant headway. In the Stalled Pattern if the third candle gaps up from the second one then it risks becoming a bearish star. Alternatively it may "ride the shoulder" of the second candle. The key here is that the third candle's diminutive size says that the buying has waned.



This chart of AMGN has a number of interesting features.

In highlight A we see an Upside Gapping Play that resulted in Three Advancing White Soldiers. This happened in an uptrend and the market became quite overbought so it needed to consolidate

its gains for a time. However the third candle in the pattern held as support during that consolidation (bullish) and the market prepared for a further advance.

Within the period between A and B we see another Upside Gapping Play. That was followed by two spinning tops and a bearish engulfing candle. The stock subsequently retraced to its uptrend line. There it put in two long lower shadows in two hammer candles, rejecting lower prices, and bounced. After bouncing we see Rising Three Methods and then at B a huge gap up on a high-volume day.

The stock pulled back and filled the gap at B, then rallied weakly, put in a lower high just prior to C (on a gravestone candle) and then collapsed to the trend line again. The trend line was tested on heavy volume but essentially held (if very slightly penetrated). The stock then rallied back up to fill the gap formed immediately prior to C and then sank hard at D, again on high (but not extraordinary) volume.

One might have expected further downside follow-through at D. However AMGN refused to penetrate the low at C and rejected a teeny intraday penetration of the low at D, and rallied back up over the trend line, making it convincing on the high-volume white candle at E. At that point the stock broke over the line of declining tops that extends from D and that period took on the look of a bullish triangle consolidation.

The breakout from that triangle has indeed taken the stock into the low \$70s as I write.

In this section we've looked at a number of candlestick continuation patterns. There are some others as well: Gap Tasuki, Gapping Side-by-Side White Lines, and Separating Lines, for example.

This section has served only as an introduction to the vast and multi-faceted art and science of candlestick charting. The subject is worthy of a book or two on its own and indeed Steve Nison has written two fairly definitive volumes on the subject, which we highly recommend, *Japanese Candlestick Charting Techniques* and *Beyond Candlesticks*. Having studied this section, however, you now have a working knowledge of some of the important basics of candlestick charting.