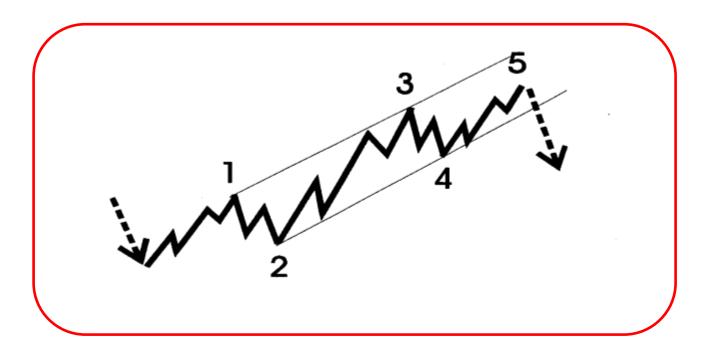
# ELLOTT WAVE UNVEILED



Traders World Magazine
In cooperation with Prognosis Software Development

Some parts of this book are copyrighted to Prognosis Software Development

# SignalForAll App is Live Now!

Join For Free: 👉 👉 https://app.signalforall.com

SignalForAll is your AI-powered crypto trading app that delivers professional-grade signals with real-time market analysis, helping you trade smarter and maximize profits.

What You Get (100% FREE)

- 2 Free Daily Free Signals
- Access to our revolutionary SFA AI Advisor and SFA Indicator setup
- ✓ Comprehensive Signal Dashboard
  - Live Signal Tracking See all active signals at a glance
  - Performance History Track your success rate
  - Target Progress Visual indicators for each take profit
  - **Profit Calculator** Know your potential gains instantly
- ✓ Al Hints for signals:
- Real-time market analysis with live RSI, EMA, and volume data
- **o** Smart entry detection Know exactly when to enter
- P Actionable recommendations Clear guidance on what to do next
- 📊 Target probability analysis See which targets are most likely to hit
- ▼ Telegram Integration Signals delivered instantly
- Email Notifications Stay informed wherever you are

Stop guessing. Stop losing. Start winning with SignalForAll.  $\displayskip$  It's FREE. It's PROFITABLE.  $\displayskip$ 

SIGN UP FREE NOW → f https://app.signalforall.com

Join Our Free Telegram Channel for Daily Free Signals and Live Tradings!

Join 30,000+ users as we run live trades, discuss strategies, and share market insights.

Join Now: f https://t.me/signalforallchat Website: f https://signalforall.com

#### https://signalforall.com

Copyright 2001 by Halliker's, Inc., dba Traders World

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United Stated Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 750-4744. Requests to the Publisher for permission should be addressed to the Permissions Department, Halliker's, Inc. 2508 W. Grayrock St, Springfield, MO 65810. (417) 882-9697, Fax (417)886-5180. E-Mail: publisher@tradersworld.com

Parts of this book came from the ELWAVE software manual produced by Prognosis Software Development. This publication is written to provide accurate information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional person should be sought.

To receive a password for the Internet Support Site for the Book via E-Mail:

#### publisher@tradersworld.com

CAVEAT: It should be noted that all commodity trades, patterns, charts, systems, etc., discussed in this book are for illustrative purposes only and are not to be considered as specific advisory recommendations. Further note that no method of trading or investing is foolproof or without difficulty, and past performance is no guarantee of future performance. All ideas and material presented are entirely those of the author and do not reflect those of the publisher or bookseller.

Library of Congress Cataloging-in-Publication Data:

Printed in the United States of America

# Introduction

R.N. Elliott developed Elliott Wave Theory in the 1920's. Mr. Elliott discovered there is no chaos in the markets, but on the contrary this is a natural order in the markets that manifests it self in wave patterns, which continually repeat themselves. These wave patterns continually repeat themselves over and over again in the markets. The wave patterns are also fractal in nature, which means that you can subdivide these waves into smaller and smaller waves and they was have the same pattern, just a different degree.

In the 1970's the Elliott Wave Principal was extremely popular because of books published by Prechter and Frost. The most famous book they published was "The Elliott Wave Principle...key to stock market profits" in 1978. Robert Prechter was extremely popular and was frequently interviewed by the news media during the time. He predicted the bull market of the time and even the crash of 1987.

The secret of the Elliott Wave Theory is to learn how to correctly detect these wave patterns that tend to occur over and over again in the markets. These wave patterns can be divided into basically two kinds, the trending wave and the non-trending wave. Some people call them impulse waves and corrective waves. The markets tend to trend only 20% of the time and they go into corrections 80% of the time.

The impulse wave has five price movements. Three of them are in the direction of the market and two of them are in the opposite direction of the market. See Fig. 1.

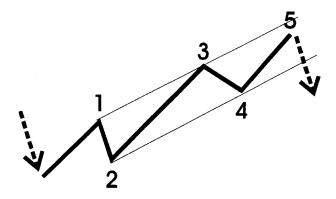


Fig. 1

These five waves can also be broken down into smaller waves. Each impulse wave has five waves and each correction has 3 waves. See Fig. 2.

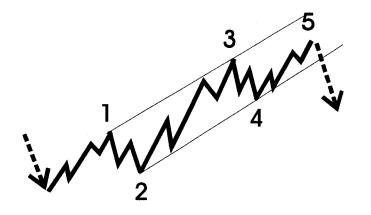


Fig. 2
The corrective waves can also be broken down into a smaller degree.
Waves A and C are in the direction of the reaction. This would illustrate the reaction in a bullish trend. See Fig. 3.

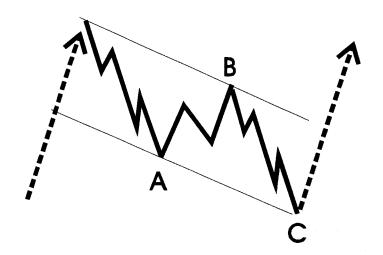


Fig. 3

It should be very easy now to distinguish between the trends of the market and the corrections. See Fig 4. Also it's important to understand the concept that the wave structure of the large degree is composed of the same wave structure in the smaller degree.

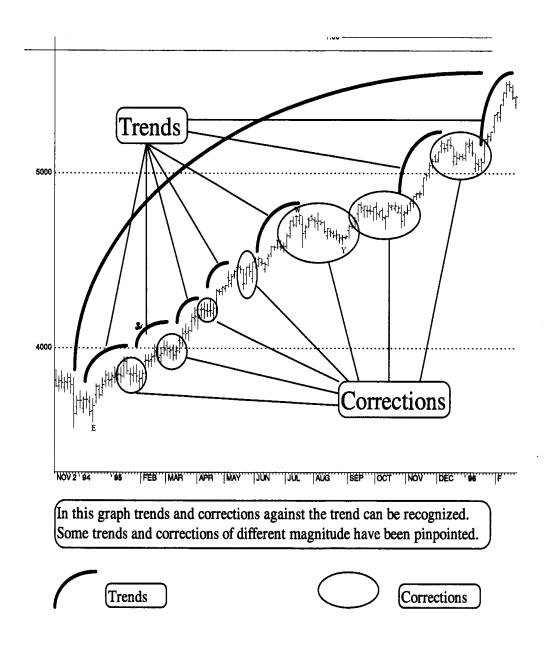


Fig. 4

The following are the wave degrees the most Elliott Wave Technicians follow:

Wave degree	Trend	Correction
Grand Supercycle	(Ī)	(A)
Supercycle	Œ	(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

You must remember that the possible number of wave degrees is infinite. You can only trade so many waves down. The smallest detectable wave pattern would be using a 1 minute bar chart. The advantage of having different degrees of waves is that you can trade the degree that you are most comfortable with. Day-traders might trade the Sub Minuette Wave Degree and intermediate investors might use the Primary Wave Degree to trade.

#### **Patterns**

Recognizing the patterns of the waves as they are developing is the most important thing you can do. Many Elliott Wave technicians can correctly analyze a completed chart with the correct patterns, but what good does that do. You need to do it as it is happening. You can correctly determine the where you are in the Elliott Wave pattern, as it is unfolding, it will tell you the levels the market will rise or fall to. That's the importance of the Elliott Wave theory.

The unique software ELWAVE gives you the Elliott Wave patterns automatically so you can better trade the markets.

#### Classic Patterns vs. Modern Elliott Wave Patterns

There are two versions of the Elliott Wave Theory. One is the classic version brought out by Elliott and the modern version that Prognosis Software Development found after 10 years of research and experience. You will have to experiment which each of the markets to determine which set of patterns to use. The ELWAVE software program makes it easy to do. You can select which to use with just a click of the mouse button.

Now let's look at the various Elliott Wave Patterns in a very strict manner according to the rules followed by Elliott Wave technicians:

# a. Impulse

# **Pattern**

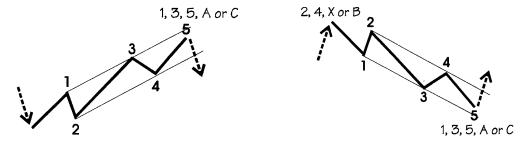


Fig. 5

# **Description**

Impulse waves are composed of five waves labeled 1,2,3,4,5.

Waves 1, 3, 5 are themselves impulse waves.

Waves 1, 3, 5 are usually equal in length.

Waves 2 and 4 are corrective waves.

#### **Rules and Guidelines**

Wave 2 cannot be longer in price than wave 1.

It can't 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. Exception, diagonal triangles.

The third wave usually shows the highest momentum.

Exception, when the fifth wave is the extended wave.

#### In Which Wave

Impulse patterns occur in wave 1, 3, 5 and waves A and C

#### Internal Structure

Composed of five waves 5-3-5-3-5

#### b. Extension

# **Pattern**

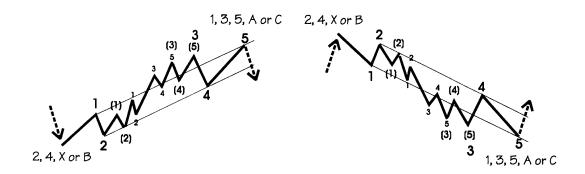


Fig. 6

#### **Description**

An extension occurs in a impulse wave.

It can be wave 1, 3, or 5

Usually one of these waves is extended.

Normally the third wave is the extended wave.

The other two waves are normally equal in length.

# Rules

Extended waves are composed of 5, 9, 13 or 17 waves.

Wave 2 can't be long in price distance than wave 1.

Wave 3 is never the shortest when compared to wave 1 and 5.

Wave 4 can't overlap wave 1.

Wave 5 exceeds the end of wave 3.

The extended wave normally shows the highest acceleration.

# In Which Wave

Extensions occur in wave 1, 3, 5 and in A and C waves.

# **Internal Structure**

Minimum number of waves of an extended wave is 9, 13 or 17.

Minimum internal structure of 9 waves is 5-3-5-3-5-3-5.

# c. Diagonal Triangle Type 1

#### **Pattern**

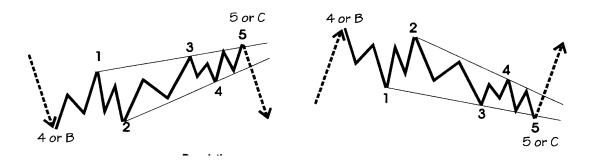


Fig. 7

#### **Description**

Diagonals are impulse patterns.

They occur in terminal waves like fifth or a C wave.

Diagonals are relatively rare.

They occur a lot in lower wave degree charts.

Usually they are followed by a violent change.

#### **Rules and Guidelines**

It is composed of 5 waves.

Waves 4 and 1 do overlap.

Wave 4 can't go beyond the origin of wave 3.

Wave 3 can't be the shortest wave.

Internally all waves of the diagonal have a corrective structure.

Wave 1 is the longest wave and wave 5 the shortest.

The Channel lines of Diagonals must converge

The internal wave structure should show alternation.

#### In Which Wave

Diagonal triangles type 2 occur in waves 1 and A.

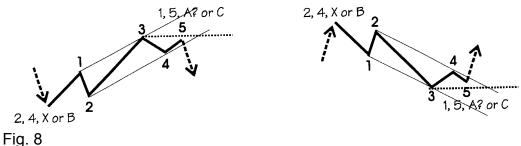
# **Internal Structure**

The five waves of the diagonal type 2 show an internal structure of 5-3-5-3-5.

#### **Trends**

# d. Failure or Truncated 5th

#### **Pattern**



#### ı ıy. o

#### Description

Impulse wave in which the fifth doesn't extend beyond the third.

Fifth wave goes only slightly beyond the third wave. Classified as a failure wave

Trend is week and will accelerate in opposite direction.

# **Rules and Guidelines**

Wave 2 can't be longer in price than wave 1.

Wave 2 can't go beyond the origin of wave1.

Wave 4 can't overlap wave 1 or A.

Wave 5 fails to go beyond the end of wave 3.

Wave 3 shows the highest momentum.

Internal wave structure should show alternation.

# **Internal Structure**

It must be composed of five waves.

# a. Zigzag

#### **Pattern**

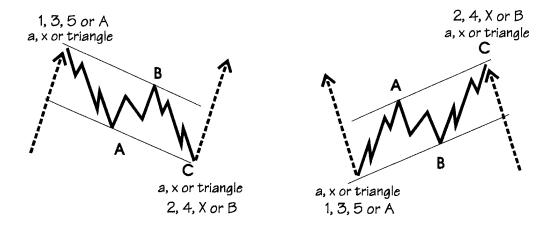


Fig. 9

#### **Description**

The most common corrective wave structure.

Begins with a sharp reversal.

It looks like an impulsive wave

Can extend into a double or triple zigzag. (not common)

#### **Rules and Guidelines**

Composed of 3 waves

Wave A and C are impulses, Wave B is corrective.

The B wave retraces no more than 61.8% of A

The C wave must go beyond the end of A

The C wave normally is at least equal to A

#### In Which Wave

Most of time it happens in A, X or 2.

Also common in B waves or part of a Flat or Triangles or in 4.

#### **Internal Structure**

Internal structure of the 3 waves is 5-3-5 in a single Zigzag, 5-3-5-3-5 in a double.

# Corrections Example of a Double Zigzag

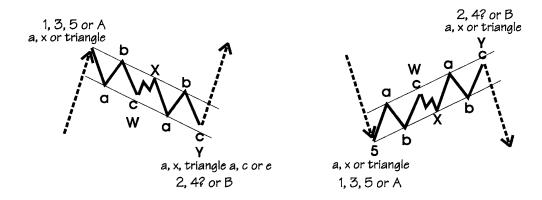


Fig. 10

The above is a modern representation of the Double Zigzag using the labels WXY instead of ABCXABC. This is more consistent because this way 2 zigzags of lower degree get corrected to each other by waves of higher degree.

#### b. Flat

#### **Pattern**

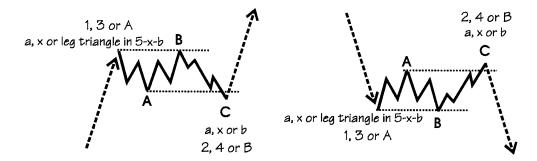


Fig. 11

# **Description**

Flats are very common form of correction patterns.

Shows sideways direction.

Waves A and B of the Flat are both corrective patterns.

Wave C is an impulse pattern.

Normally eave C will not go far beyond the end of wave A.

# **Rules and Guidelines**

It is composed of 3 waves.

Wave C is an impulse, Wave A and B are corrective.

Wave B retraces more than 61.8% of A

Wave B shows a common retracement to the end of previous wave.

Wave C shouldn't go far beyond the end of A

Normally wave C is at least equal to A.

# In Which Wave

It occurs mostly in B waves, also common in 4 and 2.

#### **Internal Structure**

The internal structure of these waves is 3-3-5. Both waves A and B are normally Zigzags.

# c. Expanded Flat or Irregular Flat

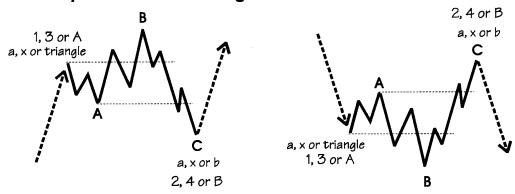


Fig. 12

# **Description**

This is a common special type of a Flat.

B wave is extended and goes beyond the end of the previous wave.

The B wave has a lot of strength and shows the direction of B.

Strong acceleration is present which starts the 3<sup>rd</sup> or 5<sup>th</sup> wave.

If C wave is much longer than A, the strength will be less.

#### **Rules and Guidelines**

It is composed of 3 waves.

Wave C is an impulse, wave A and B are corrective.

Wave B retraces beyond the end of the previous impulse wave A.

The C wave normally is much longer than A.

# In Which Wave

Can happen in 2, 4, B and X. It can happen in 2 and C is relatively short, normally an acceleration in the third will take place.

# **Internal Structure**

Composed of five waves, which has a structure of 3-3-5-5.

# d. Triangles (Contracting)

#### **Pattern**

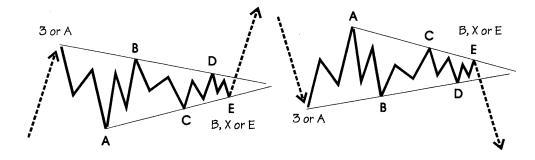


Fig. 13

# **Description**

A triangle is a corrective pattern, which can contract or expand. It can ascend or descent.

It is composed of five waves; each of them has a corrective nature.

# **Rules and Guidelines**

It is composed of 5 waves.

Wave 4 and 1 do not overlap.

Wave 4 can't go beyond the origin of wave 3

Internally all waves have a corrective wave structure.

Wave 1 is the longest wave and wave 5 is the shortest.

# In Which Wave

Triangles occur in wave B, X and 4, never in wave 2 or A.

# **Internal Structure**

It is composed of fives waves, internal structure 3-3-3-3.

# Corrections Expanding Triangle

#### **Pattern**

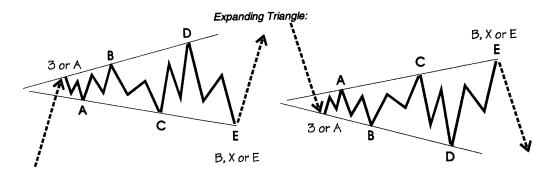


Fig. 14

# **Ascending Triangle**

This triangle slopes upwards.

This pattern has been implements in Modern Rules.

# **Descending Triangle**

This is a triangle, which slopes downwards.

This pattern has been implemented in modern rules.

# **Running Triangle**

This is a triangle where the B wave exceeds the origin of wave A.

#### e. WXY or Combination

#### Pattern

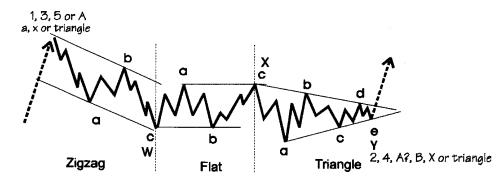


Fig. 15

# **Description**

Combines several types of corrections. Labeled WXY and WXYXZ.

# **Rules and Guidelines**

Forms small patterns to make a larger one. The triangle should normally appear at the end.

# In Which Way

Generally a combination occurs mostly in B, X and 4.

Less common in A and rare in 2.

# **Internal Structure**

A Zigzag followed by a flat, followed by a Triangle has the following internal structure. 5-3-5 (Zigzag)-5-3-3-5

# f. Running Flat

Pattern

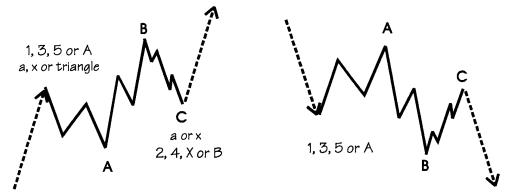


Fig. 16

#### **Description**

Rare form of a failure.

Kind of a Flat with elongated B wave and very small C wave.

ELWAVE doesn't accept a C wave that fails to reach wave A.

This could be an extension in an impulse wave.

If B is a clear three wave, then it is a running correction. The market will explode in the direction of the B wave.

#### **Rules and Guidelines**

The B wave must be composed of three waves.

The C wave must be composed of five waves.

Wave C must be very short and not reach wave A.

Wave C must retrace less than 100% of wave B.

Wave C must retrace more than 60% of wave A.

#### In Which Wave

Most of the time it should occur in wave 2 or B.

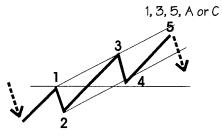
# **Internal Structure**

It is a three-wave structure 3-3-5.

# Modern Elliott Wave Patterns

In the Modern Rules ELWAVE engine the program has defined extra pattern that are mostly hybrid patterns derived from the known patterns that have existed from the beginning. In addition the program allows for occurrence of more patterns in some wave. For example, wave 1 may also contain a diagonal 1, diagonal 2 and impulse 2 pattern, next to the other trend patterns, that a classic interpretation accepts.

# a. Impulse 2



2, 4, X or B 1, 3, 5, A or C

Fig. 17

# **Description**

An impulse 2 is an uncommon pattern.

ELWAVE allows for a maximum retrace of 51.5% for wave 4.

Sometimes the retrace of wave 4 could be 51.6%.

# **Rules and Guidelines**

The same rules and guidelines apply as with a normal impulse except for the following:

Wave 4 is allowed to retrace in between 51.5% and 62%.

Must not penetrate the region of wave 1.

As a guideline, wave 4 very often is a Zigzag.

# In Which Wave

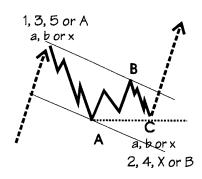
Impulse 2 patterns occur in wave 1, A or C, never in wave 3.

#### **Internal Structure**

It is composed of five waves 5-3-5-3-5.

The mentioned 3's are corrective waves.

# Corrections Impulse 2



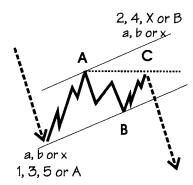


Fig. 18

# **Description**

Apart from contracting triangles, a failure in a corrective pattern happens when the C wave is shorter than wave A and fails to go beyond the end of A.

Happens in running flats or in zigzags.

Indicated strength in the direction of the main trend.

#### **Rules and Guidelines**

The rules as mentioned with other corrective patterns apply.

Wave C fails to go beyond the end of wave A.

#### In Which Wave

Failures can occur in a C wave 2, in a C or E wave of 4 in a C wave of B or X.

# b. Failed Flat

# **Pattern**

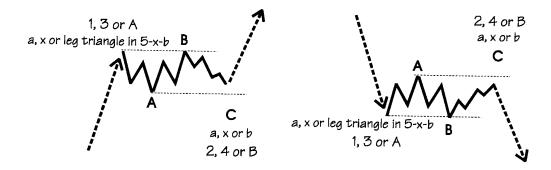


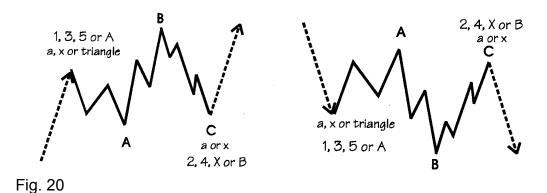
Fig. 19

# Description

This pattern is exactly the same as a Flat, except for the fact the wave C does not reach the end of wave A and therefore is shorter than wave B.

# c. Running Flat (modern)

#### **Pattern**



# **Description**

This pattern is exactly the same as a Running Flat, except for the fact that it must retrace more than 60%, of not ELWAVE considers it to be a normal Running Flat. This distinction is necessary, because normally a Running Flat is rare. But if it retraces more than 60% and still fails to race the end of wave A, it suddenly becomes a much more probable pattern to occur. In that case it will get a much higher score.

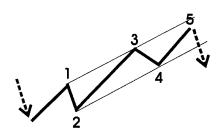
# Channeling

This is an important tool to determine which subwaves belong together and to project targets for the next wave up.

Channels are parallel lines, which contain complete price moves.

Trendlines of triangles are also considered a channel.

The following is an example of a channel in impulse wave and a channel in corrective waves.



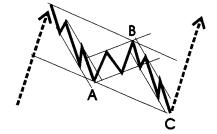


Fig. 21

Waves of the same degree can be recognized by drawing channels. Especially this is the case for Impulse (5) wave structures, Zigzags and Triangles. If these waves do not fit properly, you have a strong indication to search for an alternative count.

#### Targets for Wave 3 or C

To begin with you can draw a channel as soon as wave 1 and 2 are finished. Connect the origin of wave 1, which has been labeled as zero, and the end of wave 2. then draw a parallel line from the top of wave 1.

Generally this channel is regarded as not being very useful, but it is, First of all the parallel line services as a absolute minimum target for the 3<sup>rd</sup> wave under development. If the 3<sup>rd</sup> wave can't break through the upper line or fails to reach it, you are probably dealing with a C wave instead of wave 3.

Furthermore the base line from 0 to wave 2 serves as a stop. When this base line gets broken, there is a strong probability that wave 2 (or B) gets more complex, thus wave 3 or C has not begun yet.

Keep in mind that wave 3 is normally the strongest wave and often will go far beyond the upper trend line.

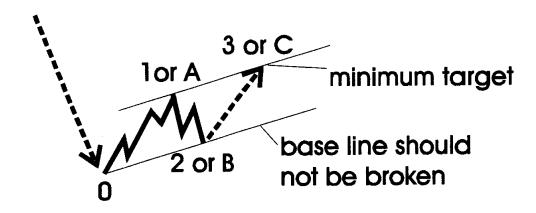


Fig. 22

# Targets for Wave 4

As soon as wave 3 has finished you can draw a channel connecting the end of wave 1 and wave 3 with a trend line and drawing a parallel line from the end of wave 2. by Doing this you can project a target for wave 4. Keep in mind that normally the base line from wave 3 will be broken slightly by the price action of wave 4. If wave 4 doesn't come near the base line at all this is a sign of a very strong trend. You are probably still in wave 3 or your should get ready to a blow off in wave 5.

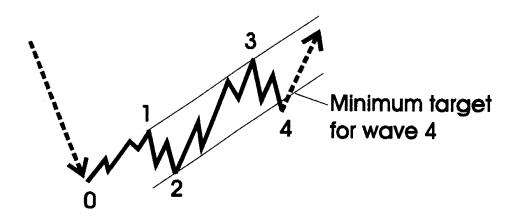


Fig. 23

# Targets for Wave 5

# Method 1

As soon as wave 4 has finished you can draw a channel connecting the end of wave 2 and wave 4 with a trend line and draw a parallel line from the end of wave 3 and project upward to wave 5. This is your target for wave 5. This would be for a normal wave 5. An extended wave 5 would push higher. It the price fails to hit the projected trend line to wave 5 then the market is weak and you should look for a sell off.

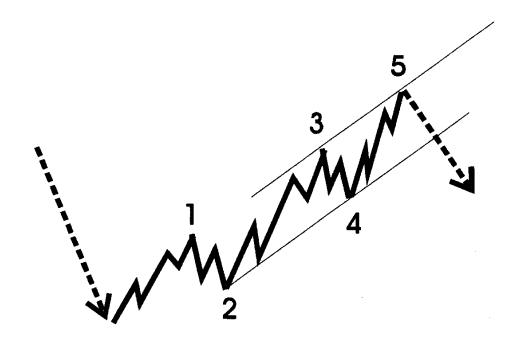


Fig. 24

# Targets for Wave 5

# Method 2

Mostly wave 3 is the strongest wave showing a very fast acceleration relative to wave 1 and 5. If wave 3 indeed shows a nearly vertical rise or decline, then draw a trend line-connecting wave 2 and 4 and draw a parallel line from wave 1. This parallel line will cut through wave 3 and will target wave 5. Experience shows this is a very valuable channel.

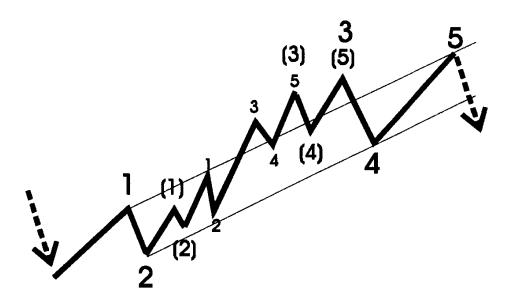


Fig. 25

# Targets for Wave D and E

As soon as wave B has finished you can draw a trend line connecting the origin of wave A and the end of wave B to get a target for wave D, provided a triangle indeed is developing, which is more certain after completion of wave C.

As soon as wave C has finished you can craw a trend line connecting wave A and the end of wave C to get a target for wave E almost never stops at the trend line precisely, it either never reaches the trend line or it overshoots the trend line fast and temporarily.

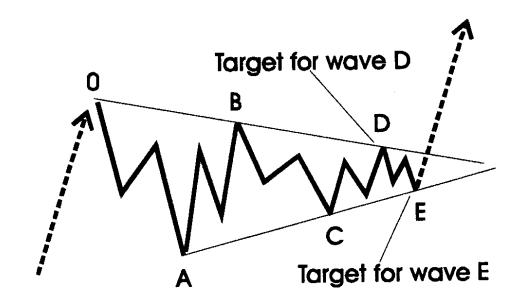


Fig. 26

# Targets in a Double Zigzag

Drawing a channel is very useful to separate Double Zigzags from impulsive waves, which is difficult since both have impulsive characteristics.

Double Zigzags tend to fit a channel almost perfect, while in an impulsive wave the third wave clearly breaks out of the channel.

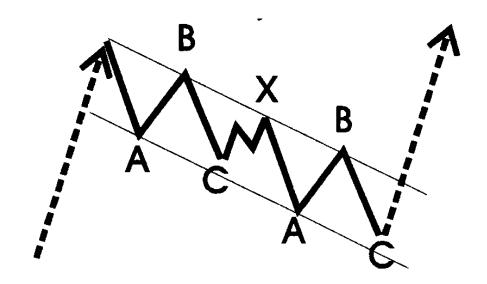


Fig. 27

#### Fibonacci Ratios

The Fibonacci series are a mathematical sequence in which any number is the sum of the two preceding numbers.

The sequence goes as follows: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144 and so on.

The properties of this sequence appear throughout nature and in the arts and science. Most notable is the ratio of 1.618 which is called the "Golden Mean". It was discovered even in ancient times. The number can be approached by dividing a Fibonacci number by its preceding number as the sequence extends into infinity. The ratio of .618 is also very prominent when analyzing Fibonacci relationships.

The wave counts of the impulse and corrective patterns 5 + 3 = 8 are Fibonacci numbers.

Analyzing Fibonacci relationships between price movements is important for several reasons:

- 1) You can control your wave analysis.
- 2) The better the Fibonacci ratios of your wave count, the more accurate your count is, because in some way or the other all waves are related to each other.
- 3) You can project realistic targets once you have distinguished different scenarios, which point in the same direction.
- 4) Since Fibonacci manifests itself in the proportions of one wave to another, waves are often related to each other by the ratios of 2.618, 1.618, 1, 0.618, 0.382 and 0.236. This fact can help you in estimating price targets for expected waves. If , for example a wave 1 or A of any degree has been completed, you can project retracements of 0.382, 0.50 and .618 for wave 2 or B, which will give you your targets.
- 5) Most of the time the third wave is the strongest, so often you will find that wave 3 is approximately 1.618 times wave 1.
- 6) Wave 4 normally shows a retracement, which is less than wave 2, like 0.236 or 0.382. If wave three is the longest wave, the relationship between wave 5 and three often is 0.618.
- 7) Also wave 5 equals wave 1 most of the time.
- 8) The same relationship can be found between A and C waves. Normally C equals A or is 1.618 times the length of A.
- 9) You can even combine waves to find support and resistance zones. For example the next price movement of wave 1 and 3 times 0.618 creates another interesting target for wave 5.
- 10)It is worthwhile to experiment a lot with your wave count, Fibonacci will help you to solve the rhythm of the markets.

# **Targets**

#### Wave 1

The first wave of a new impulsive price movement tends to stop at the base of the previous correction, which is the B wave. The often coincides with a 38.2% or a 61.8% retracement of the previous correction.

#### Wave 2

Wave 2 minimally retraces 38.2% and mostly 61.8% or more of wave 1. It often stops at subwave 4 and more often at subwave 2 of previous wave 1. A retrace of more than 76% is highly suspicious, although it doesn't break any rules yet.

#### Wave 3

Wave 3 minimally is equal to wave 1, except for a Triangle. If wave 3 is the longest wave it will tend to be 161% of wave 1 or even 261%.

#### Wave 4

Wave 4 minimally retraces 23% of wave 3 and more often reaches a 38.2% retracement. It normally reaches the territory of subwave 4 of the previous 3<sup>rd</sup> wave. In very strong markets wave 4 could only retrace 14% of wave 3.

#### Wave 5

Wave 5 normally is equal to wave 1 or travels a distance of 61.8% of the length of wave 1. It could also have the same relationships to wave 3 or it could travel 61.8% of the net length of wave 1 and 3 together. If wave 5 is the extended wave it mostly will be 161.8% of wave 3 or 161.8% of the net length of wave 1 and 3 together.

#### Wave A

After a Triangle in a fifth wave, wave A retraces to wave 2 of the Triangle of previous wave 5. When wave A is part of a Triangle, B or 4 it often retraces 38.2% of the complete previous 5 wave (so not only the fifth of the fifth) into the territory of the previous 4<sup>th</sup> wave. In a Zigzag it often retraces 61.8% of the fifth wave.

#### Wave B

In a Zigzag wave B mostly retraces 38.2% or 61.8% of wave A. In a Flat, it is approximately equal to wave A. In an Expanded Flat, it usually will travel a distance of 138.2% of wave A.

#### **Wave C**

Wave C minimally has a length of 61.8% of wave A. It could be shorter in which case it normally is a failure, which foretells an acceleration in the opposite direction. Generally wave C is equal to wave A or travels a distance of 161.8% of wave A.

Wave C often reaches 161.8% of the length of wave A in an Expanded Flat. In a contracting Triangle wave C often is 61.8% of wave A.

#### Wave D

In a contracting Triangle wave D often travels 61.8% of wave B.

#### Wave E

In a contracting Triangle wave E often travels 61.8% of wave C. It cannot be longer than wave C!

# Wave X

Wave X minimally retraces 38.2% of the previous A-B-C correction; a retracement of 61.8% is also common.

#### Trading the Elliott Wave

The Elliott Wave provides you with the most objective and disciplined method available for trading. Only a handful of patterns exist, sometimes easy to recognize especially in strong impulsive waves. The available patterns tell you where the market is heading; in what way (or structure) this will happen and under what circumstances the pattern gets a stronger probability. Also the pattern will tell you when it is no longer valid because of the occurrence of an intolerable price action. This makes it possible to exactly determine your entry and exit points, which is an outstanding characteristic of the Elliott Wave.

The key to forecasting markets with the Elliott Wave lies in determining the probabilities of alternative scenarios. If you find several alternative counts pointing in the same direction, you have found an excellent trading opportunity.

Some people, mainly those who could not successfully apply the Elliott Wave themselves, will tell you either it is too complex and subjective or that the waves don't exists at all, suggesting the market follows a random pattern.

Obviously the Elliott Wave can get very complex-especially in corrective waves- since you will have to look for patterns, which contain patterns, which contain patterns etc. etc. But it never loses its objectivity if you apply the rules and guidelines. The only problem is that sometimes it is not totally clear if the internal structure of a wave is a 3 wave or a 5 wave. In that case you will have to determine alternatives for both internal wave structures and look for other confirmations, such as channels, indicators and Fibonacci ratios. Below we will mention the key steps for Elliott Wave analysis and supply basic trading patterns to search for.

# General Directives for Trading

Now you can use the Automatic Analysis to trade profitably, the more probable an outcome the better opportunities. The more alternatives point in the same direction the more certain the market will move accordingly. The Automatic analysis will generate an ever objective and consistent wave count and will always present the most probable outcome first, set by objective rules and guidelines implementing a true Elliott Wave model. Those who really would like to learn the Elliott Wave have to really study the ins and outs. In the following we offer some directives. These directives come from our own experience as well as many publications on this subject. Of course every trader or analyst should find his own path to success.

# Study the Patterns

- know the rules and guidelines
- learn the internal structure of patterns, which enables you to recognize a pattern within a pattern
- remember that only waves 1,3,5, A and C can be impulsive waves
- all other waves are corrective, against the trend, and show overlap in their internal structure

# Design Alternative Scenarios by Labeling the Chart.

- Start labeling the chart by taking into account the following rules and guidelines:
- Separate impulses from corrections, an impulse normally shows acceleration and no overlap, a correction a sideways pattern
- Waves of the same degree should have the same proportions, which is especially important for wave 2 and 4. A minuscule 4<sup>th</sup> wave cannot belong to a big wave 2 and so on.
- Wave 2 can never retrace more than 100% and go beyond the origin of wave 1.
- Wave 3 normally is the longest wave and shows the most powerful acceleration
- In wave 3 there is never an overlap between wave 4 and 1, as it occurs in fifth waves (and first or A waves
- Label the big picture, is it a three or a five?
- Label more in detail, by labeling the smaller wave degrees, then go back to the large wave degrees, changing your labels if necessary

- Check if the required internal structure of your waves comply with the rules and guidelines. For example a B wave never can consist of five waves and so on
- Check if the internal structure of the internal structure is correct. For example an (expanded) Flat consists of a 3 wave, again a 3 wave and a 5 wave structure. If this is not true, change your labeling
- Check your wave count for alternation, especially with wave 2 and 4.
   If wave 2 showed a simple Zigzag, wave 4 should show a complex pattern
- A corrective pattern mostly minimally carries into the territory of the 4<sup>th</sup> wave of the previous impulse wave
- Use momentum indicators and volume to support your wave labeling. Wave 3 should have the highest momentum and volume (if it is the longest wave).
- Calculate Fibonacci relationships. If your wave count reveals a lot of reasonable Fibonacci ratios, you have found an interesting count.
- Throw in channels and determine if your wave count more or less fits these channels
- Design as many scenarios as the Wave Principle allows for, with regard to the wave degree or time frame you are analyzing
- Do the same for shorter and longer time frames (or lower and higher wave degrees) and try to narrow down alternatives by fitting them to a multiple of wave degrees
- Assess the probabilities of these scenarios by studying their compliance with the permitted internal wave structure, the outcome of Fibonacci ratios and the fit of channels
- Draw the expected price action/pattern of each scenario you have designed, mark price levels where you get signals to enter/exit market.

#### Design a Trading System

- Determine what time frame (or wave degree) you would like to trade
- Determine which patterns and alternative wave counts give the best trading opportunities, such as when several alternatives all produce a price movement in the same direction
- Determine objective entry points based on patterns
- Determine objective exit points, also based on patterns. You should

for example exit a trade when a price movement makes your preferred wave count invalid.

#### **Control Your Emotions**

- Don't be afraid to take a loss if your stop gets hit. This means you
  will have to admit you were wrong on this trade. Don't be afraid of
  loosing the (little) profit you have made, only exit if your system or
  wave analysis tells you to
- Follow the rules of the Elliott Wave and don't second-guess the market. Believe what the Elliott Wave tells you, your stop will protect you
- Of course there will be loosing trades; a 100% score is impossible.
   But if you limit your losses (by executing your stop) and let your profits run, you could be very successful. So maintain your discipline and learn from all trades

### Trading Example

In this section you will be shown how to recognize an impulsive wave from a corrective wave. In the same way as these basic patterns are compared and analyzed here, you can do it yourself with all other patterns. Suppose the market has experienced a big sell off. From the bottom it starts to rise. Wave 1 (or A) and wave 2 (or B) have been completed and the market starts to rise again. The first picture shows two scenarios possible, either an impulse (1,2,3) or an A,B,C correction. The pictures there under demonstrate which price action to expect in an impulse or in a correction: The pattern can be an impulse only if the 4<sup>th</sup> wave does not overlap the first, a level indicated by the horizontal "stop" line. As soon as the price drops under this line-before wave 5 has been completed- you have your first signal of a pending correction (picture above at the right). This correction will be confirmed when the price drops under the origin of wave C, which is the end of wave B. As long as it doesn't drop under the "confirmation" line, it could still be an extended 3<sup>rd</sup> wave that subdivides. In that case the C or 3 wave is only wave 1 of the third wave! You will find the pattern called extension under the chapter "Patterns".

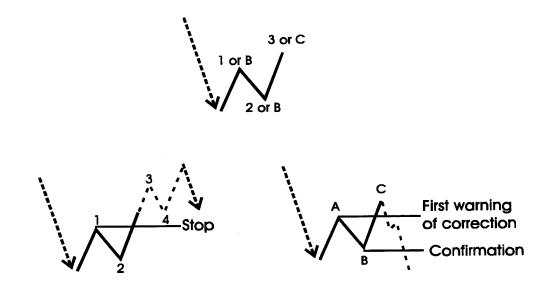
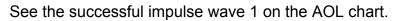
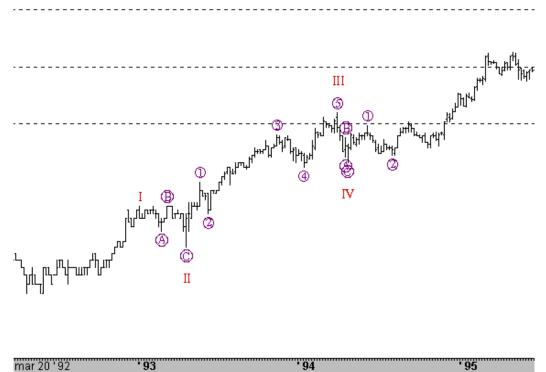


Fig. 28





See the failure of a wave to go up and the result of and an A B C correction wave in the gold chart.



### **Indicators**

A selective set of indicators can help you determine the wave structure. Remember that an Elliott Wave trader makes his trading decision mostly on the wave count and not solely on indicator values, On the other hand some indicators can be very helpful, because they show specific characteristics in different waves.

Indicators can be added to the price chart or in a separate window. Normally, indicators like moving averages and others, which have the same scaling as a price chart, are added to the price chart itself. Other indicators, like RSI for example, are clearer if displayed in a separate window.

The most useful indicators are the following, not all of them have been explained, since all books on technical analysis already clarify their use:

- RSI
- MACD
- DM1
- Momentum
- Exponential Moving Average
- Simple Moving Average
- Displaced Moving average
- Rate of Change
- Elliott Oscillator
- Stochastic
- Volume
- Bollinger Bands

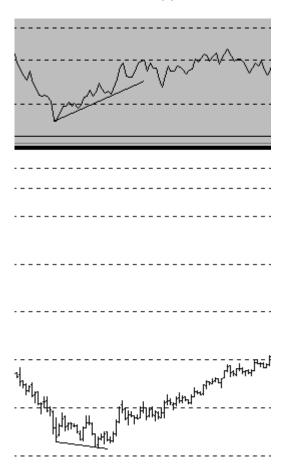
Indicators always have the same compression as the price chart. For example if the RSI has been set to a time period of 14 and a daily bar is displayed in the price chart, then the RSI will calculate a 14-day RSI. If you change the price chart to weekly, the RSI will calculate a 14-week RSI. The same accounts for intra day (intra day version only), for example an hourly chart creates an 14-hourly RSI and so on.

# Relative Strength Index

Relative Strength Index (RSI) is an oscillator developed by J. Welles Wilder, JR. It is a very popular indicator and useful when applying the Elliott Wave.

RSI measures the strength of any price action by monitoring changes in its closing prices. It is a leading or a coincident indicator, it never lags the price action. The RSI indicator fluctuates between 0 and 100. Horizontal reference lines in the RSI are often drawn at 30 and 70. RSI gives several buy or sell signals, which are divergences, patterns, trend lines and the absolute level of RSI, the RSI levels as already mentioned. Divergences are the most important signals. Divergences between RSI and prices give the strongest buy and sell signals. Normally this happens at tops and bottoms in an impulsive wave, which consists of five waves. If the C wave is equal in length to wave A, the RSI should also show a divergence. Generally a divergence indicates that the trend is weak and ready to reverse.

A bullish divergence gives a buy signal, when prices fall to a new low but RSI fails to make a new low. You can buy as soon as the first RSI bottom has been below its lower reference line (for example at 30) and the second bottom of the RSI happens above the reference line. See chart below.



A bearish divergence works exactly the same, but the other way round. It gives sell signals. You can sell as soon as the first RSI high has been above its higher reference line (for example at 70) and the second top of the RSI happens underneath the reference line. See Chart below.

Trend lines, support and resistance lines, and patterns, like "head and shoulders", work fine with RSI. Because RSI leads the price chart, it often gives early warnings of likely trend changes. RSI trend lines are penetrated before it happens in the price chart and patterns can be completed a few days before completion in the price chart. Of course the fifth wave of a RSI mostly is a failure, except when the fifth wave is an extension.

RSI levels indicate that above 70 the market is overbought, which calls for a correction, although the RSI can reach 80 and more in a bull market. Under 30 the market is oversold, so a rise can be expected, but be careful because in a bear market a RSI beneath 20 is quite common. So when the RSI goes above 70 and certainly above 80, look for a selling opportunity. Beneath 30 and certainly 20 you should look to buy.

# Moving Averages (MA)

A 10 day MA shows the average price for the past 10 days, a 30-day MA shows the average price for the past 30 days. A moving average normally will be displayed in the price chart as a line, by connecting each day's MA values.

Moving averages can be calculated as a simple moving average, which gives each day an equal weight.

Also, an exponential moving average can be calculated, where the latter days are heavier weighted. With a moving average you can see the main trend more easily, because it filters out the small price movements. When it rises, the moving average shows that investors become more optimistic. When it falls, investors become more pessimistic.

An exponential moving average (EMA) is a better trend-following indicator than a simple MA, because it responds faster to the latest price changes than a simple MA and skips older data which are less relevant. For the investor moving averages are most helpful in following the trend. The direction of its slope in each time frame tells you what the trend of this specific time frame is. Be sure to trade in the direction of the trend of the time frame you use. When you are trading a trend, you can use a short term MA as a stop. See 30 EMA below.

In the price chart you could also display a short term MA and a longer term MA. When the shorter term MA crosses the longer MA in upward direction this is a buy signal, which confirms the up trend. When it dips under the longer term MA this is regarded as a sell signal. Be careful with this signal, because a sideways market shows a lot of crossovers and thus a lot of false signals. You can also use a moving average as a stop. The shorter your investment horizon the shorter your moving average should be. As soon as prices break the moving average line you can close your position. This can be very useful if you want to invest in a third wave only.

# Moving Average Convergence Divergence (MACD)

Gerard Appel has constructed a more advanced indicator, called the Moving Average Convergence-Divergence, or MACD, which is built of three exponential moving averages. It is displayed as two lines, the MACD line and a the Signal line. The MACD line is built out of two exponential moving averages (EMAs). The signal line is built from the MACD line smoothed with another EMA. The MACD line responds more quickly to changes in prices.

Buy and sell signals occur when the fast MACD line crosses above or below the slow Signal line.

You can use the crossovers of the MACD and signal lines to trade with the trend of the market. The fast MACD line crossing above the slow Signal line gives a buy signal. The fast MACD line crossing below the slow Signal line gives a sell signal

Also you can look for divergences as explained with the RSI to determine the momentum of the market. Again a wave 3 should have the lowest (bear market) or highest (bull market) MACD. Divergences in the MACD don't work on longer term.

### Momentum

The Momentum indicator shows how strong the trend is by measuring its acceleration. The faster Momentum gains or loses speed the more the trend accelerates. This is a leading indicator, which usually reaches a peak before prices reach their highs and reaches a bottom before prices reach their lows.

The trend is up as long as Momentum gets higher and higher, you can normally hold on to your bullish positions. As long as it keeps reaching new lows, you can hold on to your short trades. Every time Momentum reaches a new high, the up trend is still accelerating. Every time Momentum reaches a new low, the downtrend is still accelerating. When the direction of Momentum changes, without having set a divergence already, be prepared for a reversal.

You can use Momentum to catch large trends, for this purpose use a longer time frame. If you want to spot changes in the trend quickly, then use a shorter period Momentum.

When the direction of Momentum changes, the pattern could be the third of a C wave or the third of a five wave. A small correction will take place to form the 4<sup>th</sup> wave. The fifth wave still has to develop in the same direction of the trend. When this fifth wave is underway, you can cover your shorts or sell your longs.

Again a divergence is one of the most powerful signals, which normally occurs in every five wave structure. The bigger the divergence the sharper the reversal can be. If Momentum fails to make a new high or low, this could be a C wave or a five-wave structure, which depends on the wave structure of larger degree.

If you can recognize five waves in a C wave in a larger trend, which points to the opposite direction, and at the same time Momentum makes a lower top or a higher low, it is better to close your (trend following) positions at once. After a C wave the reversal could be quite sharp. On the other hand, if the larger trend is still up, this only could be wave 3 with wave 4 and 5 to follow. Here you could hold on to your positions depending on the wave degree you have determined. In a larger degree a bigger reversal can be expected, making it worthwhile to exit. Later on you could possibly reenter at a better price.

You can also draw trend lines or channels to identify support and resistance in indicators. Usually Momentum breaks through its resistance a long time (relatively speaking) before prices do.

### Rate of Change

Rate of Change is quite similar to Momentum, since it also measures the strength of a trend. The only difference is that Rate of Change is calculated differently. It divides today's price by a past price. The faster Rate of Change gains or loses speed the more the trend accelerates. This is a leading indicator, which usually reaches a peak before prices reach their highs and reaches a bottom before prices reach their lows.

The trend is up as long as Rate of Change gets higher and higher, you can normally hold on to your bullish positions. As long as it keeps reaching new lows, you can hold on to your short trades positions. Every time Rate of Change reaches a new high, the up trend is still accelerating. Every time Rate of Change reaches a new low, the downtrend is still accelerating.

When the direction of Rate of Change changes, without having set a divergence already, then be prepared for a reversal. You can use Rate of Change to catch large trends, for this purpose use a longer time frame. If you want to spot changes in the trend quickly, then use a shorter period for Rate of Change.

When the direction of Rate of Change changes, the pattern could be the third of a C wave or the third of a five wave. A small correction will take place to form the 4<sup>th</sup> wave. The fifth wave still has to develop in the same direction of the trend. When this fifth wave is underway, you can cover your shorts or sell your longs. Again a divergence is one of the most powerful signals, which normally occurs in every five-wave structure. The bigger the divergence the sharper the reversal can be. If Rate of Change fails to make a new high or low, this could be a C wave or a five-wave structure, which depends on the wave structure of larger degree. If you can recognize five waves in a C wave in a larger trend, which points to the opposite direction, and at the same time Rate of Change makes a lower top or a higher low, it is better to close your (trend following) positions at once. After a C wave the reversal could be quite sharp. On the other hand, if the larger trend is still up, this only could be wave 3 with wave 4 and 5 to follow. Here you could hold on to your positions depending on the wave degree you have determined. In a larger degree a bigger reversal can be expected, making it worthwhile to exit. Later on you could possibly reenter at a better price.

You can also draw trend lines or channels to identify support and resistance in indicators. Usually Rate of Change breaks through its resistance a long time (relatively speaking) before prices do.

### Elliott Oscillator

This indicator is very useful in counting waves. It was discovered by Tom Joseph in 1987 and named the Elliott Wave Oscillator.

The pattern this oscillator produces has a strong correlation with the pattern of the Elliott Wave. For example the 3<sup>rd</sup> wave mostly is the strongest wave. At this point generally the Elliott Oscillator shows the highest value, thus confirming a 3<sup>rd</sup> wave. The Elliott oscillator works in all time frames, provided you have enough periods or bars available in your price chart. In order for the Elliott Oscillator to produce reliable values your price chart should contain 100 bars minimally.

If you work with intra day data, you can zoom in on each wave to check the pattern of the Elliott Oscillator, as long as enough detail is available.

Formula: 5-period MA - 35 period MA of the (High + Low) /2 A divergence between the Oscillator and prices indicates a trend reversal. When the market has set new lows but the Oscillator does not, you have probably found wave 1 in Elliott terminology.

When you spot this divergence you could do your first trade and buy the market. At this juncture risk is high, so watch the market closely. Always sell when the market reaches a new low, since this could be the beginning of a renewed sell off.

Next a correction will take place, which is wave 2. Neither the market will reach new lows in wave 2, nor will the Elliott Oscillator. If wave 2 is complex, the oscillator will pull back to zero. A simple wave 2 on the contrary will hardly affect the oscillator. When the oscillator reaches zero you could buy again to profit from the coming 3<sup>rd</sup> wave, on the condition that the pattern of supposedly wave 2 is corrective (when it shows a lot of overlap and not a 5 wave)

Then the market will build wave 3, normally the strongest price movement. Both the indicator and the market will reach new extremes. As soon as wave 3 has gone beyond wave 1, the market will accelerate sharply. The oscillator does not provide for an exit point in this time frame or wave degree, so you have to look at the subwave of this wave degree. If you detect a divergence between subwave 3 and wave 5 of the main 3<sup>rd</sup> wave, you have found your exit.

After wave 3 again a correction will take place in wave 4. Notice that wave 4 will be complex if wave 2 was simple and vice versa. Normally (90% of all 4<sup>th</sup> waves) the oscillator will at least retrace to zero in wave 4. As long as the oscillator does not retrace more than 138.2% of the wave three peak, the correction is considered to be wave 4. If it retraces more prepare yourself for a decline, since there is a strong probability that the price rise was a corrective three wave in a contra trend price movement. When the Oscillator reaches zero you could enter the market again to profit from wave 5, on the condition that the pattern of wave 4 was corrective.

Most of the time the market will make new highs in the  $5^{th}$  wave, but the oscillator won't come near its top in wave 3. This divergence is a strong sell signal, on the condition that the pattern of the  $5^{th}$  wave is complete. If both the oscillator and the market make new highs, you will have to relabel the  $5^{th}$  wave to wave 3!

# The ELWAVE Program - Introduction

#### Attention:

You will need the special "Automatic analysis" module to automatically analyze price data according to the Elliott Wave Principle. In addition, you will need the "Trading signals" module to generate trading indications automatically.

In this chapter we will introduce you to our Elliott Wave software. We will show you how to use ELWAVE without the requirement of being an Elliott Wave expert.

Now Elliott Wave analysis and trading is just a few mouse clicks away.

For experts we explain the possibilities and advanced features in the Chapters "AUTOMATIC ANALYSIS", "TRADING SIGNALS" and "MANUAL WAVE COUNT".

The Automatic analysis chapter will briefly describe how our Elliott Wave model works, a short description of analysis options, the difference between the CLASSIC and MODERN rules and how to inspect the alternatives ELWAVE has found.

The Trading signals chapter explains the outcome and interpretation of the signal indications as well as further explanation of the SUMMARY INSPECTOR, the ALERTS INSPECTOR and the SIGNALS INSPECTOR.

The Target clusters chapter explains how to interpret time projections using the TIME CLUSTERS indicator or the Target zone, which can be shown in the chart.

The chapter Manual Wave count explains how to make an Elliott Wave count yourself instead of have ELWAVE do it for you. Of course you have to be an expert to make a high quality count, but fortunately ELWAVE is able to check the count, even if you have the Basic module only. In addition you will find more information about the WAVE INSPECTOR and the WAVE TREE.

If you are looking for explanation on specific topics, check out the chapter "Technical Tools-Extra information". Here you will find more information on for example loading and saving data and scenario files, the price chart window, trend lines, channels, time ratio ruler and real-time data feed. For your convenience we have also added a chapter that describes the menu options one by one, called "Using the menu".

Naturally we have included an extended chapter on the basics of the Elliott Wave Principle and a detailed description of the Elliott Wave patterns. Reading is not required to use the software, but still highly recommended.

Our manual concludes with a short chapter on Indicators. Not all indicators have been explained, because many books on interpretation and use of these indicators are available. We recommend getting more information on indicators from other sources as well.

Our Automatic analysis uses a true Elliott Wave model to detect validated patterns and to determine the direction of prices, thus enabling you to forecast markets more accurately. In this section you will learn the essentials in order to start using the program right away, assuming you have purchased the full End of Day or Intra day version. If you have the Basic version only, please go to chapter "Manual Wave count".

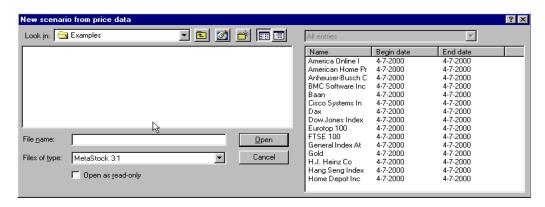
After you have followed the steps listed below you will be able to use ELWAVE. We have assumed that you are familiar with the Windows environment, the way the menu works and so on. If not, you will have to study your Windows manuals.

### **Quick Start**

1. On top of the screen the main menu is listed, click on the menu item to access its options.



2.Load an existing scenario file by choosing Open from the Scenario menu or choose New and From price data to import data. Select the directory that contains your data and choose the correct FILE TYPE.



3. After the chart has been loaded, choose Analyze entire chart from the Analyze menu.



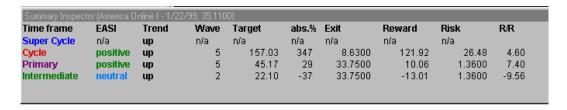
4.Press the TARGET ZONE button in the right lower corner of the chart window.



5. This will then draw the TARGET ZONE and expected market PATH.



- 5.ELWAVE will present all information you need after completion of the analysis, such as
- Preferred alternative
- Targets
- Trading signals
- Entries, exits, risk / rewards etc.



Now take a look at the SUMMARY INSPECTOR to spot opportunities easily in the EASI indicator column. The more positive indications shown, the stronger the uptrend and vice versa. It's that simple.

# Analysis Results

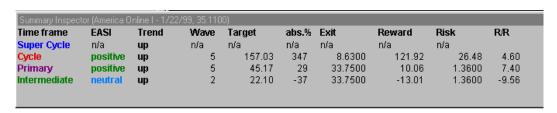
We will now discuss how ELWAVE presents analysis results when you have taken the steps as mentioned before. After completion of an automatic Elliott Wave analysis, ELWAVE will come up with more or less the following screen.



As you see, a lot of information is available, which we will explain step by step in the following sections.

In all predefined layouts (see Analysis menu) ELWAVE will show the SUMMARY INSPECTOR, which probably gives the most important and concise information as depicted in the picture below.

Additionally the expected market PATH as well as the more specific TARGET ZONES are pictured below.

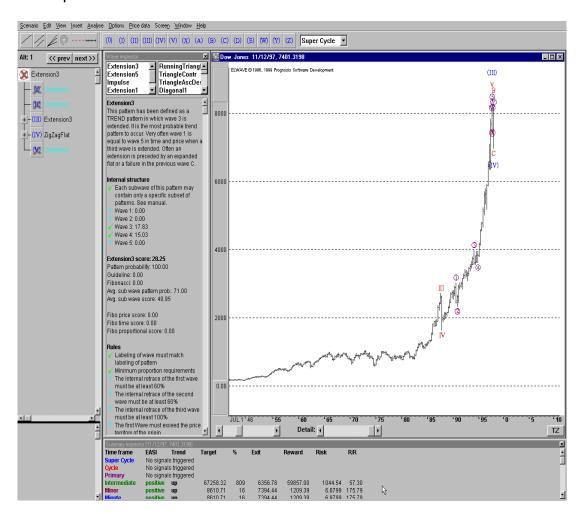


### Price Chart window

In the default layout this window is presented at the left. of the screen. It contains for example the price data, the wave labels that have been inserted by ELWAVE and the automatic channels.

In this example an analysis of 100 years of Dow Jones data, 3 wave degrees or time frames are displayed.

Every wave degree has a different color, all connected objects, such as channels, target bars, have the same color. TARGET BARS are displayed as vertical lines, representing the minimum and maximum expected target of the selected pattern. The small diamonds represent the average targets, which correspond with the information in the SUMMARY INSPECTOR (see below). For easy recognition, these diamonds inherit the color of the wave degree or time frame to which they belong. The same goes for the triangles that represent the exits.



### **Toolbars**

On top of the screen, just underneath the main menu, two toolbars are displayed (See the pictures on the previous pages). The OBJECT toolbar or Chart objects contain buttons



for inserting channels, trend lines, time rulers, spirals and trigger lines. Grab the button and drag it into the chart and release it at the required spot.



### The WAVE LABEL toolbar,

The wave label toolbar, which by default lists the "Supercycle" wave labels, can only be used when determining your manual wave count. The setting of this toolbar to a specific wave degree has nothing to do with the automatic Elliott Wave analysis.

### Wave Tree

The WAVE TREE is a tree-structured representation of the first Elliott Wave analysis that is displayed in the chart. It is displayed at the left of the screen. On top of THE WAVE TREE, two buttons "PREVIOUS" and "NEXT" can be found. Clicking these buttons will only affect the highest wave degree and scroll to the next or previous Elliott Wave alternative. To take a look at alternatives from lower degrees, click that particular WAVE BUTTON and click the right mouse button and scroll the alternatives.

The WAVE TREE itself is composed of WAVE BUTTONS, each of them represent a wave in the chart, which in fact is a small or large trend or correction. Together, a group of WAVE BUTTONS build a higher wave degree of a larger time frame.

Clicking a WAVE BUTTON, that displays a wave label, will show that particular wave with the required wave detail, all of its channels and other connected objects.

The small + or - buttons make the WAVE TREE expand or collapse. If you press the + button, the underlying patterns that consist of several waves, each represented by a separate WAVE BUTTON, will be displayed. By expanding the WAVE TREE and selecting lower level waves, you can navigate as deep down into the wave structure as you like. This will show which patterns ELWAVE has found. The patterns found are listed at the right of the WAVE BUTTON.

The most interesting Waves are the unfinished waves, which can be recognized by the gray cross in THE WAVE BUTTON. Obviously a correct forecast of the pattern in an unfinished wave is the key to forecasting markets.

In case a red cross appears in the WAVE BUTTON, the patterns in this wave or in the underlying waves are either not found or are not allowed.

If the Trading signals module is included, double clicking a WAVE BUTTON will show the trading signals for the pattern under inspection.

At the left in the SIGNAL INSPECTOR the trading indications are listed together with the critical price level. At the right the patterns that share this signal, are listed. At the bottom the description of the rule, on which the trading indication is based, is displayed.

Trading signals in ALL CAPS already have been triggered, while Trading signals in lower case have not yet been activated, because their critical price level is not reached. There are four signals:

Entry, to enter a position, which is a buy or sell indication depending on the trend

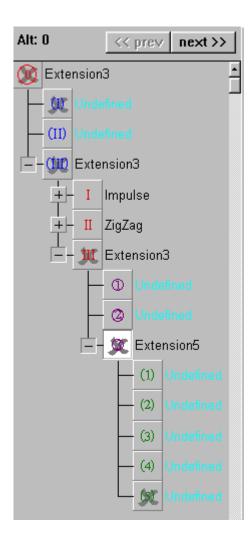
Exit, to exit a position, which is a buy or sell indication depending on the trend

Confirm, this is an alert that the trend has been confirmed, depending on your strategy this can either be used as an entry or an exit

Recalc, if this price level gets penetrated, ELWAVE will update the analysis because a critical price level has been broken, its price level will coincide with some other signals

Use the scroll bars at the right side of the WAVE TREE window or at the bottom to scroll the tree.

As shown in the picture below, clicking on the WAVE BUTTON (or pattern) in the WAVE TREE displays this wave in the price chart, the SWING FILTER (light blue line), a text book example of an impulse pattern and connected TARGET BARS.



# Wave Inspector

The WAVE INSPECTOR gives a lot of additional information on the pattern under inspection. It is not necessary to inspect this information; nevertheless it could be a valuable tool in your trading. Certainly it will teach you which rules and guidelines determine the patterns.

The WAVE INSPECTOR will always display information on the pattern that has been selected as in this case, where the pattern Impulse has been highlighted in the left list box on top of the WAVE INSPECTOR.

At the left the still validated patterns are listed, at the right dismissed patterns are listed. If you choose one of the dismissed patterns, you will notice that at least one of the rules of the pattern has been violated and checked by a red cross.

Use the scroll bar at the right side of the WAVE INSPECTOR window to see more. In the following pictures we have shown the available information.

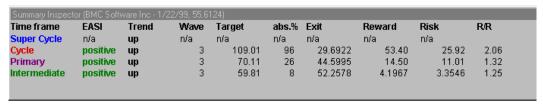
The score on top in bold in the WAVE INSPECTOR is the total score, which is used to rank the alternatives.

The better the Fibonacci ratios, the better the Elliott Wave analysis.

Clicking on the rules and guidelines in the WAVE INSPECTOR will display the critical price levels, where the rules or guidelines get violated, in the chart.

# Summary Inspector

Probably the SUMMARY INSPECTOR gives the most important and concise information, eliminating the need of being an expert Elliott analyst. Using this information will give clear indications on how to trade and when to enter or exit positions.



Apart from the SUMMARY INSPECTOR it is recommended to take into account other information and use other tools as well, in order to make the best trading decision possible.

By default, the SUMMARY INSPECTOR is displayed at the bottom of the screen. The column called EASI is the main thing to watch in combination with the R/R (risk-reward) parameter. As long as the AVG R/R is above zero the EASI column will give a positive or negative indication, depending on the trend. If the AVG R/R turns negative, the EASI will become a "neutral".

If all time frames display the same signal, either a "Positive" or "Negative" and the AVG R/R is above 1, then expect an acceleration in the direction of the trend, provided a large price movement has not yet taken place. A risk-reward of 2 or more is very favorable as long as this is not caused by an extremely small risk in the RISK column.

After ELWAVE for example shows a "Positive" on every time frame, at some point the EASI column of time frames (the smallest time frame first) will turn into a "Neutral" as soon as the TARGET has been reached. As said before TARGETS are displayed in the chart by a diamond, while EXITS are displayed as little triangles. Both TARGET and RISK are presented in points.

Normally a "Neutral" means you can still hold on to your positions. If he smallest time frame turns to a "Negative" or the EXIT, as listed in the SUMMARY INSPECTOR, is penetrated, you have a signal to exit your positions, depending on your trading strategy.

If the EXIT level gets hit this does not automatically mean that the position should be abandoned, especially if the EASI is still a positive (Negative in down market) or a hold. Consider the EXIT to be the first warning signal of a reversal, which has yet to be confirmed. In Elliott terminology the stop of at least one alternative has been hit, invalidating this scenario, but other alternatives could still be possible.

In case all alternatives have been dismissed, because all their exits have been triggered, the SUMMARY INSPECTOR will show a change in the TREND column and /or the EASI column.

These time frames, as highlighted in the above picture, show the relative order of the trends within trends or pattern within patterns that ELWAVE has found automatically. Time frames of the same degree normally do not exactly have the same duration; they are dynamic in nature.

The lower listed TIME FRAMES (or wave degrees) in the SUMMARY INSPECTOR are smaller trends in a larger trend (or the higher listed TIME FRAME).

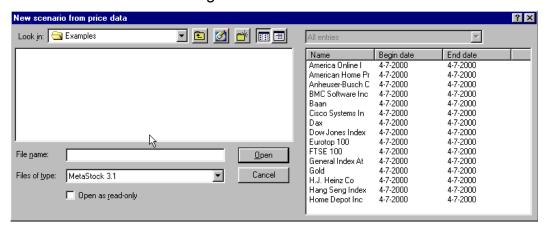
Therefore an Intermediate time frame is a smaller trend in the Primary and so on.

Please note that a wave degree as listed in the SUMMARY INSPECTOR is not related to the duration of the wave degrees as normally defined by the Elliott Wave Principle, which definitions are only tendencies, not fixed and exact.

RISK shows the number of points you risk if you adhere to the exit in the EXIT column.

#### ELWAVE in a Nutshell

1. Only the very first time you have to import an existing (intra day) data file for each security or market provided you save it as a scenario file, which you load the next time. With respect to intra day files, you should use an already existing intra day file and have this updated by the real-time feed (make sure the date and other formats are the same). Alternatively you can start a file from scratch using a real-time data feed!



- 2. Select New from Scenario menu and next From Price data to import data: Import existing data files, choose the type of data to import by selecting FILES OF TYPE in the dialog box as displayed above. Next cruise to the directory where your data files are located. The formats supported are Metastock3.1-6.5, ASCII, TC2000 3.0-4.0, FutureSource, CSI, Keyword and Techtools. From real-time feed, to start collecting tick by tick, building your own intra day files from scratch
- 3. Files of the type you have specified will be listed in the right pane. Click on the file in the right pane once and click on OPEN
- 4. Once you have imported the data, immediately save the chart as a scenario file for later use, giving it the name of the security or market. This makes it easier to load the data file and will save real-time feed settings as well. In addition, a print out of the chart will have included the scenario file. In order to do so, choose Scenario and select Save.
- 5. The next time you would like to analyze this market, just load the scenario file you have just saved, choose from the main menu Scenario and select Open, the scenario file will remember where to find the data file automatically.
- 6. ELWAVE will use a default analysis layout to present results, taking into account your screen resolution. If you like, you can readjust all the windows to make a tailor made layout. Save it by selecting Analyze from the main menu and by choosing the option Save Custom layout.

- 7. Start Automatic Analysis by choosing Analyze from the main menu and select the option Analyze entire chart to generate an analysis from scratch. Of course you must have loaded data first. You may analyze a market from scratch or analyze an existing wave count in more detail (see examples in the next chapter). ELWAVE will present still remaining alternatives together with their targets and channels automatically.
- 8. The SUMMARY INSPECTOR will show concise information about several time frames. The most important information to watch is the Trend and EASI (Elliott Advanced Signals Indicator). For each time frame EASI will show Positive, Negative or Neutral, if 2 or 3 consecutive time frames show positive or negative, an interesting trading opportunity is emerging in the direction of the trend.
- 9. Press the TARGET ZONE button, which is located in the lower right corner of the chart window, to show the expected path of prices as well as the target zones in the chart.
- 10. Save your analysis by choosing Save from the Scenario menu
- 11. More detailed analysis using results of Automatic analysis, the WAVE TREE has appeared at the left after you have analyzed the entire chart as described under point 7, click with your left mouse button on the wave (button) in the WAVE TREE you want to analyze select Analyze from the main menu choose the Analyze selected wave option.
- 12. Using a wave count defined by the user:
  - first load your scenario file containing your own wave count
  - select Analyze from main menu
  - choose option Check wave count
  - if this is your first time, accept the settings of the dialog box by clicking OK
  - The WAVE TREE appears at the left, click with your left mouse button on the wave (button) to be analyzed select Analyze from the main menu
  - choose Analyze selected wave option
- 13. ELWAVE will present the preferred wave count in the WAVE TREE, displayed at the left, as well as in the chart. In addition it will display all formation in the WAVE INSPECTOR
- 14. You may cruise the chart by clicking on the WAVE BUTTONS in the WAVE TREE. This will bring you to the required section in the chart, it will zoom in on this area and adjust detail accordingly. Alternatively, to zoom in, position your mouse pointer on empty space of the chart and press the RIGHT mouse button (not the left button) and a menu pops up which

- contains the option Zoom in, select this and drag your mouse on the section of the chart
- 15. To expand wave degrees, click on the + Button in the WAVE TREE, which are positioned in front of this wave degree.
- 16. The preferred pattern is listed behind the WAVE BUTTON
- 17. To make the WAVE TREE disappear select from View the option WAVE TREE, use this as a toggle for display
- 18. By default the WAVE INSPECTOR will come up with complete information about the preferred pattern of largest degree, which is the top WAVE BUTTON of the WAVE TREE.
- 19. If you press another WAVE BUTTON in the WAVE TREE, immediately the WAVE INSPECTOR will show information on the preferred pattern, found in this wave degree.
- 20. It will show a standardized drawing of this pattern in the chart, presenting targets for this pattern and the path the pattern is expected to follow.
- 21. On top of the WAVE INSPECTOR you will find two list boxes. The left box lists the patterns that have been approved, the right one that have been rejected. Select one of these patterns to see why patterns have been approved or rejected by inspecting the rules and guidelines that can be found in the WAVE INSPECTOR.
- 22. Click on a rule or guideline in the WAVE INSPECTOR to visualize it in the chart.
- 23. To make the WAVE INSPECTOR disappear select from View the option WAVE INSPECTOR, use this as a toggle for display.
- 24. A summary of Trading Signal indications will appear automatically in the SUMMARY INSPECTOR provided the Trading Signals module has been ordered.
- 25. To display indicators for the active chart, choose from the main menu Insert and select New Indicator pane. With your mouse select the indicator in the dialog box that pops up, Press the ADD button and Press OK. Some Indicators can only be inserted in the chart, choose New indicator in chart...
- 26. The same way you can show the TIME CLUSTERS, provided the Target Clusters module has been purchased.
- 27. If you like to use the other tools of ELWAVE as for example Channels, Fibonacci Pane and Quick targets, you will have to convert one of the alternatives of the automatic count to manual wave labels first. Select Analyze from the main menu and choose Convert to wave count. Please note that only the activated alternative will be saved in a separate window.

Hereafter you may save the scenario by choosing from the Scenario menu the option Save as...

- 28. Loading a scenario containing manual wave labels, will not automatically display the WAVE TREE and WAVE INSPECTOR. In order to accomplish this you have to choose Check Wave count from the Analyze menu
- 29. To display Fibonacci ratios of the selected wave label, choose from the main menu Insert and select Fibonacci pane. This will only work after you have converted to a wave count! And again you have to click on the wave label first to select it!
- 30. To visualize more targets, select the wave label in the chart, press the right mouse button and choose Quick targets
- 31. To drop channels, trend lines, spirals and the TIME RULER, grab this object in the CHART OBJECTS Toolbar on top of your screen and drop it on the wave label of your choice or at another position in the chart.
- 32. In order to save all settings of the chart, including indicators, channels, targets etc., save the scenario frequently.
- 33. You are allowed to analyze multiple charts in several sessions of ELWAVE.
- 34. If you have analyzed several charts, you can toggle display of the chart together with full analysis information by using from the main menu Windows and selecting one of the charts listed as menu items.
- 35. To use the simulation feature (only available on purchase of Trading Signals), choose Options from the main menu and select Truncate price data...

Before you choose this option, move the mouse pointer over the chart area where you would like to truncate the chart and watch the right end of the status bar for the index number, which has to be inserted in the Truncate dialog box. Truncate price data will force the software to neglect future data. Now instruct ELWAVE to analyze these truncated data and compare the analysis outcome and signals with what really happened in the future.

For easy comparison future data has been grayed out in the chart window.

36. Press CTRL-1 (or a higher number of the numerical keypad, NUM LOCK must be ON) to add future data to the price chart. If critical price levels get penetrated when adding future data, the ALERT INSPECTOR will show the trading indications automatically.

### Batch Processing

The ELWAVE BATCH PROCESSOR is a new and powerful addition to the ELWAVE suite of financial analysis products. Frequently recurring operations, such as analysis or printing of charts, can now be automated.

The following dialog box will come up when you double click the Batch processing icon.

Now you can define which charts you would like to have analyzed without the need to give the software every instruction by hand for every chart.

You can only use previously defined Scenario files (extension \*.ELW)!!

### **Batch Processing Step by Step**

1. Define scenario files for each data file. Load the data file in ELWAVE and save it by choosing Scenario from the main menu and select the menu item Save. Repeat this for every data file you would like to include in the batch processing.

Save these scenario files in a separate directory, so you can track them easily.

- 2. If you have already defined a set of scenario files, press the ADD button to choose which scenario files to include. The above displayed dialog box will appear, cruise to the directory where your scenario files are located and select the files one by one or select multiple files by clicking the first scenario file, keeping SHIFT key pressed and clicking on the last scenario file with the left mouse button. After selecting scenario files click on the OPEN button.
- 3.Alternatively you can drag scenario files from the Explorer into the BATCH PROCESSING dialog box.
- 4. The BATCH PROCESSING dialog box will be filled with the selected scenarios. Behind each scenario files you will find the status of the analysis, which can be TODO, DONE, STOPPED.
- 5. Now set other options you would like to have automated such as:

#### Analyze chart

Analyzing multiple charts automatically is the main purpose of batch processing so normally you would like to have this included.

#### Print chart

Check the Print chart option to print every chart automatically after it has been analyzed

#### Save chart

Check the Save chart option to save every analysis automatically for later inspection.

### Print target clusters

Check the Print target clusters to also print the target zones with every chart automatically.

Maximum number of ELWAVE instances to be used simultaneously

You can start several sessions (increase the number) of ELWAVE, which is useful for computers running under NT equipped for dual processing. Otherwise it is advised to leave the setting at its default value.

- 6. Press the SAVE or SAVE LIST AS... button to save the list of scenarios you have just defined to include with the batch processing. The next time you can easily retrieve the same list. Choose LOAD LIST... to do so.
- 7. Press the START button to start the batch processing.
- 8. Press the STOP button to halt the batch processing
- 9. To remove a scenario from the list press the REMOVE button, to remove them all at once press REMOVE ALL
- 10. If you press the RESET STATUS button the batch processing status will be reset to TODO

#### Other information

While the batch is being processed, it's still possible to add new files by dragging them into the window or by using the ADD... button.

While the batch is being processed, it's also possible to remove all or a selection of files from the set. Scenarios that were being processed at that time are stopped before they are removed from the list.

In addition, while the batch is being processed, it's also possible to change the maximum number of instances that ELWAVE can use. For example: if you have a dual-processor system, you may want to run the batch processor with a maximum of one instance while you are still working on the system yourself, and switch the batch processor to '2' when you are going home for the day, leaving the batch processor running.

The ELWAVE Batch Processor can make use of up to 8 processors in a single system, provided enough memory is available.

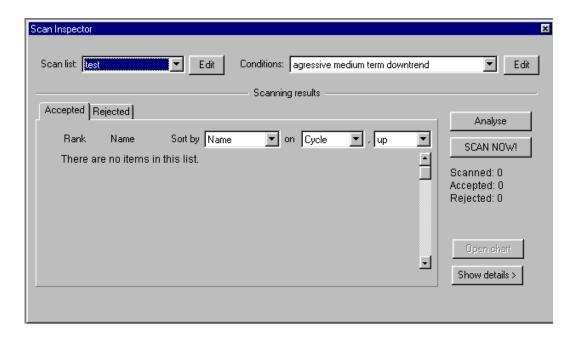
# Scanning

The scanning modules come in two different versions, which are called SCANNING END-OF-DAY and SCANNING PROFESSONAL.

This way the user can choose how much to add to ELWAVE. Of course THE SCANNING PROFESSIONAL is the most powerful module that works not only on end of day data, but on intra day data as well.

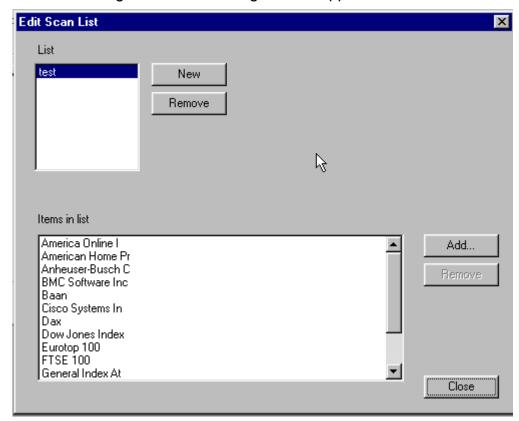
Scanning, First Steps

- 1. Start ELWAVE
- 2. Choose View from the main menu and select Scan Inspector. The dialog box of the SCAN INSPECTOR will appear immediately as shown below

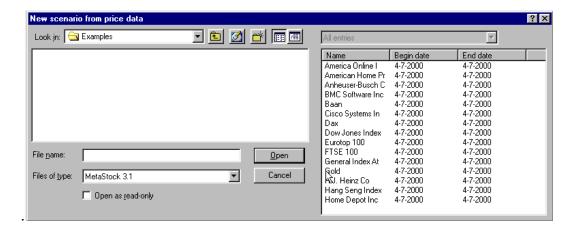


3. If you are using the SCAN INSPECTOR for the first time, use the predefined list to define the items to include in the scan lists. Please note that you can make as many scan lists as you like. Select the EDIT button next to SCAN LIST in the upper left corner to add items to your list

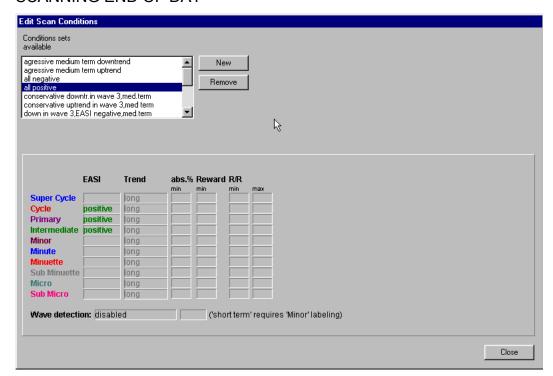
4. The following SCAN LIST dialog box will appear:



- 5. Select the NEW button, which will make appear another dialog box to input the name of the list you would like to make;
- 6. Press OK and next the ADD button from the SCAN LIST dialog box to add items to your scan list and repeat this process if you would like to add more lists.
- 7. Cruise to the directory that contains the data files of the items you would like to include
- 8. Select the items to include, please note that you can add multiple items by using the special Windows SHIFT and CTRL key combinations. Select the first item on top of the screen in the Open dialog box, scroll down to the last item and select it while keeping pressed the SHIFT-key to select all items at once.
- 9. Press the OPEN button to return to the SCAN LIST dialog box
- 10. Press the CLOSE button to return to the SCAN INSPECTOR dialog box
- 11. Select the EDIT button at the RIGHT upper corner that belongs to Conditions

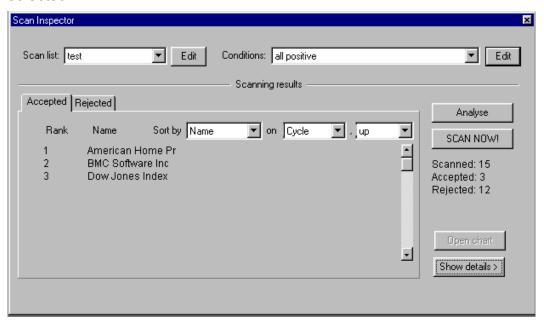


12. Now the EDIT SCAN CONDITIONS dialog box comes up, where you can define the criteria to scan for. Below you will find an example from the SCANNING END OF DAY



- 13. Press the NEW button to name your conditions set and start entering criteria by moving the mouse to the field you would like to specify.
- 14. Select CLOSE once you have finished entering criteria, which will return you to the SCAN INSPECTOR dialog box

Press the SCAN NOW button to start scanning your list for the criteria selected.



# Automatic Analysis

NOTE: In case the Trading Signals module has been included in the software package, ELWAVE will make a full automatic interpretation of the remaining Elliott alternatives and display the results in the SUMMARY INSPECTOR.

ELWAVE will list the most probable outcome as the very first alternative. Alternatives that contain very little detail should be dismissed, if they appear at all.

You will notice that alternatives are ranked according to their probability, taking into account the probability of the occurrence of a pattern, the Fibonacci ratios, the scores of the sub patterns and so on. A more detailed description can be found under the experts' section.

If most alternatives, that remain with respect to the same time frame (every wave degree is a time frame!), indicate the same price direction, we encounter a strong probability that prices will move in the direction of the forecasted trend. In case - with respect to the same time frame- half of the alternatives indicate rising prices and half of these predict lower prices, obviously there is no interesting trading opportunity at hand.

Still you have to inspect thoroughly the different alternatives that are available. You can inspect alternatives on every wave degree level by clicking with the right mouse button on the WAVE BUTTON. A dialog box will appear where you can select the previous and next alternatives. The alternative that has been numbered 0, has the highest score. Especially unfinished, mostly extended waves could not (yet) have the highest score, because relatively fewer data is available compared to finished waves. Obviously finished waves for example could contain more Fibonacci ratios and therefore have a higher score, which the unfinished wave could get as soon as it is more complete.

Still the unfinished waves could be a very probable outcome. For experts it is advised to sub label every LAST unfinished wave of all unfinished waves as deep as possible to see if the alternative still holds and how it scores. Do the same with other alternatives and compare the outcome.

In order to accomplish this you could start with a FAST automatic analysis, see Analysis options dialog box, select the last unfinished wave in the WAVE TREE and choose Analyze Selected Wave from the Analyze menu.

Just take a look at the picture in the Targets section following, to get the general idea.

Alternatively you could insert the main wave labels yourself and start from there generating an unfinished wave every time, see the Experts information section.

Besides, you could try the different Analysis options to compare their results. The more detailed the results the fewer counts will be available.

Please pay attention to the following. In general the most detailed chart, which has labeled more wave degrees, without generating an internal wave structure violation, is the most probable outcome. If there are other less detailed alternatives, try to analyze these further down (more wave degrees) step by step.

If the analysis comes up with a finished wave as the most probable outcome, always inspect if there is an unfinished alternative and compare wave detail, scores as well as the sub scores that these scores are composed of.

Furthermore the software will present the following:

- a list of alternatives, the main alternatives of the highest wave degree will be displayed as buttons right above the WAVE TREE, click on the button and the wave analysis will appear in the chart window
- a summary of results of a pattern in the WAVE INSPECTOR
- the most probable targets based on Fibonacci ratios, taking into account that targets differ for each pattern and each wave within a pattern, see below
- a path of expected price action for the pattern under investigation.
  By selecting the pattern in the WAVE INSPECTOR, ELWAVE will
  show the pattern (using the color of the wave degree), the TARGET
  BARS (using the color of the wave degree) and the SWING FILTER
  in the chart (the light blue line). The pattern also presents one most
  common target for each wave to be reached, based on the ratios of
  already completed waves within the pattern.

# **Targets**

As mentioned before targets will be automatically displayed when the chart has been analyzed by either choosing Analyze entire chart, Analyze selected wave or Check wave count, provided you have switched on the display of targets in the WAVE INSPECTOR options. Only targets of unfinished or incomplete waves are projected!

These unfinished waves display a gray cross in the WAVE BUTTONS of the WAVE TREE.

These targets are represented in the TARGET BAR, which display the expected range of the pattern under investigation as a vertical line.



On the vertical line you will notice small horizontal lines, which are the most probable targets based on Fibonacci price relationships. The positioning of the target bar at a specific point of the Time (or X-) axis is not relevant.

If 5 wave degrees are unfinished as in the example depicted above, 5 target bars will appear, each in the color of their respective wave degree.

The more these target bars converge to the same range and cluster of targets, the more likely the targets are.

Of course targets can still be inserted as before by selecting a wave labelprovided you have converted the analysis to manual wave labels-, clicking the right mouse button and choosing Quick targets.

ELWAVE will insert channels automatically in a smart way, depending on the progress of the pattern.

### Elliott Wave Model

Below we will give some information on the Elliott Wave model used to generate an analysis automatically.

First of all we would like to emphasize that our software uses a true Elliott Wave model that incorporates every aspect as required by the Elliott Wave. The secret of the Elliott Wave is the patterns in patterns concept, which is fully supported in the software. We mention the following:

#### Fractals

As described in a later chapter of this manual, Elliott has discovered that price fluctuations and market action are of a fractal nature. 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 is composed of five waves. 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 again and so forth.

Of course this fractal nature enabled us to program the Elliott Wave. The ever and ever repeating structures or patterns in prices, which are limited in number, makes it possible to detect which pattern most probably applies and in which direction the market is headed.

We have defined all standard patterns plus patterns we have discovered in our extensive research and years of experience (see chapter, the Elliott Wave Principle.), which have been implemented in our "Modern" rules.

# Basic patterns

The Elliott Wave allows for predefined patterns only. This means that only a limited number of patterns can occur in price charts, each pattern having its own unique characteristics.

Meticulously, we have defined all these patterns in our rules. Once an analysis has been generated or checked, you can inspect all the rules and guidelines that belong to a specific pattern.

#### Internal structure

Internal structure refers to the internal wave structure or patterns of a pattern. (Sub)Waves of a pattern may consist of permitted patterns only!. For instance an impulsive wave 3 can never contain a zigzag pattern, if this occurs the internal structure of wave 3 is incorrect and therefore the pattern to which wave 3 belongs is incorrect, and its higher pattern is incorrect and so on...

In our rules we have defined which patterns are allowed for each wave.

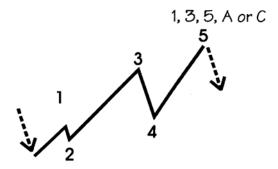
For example, the second or B wave of a flat is allowed to contain a Zigzag, but not a Triangle, while the 3rd or C wave of a Flat can have an Extension3 but not a Zigzag pattern.

## **Proportions**

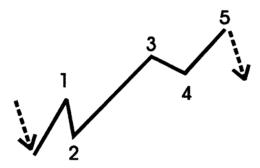
In order to group waves that belong to the same degree, together building a larger degree pattern, proportions of waves are essential.

Obviously waves of the same degree must approximately have the same objective measurements in time and / or price. For this purpose we have developed our proprietary "Fibonacci proportions", that closely work together with our home made SWING FILTER, which identifies the major turning points for every wave degree.

Below we first will give an example of wrong proportions and therefore an incorrect wave count:



Wave 2 is far too small to be of the same degree as wave 4. Using such a method of counting waves will make it possible to come up with every wave count imaginable. Unfortunately this aspect seems to be very difficult to assess objectively. No longer using ELWAVE, which will do an objective and consistent analysis, recognizing patterns correctly as in the example below, where wave 2 and wave 4 do belong to each other:



### Other selection criteria

Furthermore we mention some of the other criteria that have been used to determine the wave count:

- waves must have enough data points of at least 8 to make it possible to define a pattern at all
- of the different types of patterns possible in a wave, only the best pattern will be maintained. If for example in a wave several impulses and Extension3 are validated, only the best impulse and the best Extension3 will be listed
- in an extended wave where a wave 1 and wave 2 again is followed by a wave 1 and 2 of lower degree, at maximum sub wave 1 can be a little longer than its parent wave 1

 apart from the checks visible in the WAVE INSPECTOR, several proprietary checks have been implemented to determine the validity of a wave count

# Ranking Alternative Wave Counts

In order to rank alternatives ELWAVE determines the probability of alternatives that have been validated. Patterns that remain, have a correct internal structure and satisfy every rule as defined in all sub patterns and waves.

The scores or probability of every pattern have a relative significance. If scores of patterns are more or less the same (difference of less than 5 points), they should be regarded to have a more or less equal probability.

A score above 40 should be regarded as relatively high, while a score under 20 makes a pattern less likely. Of course these scores can still increase as the pattern progresses.

Every validated wave count gets a score that, among other factors, takes into account the following:

- general probability of the occurrence of patterns, for example one of the most frequent encountered patterns is an Extension3 (Extension in the 3rd wave)
- probability of the occurrence of patterns in a particular wave, f.e. a Zigzag in a wave 2 is very common, but less likely in wave 4 of an impulsive pattern
- Fibonacci Proportions, the more waves have the same measurements, the better their scores
- Fibonacci Time ratios, the more and better Fibonacci time relationships can be found, the higher the score
- Fibonacci Price ratios, the more and better Fibonacci price relationships can be found, the higher the score
- guidelines, the more guidelines are satisfied, the higher the score of a pattern
- scores of sub waves and sub patterns, the better sub waves of a wave score on all of the above mentioned aspects, the higher the total score.

# Inspecting Alternative Wave Counts

On every wave degree alternative wave counts can be inspected. The main alternatives of the highest wave degree or time frame are listed in the WAVE TREE. In order to investigate alternatives of sub waves, click on the WAVE BUTTON in the WAVE TREE and expand the WAVE TREE if necessary. Next click with the right (not the left!) mouse button on that WAVE BUTTON and a list of alternatives for this wave will appear. Selecting one of these alternatives will display the alternative in the chart.

This can be repeated for every wave that has been listed in the WAVE TREE. Remember that always the best alternative on every wave degree will be listed on top.

Nevertheless it could be possible that a less probable alternative wave count or pattern ends up to be the one markets are following.

# Multiple Time Frames

As known to experienced traders, each time frame has its own characteristics such as trend, volatility and momentum as well as support and resistance areas. The shorter the time frame you are able to assess correctly, the earlier you will get signals for the larger trend of which the shorter trend takes part.

Obviously you need to inspect multiple time frames using a consistent and objective methodology. That is exactly one of the strengths of the Elliott Wave provided it is applied correctly.

The Elliott Wave is nothing but clearly picturing multiple time frames, since it is composed of patterns in patterns, where the shorter-term patterns give precious information on the larger pattern in progress and every pattern from small to large covers a specific time frame.

What's more, using its SWING FILTER ELWAVE will automatically group waves together that belong to the same time frame, which in Elliott Wave terms are referred to as wave degrees.

ELWAVE includes an Automatic compression option, which is very convenient to use in conjunction with the WAVE TREE. If you disable automatic compression the WAVE TREE will no longer clearly present the attached time frames.

Thereby ELWAVE automatically finds the time frames or wave degrees that are of value in a particular price movement. Normally a trader has to try multiple time compression settings from monthly to weekly, daily, hourly, 15 minutes etc., in order to find the time frames that apply, being aware of the fact that time frames vary from time to time.

The wave degrees ELWAVE will come up with, will show the multiple time frames that are in existence for this market or stock. Activating the highest wave degree, by clicking on the WAVE BUTTON of the pattern of largest degree in the WAVE TREE, will show the largest trend or time frame immediately. Clicking on one of the buttons of the sub waves of this pattern will present the lower time frame and so on, down to the smallest time frame in existence.

# Converting Automatic Wave Counts to Manual Counts

You can convert the selected alternative from the automatically generated wave counts by choosing Convert to Wave Count from the Analyze menu.

The manual wave count will appear in a separate chart document. You can convert to a manual wave count as many times as you like. In order to save an alternative as a scenario, choose from the main menu File and select Save as to save the wave count as a scenario.

# Analysis Options

You can adjust important variables that determine the outcome of an Automatic analysis, by changing the default setup. Select one of the presettings presented.

The following settings are available (version 6.0):

#### Pattern definitions

You can choose either the CLASSIC or the MODERN RULES version. The Classic version adheres to a very strict interpretation of the Elliott Wave

# **Analysis Type**

By choosing one of the presettings you will set the detail of the SWING FILTER as well as the analysis depth or number of wave degrees to inspect. The SWING FILTER will search for major turning points for every wave degree, grouping waves of the same degree together.

If you instruct ELWAVE to use a more detailed analysis, the SWING FILTER will find more turning points automatically, revealing more variations of possible wave counts. By default the SWING FILTER (pale blue line) will be shown in the chart by clicking on a button of the WAVE TREE, select pattern in chart in the WAVE INSPECTOR for switching it on or off.

## **FAST**

this will produce a wave count of three wave degrees very fast using a SWING FILTER that identifies the major turning points only.

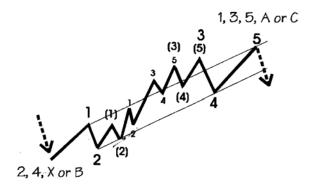
#### DETAILED

again a three wave degrees deep analysis is produced, but this time the SWING FILTER will search for a lot more turning points (around 8) at the highest wave degree level. This option produces many alternatives and we advise this to be used by experts only, who can eliminate alternatives themselves.

# **PRECISE**

using this setting a detailed SWING FILTER will inspect patterns four wave degrees deep and use a lot more turning points to inspect many more alternatives.

Below an example of an analysis depth of 3 wave degrees in wave 3 is shown. The pattern is called an Extension3 since the 3rd wave is extended. This pattern must consist of 5 waves, which is correct.



# Extra wave degrees

Adjusting this option allows for automatically adding extra time frames or wave degrees during the analysis. It will analyze the most recent price data in more detail giving more information on the smallest patterns in patterns. The more extra time frames you require, the more time it will take to complete the analysis.

### **Minimum Bars**

Enough bars or data points must be available in order to recognize reliable Elliott Patterns. If Minimum bars has been set to 20, the software will return an undefined pattern if it encounters less then 20 bars in a pattern. We recommend setting this option to 8 bars for End of Day charts. Of course ELWAVE will allow you to adjust settings in order to get results faster, detect more complicated patterns or to get a more detailed result.

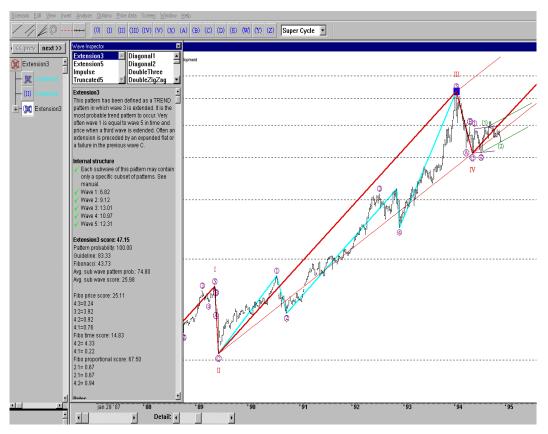
# Analysis Example

In this section we will give another example of generating an Automatic analysis.

Once an analysis has been generated the WAVE TREE, the WAVE INSPECTOR and the chart with its current wave count will be displayed.

Now it is possible to further inspect and analyze the wave count that has been generated. Click on a WAVE BUTTON in the WAVE TREE to inspect and display that section of the chart. The chart will zoom in and display correct detail automatically. The WAVE INSPECTOR will give a lot of information on the wave or pattern selected. On top at the left, the WAVE INSPECTOR will show validated patterns at the right dismissed patterns. Both can be inspected, as you like.

Click on the pattern to display all information in the WAVE INSPECTOR, which feature makes the Elliott Wave completely transparent. The pattern has been described, the internal structure of the pattern has been checked, all Fibonacci ratios are presented and rules as well as guidelines can be inspected. Clicking one of these rules or guidelines will visualize it in the chart.



For more information, see the next chapter, where WAVE TREE and WAVE INSPECTOR have been explained in more detail.

# Analyzing Waves

# **Analyzing Finished Waves**

Suppose ELWAVE has completed an analysis and after inspection of the alternatives produced, you would like to analyze some wave in more detail. You may want to analyze Finished (completed) as well as unfinished (incomplete) waves, but let us first start with Finished waves.

A finished wave is a wave that contains a completed pattern; every wave within the pattern has been found and determined. See the following ABC completed wave.



Now suppose we would like to analyze it more detailed and see if the internal structure still supports the pattern found.

We can now analyze the C portion of the wave by selecting it in the wave tree and then analyzing the selected wave. This will produce more detail.

# **Analyzing Unfinished Waves**

This can be accomplished in exactly the same way as with finished waves. An unfinished wave is the last wave in progress marked by a gray cross in the WAVE BUTTON. Select this wave in the WAVE TREE and choose Analyze selected wave from the Analyze menu.

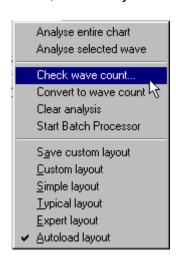
# Using your Own Wave Count

Of course you can label a chart yourself and then have ELWAVE analyze any section you like, which enables you to take shortcuts. We will give a simple example below.

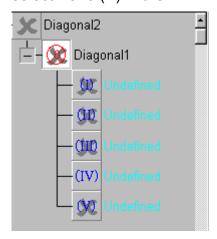


Just drop wave (IV) on the low you would like to determine as the end of wave (IV) and the beginning of wave (V).

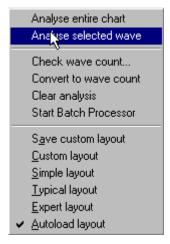
The next step is to choose from the main menu Analyze and select Check Wave count. A WAVE TREE will be generated, just neglect the patterns that appear next to the WAVE BUTTONs, because these have no added value, since only one wave label has been inserted.



Now we will analyze the unfinished wave (V). To produce this analysis, select wave (V) in the WAVE TREE.

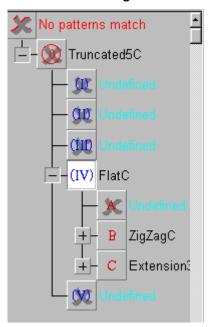


Then choose Analyze selected wave as explained under Analyzing Unfinished waves.



In case you would want to test if wave (V) could already be finished, insert wave V at the current top, choose Check wave count, select wave (V) in the WAVE TREE and generate an analysis.

You would then get the following tree pattern,



# and the following chart labels.



# Introduction to Trading Signals

The Trading Signals module now provides full automatic detection of trading opportunities. Please note that the Automatic Analysis module is required.

#### Attention:

You will need the special "Trading Signals" module to have available full automatic trading indications.

The "Trading Signals" module will make life a lot easier by interpreting remaining Elliott alternatives for you. It presents a summary and it will give clear entry and exit indications as soon as trading opportunities emerge, even in real-time if required. In addition, a SUMMARY INSPECTOR will be presented containing essential information.

As soon as critical levels are broken, the software will show signals, update the summary and, if required, even update the analysis partially. Partial reanalysis will save precious time compared to a full automatic analysis, thereby facilitating intra day analysis of a very complex and demanding method as much as possible. However, an entire analysis will always be more precise than just updating the analysis.

Our trading signal indications, which are slightly different for the CLASSIC and MODERN RULES, are no black box mechanical system that should be used in blind trust. You will have to familiarize yourself thoroughly with the outcome, the interpretation and the circumstances that make particular signals useful.

### Disclaimer

The Customer acknowledges and agrees that neither Prognosis Software Development (Owner), nor its employees, make any representation or guarantee regarding how this product may perform in the future, nor will this product guarantee profits for the Customer. The Customer is advised to test the software thoroughly before relying upon it. The user accepts to assume the entire risk of using the software. In no event shall Owner be responsible for any special, consequential, actual or other damages, regardless of type, and any loss or lost profit resulting from the use of this software or printed material. Customer acknowledges that success depends upon Customer's ability to utilize the information, software and techniques described in this product. Customer's payment, returning of the registration card or signature shall be evidence of Customer's acceptance of all of the License agreement.

Although many strategies are possible, we would still like to mention common misperceptions some may have using the Elliott Wave. Obviously these have been caused either by the complexity of the Elliott Wave or by human nature, always searching for the perfect system.

Some people think Elliott Wave comes up with too many alternatives: exactly this is the complexity of the Elliott Wave, not only to see the big picture as well as how to fit the smaller patterns into this big picture, but also to understand how and under what circumstances different alternatives support each other within the same time frame or, even more difficult, using several time frames at once.

This is exactly the way ELWAVE determines trading opportunities. Although it selects alternatives that have high probability first, it does not try to pinpoint the one and only possible alternative. It just forecasts the trend as a composite picture of all alternatives!! The moment an up or down trend has been confirmed, the software will signal this.

Some people think Elliott Wave should be used for picking highs and lows: The Elliott Wave is possibly the best method to pick tops and bottoms, but this requires expert knowledge and experience. Apart from that, it is always possible that a trend extends under specific circumstances; so taking counter trend positions by picking tops and bottoms is more risky.

The Elliott Wave is even more reliable, if used to signal trading opportunities at cross points. At cross points, penetration of critical levels could cause virtually all alternatives to suddenly forecast one price direction and trading opportunities do emerge with a very high probability and a relatively very tight stop.

Naturally such a trading strategy will be more rewarding in the long run, than just hoping to pick a top or low exactly, not having a clear stop and incurring the (high) risk of missing a lot of the trend in progress.

# Summary Inspector

Trading signals get most powerful if used together with the Automatic Analysis. After completion of the Automatic analysis, all relevant signals will be collected, sorted and automatically summarized in the SUMMARY INSPECTOR.

The SUMMARY INSPECTOR will show each time frame or wave degree that has been analyzed. By default the "FAST" analysis will show results of 3 consecutive time frames, always starting with Supercycle degree.

We explain the columns of the SUMMARY INSPECTOR below:

#### Time frame

In the TIME FRAME column the name of the wave degree appears in the same color as the wave labels in the chart. Although the wave degrees carry the names as used in the Elliott Wave Theory, they do not relate to the time period that normally has been assigned to these wave degrees. The largest trend or highest degree pattern is listed on top followed by the smaller wave degrees, which build the larger trend or pattern.

### **EASI**

The column EASI tells if this market or stock still should be bought or sold. It has three possible readings, which are Positive, Negative or Neutral.

In case the Risk / Reward is negative, but the trend is still up, it will indicate to Hold positions (= Neutral) until the first Exit has been encountered as specified in one of the next sections. In this case the last price will have traveled beyond the TARGET, which has turned negative, indicating targets have been reached and risk is increasing. But in view of the fact that very often Extensions occur, it is advised to wait for an Exit signal to reverse positions.

If the R/R is positive and the trend is up it will give a positive indication, if the trend is down it will give a negative indication.

Sometimes the highest scoring alternative may conflict with the EASI result as shown in the SUMMARY INSPECTOR. For example, a complete uptrend could have been labeled while the SUMMARY INSPECTOR still gives a positive indication! Although theoretically the uptrend could be complete, obviously the composite picture of all alternatives clearly tells you not to try to pick this top. Only when all or most trends support each other pointing in the same direction, normally an opportunity emerges.

### **Trend**

The Trend Column clearly indicates the trend - up or down - that has been detected for each time frame. Sometimes both an uptrend as well as a downtrend has been discovered, which means alternatives do not agree upon the future trend. Naturally in this case the EASI column will be Neutral, since we do not yet know where prices will go.

# **Target**

This column represents the expected weighted reward of all alternatives per time frame and serves as a sort of minimum target. If a trend is recognized early, one could take advantage of a very interesting trading opportunity, giving a high reward and relatively low risk. This target has been calculated rather conservatively and will normally be reached. When the price moves continues, first the TARGET will become negative, because the average expected target has been exceeded. Later on, again the TARGET could become positive due to the elimination of patterns that have a much lower expected target. The TARGET is displayed in the chart for every time frame using a diamond symbol.

%

The percentage expected return derived from the TARGET and current price.

#### Exit

This is the price at which the very first critical level gets broken, indicating to reverse the current position. This exit is very conservative and defensive, because possibly just one of the remaining patterns could have been eliminated and still other alternatives are in existence. It is advised to run an Entire analysis before acting upon this exit. The EXIT is pictured for every time frame using a small triangle symbol in the same color as the time frame.

#### Reward

This is the number of points calculated by the TARGET minus the current market price.

#### Risk

The RISK is pictured in the next column, displaying the number of points until an exit would get triggered. Please be careful an do NOT rely upon risks that are relatively very small and lead to high R/R's.

In our view it is not the one and only outcome that one should try to find, but what really matters is the accumulated result of all alternatives. If most alternatives indicate an uptrend this is much more likely to happen than just selecting one alternative as THE one and only outcome

# Alert Inspector

Inspection of and understanding signals requires much more knowledge of the Elliott Wave. Nevertheless studying these facilitates learning the Elliott Wave more easily, but it will take time and you need to practice.

The ALERT INSPECTOR will appear as soon as critical price levels have been triggered. This could happen when new End-of-Day or intra day data have been appended to the data files or when a real-time feed has been activated.

This will also appear when using the powerful simulation feature for which the Trading signals module is required.

Alternatively the ALERT INSPECTOR can be displayed by selecting View from the main menu and choosing ALERT INSPECTOR.

By default a summary of the signals will appear on top of the window. ELWAVE presents the number of positive indications or negative indications per time frame. If the positives significantly outnumber the negatives on a specific time frame, the picture of course foretells a rising market, provided the outcome of the SUMMARY INSPECTOR agrees upon the same trend. Clicking on the DETAILS button will show all signals, which can give important additional information to take into account.

Remember that the outcome as presented in the SUMMARY INSPECTOR is most important. Sometimes at first sight the (number of ) signals could give a conflicting message.

The following should be taken into consideration when studying the signals:

- determine the time frame you will use for your investment first
- check the outcome of the summary, if the summary displays a
  negative for a time frame and positive signals are presented in the
  ALERT INSPECTOR, it is risky to start buying already, however it
  could be an early warning for a trend change.
- compare the number of positives versus the number of negatives for each time frame. The strongest indication is when no conflicting signals are given.
- take a look at the patterns for which signals have been generated, trend (especially Extensions) and Zigzag patterns are the most reliable to trade
- take a look at the wave of the pattern, wave 3 is the most interesting and reliable wave
- Although ELWAVE will automatically reanalyse, it is advised to start a new, entire analysis from time to time, especially when conflicting signals have been encountered.
- check the description of the signals:
- most signals go with the trend and confirm that the trend is in progress.
- There is one exception though, the description "Most often the second wave retraces from around 50% to 62%" refers to a signal that goes against the current trend and therefore is more risky. Signals based on this rule have great potential, but should be carefully considered. If at the same time conflicting other signals come up, its significance is diminished. In addition, preferably the

trend of the higher wave degree should support the direction (up or down) of the lower trend and it must be a wave 2.

- Check the type of signal as for example Entry buy or Exit buys as explained below.
- Now we will explain the ALERT INSPECTOR in more detail. Below we will first show an example of the summary in the ALERT INSPECTOR:

Pressing the DETAILS button will list the trading indications that have been triggered as demonstrated below:

The ALERT INSPECTOR can show the following signals, remember that the SUMMARY INSPECTOR is the dominant factor:

# **Entry buy**

this signals that positive alternatives have been confirmed and is the strongest positive indication. Normally the SUMMARY INSPECTOR too will show a Positive for this particular time frame.

# Exit buy

this signals that minimally one negative alternative has been dismissed. It should be considered to be a less strong positive indication, because other negative alternatives could still be in existence. Check if the SUMMARY INSPECTOR shows a Positive too for this particular time frame. Normally this is an early warning signal for a trend reversal.

## **Entry Sell**

this signals that negative alternatives have been confirmed and is the strongest negative indication. Normally the SUMMARY INSPECTOR too will show a Negative for this particular time frame.

### **Exit Sell**

this signals that minimally one positive alternative has been dismissed. It should be considered to be a less strong negative indication, because other positive alternatives could still be in existence. Check if the SUMMARY INSPECTOR shows a Negative too for this particular time frame. Normally this is an early warning signal for a trend reversal.

# Target Clusters

Attention: In addition to the Basic module, you will need to have purchased the Automatic as well as the Trading Signals module to be able to use the Target Clusters.

The TARGET CLUSTERS module now features time and price targets based on Fibonacci relationships. Very powerful research tools have been included to project probable turning points in time as well as price.

In an indicator pane TIME CLUSTERS can be added as an indicator, just like other indicators. In addition a so-called TARGET ZONE can be shown in the chart when an automatic analysis has been completed.

#### **Time Clusters**

Although ELWAVE has supported a time tool from the beginning, which is the GOLDEN RATIO TIME RULER, we have now implemented a faster and almost automatic way of finding interesting reversal points in time.

Finding valuable time targets still is one of the most difficult and time consuming things to accomplish. One of the best methods is to use Fibonacci time relationships and project future dates where a lot of these relationships coincide around or near the same date.

The arrow in the picture above is located at a point in time where at least a reversal of some importance is likely, because at that point the cluster bars are the highest.

Please note that only future dates beyond the last price data will be shown by TIME CLUSTERS. Therefore no TIME CLUSTERS will appear when you have zoomed in upon a small part of the chart that does not include future dates beyond the end of the data file.

The TIME CLUSTERS indicator supports two types of clusters, both based on projections of Fibonacci ratio relationships. The first type uses the patterns as found by the Automatic Elliott Wave analysis, the second type uses a user-defined swing filter. This will be explained in a later section of this chapter.

To assess if an important turning point is around the corner, in general we advise to check the following:

The higher the bars in the TIME CLUSTERS indicator pane, the more Fibonacci TIME CLUSTERS come together at one point in time.

The more wave degrees or trends, depicted by different colors of the clusters, support these clusters the more important it gets. If for example a high cluster bar is only supported by one color, it should be considered as weak or only a very short-term indicator. If the larger time frames support the cluster bar too, it should normally be a more important indication and could become a reversal of larger degree.

Because the shortest trend projects the most turning points and does so nearby the latest price action, the cluster bars tend to be higher at the start of the projection, just beyond the end of the data. Normally high peaks that show up much later in the future are more important and therefore should be watched carefully.

You can choose to connect only highs, only lows or any combination. This way you can research if for example projecting only Fibonacci ratios of market lows will project the next important low. This should be expected, however, when you have found a focal point in time, where a lot of

Fibonacci ratios coincide backward and forward, alternation could show up and project the next high instead of a low.

Try different zooming positions when looking at the TIME CLUSTERS and compare their results, because ELWAVE will only use the price data that is visible in the chart window. If you have zoomed in upon a small area, only Fibonacci ratio relationships of that particular data will be used to calculate TIME CLUSTERS.

Use the simulation feature to determine how to read the TIME CLUSTERS and which settings to use.

# **Time Clusters Settings**

Just like ordinary indicators, you can insert the TIME CLUSTERS by selecting Insert from the main menu and choosing Insert indicator pane.

Select TIME CLUSTERS, click on the ADD button and the next dialog box will pop up where you can adjust settings of the TIME CLUSTERS.

### **Patterns**

# Include all patterns

If this option has been checked, time targets of all patterns that still have been validated on every wave degree will be included in the projection. If this option has been set to off (unchecked) only the time targets of the currently selected pattern will be calculated.

### Include all alternatives

If this option has been checked, time targets of all validated alternatives on every wave degree will be included in the calculation. If this option has been set to off (unchecked) only the time targets of the currently selected alternative and their sub selections will be calculated.

#### Include finished waves

In case this option has been selected, Fibonacci time targets of finished or completed patterns, that normally have no relevance to a pattern in progress, will be calculated too. Therefore by default this option has been set to off, however it still could be valuable to research if completed patterns are of any importance.

In addition, if this option is set to off, ELWAVE automatically will make a selection to only include alternatives of which trading signals have been triggered and really matter.

### **Filter based Time Clusters**

**Filter 1** Here you can define the number of turning points for the first swing filter that it will take into account for the calculation of TIME CLUSTERS. The fewer the turning points, the larger the trend or waves that are used and the fewer clusters appear.

**Filter 2** See above. You can choose to define a second filter with for example a lot more turning points to discover smaller degree reversal points.

**Filter 3** See above. You can choose to define a third filter with a lot more turning points to discover smaller degree reversal points again

## Change color

You can change the color of the swing filter that will be shown in the chart.

## Connect highs with highs

If this has option been checked, the distance in time between every two consecutive highs will be measured and Fibonacci ratio relationships as defined under Ratios will be projected. Normally this option is used to project future highs. However because highs and lows sometimes tend to alternate, it could be interesting to research if this option is also valuable to predict future lows.

### Connect highs with lows

If this has been checked, the distance in time between every two

consecutive high and low will be measured and Fibonacci relationships as defined under Ratios will be projected.

### **Connect lows with lows**

If this has been checked, the distance in time between every two consecutive lows will be measured and Fibonacci ratio relationships as defined under Ratios will be projected. Normally this option is used to project future lows. However because highs and lows sometimes tend to alternate, it could be interesting to research if this option is also valuable to predict future highs.

## Show filters in chart

If this has option been checked, ELWAVE will show the swing filters in the chart in order to see yourself what turning points, highs and lows have been used for the calculations.

# Show degrees accumulated

If this has option been checked, the software will make a total of clusters instead of picturing every wave degree or trend separately.

#### **Ratios**

By default the most common ratios have been defined. You can add or change the ratios as you like.

### Restore defaults

Press this button to restore default ratio settings as set by Prognosis.

# Target Zone

This exciting new feature combines both price and time Fibonacci ratio relationships to project not only an expected PATH of price direction, but also to visualize hot TARGET ZONES where prices are expected to travel to.

Although time Fibonacci ratios between waves do occur frequently, normally for example an explosive wave 3 will take only a fraction of the time to complete wave 1. Obviously in such a case often no Fibonacci relationships exist.

Nevertheless other relationships, that combine price and time Fibonacci ratios, do apply and can be used to project hot spots where prices are expected to meet resistance. If these zones get penetrated, normally the price could travel to the next target zone.

The PATH in the chart shows the bandwidth that is expected to contain the price movement.

The (red) hot spots in the chart are the so-called TARGET ZONES. The more targets come together in the same area the more red this target zone will become.

Definitions of Fibonacci ratios of the TARGET ZONES have been preprogrammed in ELWAVE and cannot be changed. Other settings of the TARGET ZONES can be changed by selecting Options from the main menu and next choosing the menu item Target Zones. Below we will explain the settings in more detail.

#### Target zone settings

These settings can be subdivided in two sections:

#### Cluster calculation settings

These settings are specific to each scenario, therefore every scenario can contain different settings.

### Include all alternative wave counts

If this option has been checked, the TARGET ZONE will be calculated using every still validated alternative and pattern. In addition, only the TARGET ZONES of unfinished waves will be calculated, not of finished waves or completed patterns.

## **Currently selected wave count**

If this option has been checked, the TARGET ZONE will be calculated only for the wave count that has been selected.

#### **Include all patterns**

If this option has been checked, the TARGET ZONE will be calculated using all different patterns that are still possible in the wave count under investigation, not just the selected pattern. Patterns can be selected in the WAVE INSPECTOR, choose from Analyze the menu item Expert layout to

display the WAVE INSPECTOR alongside the chart. All patterns listed in the left box on top of the WAVE INSPECTOR will be taken into account.

Of course patterns listed in the right box will not be included because these patterns have been invalidated.

### Include sub waves

If this option has been checked, TARGET ZONES of completed patterns or finished waves will also be displayed. At a glance this will give you information how the target zones did fit historically for the selected pattern.

# Exclude targets exceeded by...%

Here you can choose to exclude targets that exceed a user-defined percentage. Targets above or below a certain percentage market price could be less relevant to the shorter-term trader and distort the picture.

# Cluster display

These settings are global and therefore are the same for each scenario.

## Show path

If this option has been checked, the expected path, which is a specific angle of decline or rise as well as the bandwidth that will contain price movements, will be shown in the chart. If not checked, still the Target zones could be shown.

# **Show Fibonacci Target Zones**

Use this option to toggle the display of Target zones.

#### Update automatically

If this option has been checked, the TARGET ZONES and / or PATH will be recalculated whenever changes occur to the (display) of the chart. You will need a very fast computer for smooth operation. Normally, on slower computers, the preferred setting will be off. Press F12 or the TZ button in the right hand corner of the chart window to refresh the PATH and TARGET ZONES.

### Detail

This option is also included to toggle settings for slower computers. The lower the resolution has been set the quicker the calculation and display will be completed.

## Change color

Use this option to change the color of the PATH and TARGET ZONES to your own preferences.

# Introduction to Manual Wave Count

Attention: Some of the tools will only work with a manual wave count. You have to convert an automatic analysis to a wave count first if not using your own wave count.

Using ELWAVE you can label and check your own wave counts very fast. First you have to define the wave count of the chart under inspection yourself (alternatively you could perform the same operations on an automatic analysis, which has been converted to a manual wave count), then choose from the main menu Analyze and select Check Wave Count.

Immediately Wave counts will get checked on specific Elliott rules and guidelines and ELWAVE will show the results in an orderly manner, displaying the WAVE TREE and WAVE INSPECTOR.

## Make your own wave count

On top of the screen you will find a window or box called "wave labels". This box can be docked on top of the screen or repositioned anywhere by clicking and dragging it to its new position. In the wave label box you will find a combo box, which shows the current degree (Supercycle) of the visible wave labels. This wave label degree can be changed by clicking on the down arrow of the combo box and selecting the wave degree.

(IV) Insert label of higher degree first.

Looking at the chart you have imported, you see for example an obvious uptrending "five wave", which you would like to label accordingly. Go to the "wave label" window and grab wave label (IV)

First drop a wave label (IV) or (II) of higher degree at the low, where the 5-wave up begins.

This is needed to mark the beginning of the uptrend of lower degree.

Now grab wave label I by clicking on this wave label with the left mouse button, keep the mouse button pressed down, drag the wave label to the right place and drop it by releasing the mouse button. This is the top of the first wave or leg, when the chart rises. Notice that ELWAVE automatically will search for a high or low to drop the wave label on, which speeds up the labeling considerably. Repeat this process for all wave labels you want to insert into the chart. Note that you are free to insert these wave labels anywhere in any order. Of course, it is important to place these wave labels in an orderly fashion to get results that make sense. As soon as you have placed label (I) to (V), you could also place the labels of the lower degrees. Click on the combo box in the wave label box and select the lower degree. Then repeat the drag and drop procedure and so on. We advise you to label your chart first, before you go to the next topic, because the objects mentioned hereafter depend on these labels to function. A complete labeling of one wave degree will suffice.

# Changing the existing wave labeling

If you want to change the wave labeling you can grab an already positioned wave label and drop it on another bar. In order to grab the label, first point at the label and click the left mouse button to select the label. Then click on the wave label with the left mouse button and while keeping this mouse button pressed down, you drag the label to another position in the chart. Release the left mouse button and the label will be dropped on its new position.

## Changing the color of a wave degree

Double click a wave label to change the color of all wave labels of the same degree. In addition all objects attached to this wave degree will inherit the same color. This is a very useful feature to distinct different wave degrees.

### **Deleting wave labels**

If you want to change the wave labeling you can point at the label and click the left mouse button to select the label. Then press the DELETE key or choose Edit and Delete from the menu on top of the screen. To delete all selected wave labels at once, first select the area, which should be deleted using the mouse. The area can be selected by pointing the mouse at the beginning of the area, pressing the left mouse button, keeping it pressed, dragging the mouse to the end and releasing the mouse button. Next select Edit and Delete from the menu on top. Instead of using the menu you can also press the DELETE key.

### Change wave degree

Select the wave label or select the section in the chart (by dragging the mouse) in which you want to change the wave degree. Next choose Edit from the menu on top of the screen and select the menu option Degree up or Degree down.

### **Check manual wave count**

Basically the pattern engine knows how to recognize the patterns by checking the rules and guidelines. In addition the engine knows which patterns are allowed in sub waves of its parent pattern, because knowing which patterns in patterns in patterns... etc. to expect is a very important tenet of the Elliott Wave Principle. The program refers to the above by "Internal structure".

When a computer checks rules to evaluate wave counts, it does so very strictly. The outcome is either true or false, there is no in between. Consequently, it will reject patterns, even if rules have been violated with the slightest margin possible.

For example the Zigzag pattern, which consists of three waves A B C, does not allow the B wave to retrace more than 61.8%. If it retraces 61.9% the rule engine will reject the Zigzag. Of course, it is highly arbitrary to set such

rules and we recognize the fact that opinions may differ with regard to pattern definitions. For this reason we have for example defined a Zigzag Flat pattern in our MODERN RULES engine, which allows for a bigger retracement than 61.8% for a B Wave.

Nevertheless, ELWAVE does very well what it is supposed to do. It classifies and recognizes the patterns according to its rule definitions, which conform to the Elliott Wave Principle. As a result normally only one pattern remains if the pattern has been labeled correctly.

Besides it is possible to load different rule definition files in order to suit different preferences.

The CLASSIC RULES and guidelines set will analyze the wave count according to very strict definitions of patterns as required by the Elliott Wave Principle and will signal a false internal structure as well.

Elliotticians who adhere to strict application of the Elliott Wave will find the CLASSIC RULES most helpful. Wave counts that fit these rules should have a stronger probability anyway.

The MODERN RULES and guidelines set has a more pragmatic approach, taking into account that markets not always conform to text book examples. Herein you will find a lot more pattern definitions. You will find for example hybrid patterns like "Zigzag Flat", which is a combination of a Zigzag and a Flat. Or falling and rising wedges, more or less similar to ascending and descending triangles, are allowed. Another example is that the C wave is allowed to get longer than 261.8% of wave A.

The main purpose for a less strict definition of patterns and allowing for less common (hybrid) patterns in the MODERN RULES and guidelines set, is the fact that the program will not reject wave counts totally if patterns deviate slightly from a text book example. This way you will still get presented a possibly valid alternative and decide yourself to reject it or not. In addition you could take an extra look at the guidelines to determine the probability of the wave count under inspection. The more guidelines have been satisfied the stronger the probability of the count.

## **How to check hand made Wave Counts**

Tip: Incomplete or unfinished waves are represented by a WAVE BUTTON in the WAVE TREE containing a gray cross, if valid patterns have been found. At the right of the WAVE BUTTON the first of validated patterns is displayed.

Select Analyze from the main menu and choose Check Wave Count. This command can be used to check the wave count of the active chart, to build the WAVE TREE and to display specific information on patterns, rules and guidelines.

This is a useful tool to inspect your wave count quickly and in an orderly manner. For a description of the use of the WAVE TREE see the section below.

ELWAVE will analyze your wave count very fast. It will display the patterns found next to the wave label in the WAVE TREE.

Selecting a wave label in the WAVE TREE will display information relevant to the pattern found in this wave and display all of the wave degree in the price chart.

In the window named "WAVE INSPECTOR" you will find information on the pattern itself as well as the internal wave structure, rules and guidelines that have been checked.

# **Options**

After selecting from the menu Check Wave count, you can choose which rules to use for checking a wave count, i.e. MODERN or CLASSIC.

Additionally you may activate or deactivate (default setting) the option CHECK WAVE LABELS. This will check wave labels exactly as they are, so if a wave I and II has been inserted this no longer can be an A or B of a Zigzag. We advise you to keep the default setting.

When checking your own wave counts, ELWAVE will always check the internal structure of the patterns. If the internal structure is incorrect, it will return a message "No patterns match".

Wave Tree and manual wave counts

On the left of the screen you will find the so called "WAVE TREE". You can toggle the display of the WAVE TREE by selecting WAVE TREE from View in the main menu.

The WAVE TREE displays the wave degrees in a structured way, recognizing the patterns within patterns. Using the WAVE TREE you can navigate through the chart and inspect the wave count.

Clicking the WAVE BUTTONS will zoom in on a specific area in the price chart, which is connected to the selected wave degree.

Together with the information in the WAVE TREE, the patterns, the rules and guidelines as well as major mistakes will be shown in an orderly manner.

Notice that the WAVE TREE, the price chart and the messages are all interconnected.

Expand the wave degrees as you like by clicking with the left mouse button on the little buttons in the WAVE TREE which show "+" signs. The sign in the "+" button will change to "-". Clicking the same button again will collapse the wave degree.

If you click on a "+" or "-" button or a button which contains a wave label, the appropriate section of the chart will be shown at the same time together with the correct wave detail level.

Each large WAVE BUTTON represents a wave and contains the connected wave label of this wave. Next to the WAVE BUTTON you will find the pattern that ELWAVE has found.

If no valid pattern could be found, the WAVE BUTTON contains a red cross and the message "No patterns match" will appear, indicating that the wave has been labeled incorrectly (apart from the upper wave degree).

The message "undefined" will appear if the relating wave has not been labeled. This is not considered to be an error.

Double click the WAVE BUTTONs in the WAVE TREE to display more information about this wave. This will make the WAVE INSPECTOR appear as described below.

Underneath the WAVE TREE you will find a separate window, which lists the main errors found in the wave count. These errors are:

- No patterns match
   Probably the wave labeling is incorrect, because no matching pattern could be found. Also a wave label could be missing.
- Missing wave degree
   A wave degree is missing in the order in which the waves have been labeled. For example the parent wave is of Primary degree, while its sub wave is of Minor degree instead of Intermediate degree.

Clicking on these errors will navigate you directly to the right spot in the chart and in the WAVE TREE, facilitating correction of mistakes fast and easily.

Once you have corrected an error, just check the wave count again to inspect whether violations still exist.

# Wave Inspector and Manual Wave Counts

The WAVE INSPECTOR will show up when you have instructed the software to check the wave count or as soon as an automatic count has been completed. You can close it by clicking on the X button at the right top of the window and reopen it by double clicking a WAVE BUTTON in the WAVE TREE

The WAVE INSPECTOR displays information on the wave, which has been selected in the WAVE TREE.

On top in the left list box you will find the matching patterns, at the right you will find dismissed patterns.

You can select matching or dismissed patterns by clicking on them with the left mouse button. Immediately the WAVE INSPECTOR will show information on the selected pattern.

First a brief definition of the selected pattern is given, followed by Internal structure, Rules and Guidelines. In front of the rule or guideline you will notice a special character, if it has been violated or correct.

Rules and Guidelines with a question mark? have not been checked by the program and are referred to as "undetermined".

A pattern, which has appeared in the left list box, will show correct rules only. The guidelines could be violated, but logically these do not reject the pattern, it can only reduce its probability.

The CLASSIC pattern definition requires a wave count, which adheres to strict Elliott Wave rules and patterns.

#### Pattern in chart

Along with the information in the WAVE INSPECTOR, by default the selected pattern will be displayed in the chart, along with the SWING FILTER and TARGET BAR. With respect to finished waves (waves already completely defined) you can easily project each pattern in the chart to inspect which pattern has the best fit by selecting the listed pattern in the list boxes on top of the WAVE INSPECTOR. ELWAVE will intelligently calculate and draw the patterns by using the begin and end points of the wave.

Looking at unfinished or incomplete waves it is even more interesting to project still possible alternatives, based on the wave count defined by the user. Validated patterns will use the already defined waves, to draw the pattern in the chart.

If, for example wave 1 and wave 2 have been labeled, these waves will be used to calculate an Impulse pattern, while wave 3,4 and 5 will be calculated using the price and time relationships of wave 1 and 2.

In addition, dismissed patterns can be visualized in the chart giving important information on all possible alternatives and enabling you to compare the fit of the pattern with the actual chart.

If for example you have labeled an unfinished wave as wave 1 and 2, this could still be a wave A,B in a Zigzag or even a Double Zigzag, depending on the parent wave. The pattern shown in the chart will clearly guide you, which alternatives are worth wile to investigate.

Notice that with regard to unfinished waves the WAVE TREE will eliminate those patterns of which the rules already have been violated.

For example as soon as prices exceed the end of wave 3, a truncated 5th will no longer be possible and eliminated.

# **Options**

Several preferences with regard to the WAVE INSPECTOR and the analysis can be defined by the user.

Select from the main menu Options and choose the menu item WAVE INSPECTOR to decide what information gets displayed in the WAVE INSPECTOR. Please note that display of TARGET BARS and SWING FILTER is connected to display of PATTERN IN CHART Below we show the dialog box that will appear.

# **Trouble shooting**

To correct your wave count, if any errors have been reported by the software, use the WAVE INSPECTOR and check the following:

The message "no pattern found" could indicate that:

- The wave has not been labeled completely. A common error is f.i. that wave 5 is not inserted
- The wave has not been labeled correctly, wave degrees have been mixed or defined twice
- The pattern is incorrect because rules have been violated, which can be checked using the WAVE INSPECTOR. Some examples: Wave 2 retraces too much, wave 3 is the shortest wave and so on.

A sub wave of a bigger wave should be of ONE lower wave degree, if not, this will generate the message "missing wave degree".

# Technical Tools

In this section you will learn the essentials in more detail in order to start using the program as a tool right away.

We have assumed that you are familiar with the Windows environment, the way the menu works and so on. If not, you will have to study your Windows manuals. You will also need to know how to drag and drop objects, which we have explained in the beginning of the manual under the subtitle Interface.

Tip: You can change the properties of all objects in the price chart and the indicator pane by clicking with your left mouse button on these objects. Alternatively you can double click with the left mouse button to change its properties. Notice that the mouse pointer will change when moving over an object.

# Scrolling the chart

This function will allow you to easily find that section of the chart that is of special interest to you. To scroll the chart press the scroll bar positioned at the lower left corner of the chart window. To scroll left press the left arrow or left of the scroll button and vice versa to scroll right. If you scroll the chart far enough to the right, empty space will appear where the price data stops.

# Charting styles

To change the charting style, choose from the menu on top of the screen the option View, next select the menu item Charting styles...

If you select this menu item a dialog box will appear, where you can select one of the following styles:

#### OHLC Bar

This chart displays the price chart as bars, including open and closing prices. Using this chart you will see three times less detail in your price chart

#### HL Bar

This charts displays the price chart as bars without Open and Close. Using this chart you can display the maximum number of price data

#### Line

this chart displays a line graph by connecting the closing prices

#### Candlestick

The price chart will be displayed as a so called Candlestick chart

#### Elliott OHLC Line

This charting style has been specially designed for the Elliott Wave. Each time interval in the price chart will display the Open, High, Low

and Close in the order they occurred, provided this information is available which is not the case in normal End-of-Day charts.

#### Elliott HL Line

This charting style has been specially designed for the Elliott Wave. Each time interval in the price chart will display the High and Low in the order they occurred. Alternatively you can position the mouse pointer above empty space of the price chart and double click the left mouse button. A dialog box will appear in which you can change the charting style by selecting the charting style of your choice from the drop down box. We will explain the dialog box below:

# Graph type

As explained above under charting styles

# Component

Select if you would like to change the setting of for example the High-Low bar, the Open and so on. You can change pixel size or color settings

#### Color

Change the color of the Bar, line, Candlestick etc.

#### Size

Change the size (in pixels) of a Bar, Line, Candle stick etc.

#### Zoom

NOTE: the steps you have made while zooming in, will be remembered by the program.

NOTE: the zoom selection will only apply to the time period (X-axis) not the price scaling (Y-axis), which will scale automatically!

The zooming function allows you to take a detailed look at a specific section of the chart. First click the right mouse button and select Zoom in from the menu. Alternatively you can select Zoom in from the View menu. The cursor will change to a magnifying glass. Click the mouse at the beginning of your selection and drag the mouse to the end of your selection to select the area you would like to see in detail. Release the mouse and you will now see in detail the selection you have made. By choosing the menu item Zoom out, you will return to your previous chart view. The Zoom Reset option will reset all the zooming steps you made, and show the entire chart plus empty space to the right.

# Scaling

The scaling of the Price (Y-axis) will be done automatically by the program in such a way that the high and low of the chart will always be visible.

The Y-axis can be adjusted by clicking the left margin. In the margin you see two kind of buttons, which can be dragged or clicked. If you click the

button on top, you can adjust the margin at the top of the chart. By clicking the button at the bottom you can adjust the margin below the low of the chart data.

For example increase the available space above the high of the chart, to reveal all wave labels, by dragging the border of the button down or click just under the button in the margin. Clicking just under the button will increase the area above the high.

To increase the margin under the low of the chart, for example to reveal all wave labels, drag the border of the button up or click just above the button in the margin. Clicking above the button will decrease the area under the low.

# Compression

For example using this option, you can compress the time period from daily to weekly to fit a longer time period in your chart view. Normally you won't need this option because ELWAVE will compress automatically, if automatic compression is on. This is very convenient; the only drawback is that gaps like those in daily graphs don't appear.

To compress time periods (X-axis), press the right mouse button and select Compression from the menu. Then select the compression of your choice. Resetting the compression will still show the last price data of the chart. The software will make calculations to fit as many data points in the chart window as possible.

#### **Detail level**

Detail level is linked to wave degrees. You can determine up to which wave degree you would like to see the wave labels and attached objects. Click the scroll bar at the right underneath the chart to adjust detail.

# Rescaling of panes

The size of the panes for indicators, Fibonacci and volume can be changed by grabbing the borderline between the pane and the price chart and dragging it to a new position.

#### Trend lines

Conventional technical analysts connect lows or highs when drawing trend lines, while Elliotticians connect the points where waves begin or end, which could make an important difference. In ELWAVE both methodologies are supported.

A trend line can be inserted anywhere in the price chart, even in the indicator window, which we will explain later. In this program a trend line is an object, like all the objects in the "objects" window or box.

To place a trend line grab (like always; click on the trend line with the left mouse button, while keeping the mouse button pressed) the single trend line from the CHART OBJECTS box, drag the trend line to the place where it should be inserted and drop it (by releasing the mouse button). Then click precisely on the trend line, this way it is selected and you can adjust it. After selecting the trend line two handles will appear (small square boxes). To resize or move the trend line, grab a handle and drag it to the right position. If you drag it on a wave marker the trend line will attach itself to this wave marker. This means it will be repositioned when you grab and drag the wave label later on. Repeat this for the second handle of the trend line.

To change the properties of the trend line, position your mouse pointer exactly on the trend line, press the right mouse button and choose properties.

Alternatively you can more easily change the properties of any object by double clicking it with your left mouse button.

# Special feature

Watch what happens when you drop the trend line on a wave label! It will automatically connect with the previous wave label. For example dropping the trend line on wave 4 will connect a line from wave 2 to wave 4 (with an automatic extension). Dropping it on wave B will connect the line with the previous wave 5.

Practice this option now by dropping trend lines on any labels.

#### Channels

Channeling is an important technique used by Elliott Wave analysts in order to get realistic price targets, therefore this is thoroughly supported in this program. Channels can be inserted manually or the software will insert them automatically after automatic analysis of the chart. The latter channels cannot be selected.

The following describes how to insert channels manually in the chart. Like trend lines, a channel is an object. Channels can be dropped anywhere in the chart. Then select the channel by clicking on it and adjust its position by grabbing the handles.

A more convenient way to use channels is to label the chart first and then grab the channel icon from the objects box, drag it to the wave label which you would like to channel and drop it on this wave label. Notice that dropping the channel on wave label (II) will connect this wave label with the origin of wave (I) and draw a parallel line from wave (I). Dropping the channel object on wave label (III) will connect waves (I) and (III) and draw a parallel line from wave (II). Logically dropping it on wave (IV) will connect waves (II) and (IV) and draw a parallel from wave (III). This also works in corrective waves, where you can drop the channel on wave label (B). Don't hesitate to try this now! Of course, you are not obliged to drop the channel on a wave label. You can drop a channel anywhere you like. To resize or reposition the channel click on one of the trend lines of the channel and three handles will appear. The handles work in the same way as those of the trend lines mentioned in the above section. The only difference is that

the parallel will move together with the base line. The handle on the parallel line can be used for repositioning the parallel line. Naturally this line will always keep its parallel position.

To change the properties of the Channel position your mouse pointer exactly on the Channel, press the right mouse button and choose properties.

Alternatively you can more easily change the properties of any object by double clicking it with your left mouse button.

# **Speedlines**

Grab from the chart object toolbar the speedlines button and drop it in the chart or on a manual wave label. Click on the upper speedline to adjust the drawing of the speedlines, handles will appear which can be used to readjust the speedlines.

With respect to uptrends, connect the beginning of the speedline or the first handle to the low and the second handle to the first important high.

The market should find support at the 2/3 speed resistance line. If this breaks, most probably the lower degree pattern has been completed and a wave of higher degree is in progress.

If the market breaks below the 1/3 line it gets more likely that a new low is just around the corner.

Theoretically all speedlines should provide important support and resistance.

# Projecting Targets

Tip: you can adjust the way targets are displayed by choosing the menu item Targets from the menu option View. You can choose to display target ratios and /or values. In addition you can choose to display targets at the right or at the left of the target line

Using ELWAVE you can project targets yourself once you have determined the wave count by manually labeling the chart first. These targets are based on Fibonacci relationships, which play an important role in Elliott Wave analysis. So with the help of the Targets tool you can make strong probability forecasts provided you have made the correct wave analysis.

The following method of projecting targets only works on charts with manual wave counts. Once a chart has been analysed automatically, choose from Analysis the option Convert to wave count to generate a manual wave count quickly.

To project targets first select a wave label on which the target should be based. Next press the right mouse button and choose from the menu Quick targets.

If, for example, wave 1 and 2 are finished, and you would like to project several targets for wave 3, select wave label 2, click the right mouse button and choose Quick targets from the menu. Instantly the targets will be projected in the chart along with the Fibonacci ratio on which it has been based.

When you project targets based on waves mentioned underneath, the following calculations will be made:

- wave 1: retracements of wave 1 of 38.2%, 50%, 61.8% and 76.4%
- wave 2: the price length of wave 1, times a Fibonacci ratio of 61.8%, 76.5%, 100%, 161.8% and 2.618% will be added to the end of wave 2, which is the beginning of wave 3,
- wave 3 : retracements of wave 3 of 23.6%, 382%, 50% and 61.8% are calculated.

Tip: change the wave count while your Targets are displayed. Grab the wave label to which targets are attached and drag it to its new place. Note that the targets of this wave label (and related wave labels) will change instantly when you reposition the label. If the new targets fit the price action better after moving the wave label, you could have found an interesting wave label position.

- wave 4: the price length of wave 3, times a Fibonacci ratio of 61.8%, 100%, 161.8% and 2.618% will be added to the end of wave 4, which is the beginning of wave 5,
- wave 5 : retracements of wave 5 of 38.2%, 50% and 61.8% are calculated,
- wave A: retracements of wave A of 38.2%, 50%, and 61.8% are calculated,
- wave B: the price length of wave A, times a Fibonacci ratio of 61.8%, 100%, 161.8% and 2.618% will be added to the end of wave B, which is the beginning of wave C,
- wave C: retracements of wave C of 38.2%, 50%, 61.8% and 76.4% are calculated.
- wave X: the price length of the previous wave C, times a Fibonacci ratio of 61.8%, 100%, 161.8% and 2.618% will be added to the end of wave X, which is the start of the next pattern,
- wave D: the price length of the previous wave C, times a Fibonacci ratio of 61.8%, 100%, 161.8% and 2.618% will be added to the end of wave D, which is the start of wave E,
- wave E: the price length of the previous wave D, times a Fibonacci ratio of 61.8%, 100%, 161.8% and 2.618% will be added to the end of wave E.

# **Changing Target Properties**

Position your mouse pointer on the target line and press the right mouse button. A menu will appear from which you can choose Properties... and a dialog box will appear. Here you can change the appearance of the targets.

Alternatively you can double click a target line to change its properties.

# **Deleting Targets**

To delete targets click on the target line. The selected target line will be highlighted. To select multiple target lines at the same time, keep the control key pressed and click on the next target and so on. Then press the DELETE key or choose Delete from the View menu.

# Spirals

Logarithmic Spirals can be placed anywhere in the chart with "drag and drop". You can find the Chart object box on top in which you will find the Spiral button. Move the mouse pointer to the window, click the left mouse button on the spiral in the CHART OBJECT box, keep the mouse button pressed, and drag the spiral to its correct position. Release the mouse button and the spiral will position itself on the spot you have indicated. Notice that spirals can be attached to wave labels as well.

These spirals use the golden ratio of 1.618 and turn left. Spirals not only show a price target, but also a time target. However, it is of paramount importance to adjust the scaling of Y- and X-axis correctly, which needs a lot of experimenting.

To change the properties of the Spiral, position your mouse pointer exactly on the Spiral, press the right mouse button and choose properties.

Alternatively you can more easily change the properties of any object by double clicking it with your left mouse button.

# **Trigger Lines**

Trigger lines can be placed anywhere in the chart with "drag and drop". You can find the Chart object box on top in which you will find the Trigger line button. Move the mouse pointer to the window, click the left mouse button on the Trigger line in the Chart object box, keep the mouse button pressed, and drag the Trigger line to its correct position. Release the mouse button and the Trigger line will position itself on the spot you have indicated. Notice that Trigger lines can be attached to wave labels as well.

If a real-time feed has been activated, in the Intra day version running under Windows 95 or NT, Trigger lines will generate a sound the moment the price action penetrates the trigger line up or down. Copy a sound file with the extension ".WAV" file to the root of drive c:\ before you start the program to enable this. These Trigger lines can be inserted at specific places in the pattern to generate warnings of possible Buy or Sell signals.

To change the properties of the Trigger line, position your mouse pointer exactly on the Trigger line, press the right mouse button and choose properties.

Alternatively you can more easily change the properties of any object by double clicking it with your left mouse button.

# **Golden Ratio Time Ruler**

Tip: Dragging one of the controls of the TIME RULER and pressing SHIFT when releasing it near a top or low, will force the TIME RULER to connect exactly to that high or low!

The TIME RULER can be placed anywhere in the chart with "drag and drop". You can find the CHART OBJECT box on top in which you will find the TIME RULER button. Move the mouse pointer to the window, click the left mouse button on the TIME RULER in the Chart object box, keep the mouse button pressed down, and drag the TIME RULER to its correct position. Release the mouse button and the TIME RULER will position itself on the spot you have indicated. Notice that TIME RULERs can be attached to wave labels as well.

If you click on the horizontal line of this time object exactly, you will select the object. Two controls will appear, which you can grab and drag to reposition the object as well as to drop it on a wave label. If the object is selected press DELETE to erase the object.

The TIME RULER object displays the Golden ratio and facilitates finding such time relationships.

You could for example use the time object to find a date for a new future low by connecting lows. The same goes for major highs, but of course then you have to connect major highs or try to find clusters by connecting all major reversals.

If you put the origin of the line at the first major low and the 1.00 point at the second low, you will have a forecast for the following major low at point 1.62 (which is 38.2% of the length of the beginning of the line to point 1.00) and at point 2.62 (which is 61.8% of the before mentioned length). If you experiment with this tool, you may find interesting Fibonacci time clusters that forecast future price action.

To change the properties of the TIME RULER, position your mouse pointer exactly on the TIME RULER, press the right mouse button and choose properties.

Alternatively you can more easily change the properties of any object by double clicking it with your left mouse button.

# Fibonacci Ratios

Fibonacci relationships play an important role in Elliott Wave analysis. Fibonacci ratios, price ratios as well as time ratios, can help you to discover the underlying wave count. The more Fibonacci ratios you find in your wave count the better your wave count is. With the correct wave count at hand you can make strong probability forecasts for the markets.

In this version only Fibonacci price relationships are implemented.

Tip: change the wave count while your Fibonacci pane is open. Grab the wave label you would like to reposition and drag it to its new place. Notice that the Fibonacci ratio of this wave label (and related wave labels) will change instantly when you reposition the label. When the thermometer turns red you might have found an interesting wave label position, provided you don't break the rules.

To display Fibonacci price relations, you have to label your chart first or convert an automatic labeling to a manual wave count. Next select one of the wave labels of the main wave degree you would like to analyze. It doesn't matter which wave label of that degree you select. Choose Insert from the main menu and select Fibonacci Pane. Above your price chart, the Fibonacci Ratio pane will appear. Use the scroll bar on top at the left if no columns are visible.

Notice that the ratios of the wave degree you have selected will appear in the first column at the left. The next columns display all underlying waves of one lower wave degree of the selected wave, starting with wave 1 or A.

Left of the Fibonacci ratio you will find the waves on which the relationship is based. For example "2: 1" means the relationship between the price length of wave 2 compared to the length of wave 1.

Underneath each relationship you will find a thermometer. The more perfect the Fibonacci ratio is, the more expanded and the more red the thermometer will be.

If you spot perfect Fibonacci relationships, you will know you have made a fine wave count. If only a few Fibonacci ratios show up, you could change your wave count and repeat your Fibonacci analysis until you like the results.

In this way you can see all Fibonacci relationships of a wave at a glance.

#### **Deleting the Fibonacci Pane**

To remove the entire Fibonacci pane you can grab the lower border of the pane and drag it to the top. Release the mouse button and the pane will disappear.

#### Scenarios

NOTE: In a scenario file everything you have defined will be saved. This includes wave labels, trend lines, channels, targets, zooming, indicator panes, positioning of the price chart window and so on.

Now it is possible to save the automatic analysis that contains all alternative wave counts that are still validated, provided the Automatic analysis module has been included with your purchase.

Scenarios are an important feature, because by comparing your hand made scenarios you can keep track of the possible alternatives, their likelihood and get a more clear picture in order to forecast price movements.

To save a scenario is very easy. Each scenario is saved in a different file. Once you think it is worthwhile to save the work you have done or an automatic analysis, choose Scenario from the main menu, then select the menu item Save or Save As. Fill in the name of the scenario and click OK. This way you can save as many scenarios as you like. Suppose you edit your first scenario now to make an alternative scenario, do so and then save it under a different name by using the menu option Save As.

### Simulation

A very educational feature is the powerful simulation feature. Choose Truncate Price data to enable simulations of the chart under inspection. You can instruct ELWAVE to disregard price data in order to study the outcome that ELWAVE would present without knowing these data. This way you can really learn how the Elliott Wave works and determine your most preferred trading or investment strategy.

Truncate the price data whenever you like to investigate what the analysis looks like as if future data were unknown to ELWAVE.

Before you choose this option, move the mouse pointer over the chart area where you would like to truncate the chart and watch the right end part of the status bar for the index number, which has to be inserted in the Truncate dialog box. Next have ELWAVE analyze the chart automatically by choosing from Analyze the option Analyze entire chart and use CTRL-1 to CTRL-9 keys to add data bit by bit. (Please note that Numlock must be on). CTRL-1 will add one data point, CTRL-2 will add 2 data points, CTRL-3 will add 4 data points and in the same way a higher number will double the number of data points added at once.

When new data is added the software will check if critical price levels have been penetrated. If so, it will update the analysis and refresh information in the SUMMARY INSPECTOR as well as show for each time frame in the ALERT INSPECTOR which rules of which patterns have been triggered.

#### Indicators

NOTE: All separate windows and panes can be resized by grabbing the borderline between the price chart and indicator and dragging it to its new position. Also it is possible to close this window by grabbing the borderline and dragging it to the very top of this window.

A selective set of indicators is available, which can help you determine the wave structure. Remember that an Elliott Wave trader makes his trading

decision mostly on the wave count and not solely on indicator values. On the other hand some indicators can be very helpful, because they show specific characteristics in different waves.

Indicators can be added to the price chart or in a separate window. Normally, indicators like moving averages and others, which have the same scaling as a price chart, are added to the price chart itself. Other indicators, like RSI for example, are more clear if displayed in a separate window.

To add an indicator to the price chart select Insert from the main menu and choose the menu item Add New Indicator to Price chart. A list box with available indicators appears. Select the indicator you would like to add, click on the ADD button and click OK. If you wish you to change the properties (number of periods, appearance etc.) of the indicator just click on the PROPERTIES button. To remove an indicator click the REMOVE button.

Tip: Change the properties of an indicator by double clicking the indicator line.

Alternatively you can change the properties of any indicator by double clicking exactly on the indicator line with your left mouse button.

To add an indicator in a new window or pane above the price chart, select the menu item Add New Indicator Pane from the Insert menu. The same list box will appear and you can select the indicator of your choice. By clicking OK the indicator will be displayed. The buttons mentioned above ("Properties and Remove") work in the same way.

The indicator pane has a special feature. On top of the indicator pane you will find "Tabs", which represent a sheet under which an indicator has been put. The first indicator you have defined will appear in the first tab and so on. Now it is very easy to switch indicators by just clicking a tab with your mouse!

Probably you would like to save your work, perhaps to create an alternative scenario with other wave counts, indicators and analysis.

The most useful indicators have been included, which are the following, not all of them have been explained, since all books on technical analysis already clarify their use:

Tip: Place indicators under TABS in the indicator pane to have fast access. If you like to compare indicators, insert each indicator in a different pane. Of course this will consume a lot of space and will leave less room for your price chart.

- RSI
- MACD
- DMI
- Momentum

- Exponential Moving Average
- Simple Moving Average
- Displaced Moving average
- Rate of Change
- Elliott Oscillator
- Stochastic
- Volume
- Bollinger Bands
- Keltner channels
- Parabolic
- Time Clusters

Indicators always have the same compression as the price chart. For example if the RSI has been set to a time period of 14 and a daily bar is displayed in the price chart, then the RSI will calculate a 14-day RSI. If you change the price chart to weekly, the RSI will calculate a 14-week RSI. The same accounts for intra day (intra day version only), for example an hourly chart creates an 14-hourly RSI and so on.

# Creating an indicator in the price chart

NOTE: adding indicators to price charts is meant for indicators that use the same scaling as the price chart, like moving averages.

To create a new indicator or to add an indicator in the active price chart window, click the right mouse button and select Insert from the menu. Next choose New Indicator in Price Chart. A dialog box will appear, which displays available indicators at the left and selected indicators at the right.

At first the box at the right will be empty, so you have to select an indicator. After selecting an indicator from the left, you click the ADD button to add this indicator to your selection. If you choose to display more then one indicator in the same price chart, for example several moving averages, just select another indicator and click the ADD button again. Then click OK and you will return to the price chart in which the selected indicator(s) will be displayed. In theory you can select as many indicators as you like, but too many indicators in the price chart will not clarify the picture.

# Creating an indicator in a separate pane

To create a new indicator or to add an indicator in a separate pane, choose Insert from the main menu and select the menu item New Indicator Pane. A box will appear, which displays available indicators at the left and selected indicators at the right.

Tip: Alternatively you can double click the indicator line to change its properties.

The box at the right will be empty, you have to select an indicator first. After selecting an indicator from the left, you click the ADD button to add this indicator to your selection. If you choose to display more then one indicator, make a selection again. It is possible to display more moving averages in the same window at the same time. Other indicators can not be combined.

# **Modifying indicators**

If you want to modify an indicator, which has been inserted under a TAB of the indicator pane, first click on the tab. Next click the right mouse button, while your mouse pointer is positioned on the indicator pane, and the indicator dialog box will appear. Select from the right window the indicator you would like to modify by clicking on it. Click on the MODIFY button and a dialog box will appear in which the appearance and the parameters of the indicator can be adjusted. Click on the TAB of your choice, modify the indicator and select OK if you agree to the modifications, otherwise select CANCEL.

# **Deleting or removing indicators**

To remove an entire indicator pane you can grab the lower border of the indicator pane and drag it to the top. Release the mouse button and the pane will disappear.

If you want to delete an indicator, which has been inserted under a TAB of the indicator pane, first click on the tab. Next click the right mouse button, while your mouse pointer is positioned on the appropriate indicator pane, and the indicator dialog box will appear. Select the indicator you would like to remove from the right window by clicking on it. Click on the REMOVE button and the indicator will no longer be selected.

### Relative Strength (RSI)

Relative Strength Index (RSI) is an oscillator developed by J. Welles Wilder, JR. It is a very popular indicator and useful when applying the Elliott Wave.

RSI measures the strength of any price action by monitoring changes in its closing prices. It is a leading or a coincident indicator, it never lags the price action. The RSI indicator fluctuates between 0 and 100. Horizontal reference lines in the RSI are often drawn at 30 and 70.

# Trading RSI

RSI can give several buy or sell signals, which are divergences, patterns, trend lines and the absolute level of RSI, the RSI levels as already mentioned. Divergences are the most important signals.

Tip: look for a divergence in the RSI within an impulse wave of any degree, which is very helpful to determine a third wave. Normally a third wave shows the most extreme reading of the RSI, the fifth wave should fail to surpass the low or high of the RSI, set in the third wave of the same degree.

Divergences between RSI and prices give the strongest buy and sell signals. Normally this happens at tops and lows in an impulsive wave, which consists of five waves. If the C wave is equal in length to wave A, the RSI should also show a divergence. Generally a divergence indicates that the trend is weak and ready to reverse.

A bullish divergence gives a buy signal, when prices fall to a new low but RSI fails to make a new low. You can buy as soon as the first RSI low has been below its lower reference line (for example at 30) and the second low of the RSI happens above the reference line. See below.

A bearish divergence works exactly the same, but the other way round. It gives sell signals. You can sell as soon as the first RSI high has been above its higher reference line (for example at 70) and the second top of the RSI happens underneath the reference line.

Trend lines, support and resistance lines, and patterns, like "head and shoulders", work fine with RSI. Because RSI leads the price chart, it often gives early warnings of likely trend changes. RSI trend lines are penetrated before it happens in the price chart and patterns can be completed a few days before completion in the price chart. Of course the fifth wave of a RSI mostly is a failure, except when the fifth wave is an extension.

RSI levels indicate that above 70 the market is overbought, which calls for a correction, although the RSI can reach 80 and more in a bull market. Under 30 the market is oversold, so a rise can be expected, but be careful because in a bear market a RSI beneath 20 is quite common. So when the RSI goes above 70 and certainly above 80, look for a selling opportunity. Beneath 30 and certainly 20 look to buy.

#### **Moving Averages**

Tip: Experiment with different time periods for a moving average and try to figure out for the waves in a pattern if and by how much the MA line gets penetrated by prices when using a specific period.

For example in a third wave or a C wave- if the time period has been set correctly- the moving average line should not be penetrated after it has been broken by the price. Wave 4 will break the moving average line, which tells you the end of the trend is near. See a 40 EMA example.

A 10-day MA shows the average price for the past 10 days, a 30-day MA shows the average price for the past 30 days. A moving average normally will be displayed in the price chart as a line, by connecting each day's MA values.

Moving averages can be calculated as a simple moving average, which gives each day an equal weight.

Also, an exponential moving average can be calculated, where the latter days are heavier weighted.

With a moving average you can see the main trend more easily, because it filters out the small price movements. When it rises, the moving average shows that investors become more optimistic. When it falls, investors become more pessimistic.

An exponential moving average (EMA) is a better trend-following indicator than a simple MA, because it responds faster to the latest price changes than a simple MA and skips older data which are less relevant.

# **Trading Moving Averages**

For the investor moving averages are most helpful in following the trend. The direction of its slope in each time frame tells you what the trend of this specific time frame is. Be sure to trade in the direction of the trend of the time frame you use. When you are trading a trend, you can use a short term MA as a stop

In the price chart you could also display a short term MA and a longer term MA. When the shorter term MA crosses the longer MA in upward direction this is a buy signal, which confirms the uptrend. When it dips under the longer term MA this is regarded as a sell signal. Be careful with this signal, because a sideways market shows a lot of crossovers and thus a lot of false signals.

You can also use a moving average as a stop. The shorter your investment horizon the shorter your moving average should be. As soon as prices break the moving average line you can close your position. This can be very useful if you want to invest in a third wave only.

# **Moving Average Convergence Divergence (MACD)**

Gerard Appel has constructed a more advanced indicator, called the Moving Average Convergence-Divergence, or MACD, which is built of three exponential moving averages. It is displayed as two lines, the MACD line and a the Signal line. The MACD line is built out of two exponential moving averages (EMAs). The signal line is built from the MACD line smoothed with another EMA. The MACD line responds more quickly to changes in prices.

Buy and sell signals occur when the fast MACD line crosses above or below the slow Signal line.

# **Trading the MACD**

You can use the crossovers of the MACD and

- signal lines to trade with the trend of the market.
- The fast MACD line crossing above the slow Signal line gives a buy signal,
- The fast MACD line crossing below the slow Signal line gives a sell signal

Also you can look for divergences as explained with the RSI to determine the momentum of the market. Again a wave 3 should have the lowest (bear market) or highest (bull market) MACD. Divergences in the MACD don't work on longer term.

#### Momentum

The Momentum indicator shows how strong the trend is by measuring its acceleration. The faster Momentum gains or loses speed the more the trend accelerates. This is a leading indicator, which usually reaches a peak before prices reach their highs and reaches a low before prices reach their lows.

# **Trading Momentum**

The trend is up as long as Momentum gets higher and higher, you can normally hold on to your bullish positions. As long as it keeps reaching new lows, you can hold on to your short trades. Every time Momentum reaches a new high, the uptrend is still accelerating. Every time Momentum reaches a new low, the downtrend is still accelerating.

When the direction of Momentum changes, without having set a divergence already, be prepared for a reversal.

You can use Momentum to catch large trends, for this purpose use a longer time frame. If you want to spot changes in the trend quickly, then use a shorter period Momentum.

When the direction of Momentum changes, the pattern could be the third of a C wave or the third of a five wave. A small correction will take place to form the 4th wave. The fifth wave still has to develop in the same direction of the trend. When this fifth wave is underway, you can cover your shorts or sell your longs.

Again a divergence is one of the most powerful signals, which normally occurs in every five-wave structure. The bigger the divergence the sharper the reversal can be.

If Momentum fails to make a new high or low, this could be a C wave or a five-wave structure, which depends on the wave structure of larger degree.

If you can recognize five waves in a C wave in a larger trend, which points to the opposite direction, and at the same time Momentum makes a lower top or a higher low, it is better to close your (trend following) positions at once. After a C wave the reversal could be quite sharp. On the other hand, if the larger trend is still up, this only could be wave 3 with wave 4 and 5 to follow. Here you could hold on to your positions depending on the wave degree you have determined. In a larger degree a bigger reversal can be expected, making it worthwhile to exit. Later on you could possibly reenter at a better price.

You can also draw trend lines or channels to identify support and resistance in indicators. Usually Momentum breaks through its resistance a long time

(relatively speaking) before prices do.

See momentum chart below tops before the top of the market and bottoms on the same day.

# Rate of Change

Rate of Change is quite similar to Momentum, since it also measures the strength of a trend. The only difference is that Rate of Change is calculated differently. It divides today's price by a past price. The faster Rate of Change gains or loses speed the more the trend accelerates. This is a leading indicator, which usually reaches a peak before prices reach their highs and reaches a low before prices reach their lows.

# Trading Rate of Change (ROC)

The trend is up as long as Rate of Change gets higher and higher, you can normally hold on to your bullish positions. As long as it keeps reaching new lows, you can hold on to your short trades positions. Every time Rate of Change reaches a new high, the uptrend is still accelerating. Every time Rate of Change reaches a new low, the downtrend is still accelerating.

When the direction of Rate of Change changes, without having set a divergence already, then be prepared for a reversal.

You can use Rate of Change to catch large trends, for this purpose use a longer time frame. If you want to spot changes in the trend quickly, then use a shorter period for Rate of Change.

When the direction of Rate of Change changes, the pattern could be the third of a C wave or the third of a five wave. A small correction will take place to form the 4th wave. The fifth wave still has to develop in the same direction of the trend. When this fifth wave is underway, you can cover your shorts or sell your longs.

Again a divergence is one of the most powerful signals, which normally occurs in every five-wave structure. The bigger the divergence the sharper the reversal can be.

If Rate of Change fails to make a new high or low, this could be a C wave or a five-wave structure, which depends on the wave structure of larger degree.

If you can recognize five waves in a C wave in a larger trend, which points to the opposite direction, and at the same time Rate of Change makes a lower top or a higher low, it is better to close your (trend following) positions at once. After a C wave the reversal could be quite sharp. On the other hand, if the larger trend is still up, this only could be wave 3 with wave 4 and 5 to follow. Here you could hold on to your positions depending on the wave degree you have determined. In a larger degree a bigger reversal can be expected, making it worthwhile to exit. Later on you could possibly reenter at a better price.

You can also draw trend lines or channels to identify support and resistance in indicators. Usually Rate of Change breaks through its resistance a long

time (relatively speaking) before prices do. See ROC chart below. Looks similar to the momentum chart.

#### **Elliott Oscillator**

This indicator is very useful in counting waves. It was discovered by Tom Joseph in 1987 and named the Elliott Wave Oscillator. Additionally a moving average of the Elliott oscillator can be drawn, normally a 5-period MA is used, which is the (red) line in the picture at the next page

The pattern this oscillator produces has a strong correlation with the trend patterns of the Elliott Wave. For example the 3rd wave mostly is the strongest wave. At this point generally the Elliott Oscillator shows the highest value, thus confirming a 3rd wave.

The Elliott oscillator works in all time frames, provided you have enough periods or bars available in your price chart. In order for the Elliott Oscillator to produce reliable values your price chart should contain 100 bars minimally.

If you work with intra day data, you can zoom in on each wave to check the pattern of the Elliott Oscillator, as long as enough detail is available.

#### Formula

5-period MA - 35 period MA of the (High + Low) / 2

# **Trading The Elliott Oscillator**

A divergence between the Oscillator and prices indicates a trend reversal. When the market has set new lows but the Oscillator does not, you have probably found wave 1 in Elliott terminology.

When you spot this divergence you could do your first trade and buy the market. At this juncture risk is high, so watch the market closely. Always sell when the market reaches a new low, since this could be the beginning of a renewed sell off.

Next a correction will take place, which is wave 2. Neither the market will reach new lows in wave 2, nor will the Elliott Oscillator. If wave 2 is complex, the oscillator will pull back to zero. A simple wave 2 on the contrary will hardly affect the oscillator. When the oscillator reaches zero you could buy again to profit from the coming 3rd wave, on the condition that the pattern of supposedly wave 2 is corrective (when it shows a lot of overlap and not a 5 wave)

Then the market will build wave 3, normally the strongest price movement. Both the indicator and the market will reach new extremes. As soon as wave 3 has gone beyond wave 1, the market will accelerate sharply.

The oscillator does not provide for an exit point in this time frame or wave degree, so you have to look at the sub wave of this wave degree. If you detect a divergence between sub wave 3 and wave 5 of the main 3rd wave, you have found your exit.

After wave 3 again a correction will take place in wave 4. Notice that wave 4 will be complex if wave 2 was simple and vice versa. Normally (90% of all 4th waves) the oscillator will at least retrace to zero in wave 4.

As long as the oscillator does not retrace more than 138.2% of the wave three peak, the correction is considered to be wave 4. If it retraces more prepare yourself for a decline, since there is a strong probability that the price rise was a corrective three wave in a contra trend price movement.

When the Oscillator reaches zero you could enter the market again to profit from wave 5, on the condition that the pattern of wave 4 was corrective.

Most of the time the market will make new highs in the 5th wave, but the oscillator won't come near its top in wave 3. This divergence is a strong sell signal, on the condition that the pattern of the 5th wave is complete.

If both the oscillator and the market make new highs, you will have to relabel the 5th wave to wave 3!

In addition it could be of importance to monitor the crosspoints of the Elliott oscillator and the moving average line a an early warning of a trend reversal.

# Using the Menu Scenario

The Scenario menu is used to import your data for analysis. Furthermore you can use the Scenario menu for saving and loading scenario files, which contain your manual wave count or you can save an automatic analysis.

A scenario file will not only remember the wave count, trend lines, channels etc., but also the indicators and panes as well as the layout of your scenario file.

In accordance with the Windows standard you can also find the Print menu items under the Scenario menu, as pictured below (intra day version for Windows 95).

To access the Scenario menu click on Scenario with your mouse and choose the correct menu item.

Select the Scenario menu and choose New and next From Price data... You can use this command to import new data.

#### Scenario - New

This command is very important for first time users of ELWAVE. You will have to import a MetaStock, ASCII or other data files to start working with the program, unless you would like to use one of the example scenarios provided. All sorts of different data formats can be imported.

First select a file type from the drop down box and cruise to the directory where your files are located. Select the file in the pane at the right and click OPEN. If no file names appear in the list box, you will have to navigate to the directory where you keep your files by clicking on the drop down box next to LOOK IN, click on the drive or directory to list its contents. Please note that only the Intra day version supports intra day files.

Use the menu option From real-time data feed (intra day version only) to collect real-time data from scratch. Wait until the chart appears, which will happen as soon as sufficient ticks have been collected.

Of course an automatic analysis will only be realistic if enough data points are available, so you will have to wait for 500 data points or 2 days, before choosing automatic analysis.

After choosing this command and completing the real-time feed dialog box, ELWAVE will show a new chart window saying "waiting for sufficient data to display chart"

DO NOT change, save or do anything before the chart data appears in the chart window.

Load ASCII data

Select the Scenario menu, choose New and next From Price data... Now a dialog box will pop up, choose FILE TYPE ASCII.

On choosing this menu, item a dialog box will appear, where you can click the file in the section at the right to select which file to load.

If necessary cruise to the correct directory, that contains your files. Load the ASCII file of your choice. Files with extensions like \*.prn will be displayed automatically, otherwise fill in the correct file name to open your file. After pressing the OPEN button a second dialog box will appear.

Here you can define the format of your ASCII file to load it correctly.

Specify the correct items and the correct date format for each column by clicking on the down arrows in the combo boxes and select the correct option.

If your ASCII file has been defined correctly click OK and the file will get loaded. When the file has been loaded, save it as a scenario file by selecting Save as. The scenario file has a link to the correct ASCII file, so the next time you load the scenario file it will load the ASCII file correctly.

The data will be imported, so you can start a new scenario from scratch. Immediately save this chart as a scenario file, because this scenario file will remember where to find the data file.

#### Load MetaStock data

The same applies as above, the only difference is that FILE TYPE must be set to MetaStock 3.1 or to MetaStock 6.51. If your data is still 3.1 format, then DO NOT specify 6.51. The Downloader used with MetaStock 3.1 data may not be able to import the data again.

# Load TC2000 data

The same applies as above, the only difference is that FILE TYPE must be set to TC2000 3.0 or TC 2000 4.0/4.1

#### Load CSI data

The same applies as above, the only difference is that FILE TYPE must be set to CSI

# **Load FutureSource data**

The same applies as above, the only difference is that FILE TYPE must be set to FutureSource

#### Load TechTools data

The same applies as above, the only difference is that FILE TYPE must be set to TechTools.

# Load Keyword data

The same applies as above, the only difference is that FILE TYPE must be set to Keyword. Look for its data in SYS directory, which is a subdirectory of the program.

### **Open Scenaro**

To open an existing scenario choose the Open command from the Scenario menu. A dialog box will appear, and you have to specify the file name of the

scenario, the directory and the drive. ELWAVE will remember the directory which you have used last. If the default directory is not the location of your scenario files, then browse to the right directory. Using this menu item you can retrieve previously saved "hand made" or automatic analyses.

The first time you use ELWAVE, you can use the example scenario files or import one of your own files, since no scenario files of your own have been designed yet.

#### File name.

Type the file name or select the scenario file with your mouse. If you double-click on the file name, the chart will load automatically.

#### Look in.

Here you can browse to the directory which contains your files.

# Files of Type

For now the only file type available is an ELWAVE scenario file. The program will add the extension ".elw" to the file name you have specified.

# Open.

If you have typed the name of the file, confirm to load this file by clicking on the OPEN button.

#### Cancel

Click the CANCEL button to leave the OPEN dialog box. No file will be loaded.

#### **Close Scenario**

Select the Scenario menu and choose Close. Use this command to close the active scenario file. If you didn't save changes made to the scenario, the program will remind you to do so now. Choose YES if you want to save the changes using the same name. Choose CANCEL if you change your mind.

#### Save Scenario

Select the Scenario menu and choose Save. Choosing the Save command will save the scenario file instantaneously. This could be a "hand made" wave count or an automatic analysis. This way you can save your scenarios fast without renaming them. If a scenario is unnamed, you will be asked to provide a file name. If the scenario file already exists you will be asked if you want to replace it. Click OK if you agree and CANCEL to return without saving.

#### Save as Scenario

Select the Scenario menu and choose Save as. The Save as command is used to save the current scenario file the first time or to save it using a different name. This is useful to create alternative scenarios, which you derive from the active scenario. This could be a "hand made" wave count or an automatic analysis. In this way it is easy to create as many scenarios as you like for the same security.

#### File name.

Tip: if you change your preferred scenarios often, you could include the date in the file name. The preferred scenario for the first of January 1999 could have the name "dj199P". This way you can keep track of the chronological changes of your preferred scenarios.

Type the file or select the scenario file with your mouse. It is helpful to specify a file name, which is easily recognizable. For example if you are saving the preferred scenario of the Dow Jones, then type "Dowpref" or any other file name which reminds you of what it is.

#### Save in.

Here you can browse for the directory where you want to save your files.

# Save as Type.

For now the only file type available is the ELWAVE scenario file. The program will add the extension ".elw" to the file name you have specified.

#### Save.

If you have typed the name of the file, confirm to save this file by clicking on the Save button.

#### Cancel

Click the Cancel button to leave the Save dialog. Nothing will be saved.

#### Save all Scenario

Select the Scenario menu and choose Save all. Use this command to save all open scenario files at once. If a scenario is unnamed, you will be asked to provide a file name.

### **Export Metastock (3.1)**

elect the Scenario menu and choose Export MetaStock. This command exports price data of the active chart to a MetaStock (intra day) file. This can be used to convert an ASCII data file to MetaStock format.

# **Export ASCII**

Select the Scenario menu and choose Export ASCII. This command exports price data of the active chart to an ASCII (intra day) file. This can be used to convert a MetaStock data file to an ASCII file.

### Real-time Data feed

Select the Scenario menu and choose Real-time data feed. This command activates a real-time feed for the active chart and will come up with a dialog box, which fields have to be specified. Ask your data vendor for the correct codes and format in order to establish the data feed. It is imperative that your data vendor supports a so called DDE link.

Tip: To print the entire screen press the Print screen key, switch to your word processor, import the picture with CTRL-V and print it from there.

If you can establish DDE links in for example an Excel spreadsheet, you can do the same using ELWAVE.

#### **Print**

Select the Scenario menu and choose Print. The Print command prints the active chart, including visible panes as well as THE SUMMARY INSPECTOR if you have checked this option in the Print dialog box

#### Exit

Select the Scenario menu and choose Exit. To leave ELWAVE choose the Exit command. As usual the same can be accomplished by simultaneously pressing ALT-F4 on the keyboard.

#### **Recent Scenarios**

Select the Scenario menu and choose one of the recent scenarios. At the bottom of the Scenario menu you will find a list of the last scenarios you have loaded before. For your convenience ELWAVE will remember the last four scenario files. This way you have quick access to the files you probably use most. Click on one of the listed files or press the number in front of the file.

# **Edit**

The Edit menu is used to make modifications to your analysis. Some menu items allow you to change the wave count easily. Also you can delete selected objects with the menu item Delete. This can also be done by pressing the DELETE key. Furthermore it is possible to modify the properties of the selected object and to copy the chart or screen to the clipboard.

The Edit menu looks as follows:

To access the Edit menu click on Edit with your mouse and choose the appropriate menu item.

# Degree Up

Select the Edit menu and choose Degree Up. This command only works on manual wave counts and is specially designed for Elliott Wave analysts. Choosing this command will change the wave degree of the selected wave label or group of wave labels to a higher wave degree. Note that you first have to make a selection by dragging the mouse.

When analyzing the wave count of a security it often happens that you have to change the wave degree up or down, for example when an extension or a failure occurs. Instead of deleting the wave label(s) and inserting a wave label of higher or lower degree, you can change the wave degree immediately.

# **Degree Down**

Select the Edit menu and choose Degree Down. This command This

command only works on manual wave counts and is specially designed for Elliott Wave analysts. Choosing this command will change the wave degree of the selected wave label or group of wave labels to a lower wave degree. Note that you first have to make a selection.

When analyzing the wave count of a security it often happens that you have to change the wave degree up or down, for example when an extension or a failure occurs. Instead of deleting the wave label(s) and inserting a wave label of higher or lower degree, you can change the wave degree immediately.

# **Copy Chart**

Select the Edit menu and choose Copy Chart. Use this command to copy the chart to the clipboard. Now you can switch to another Windows application like a word processor or a graphical program and paste the contents of the clipboard into the application. As opposed to a bitmap picture this picture will be relatively small and the embedded objects can be edited in another drawing program.

#### **Delete**

Select the Edit menu and choose Delete when you want to delete a selected object. Note that you will have to select the object first! You can also press the DELETE key on your keyboard to delete the object. If you want to select a multiple of objects, you can select these objects one by one with your mouse, while keeping the CTRL key pressed. By dragging the mouse over a certain area of the chart, you can select all objects in this area at once.

#### **Properties**

Select the Edit menu and choose Properties... when you want to change the properties of a selected object. A dialog box will appear, where you can change the appearance and the parameters of the object, if available. Alternatively you can change the properties of any object by double clicking it with your left mouse button.

The View menu is used to control the layout of your screen. Zooming will allow you to display a specific part of the price chart. You can choose to show or to delete indicator panes, volume, Fibonacci ratios and the display of other objects like for example targets and channels.

When a price chart gets crowded because you have defined a lot of objects, you could choose to show only a selection of objects instead of showing them all.

#### Zoom In

Select the View menu and choose Zoom In. First you have to select this

command and then select the area of the price chart by dragging your mouse. Then you can use this command to zoom in on the selected section of the price chart.

ELWAVE will remember all your zoom in steps and save them in a scenario file. With the Zoom in and Zoom out function you can show more or less detail in the price chart.

# **Zoom Out**

Select the View menu and choose Zoom Out. You can use this command to zoom out and go back one step at the time, repeating the same steps you did when zooming in. ELWAVE will remember all your zoom in steps.

#### **Zoom Reset**

Select the View menu and choose Zoom Reset. This command can be used to reset all zooming steps you have made while using ELWAVE. Once you have reset zooming the zoom steps will be lost! Don't save the scenario file if you would like to retain these steps

# Hairline

Select the View menu and choose Hairline. This command will allow you to toggle the display of the hairline.

# Semi-Log

To change the scaling of the chart (Y-axis), choose from the menu on top of the screen the option View, next select the menu item Semi-log.

If semi-log is the current scaling, you will notice a marker in front of this menu item. To change the scaling to line chart, choose the menu item Semi-log (now the marker in front of it will disappear). Alternatively you can change the properties of the price chart by double clicking the right mouse button on any region of the price chart as long as it is not occupied with any object. In a semi-log scaled chart, the distance between each point is exponential, which means that the distance between 20 and 40 (a 20 point, 100% increase) is the same as the distance between 40 and 80 (a 40 point, but still 100% increase).

# **Targets**

To toggle the display of target ratios, which are printed, left of target lines, choose Target Ratios. This option is useful when the ratios, printed at the left of the target lines, diminish the clarity of the chart. You can choose to display target ratios and/or target values at the right or the left of the target lines or to display just the target lines.

# **Charting Styles**

To change the charting style, choose from the menu on top of the screen the option View, next select the menu item Charting styles... If you select this menu item a dialog box will appear, where you can select the charting styles:

The picture below shows the dialog box to choose from the different charting styles.

Alternatively you can position the mouse pointer on empty space of the price chart and double click the left mouse button. A dialog box will appear in which you can change the charting style by clicking the drop down box.

# Wave Tree

Select the View menu and choose WAVE TREE. This command will allow you to toggle the display of the WAVE TREE.

# Wave Inspector

Select the View menu and choose WAVE INSPECTOR. This command will allow you to toggle the display of the WAVE INSPECTOR.

# Summary Inspector

Select the View menu and choose SUMMARY INSPECTOR to display the summary of trading signals for all time frames.

# Alert Inspector

Select the View menu and choose ALERT INSPECTOR to display the latest activated signals for all time frames.

# **Panes**

Select the View menu and choose Panes. This command will allow you to select which indicator panes will be displayed in the active chart. Also, you can remove the panes from the screen or redisplay them later on. The size of the pane can be adjusted by grabbing the separation border of the pane and dragging it to its new size.

If you select this menu option you will find a list of panes, which are available for the active window. The panes are listed in the order they appear in the active chart window. By selecting or deselecting the particular pane you can toggle its display.

The size of the pane can be adjusted by grabbing the separation border of the pane and dragging it to its new size.

NOTE: to display or remove volume you can select the View menu, choose pane and select or deselect Volume.

The Insert menu can be used to add several things you would like to have displayed in your chart, like for example new indicators and Fibonacci ratios. Indicators can be added either in a new pane or in the price chart. For some indicators only, it is useful to display them in the price chart, as for example moving averages. Because a lot of objects will be added in the price chart already, it is recommended to add most of the indicators in a separate pane. In each pane you can insert several indicators under the tabs on top of the indicator pane.

# **New Indicator Pane**

Select the Insert menu and choose the menu item New Indicator Pane. This command will insert the indicator of your choice in a new pane above the price chart. Theoretically you can add as many indicator panes as you like. On top of each pane you will notice several tabs, which are empty at first. Each time you click on one of these tabs another view will be displayed. This view can contain just one or several indicators.

Tip: if you like, you can add more then one indicator in the same pane. You could add a different indicator under each tab. By just clicking with your mouse on the tab of your choice, you can instantly access the indicator you would like to display.

If you choose this command a dialog box will appear with the available indicators on the left side and the selected indicators at the right. Here you can add and remove indicators, as well as change properties.

You can use the ADD(>>) button to add indicators to the price chart or to the indicator pane. At first no indicators will be selected, so you have to select the desired indicator from the left list box by clicking on it with the left mouse button. Then click the ADD button and the indicator will appear in the list box. Now click the OK button to return to the chart, where the indicator will be displayed. If you change your mind and want to remove the indicator, then click on the REMOVE button before pressing OK.

To change the properties of the indicator, like for example the color and indicator specific variables, press the PROPERTIES button. If you don't want to add new indicators at all, press the CANCEL button and you will return to the price chart without modifications. This only works when you have not yet selected an indicator.

To add an indicator in an empty TAB of an indicator pane, click on the TAB and click the right mouse button. An Indicators menu item will appear, select it and the same dialog box as displayed above will appear. Now you can add another indicator in the same pane. By clicking on the TABS you can switch indicators quickly.

#### Remove indicator

To remove an indicator select the REMOVE button in the indicator dialog box. A dialog box will appear with the available indicators on the left side and the selected indicators at the right. Select the indicator you would like to remove from the list box on the right and press the REMOVE button with your mouse. Now this indicator will be removed. Press OK to leave this dialog box.

# **Properties**

Select the indicator you would like to change from the list box on the right and press the PROPERTIES button with your mouse. Another dialog box will show up.

Alternatively you can change the indicator properties by double clicking with your left mouse button on the indicator line.

You can change the specifications of an indicator as indicated by the Tabs in the dialog box.

#### **Parameters**

To change the parameters of an indicator click on the Tab Parameters. Now you can change the "time periods" and the data field on which the indicator

is based. For example if you prefer a 10-day RSI instead of the standard 14-day, change the time period from 14 to 10.

# Appearance.

By clicking on this tab you can change the appearance of the indicator. To change the line thickness of the indicator press the drop down arrow at the right of "LINE WEIGHT". Here you can select your preference with the mouse . To change the color, press the CHANGE button. In the following dialog box you click the color you prefer, which will then appear in the COLOR/SOLID box and press the OK button.

# **New Indicator in Price Chart**

Select the Insert menu and choose the menu item New Indicator in Price Chart. Next select the menu item Price Chart. The same dialog box will then appear as already explained in the previous section New Indicator Pane. This command will insert the indicator of your choice in the price chart. You can add Bollinger Bands, Keltner channels, Moving averages and Parabolic indicator. Consult other technical analysis books if you need an explanation of these indicators.

# **Managing Indicator panes**

If you want to change the indicator panes already in use, position your mouse pointer on the particular pane and click the right mouse button.

A dialog box will show up, which looks the same as when you add a new indicator pane to the chart.

Here you can add and remove indicators as well as change the properties of the indicator.

#### Fibonacci Pane

This will only work on manual wave counts! Select the Insert menu and choose the menu item Fibonacci Pane. This command will insert a pane with Fibonacci price relationships. First you will have to select any wave label of the wave degree of which you would like to see the Fibonacci ratios. The wave degree you have selected will appear in the first column. In the following columns the Fibonacci ratios of the next lower degree will be listed. Underneath each ratio you will find a temperature indicator, which displays how hot the Fibonacci ratio is. The better the ratio, the more red and expanded the thermometer will be.

#### **Volume Pane**

Select the Insert menu and choose the menu item Volume Pane. This command will insert the volume in a separate pane underneath the price chart of the active chart.

# **Analyze**

# **Analyze Entire Chart**

Use Analyze from the main menu if you would like ELWAVE to generate a wave count automatically. Select the Analyze menu and choose Analyze

entire chart to generate an analysis from scratch, for further explanation see the second chapter of this manual.

# Analyze selected wave

Choose Analyze from the main menu and. Analyze selected wave if you would like ELWAVE to generate a wave count automatically for the selected wave in the WAVE TREE to generate an analysis from scratch, for further explanation see the second chapter of this manual.

# **Update analysis**

Use this option to only reanalyze selectively instead of analyzing the whole chart. ELWAVE will know exactly which section of the chart needs to be reanalyzed, which will save you precious time. If an undefined wave count is returned, you need to reanalyze the chart entirely. Since an Analyze entire chart is more precise, it is advised to prefer this analysis.

#### **Check Wave Count**

To check a wave count you have labeled yourself, select the Analyze menu and choose Check Wave Count. This command can be used to build the WAVE TREE displaying specific information on patterns, rules and guidelines all at once. This is a useful tool to inspect your wave count quickly and in an orderly manner or to navigate the chart, since the WAVE TREE will zoom in on a specific wave degree, thus providing an alternative Zoom in function.

Wave counts will get checked on specific Elliott rules and guidelines, of which different sets are available.

The CLASSIC RULES and guidelines definition will analyze the wave count according to very strict definitions of patterns as required by the Elliott Wave Principle and will signal a false internal structure as well.

The MODERN RULES and guidelines definition has a more pragmatic approach, taking into account that markets not always conform to text book examples.

The guidelines are helpful to assess the probability of a count. The more guidelines have been satisfied, the better the wave count.

#### Convert to Wave count

This option enables you to convert your preferred scenario to a wave count in order to save it as an scenario file for later use. First select your preferred wave analysis on every wave degree possible or accept ELWAVE's outcome. Once you have converted to a wave count you will not be able to convert another analysis.

#### **Clear Analysis**

Selecting this option will clear the automatic analysis completely.

# Start batch processor

This menu option will start the batch processor program, that enables you to analyze multiple charts while you are asleep. Select scenario files to load and analyze.

# **Save Custom layout**

This menu option will save the layout you have made yourself to present results.

# **Custom layout**

This menu option will present your preferred layout which you have previously designed and saved.

# **Custom layout**

This menu option will present your preferred layout which you have previously designed and saved.

# Simple layout

This is a predefined layout that skips most of the experts' information.

# Typical layout

This is a predefined layout that shows a bit more information.

# **Expert layout**

This is a predefined layout that shows all information an expert could ask for.

# **Options**

Choose Options from the main menu if you like to change the default preferences of ELWAVE.

# Analysis Options...

In order to adjust setup of analysis choose from the main menu Options and select Analysis ...

A dialog box will show up where you can change preferences for automatic analysis.

#### Analysis type

By default the option FAST will be selected, which usually is the fastest and best setting. If you would like to have more detail, choose DETAILED or VERY DETAILED.

#### **Pattern definitions**

Choose the rules engine you would like to use for analysis. The Classic adheres to very strict Elliott Wave interpretation, the Modern allows for newly found patterns and contains latest research.

# Extra wave degrees

By inputting 1,2 or 3 extra wave degrees, the software will analyze the last unfinished waves in more detail, resulting in extra time frames and more detailed information in the SUMMARY INSPECTOR. Of course adding extra time frames will increase analysis time.

# Show analyzing

Start a second session of ELWAVE for collection of real-time data I order to watch the markets continuously while another session of ELWAVE updates its analysis.

Switch this on or off, by default ELWAVE shows how it searches for Elliott Wave patterns. Switching it off will save a little bit of time.

#### Show ALERT INSPECTOR when...

By default this is switched on. When critical levels are broken because of price fluctuations, the software will give appropriate signals automatically and if necessary update the previous automatic analysis.

# **Automatic Analysis update**

By default this option is switched on, causing ELWAVE to automatically start a new analysis if critical levels are broken. You will not be able to watch price fluctuations as long as this analysis update needs to complete.

# Limit to once every ...

Depending on the speed of your computer, it will take some time to update the analysis. Reanalysing could take from around 20 seconds to perhaps 2 minutes or even more on slower computers. If you instruct the software to update the analysis too often it will get signals before the previous update has been completed.

# Minimum bars required...

In order to make it possible to detect patterns in a wave, this wave should have a minimum amount of bars or data points. Increasing the minimum number of data points will speed up the analysis, but give less detail.

#### **Analyze selected wave**

Choose Analyze from the main menu and . Analyze selected wave if you would like ELWAVE to generate a wave count automatically for the selected wave in the WAVE TREE to generate an analysis from scratch, for further explanation see the second chapter of this manual.

## Update analysis

Use this option to only reanalyze selectively instead of analyzing the whole chart. ELWAVE will know exactly which section of the chart needs to be reanalyzed, which will save you precious time. If an undefined wave count is returned, you need to reanalyze the chart entirely. Since an Analyze entire chart is more precise, it is advised to prefer this analysis.

#### **Check Wave Count**

To check a wave count you have labeled yourself, select the Analyze menu and choose Check Wave Count. This command can be used to build the WAVE TREE displaying specific information on patterns, rules and guidelines all at once. This is a useful tool to inspect your wave count quickly and in an orderly manner or to navigate the chart, since the WAVE TREE will zoom in on a specific wave degree, thus providing an alternative Zoom in function.

Wave counts will get checked on specific Elliott rules and guidelines, of which different sets are available.

The CLASSIC RULES and guidelines definition will analyse the wave count according to very strict definitions of patterns as required by the Elliott Wave Principle and will signal a false internal structure as well.

The MODERN RULES and guidelines definition has a more pragmatic approach, taking into account that markets not always conform to text book examples.

The guidelines are helpful to assess the probability of a count. The more guidelines have been satisfied, the better the wave count.

#### Convert to Wave count

This option enables you to convert your preferred scenario to a wave count in order to save it as an scenario file for later use. First select your preferred wave analysis on every wave degree possible or accept ELWAVE's outcome. Once you have converted to a wave count you will not be able to convert another analysis.

### **Clear Analysis**

Selecting this option will clear the automatic analysis completely.

#### Start batch processor

This menu option will start the batch processor program that enables you to analyze multiple charts while you are asleep. Select scenario files to load and analyze.

# **Save Custom layout**

This menu option will save the layout you have made yourself to present results.

# **Custom layout**

This menu option will present your preferred layout which you have previously designed and saved.

#### Custom layout

This menu option will present your preferred layout which you have previously designed and saved.

# Simple layout

This is a predefined layout that skips most of the experts' information.

# Typical layout

This is a predefined layout that shows a bit more information.

# **Expert layout**

This is a predefined layout that shows all information an expert could ask for.

# **Options**

In order to adjust setup of analysis choose from the main menu Options and select Analysis ...

A dialog box will show up where you can change preferences for automatic analysis.

# Analysis type

By default the option FAST will be selected, which usually is the fastest and best setting. If you would like to have more detail, choose DETAILED or VERY DETAILED.

# **Pattern definitions**

Choose the rules engine you would like to use for analysis. The Classic adheres to very strict Elliott Wave interpretation, the Modern allows for newly found patterns and contains latest research.

# Extra wave degrees

By inputting 1,2 or 3 extra wave degrees, the software will analyze the last unfinished waves in more detail, resulting in extra time frames and more detailed information in the SUMMARY INSPECTOR. Of course adding extra time frames will increase analysis time.

# Show analyzing

Start a second session of ELWAVE for collection of real-time data I order to watch the markets continuously while another session of ELWAVE updates its analysis.

Switch this on or off, by default ELWAVE shows how it searches for Elliott Wave patterns. Switching it off will save a little bit of time.

#### Show ALERT INSPECTOR when...

By default this is switched on. When critical levels are broken because of price fluctuations, the software will give appropriate signals automatically and if necessary update the previous automatic analysis.

# **Automatic Analysis update**

By default this option is switched on, causing ELWAVE to automatically start a new analysis if critical levels are broken. You will not be able to watch price fluctuations as long as this analysis update needs to complete.

# Limit to once every ...

Depending on the speed of your computer; it will take some time to update the analysis. Reanalyzing could take from around 20 seconds to perhaps 2 minutes or even more on slower computers. If you instruct the software to update the analysis too often it will get signals before the previous update has been completed.

# Minimum bars required...

In order to make it possible to detect patterns in a wave, this wave should have a minimum amount of bars or data points. Increasing the minimum number of data points will speed up the analysis, but give less detail.

# **Analyze selected wave**

Choose Analyze from the main menu and . Analyze selected wave if you would like ELWAVE to generate a wave count automatically for the selected wave in the WAVE TREE to generate an analysis from scratch, for further explanation see the second chapter of this manual.

# **Update analysis**

Use this option to only reanalyze selectively instead of analyzing the whole chart. ELWAVE will know exactly which section of the chart needs to be reanalyzed, which will save you precious time. If an undefined wave count is returned, you need to reanalyze the chart entirely. Since an Analyze entire chart is more precise, it is advised to prefer this analysis.

# **Target Zones**

Choose Target Zones... to change settings, which determine what will be shown in the chart. See the Target Clusters chapter for more explanation.

#### **Wave Inspector options**

Choose Wave Inspector... to change which information will be shown when the WAVE INSPECTOR has been activated. A dialog box will pop up as shown below.

Here you can toggle the listed options to display the information you would like to see in the WAVE INSPECTOR window.

After a while or if you are an experienced Elliott Wave analyst, you probably would like to see only the rules and guidelines which have been violated. To accomplish this deselect all check boxes and all other information will not been shown.

If you switch show pattern in chart on, not only the PATTERN, but also the SWING FILTER and TARGET BARS will be pictured in the chart.

#### Snap wave labels to extremes

By default this switch is on making sure that the wave label you insert in the chart is attached to the top or low automatically. If you like to put it at a specific spot precisely, disable this setting by selecting this option.

#### **Truncate Price Data**

Use this option to start simulations of the chart under inspection. Truncate the price data wherever you like to investigate how the analysis looks like if future data were unknown to ELWAVE. Move your mouse pointer over the chart at the price bar where you would like to truncate the data and read from the status bar the index number. Insert the index number in the TRUNCATE PRICE DATA dialog box.

Next have ELWAVE analyze the chart entirely and use CTRL-1 (from the numerical keypad, make sure that Numlock is on) to CTRL-9 keys to add data bit by bit. If you use CTRL-1 only 1 bar or tick will be added, using CTRL-2 will add 2 bars, CTRL-3 adds four bars and so on. The software will show you exactly at what cross points it will signal a positive or negative indication and when it decides to update the analysis.

# Show truncated price data

If this option is checked, truncated price data will show grayed out in the chart. Select this menu item again to hide truncated data.

#### Correct Bad Ticks...

Bad ticks will be automatically corrected in intra day charts only, provided you have a real time feed enabled. If you load an existing file you could have the whole file corrected by selecting this menu option. Make sure the settings in the \*.ini file of ELWAVE are correct, see the special section on real-time data feed. The elwave60.ini file can be found in the Windows directory.

### **Perform Stock Split**

Using this option you can split an ASCII or Metastock file and save the new data. Export of other file types is not supported so these data should be split using the data vendors' software. This option has been added because of the conversion of price data to EURO and the huge (intra day) ASCII files ELWAVE can handle, which are too large to split in Excel.

# **Export Summary Signals**

Using this option an ASCII file will be generated in which the activated trading signals can be saved for loading and further analysis in Excel.

#### Screen

#### Open screen

Select the Screen menu and choose Open. This command can be used to open previously saved screens. A dialog box will appear in which you can specify a screen file by typing its name, or choosing the screen of choice from the list box. Then click the Open button to confirm. If the screen is not listed, browse to the right directory.

#### Save Screen

Select the Screen menu and choose Save. Choosing the Save command will save the screen instantly. In this way you can save your screens fast without renaming them. If you haven't saved your screen before, a dialog box will appear in which you have to specify a screen name by typing it (a maximum of 8 characters) or clicking the screen of your choice from the list box. If the screen is not listed, browse to the right directory. Make sure you give the screen an easily recognizable name. Then click the Save button to confirm.

If the screen already exists you will be asked to replace it. Click OK if you agree and CANCEL to return without saving.

#### Save as

Select the Screen menu and choose Save as. The Save as command is used to save the current screen file for the first time or to save it using a different name. This is useful to create different screens, which you could build using the active screen. In this way it is easy to create as many screens as you like for the same security or multiple securities.

# **Close Screen**

Select the Screen menu and choose Close. Use this command to close the active screen file. If you didn't save the changes made to the screen, the program will ask you if you want to do so now. Choose Yes if you want to save the changes using the same name. Choose Cancel if you change your mind.

#### Recent Screens

Select the Screen menu and choose one of the Recent files. At the bottom of the Screen menu you will find a list of the last screens you have loaded. For your convenience ELWAVE will remember the last four screen files. This way you have quick access to the screens you probably use most. Click on one of the listed screens or press the number in front of the file.

# Using the Drawing Tools

#### Trendline

The trendline tool is probably the simplest tool available in ELWAVE, yet it is one of the most important. The reason that it is so important, is that it defines the trend that the market is in. There are of course, many degrees of market trends – short, intermediate and long term. Whatever degree you are in, the trendline can tell you if you are still in it.

The best way to use the trendline is just to draw the straight line on a chart connecting low points for an uptrend or high points for a downtrend. You must connect at least two points on the chart for it to be valid. These points must be reversal points that are indicated to be significant pivot points. See

example.

Trendlines can be drawn on three types of trends, uptrends, sideways trends and downtrends. A break in the trend is indicated when the trendline is broken by either a percentage or number of points. This is because many times the trendline is broken only by a small price or percent amount only to recover. A common number used by many is either 3 percent or 3 points. The best way to know what is an important number for an individual security or commodity is to check back on historical data to see what works the best.

Volume should be watched carefully when a trendline is broken. It can tell you if the break is valid or not. A break of a trendline on increasing volume means that it is the real thing. A break on light volume is suspicious. See the following example and notice the light volume at the top and the increase on the break of the trendline.

Some tips to use with trendlines are:

- 1) The more bottoms a trendline has the more important it is.
- 2) The longer the trendline, the more important it is.
- 3) A long trendline with a large number of bottoms hitting the line is more important that a long one with just a few bottoms on the trendline.
- 4) The steeper the angle of a trendline, the less important it is. The more horizontal trendlines are more important.
- 5) The fourth wave almost always breaks the trendline, unless it is extremely strong.

The following chart illustrates a minor uptrend first broken by the 4<sup>th</sup> wave and then finally broken by the minor trendline only to go down to the longer term trendline.

Using Parallel Channel Lines

Channel Lines can be used to define the tops and bottoms of trends. The market usually will thrust up to the top of the channel and react back down to the bottom of the channel.

To properly draw the channel you must first wait for the first two waves to form. In an uptrend draw the bottom on the channel on points 0 and 2 and the top of the channel on point 1. The top of wave 3 should end when it hits the top of the channel. See chart

When you get to the top of wave 3 then the channel should be adjusted so that its top is at 3 and the parallel bottom is at 0 and 2. See chart.

When the bottom of this channel is broken it signals the end of the uptrend. Notice the bottom of the 4<sup>th</sup> wave should end close to the bottom of the

channel. The 5<sup>th</sup> wave should then start. The price target for the 5<sup>th</sup> wave is the top of the channel.

# **Using the Fan Tool**

This is one of the most important tools in Elliott Wave analysis. This tool can be used to find trend corrections and reversals. What this tool does is find percentage retracements of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> reactions in a correction within an uptrend or downtrend. See the next two charts.

# **Using the Spiral Tool**

The Spiral tool can be used to show the ends of the corrections in the market. Place center at the beginning of the big wave and expand it out until it fits the end of the first wave. These spirals use the golden ratio of 1.618 and turn left. Spirals not only show a price target, but also a time target. However, it is of paramount importance to adjust the scaling of Y- and X-axis correctly, which needs a lot of experimenting.

To change the properties of the Spiral, position your mouse pointer exactly on the Spiral, press the right mouse button and choose properties.

# **Using the Golden Ratio Time Ruler**

Tip: Dragging one of the controls of the TIME RULER and pressing SHIFT when releasing it near a top or low, will force the TIME RULER to connect exactly to that high or low!

The TIME RULER can be placed anywhere in the chart with "drag and drop". You can find the CHART OBJECT box on top in which you will find the TIME RULER button. Move the mouse pointer to the window, click the left mouse button on the TIME RULER in the Chart object box, keep the mouse button pressed down, and drag the TIME RULER to its correct position. Release the mouse button and the TIME RULER will position itself on the spot you have indicated.

If you click on the horizontal line of this time object exactly, you will select the object. Two controls will appear, which you can grab and drag to reposition the object as well as to drop it on a wave label. If the object is selected press DELETE to erase the object.

The TIME RULER object displays the Golden ratio and facilitates finding such time relationships.

You could for example use the time object to find a date for a new future low by connecting lows. The same goes for major highs, but of course then you have to connect major highs or try to find clusters by connecting all major reversals.

If you put the origin of the line at the first major low and the 1.00 point at the second low, you will have a forecast for the following major low at point 1.62 (which is 38.2% of the length of the beginning of the line to point 1.00) and at point 2.62 (which is 61.8% of the before mentioned length). If you

experiment with this tool, you may find interesting Fibonacci time clusters, that forecast future price action.

To change the properties of the TIME RULER, position your mouse pointer exactly on the TIME RULER, press the right mouse button and choose properties.

# Conclusion

The Elliott Wave Theory and application to the markets is one of the most important tools that a trader has at his fingertips. It is overlooked and not used due to its subjectivity. The rules of the theory must be mastered and experience is needed before it can be successfully used for trading purposes. Until now there was not software program capable of allowing the trader to use the theory in his trading. The ELWAVE program has filled that important gap. It has everything in it to successfully a trading program for the markets. Put the Elliott Wave theory to use in the markets with the help of the ELWAVE program and you should learn to love to analyze and successfully the markets.

### **Internet Site**

With the purchase of this book you are eligible to access the Elliott Wave Masters site. To do this you need the username and password. To obtain this just e-mail us at: publisher@tradersworld.com

# **Order Form**

# **Prices for the ELWAVE Program and the Modules** (prices subject to change) **Basic:** \$255 Intraday: \$315 Automatic: \$470 **Trading Signals: \$315** Target Clusters: \$270 Trial Version: \$75 **Update to Basic: \$180** Company Address \_\_\_\_\_ City\_\_\_\_\_State\_\_\_Zip\_\_\_\_ Phone\_\_\_\_\_E-mail\_\_\_\_ Method of Payment: \_\_\_\_ Check \_\_\_\_ MC \_\_\_\_ Visa \_\_\_\_ AMAX Credit Card No. \_\_\_\_\_Exp. \_\_\_\_ Website: www.tradersworld.com, E-Mail: publisher@tradersworld.com Toll Free: 800-288-4266, Phone: 417-882-9697, Fax: 417-886-5180 **Traders World** 2508 W. Grayrock St. Springfield, MO 65810