#### 1. General

The Elliott Wave principle was discovered in the late 1920s by Ralph Nelson Elliott. He discovered that stock markets do not behave in a chaotic manner, but that markets move in repetitive cycles, which reflect the actions and emotions of humans caused by exterior influences or mass psychology. Elliott contended, that the ebb and flow of mass psychology always revealed itself in the same repetitive patterns, which subdivide in so called waves.

In part Elliott based his work on the Dow Theory, which also defines price movement in terms of waves, but Elliott discovered the fractal nature of market action. Thus Elliott was able to analyse markets in greater depth, identifying the specific characteristics of wave patterns and making detailed market predictions based on the patterns he had identified.

Fractals are mathematical structures, which on an ever smaller scale infinitely repeat themselves. The patterns that Elliott discovered are built in the same way. An impulsive wave, which goes with the main trend, always shows five waves in its pattern. On a smaller scale, within each of the impulsive waves of the before mentioned impulse, again five waves will be found. In this smaller pattern, the same pattern repeats itself ad infinitum (these ever smaller patterns are labeled as different wave degrees in the Elliott Wave Principle)

Only much later were fractals recognized by scientists. In the 1980s the scientist Mandelbrot proved the existence of fractals in his book "the Fractal Geometry of Nature". He recognized the fractal structure in numerous objects and life forms, a phenomena Elliott already understood in the 1930s.

In the 70s, the Wave Principle gained popularity through the work of Frost and Prechter. They published a legendary book (a must for every wave student) on the Elliott Wave (Elliott Wave Principle...key to stock market profits, 1978), wherein they predicted, in the middle of the crisis of the 70s, the great bull market of the 1980s. Not only did they correctly forecast the bull market but Robert R. Prechter also predicted the crash of 1987 in time and pinpointed the high exactly.

Only after years of study, did Elliott learn to detect these recurring patterns in the stock market. Apart from these patterns Elliott also based his market forecasts on Fibonacci numbers. Everything he knew has been published in several books, which laid the foundation for people like Bolton, Frost and Prechter, to make profitable forecasts, not only for stock markets, but for all financial markets.

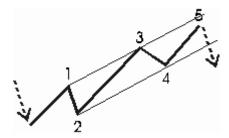
Next let's first examine the patterns Elliott identified.

## 2. Basic Theory

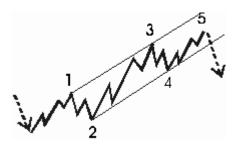
According to physical law: "Every action creates an equal and opposite reaction". The same goes for the financial markets. A price movement up or down must be followed by a contrary movement, as the saying goes: "What goes up must come down" (and vice versa).

Price movements can be divided into trends on the one hand and corrections or sideways movements on the other hand. Trends show the main direction of prices, while corrections move against the trend. In Elliott terminology these are called Impulsive waves and Corrective waves.

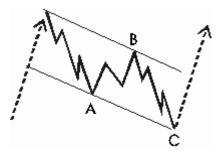
The Impulse wave formation has five distinct price movements, three in the direction of the trend (I, III, and V) and two against the trend (II and IV).



Obviously the three waves in the direction of the trend are impulses and therefore these waves also have five waves. The waves against the trend are corrections and are composed of three waves.



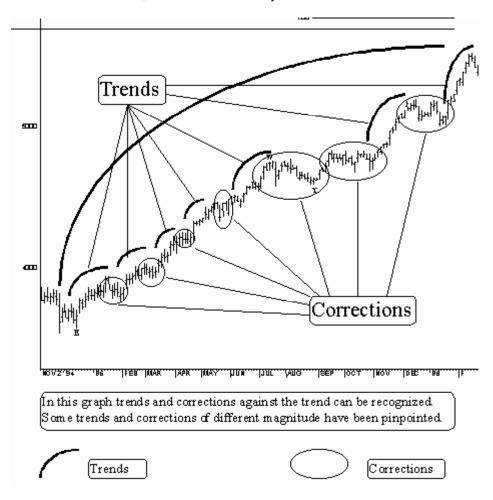
The corrective wave formation normally has three, in some cases five or more distinct price movements, two in the direction of the main correction (A and C) and one against it (B). Wave 2 and 4 in the above picture are corrections. These waves have the following structure:



Note that these waves A and C go in the direction of the shorter term trend, and therefore are impulsive and composed of five waves, which is shown in the picture above.

An impulse wave formation followed by a corrective wave, form an Elliott wave degree, consisting of trend and counter trend. Although the patterns pictured above are bullish, the same applies for bear markets, where the main trend is down.

The following example shows the difference between a trend (impulse wave) and a correction (sideways price movement with overlapping waves). It also shows that larger trends consists of (a lot of) smaller trends and corrections, but the result is always the same.



Very important in understanding the Elliott Wave Principle is the basic concept that wave structures of the largest degree are composed of smaller sub waves, which are in turn composed of even smaller sub waves, and so on, which all have more or less the same structure (impulsive or corrective) like the larger wave they belong to.

Elliott distinguished nine wave degrees ranging from two centuries to hourly. Below, these wave degrees are listed together with the style we use to distinguish them:

Wave degree	Trend	Correction
Grand Supercycle	(1)	(A)
Supercycle	(I)	(A)
Cycle	I	A
Primary	①	A
Intermediate	(1)	(a)
Minor	1	A
Minute	i	a
Minuette	1	<u>a</u>
Sub minuette	I	A

In theory the number of wave degrees are infinite, in practice you can spot about four more wave degrees if you examine at tick charts.

This indicates that you can trade the investment horizon, which is most suited for you, from very aggressive intra day trading to longer term investing. The same rules and patterns apply over and over again. Now we will take a look at the patterns...

#### 3. Patterns

Studying the patterns is very important in order to apply the Elliott Wave Principle correctly. The pattern of the market action, if correctly determined, not only tells you to what price levels the market will rise or decline, but also in which way (or pattern) this will happen.

When you are able to recognize the patterns, and apply these patterns correctly, you can trade the Elliott Wave Principle. This is not easy to accomplish, but after some study and with the help of our "detailed and personalized daily chart service" tool you will find it easier. Humans, with sufficient experience, can analyse markets in an instance, which is a requirement for trading.

Our daily chart service restricts itself mainly to the patterns mentioned in the **Classic Elliott Wave patterns**. We analysis these patterns using the **Classic Rules**.

We also use the **Modern Rules**, as mentioned under **Modern Elliott Wave patterns**, we have defined more patterns, which we have found after more than 10 years of research and experience, which definitions are more profitable in our view. This way we make available our knowledge and experience without any extra costs.

After looking at the big picture we then determine which rules are preferable.

Explaining the following descriptions, on the left you will find a picture of a bull market, at the right one of a

bear market.

The *pattern* section depicts the structure, while the *description* gives additional information. The pattern should follow the *rules and guidelines*, which can also be derived from the picture. Furthermore the section, *in which wave* explains in which wave, as a part of a larger wave degree, the patterns normally occur. Last but not least the pattern must have an *internal structure* as described. This is very important to determine which pattern you are dealing with.

#### Classic Elliott Wave patterns

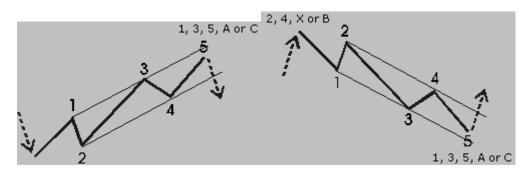
Below we have depicted all Elliott Wave patterns that are allowed under a **very strict interpretation** of the Elliott Wave Principle. Elliott detected most of these patterns, except for the Diagonal 2 pattern. The WXY and WXYXZ pattern have not been defined as such by Elliott, but he already had discovered these sort of combinations.

In our daily analysis we use the WXY and WXYXZ also for Double and Triple Zigzags. This is a much more consistent way of labeling these patterns, since now the ABC waves in waves W and Y are sub waves and an unfitting Wave X has been eliminated.

Because of this, in our daily analysis we no longer have to search for more than five waves. Using the old definition of for example a Triple Zigzag, the search was for eleven waves, apart from inconsistencies this would have slowed down our analysis considerably.

#### I. Trends

#### a. Impulse Pattern



#### Description

Impulses are always composed of five waves, labeled 1,2,3,4,5. Waves 1, 3 and 5 are themselves each impulsive patterns and are approximately equal in length. Waves 2 and 4 on the contrary are always corrective patterns.

### Rules and guidelines

The most important rules and guidelines are:

- Wave 2 cannot be longer in price than wave 1, and it must not go beyond the origin of wave 1.
- Wave 3 is never the shortest when compared to waves 1 and 5.
- Wave 4 cannot overlap wave 1, except in diagonal triangles and sometimes in wave 1 or A waves, but never in a third wave. In most cases there should not be an overlap between wave 1 and A.