Chart patterns, and what the evidence says

> **CHART PATTERN**
>
> A chart pattern is a recognisable arrangement of highs and lows that traders name and act on. Head and shoulders, double tops, triangles, flags and wedges are the common ones, and each is claimed to indicate a particular continuation or reversal. Learning them properly matters because other participants use them as shared vocabulary. The academic evidence that any specific pattern carries a reliable edge is weak, and the examples you have seen are heavily selected.

This lesson has two halves and they run in that order for a reason. First, how the common patterns are drawn and what traders read them as saying, taught properly enough that you can recognise one when another trader references it. Then, honestly, what the evidence supports.

Skip the first half and you cannot follow a conversation about markets. Skip the second and you will mistake a shared vocabulary for a predictive method.

Head and shoulders

Three peaks: a middle one higher than the two either side, with the outer two at roughly similar heights. A line drawn under the two troughs between them is the neckline.

Traders commonly read it as a reversal of the preceding uptrend, with the move considered underway when price closes below the neckline. The conventional target is the distance from the head down to the neckline, projected downward from the break. Inverted, the same shape is read as a bottom.

Double tops and bottoms

Price reaches an area, retreats, returns to roughly the same area, and fails again. A double bottom is the mirror.

It is commonly read as a failure to make a new extreme, and therefore as the prior move losing force. Confirmation is conventionally the break of the trough between the two peaks.

Triangles and wedges

A triangle is a series of highs and lows converging: lower highs against flat lows is a descending triangle, higher lows against flat highs an ascending one, both converging is symmetrical. A wedge converges too, but both boundaries slope the same way.

Traders commonly read convergence as compression, with a break out of the boundary claimed to indicate the direction of the next move. Ascending triangles are conventionally read as bullish, descending as bearish, symmetrical as neutral until broken.

Flags and pennants

A sharp directional move, then a short consolidation sloping against it, then a resumption. The flag is the consolidation.

It is commonly read as a pause within a continuing move rather than a reversal, and it is the most widely taught continuation pattern.

Fibonacci retracement

Draw a line from a swing low to a swing high, and horizontal lines are placed at 23.6%, 38.2%, 50%, 61.8% and 78.6% of that distance. Those numbers derive from a ratio sequence, except 50%, which is simply half and gets included by convention.

Traders commonly read retracements to those levels, particularly 61.8%, as places where a pullback may end and the prior direction may resume.

This is the module's argument in one example, so it is worth being exact. Nothing about 61.8% gives it any property that price responds to. There is no mechanism by which a ratio derived from a number sequence acts on a currency pair.

But enough traders draw the same tool between roughly the same two swings that orders cluster near the same prices. The level is doing exactly what lesson three described: working to the extent that participants are watching it, and for no other reason. When it does work, that is the mechanism. When it does not, it is because the crowd anchored to different swings, which happens constantly.

Learn to draw it, because other traders will reference it. Understand that its power is entirely borrowed from attention.

Elliott Wave and harmonics

Elliott Wave describes price as unfolding in a repeating structure of five waves with the trend and three against it, each subdividing into the same pattern at smaller scales. Practitioners label waves and use the count to frame where in a larger structure price sits.

Harmonic patterns - Gartley, butterfly, bat, crab - specify shapes whose legs must sit within stated Fibonacci ratios of one another. A pattern qualifies when the ratios fall inside tolerance.

Both are widely taught and both have a specific weakness worth naming plainly: the number of permitted counts or ratio tolerances is large enough that a fitting structure can nearly always be found after the fact, and re-labelled when price disagrees. A framework that can be recounted to match any outcome cannot be wrong, and lesson one set out why that disqualifies it as analysis whatever else it offers.

They are described here so you can recognise them and follow a discussion. They are not recommended, and the reason is the standard this module has applied to everything else.

What the evidence supports

Academic work on chart patterns is not encouraging. Studies that specify pattern rules in advance and test them across large samples generally find small effects that do not survive transaction costs, and results that fail to hold outside the period they were fitted on.

There is somewhat better evidence for the broad phenomena underneath some patterns - volatility clustering, so compression tends to precede expansion, and momentum over longer horizons across many markets. Those are not the same thing as a named shape predicting a target.

Why patterns look more convincing than they are

Three reasons, and they compound.

Selection. Every example in every course worked. Nobody publishes the head and shoulders that did not.Pattern-finding. Humans see structure in noise reliably, and price series produce recognisable shapes by construction - which is the point module 2 made about why charts rhyme.Definitional flexibility. If a pattern's rules are loose, it can be identified after the move and missed before it.

The remedy for all three is the same and it is lesson one's standard. Write the rules down before you look. State the level at which the read was wrong. Then the pattern is doing analytical work rather than decorating a decision you already made.

The honest position

Learn the vocabulary properly. It is how traders talk to each other, and a level that many participants have drawn is a real place where orders concentrate, whatever you think of the reasoning that put them there.

Do not treat a named shape as a forecast. No pattern in this lesson has evidence strong enough to carry a position on its own, and the ones with the most elaborate rules have the least.

Check your understanding

1. A pullback stops near the 61.8% retracement. What is the most defensible explanation?

a. The ratio has a mathematical property that price responds to
b. Enough traders draw the same level that orders cluster near that price
c. Markets move in proportions derived from natural growth patterns

Answer: b. The number has no property that acts on a currency pair. The level works to the extent participants watch it and place orders there - the same mechanism as any other level, with its power entirely borrowed from attention.

2. Why is a framework whose labelling can be revised after price moves a problem?

a. It is too complex for most traders to apply consistently

b. It cannot be wrong, so no observation tests it

c. It relies on Fibonacci ratios that have no basis

Answer: b. If any outcome can be accommodated by recounting, nothing the market does settles the question. Lesson one set that standard: a read without a level that refutes it carries no information.

3. Why do chart patterns appear more reliable than testing supports?

a. Published examples are selected, humans find structure in noise, and loose rules allow after-the-fact identification

b. Most traders apply them on the wrong timeframe

c. Modern algorithmic trading has degraded patterns that once worked

Answer: a. Three effects that compound. The remedy for all of them is writing the rules and the invalidation level down before looking, which turns a pattern into something that can be checked.