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Biorhythm waves starting at birth

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Contents

Preface

Chronobiology, a branch of biology is concerned with one-day or on-year cycles or cycles of other lengths, which are important phenomena of life. The study of biorhythms, according to which 23, 28 and 34-day (physical, spiritual and intellectual) waves start from the day when we are born and these waves stay with us without disappearing or changing at all, is often considered as a degenerated branch (pseudo-science[1]) of chronobiology. The role of the day of birth may make us think of horoscopes, but the propagators of the three cycles do not deal with horoscopes. And neither do we.

The author of this essay is a retired professor of economics and statistics. Consequently he is not involved in biology and not a specialist of chronobiology, although he knows its statistical methodology and the statistical means of studying cyclical phenomena.

When the study of biorhythms starting from birth itself was born, the founding fathers were still relating to biology, but their followers preferred to present this topic as practical knowledge. "Is this your day?" – is the title of the book[2] published in 1973 by George S. Thommen, one of the best known "apostols". According to this book if we calculate the daily state of our biorhythms, we can find out information about the possibilities allowed by out physical, spiritual and intellectual condition to see whether we need to lay special emphasis on preventing some accident for example.

The theory of biorhythm cycles starting from birth was born in the first years of the 20th century. A wave of its propagation emerged in the 1970's in several parts of the world. It reached Hungary in l977 and I myself became familiar with it then. I thought something that seems true when you hear it first might as well be really true. If you, my dear reader, have not heard about these waves, just read the Introduction and you can "catch up" with other more informed readers.

A started my research work as a hobby the aim of which was to decide whether such cycles existed and how their existence could be proved or denied by means of statistics. If on the basis of biological studies the existence of such waves is impossible, then strictly observing the rules of statistical research I cannot reach results proving biorhythm as it would also turn out to be impossible. I started my research on this basis. I found that this kind of biorhythm does exist, and the existence of (significantly?) more than three cycles can be demonstrated.

As years passed – unlike my original plans – I had several ideas about what sort of role it could have in the operation of the human body, if it really existed. I thought about conception, birth, choosing partners and dreams as the main fields. I could come up with anything really at my own responsibility, but if these things can be proved by calculations, then the situation is different regarding what I am "allowed" to think of and what I am "obliged" to think of. I supported my hypotheses with calculations based on hundreds of thousands items of data. My experiments can be repeated by others, independently from me, using other data.

I have got to acknowledge that the competent biological sciences do not know my hypothetical statements without the validity of which my calculation results could not have been reached. One of these hypotheses for example is that living creatures, such as human beings, have a biological computer, calendar and a diary or archives suitable for storing "records" and video recordings" arranged daily, and these things are all utilised. I have got to assume the existence of other subconsciously working abilities. No doubt, it is unusual to "prove" something first and then define what can be actually proved with the results.

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1 Beck, Mihály: Tudomány – áltudomány. [Science – Pseud—science] Akadémiai Kiadó, Bp. 2nd revised edition, Akadémiai Kiadó. l978.
Ádám, György: Parabiológia, parapszichológia. [Parabiology, parapsychology] Természet Világa, l982/11.

2 G. S. Thommen: Is this your day? Crown Publishers I. N. C., New York, 1973.

I often read statements according to which there are a lot of things we still do not know about the operation of the brain, the role of some of the genes, etc.[3] I hope the biological apparatus of the mechanism of biorhythm has a place somewhere in these "black boxes" and somebody will find it there. Mystical ideas are far away from me.

I have mentioned statistics several times. Do not worry my dear Readers, who are not familiar with this branch of science or know only a little about it, I "consider" you in the course of describing my statistical studies and results. I might even say that if you leave out the sections that are the more difficult from this aspect, it does not necessarily affect understanding the essence of the message. Maybe I also need to consider my statistician Readers, because in order to be clear so that everybody can understand me I refrained from using more developed mathematical statistical methods. They will be used at another place.

The present study has three parts. In the first part I try to (and I think I do) answer the question whether biorhythm starting from birth exists. The second part is about the role of biorhythm in who and what we dream of on a given day, and I also deal with its statistical demonstration. The third part is about the biorhythm of choosing partners, conception and birth. Again I finish this part with statistical demonstration. The three sections are followed by an Annex. (Chapter 4.2. of the Annex will be included in the final version of the study.)

I do not intend to answer the question what the use of my research results is.

I thank everybody for all the help they gave me. (Some of the acknowledgements can be found in chapter 1.2., the rest will be included in the final version.)

Budapest, 2004.

The Author

[3] During my research I was informed about significant new discoveries several times.

1. Do 23, 28, 33-day and other cycles exist?

1.1. Introduction

Biorhythm dealt with here was born in Central Europe. Wilhelm Fliess (l859-l928), ear-nose-throat specialist from Berlin[4] and Herman Swoboda (l873-l963) a psychologist from Vienna[5] discovered 23-day and 28-day spiritual cycles counted from people's date of birth.

Sigmund Freud's biographer[6] devoted a separate chapter to Freud's "Fliess-period" and commented on it resentfully. For quite a long time Freud was highly appreciative of Fliess's work including his ideas on biorhythm. He even praised him calling him the "Kepler of biology". Later on Freud changed his opinion on Fliess. According to G. S. Thommen mentioned above the letters of Fliess written to Freud and most of the books, studies and documents Fliess left behind got lost during World War II.

H. Swoboda collected 80 thousand client statistical data during a period of 20 years. In his book Thommen describes Swoboda's role at the university of Vienna and at the Austrian radio. In the end he says that in 1945 when the Russians occupied the university of Vienna all of Swoboda's materials got destroyed. The same thing must have happened to everything Fliess and Swoboda left behind.

The 33-day intellectual cycle was discovered by Friedrich Teltscher, professor of engineering from Innsbruck, in l928.

In the cycles that can be represented with sine-waves they assume the existence of a positive and negative section with peak point and a low point. The researchers of biorhythm say that the meeting point or close proximity of the prominent points (starting and bisecting points) of the different curves ("critical days") are more liable to accidents, death cases, etc. (see Figure 1.1.1.)

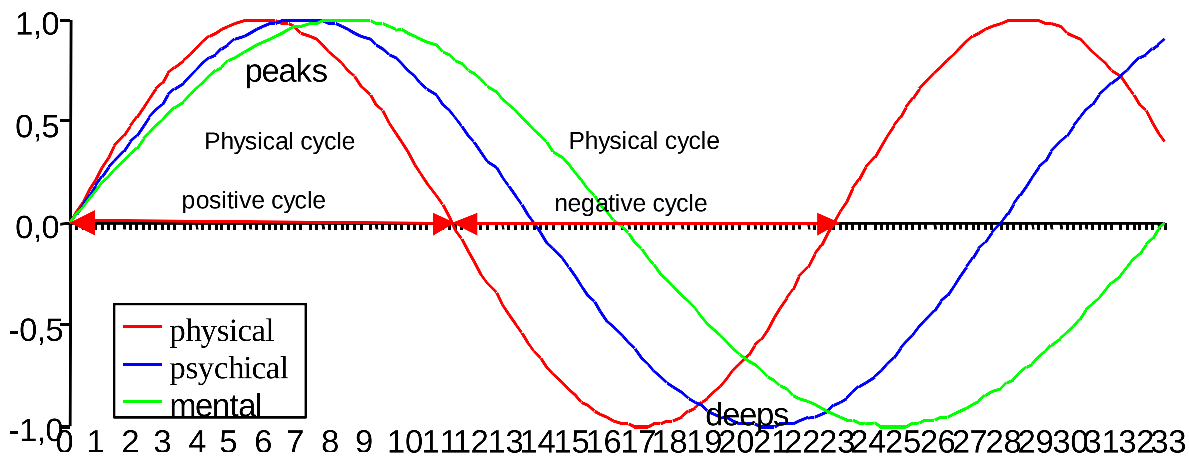

Figure 1.1.1.

The biorhythm of the first 34 (0-33) days of our life

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4 Wilhelm Fliess: Der Ablauf des Lebens. Wien, 1906.

5 Herman Swoboda: Die Perioden des menschlichen Organismus in ihrer psychologischen und biologischen Bedeutung. Leipzig, Wien, 1904.

6 Ernest Jones: Sigmund Freud élete és munkássága. [The life and work of Sigmund Freud] Európa, Budapest, 1973.

The three sine-curves will only show the same picture in $23 \cdot 28 \cdot 33 = 21252$ days (58 years and 68 days). Before that the starting point of the three cycles do not coincide. Different prominent points of two or three cycles must meet every now and again, but most of the time the curves just get entangled irregularly. Sometimes several prominent points get more or less closer to each other, which means that there is a special situation from the aspect of biorhythm. Such situations are in the background of the subject of our investigations.

Below instead of drawing sine-curves I introduce a simpler method of representation, which is illustrated by Figure 1.1.2. I do not bother with giving an explanation of the symbols.

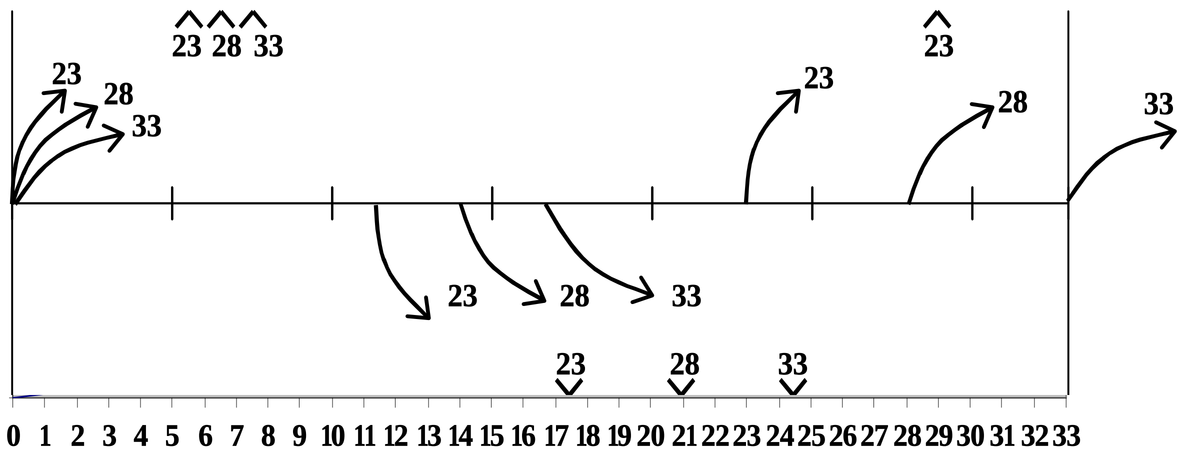

Figure 1.1.2.

Representing biorhythm cycles

Beside Thomman a Japanese author K. Tatai[7] can also be mentioned from the special literature relating to the applications of the theory of biorhythm. Among Hungarian works the book written by Détári László – Karcagi Veronika[8] should be mentioned, which is mainly about biological cycles recognised in the scientific world, but it also gives a correct description of the three waves thought to be pseudo-scientific, and we should also point out the chronobiological study written by Moussong-Kovács Erzsébet[9], which also refers to some statistical studies denying the theory of biorhythm.

The main method of the argumentation and "demonstrating" procedure followed by Thommen and Tatai is listing individual examples. As the cause of the heart attack, death or accident of famous people they stated the state of their biorhythm on the given day, their critical days from this aspect or repeatedly getting into a negative phase, but it can also explain outstanding performance, when the day of such good performance was in the positive section of each one of the three cycles or only two cycles, possibly near the peak point of the cycle. Thommen pointed out two sport achievements. One of them was the series of Olympic successes of Mark Spitz American swimmer, and the other one was the chess victory of the American Bobby Fischer.

Mark Spitz was born on 10th February l950. On 27th August 1972 he was 8234 days old. This was when his new 23-day physical days started, and his new 28-day spiritual cycle started two days earlier. Under the "protective screen" of the positive section of the two cycles he won 7 gold medals at the Summer Olympic Games in Munich and set up the same number of world records. Thommen's chart (transformed according to Figure 1.1.2.) is shown in Figure 1.1.3. It can be

7 K. Tatai: Biorhythm for health design. Japan Publications Inc., Tokyo, 1977.

8 Détári, László – Karcagi Veronika: Bioritmusok. [Biorhythms] Natura, 1981.

9 Dr. Moussong-Kovács, Erzsébet: Humán kronobiológia és –patológia. A biológia aktuális problémái 21. [Human chronobiology and pathology. The actual problems of biology] Medicina 1981.

seen that the intellectual cycle was right in the opposite state, but sport achievements are not regarded as mental creative work. (Thommen,. p. 105) See figure 1.1.3.

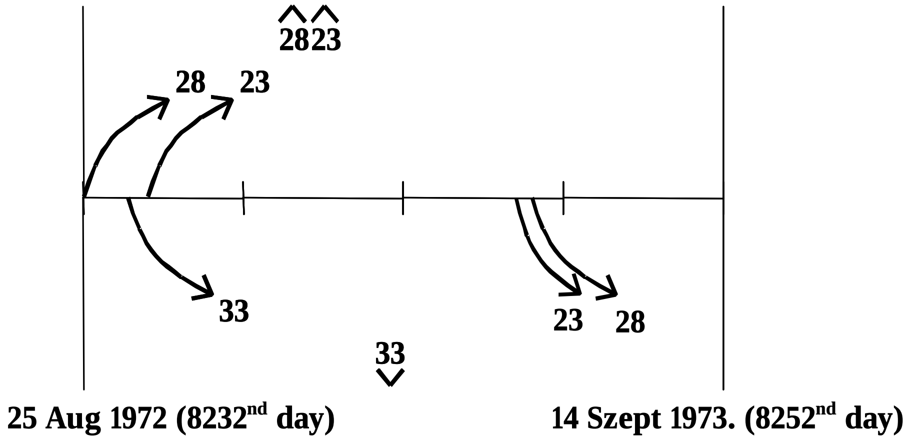

Figure 1.1.3.

The gold medals and records of Mark Spitz

Bobby Fischer was born on 3rd August l943. During the period of a chess work championship, on 15th December 1962 he was 7222 days old, which was the 0th day of the 23-day cycle. ($\frac{7222}{23}=314$, the division remainder is 0.) His intellectual 28-day cycle ($\frac{7224}{28}=258$) started two days later and his 33-day intellectual cycle ($\frac{7227}{33}=219$) started 3 days after that. The three peaks were necessarily close to each other too. The only lost game was on the 0th day of the 28-day spiritual cycle. (Thommen's book mentioned above, p. 1l3). In figure 1.1.4., under the horizontal axis the result of the individual games is shown with the usual signs for lost (0), drawn (½) and won (1) games.

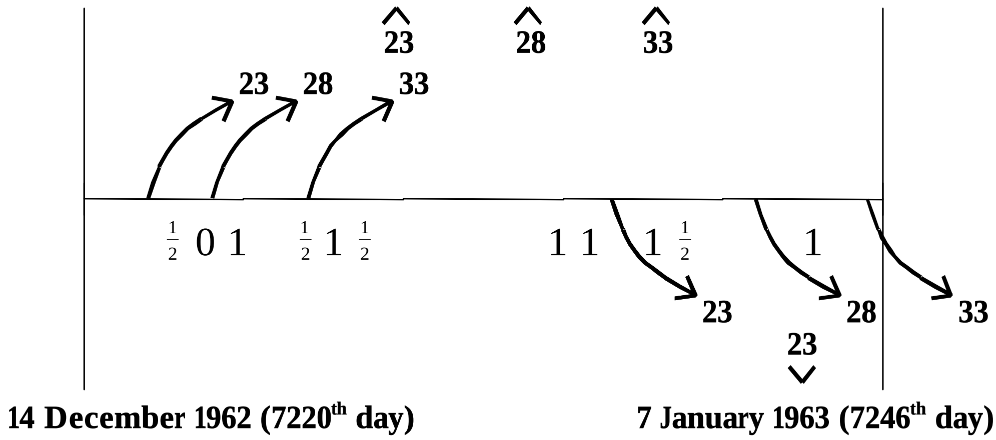

Figure 1.1.4.

Chess and biorhythm: Bobby Fischer

Critics were right to say that individual examples are not demonstrative. The suspicion arises obviously that of the many cases authors select accidentally favourable ones and throw out the unfavourable ones. In this book we intend to show different evidence. And of course, if there is proper evidence, the individual cases can also be taken seriously. With respect to what believers in biorhythm state these examples are definitely very convincing. I also contribute to the examples with two Hungarian stories. They also involve sportsmen, but instead of representing cases of “good” biorhythm they are cases of “bad” biorhythm.

István Kovács (Kokó) won the Olympic gold medal in boxing several times (he was born on 25th February 1961). During his professional career on 27th January 2001 he played against a Dominican boxer, Antonio Diaz. Kokó won the match, but it was much more difficult than expected. The sportsman himself and the experts said that his mood and ability to fight was not as usual. On the day of the match Kokó was in a passive period according to all three cycles, and even according to the fourth 38-day cycle to be introduced later. The day of the match was right at the low point of the 28-day spiritual cycle. Consequently in a period of one week he went through four low points.

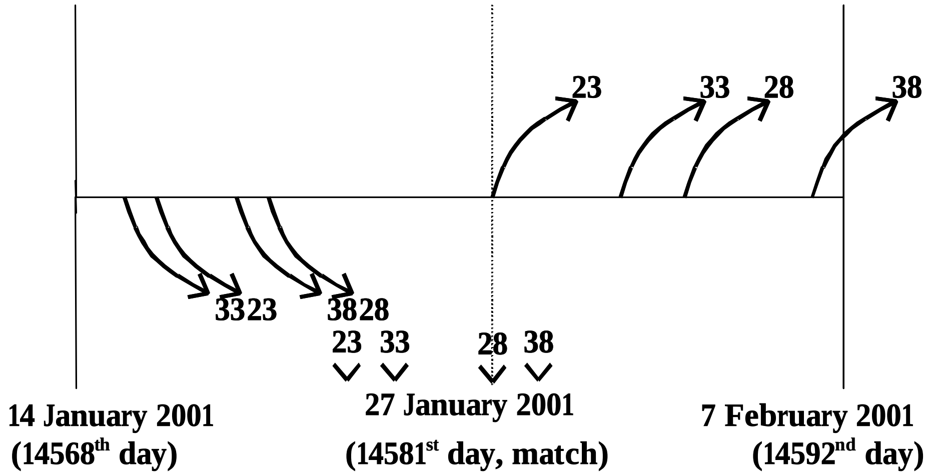

Figure 1.1.5.

Kokó’s difficult victory

A chess player, Judit Polgár (born on 23rd July 1976) was in a very similar biorhythm situation on one occasion. At one of the elimination tournaments in Moscow she was eliminated surprisingly soon against Milov from Switzerland on 27th January 2001. She was not among the best 64 players. Experts say that even the greatest competitors have a bad day sometimes. In her case in a period of four days she had four low points. See figure 1.1.6.

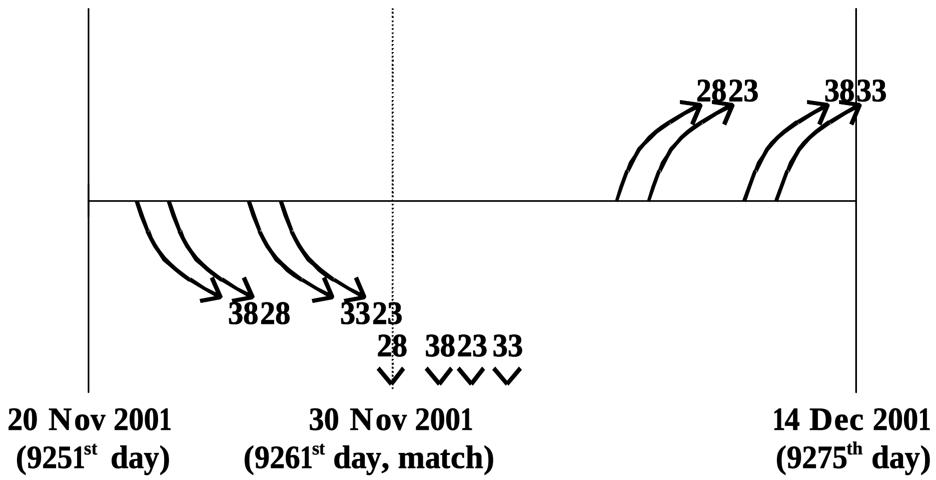

Figure 1.1.6.

Judit Polgár’s bad day

Leaving behind the deceptive mass if individual examples how could the existence of biorhythm be demonstrated by means of statistics? Or how could its existence be denied? If it exists, how could our knowledge be used? In respect of these questions first of all traffic accidents proved to be a good field of experimenting in different periods of the 20th century.

It seemed practical to take only those accidents into consideration where the person who suffered the accident also caused the accident. Biorhythm could play a role in these cases. The subjects of the examination were aeroplane and car accidents. It had been demonstrated several times that in such cases the proportion of critical days is larger than the accidentally expectable proportion. However, others had come to the result that the proportion of critical days does not show a significant difference in the case of the accidents. At certain transportation companies drivers were not allowed to drive on previously calculable critical days hoping that the number of accidents could be reduced by this.

I myself thought that in the special literature dealing with biorhythm critical days are not defined properly or clearly. Generally only the starting and bisecting days of the cycles were taken into consideration and not the quartile days, although either the peak point or low point of a cycle can be expected to play a role in creating a danger of accident. Furthermore it is not clear which type of approach of the famous cycle points is significant.

I came to the conclusion that the course of the individual cycles could be and should be examined independently from each other, without arbitrarily pointing out the critical days. Days when there is a danger of accident are statistically prominent anyway. I found that I did not even need to consider whether the given cycle related to our physical, spiritual or intellectual condition. I let other people do this. I set a certain statistical task for myself. By this I "dramatically" broke up with the usual trend of biorhythm research.

After the first calculations I realised that apart from the cycle starting, bisecting and quartile points definable "behaviour" rules could also be found at octant points. This recognition did not fit in the picture created about the positive and negative section of the sine-curve and its peak point and low point.[10]

My experience that I did not find a noticeable difference between the accident or death rates of the positive and negative section also made me turn against the original approach, while I could detect cycle changing, bisecting, quartile and octant points. On the basis of this the operation of biorhythm can be described in a different way. According to this, as a result of the "side effects" of the operation of biorhythm, at certain dividing points of the biorhythm cycle (it does not matter whether we are talking about a physical or other cycle), it "confuses" us on the given days, and we cannot concentrate on our actual activity like we normally do, so for example we become more liable to accidents.

The results I achieved during my research work were partly in harmony and partly in contradiction with the aim I set for myself, namely that I would deal with biorhythm strictly in accordance with certain statistical aspects. For example my statistical approach resulted in that I had to state the existence of more than three, significantly more than three cycles. However, my aim that I would restrict my research to statistics was seriously challenged, because for some reason I had extremely brave hypotheses I already mentioned in the Preface.

1.2. Date sets and the three cycles

In order to prove the existence or non-existence of biorhythm in a certain way we need the necessary data. First of all accident or death (lifetime) data is suitable for reaching the set aim. If we know the date of birth of a sufficiently large number of people who suffered an accident as

[10] Octant points are also significant from the aspect of mathematics: the flex points of the sine-curve are there.

well as the date of the accident, we can calculate how old the individual people were on the day of their accidents by giving their age in days. (The day of their birth is the 0th day.[11]) In the other mentioned case we must know the date of birth and death on the basis of which we can calculate the number of days the deceased person lived.

In 1979 I was allowed access to the data of 211 industrial accidents that took place at a state company between 1975-1978. (I must thank Ferenc Bányai, born in 1952, Budapest) I cannot prove the authenticity of the data. My Readers may as well regard the calculation results valuable, but the present function of the data set shown here is based on that a relatively small population is suitable for demonstrating biorhythm investigations in comprehensible way.

The recorded data of the 211 accidents and the results of the calculations carried out on the basis of them are shown in table 1.2.1. only symbolically, only the data of the first two accidents are stated.

Table 1.2.1.

Accident data and state according to the three cycles

	Name	*Date of birth*	*Date of the accident*	*Age in days*	*23-day cycle*	*28-day cycle serial number*	*33-day cycle*
1.	X. Y.	07/12/1935	14/01/1975	14,283	0	3	27
2.	N. N:	20/08/1922	22/01/1975	19,148	12	24	8
.							
211.							
.							
.							

My Readers can check the calculation of the data of the age-column, the difference between the two dates. In Table 1.2.2. I give all the 211 items of data separately in a more “economical” way. Economical here means that after the 4- or 5-figure numbers at the beginning of the lines only the 3 last figures are shown in the given magnitude of thousands.

Table 1.2.2.

The 211 items of age data in groups of thousands

5614 697 899
6046 114 133 166 572 584 697 770 915 929 936 976
7022 088 090 192 205 213 239 277 341 435 551 798 846 898 901 909 936 956
8067 140 240 272 436 453 479 700 803 859 863 884
9062 153 471 533 539 581 585 609 612 614 690 702 705 819 873 933
10006 010 028 040 134 153 361 398 416 559 702 804 957 961 982
11045 048 067 099 142 145 559 563 697 703 730 750 815 816 860 905 936 964 965 995
12058 108 182 268 345 362 390 408 408 500 604 636 704 724 731 767 796 883 946 957 967 975
13050 187 194 238 460 520 614 713 882
14108 110 118 232 256 283 488 612 619 662 732 775 818 826 927
15010 030 043 151 174 358 456 496 577 616 754 797 835 893
16041 050 217 233 251 328 334 597 601 628 729 742 847 853 919 946
17251 262 284 386 474 582 654 702 702 891 925

[11] In the case of doing calculations without a computer we must also consider leap-days.

18248 333 353 426 598 658 854 919
19020 148 225 446 449 519 542 595 802 828 899
20022 045 054 372 584 771
21354 909
23054

In the line starting with 14 thousand find the age of XY on the day of the accident. The 6th number in this line is 14283. The data of NN is on the 2nd place in the line starting with 19 thousand. Going back to Table 1.2.1. the data of the last three columns can also be checked. XY was involved in the accident on the 14283rd day of his/her life. If you divide this number by 23, the result is 621. The division remainder is zero. It means that the accident happened on the 0th day of the 23-day cycle. It is interesting that if you divide 621 by 23 again, the result is a whole number again. Poor XY had a double zero-day of the 23-day cycle. Now divide 14283 by 28! The result is 510.10714. As $510 \cdot 28 = 14280$, the division remainder is 3. The accident happened on the 3rd day of the 28-day cycle. If the number is divided by 33, the division remainder is 27. In the case of NN the day serial numbers within the 12, 24 and 8-day cycles was achieved in a similar way.

Let us process the data of the last three columns of Table 1.2.1.! In the case of such a small population we can do it "by hand". Write down the numbers 0-22 under each other (23=0 in 23-day cycles!), and according to the numbers 0, 12, etc. in the right column of the table (also considering the lines of the table that cannot be seen here) put a tick next to the numbers 0-22 written down. Count the ticks – regarding all three cycles processed now – you have a picture as in table 1.2.3. The serial number of the days within the cycles is shown by x below. (See the heading of the table!)

Table 1.2.3.

The distribution of the 211 accidents according to the days of the three cycles

Serial number of the days (x)	*23-day cycle*	*28-day cycle*	*33-day cycle*
0	9 (X. Y.)	4	8
1	5	3	5
2	5	8	5
3	4	10 (X. Y.)	8
4	8	14	2
5	7	9	8
6	12	16	6
7	6	4	4
8	10	10	2 (N. N.)
9	9	5	6
10	6	9	6
11	15	6	10
12	10 (N. N.)	7	8
13	13	9	9
14	10	11	7
15	11	4	10
16	4	4	3
17	18	7	6
18	8	6	6
19	8	9	8

20	8	8	5
21	10	7	8
22	11	5	5
23		4	8
24		7 (N. N.)	3
25		8	9
26		10	10 (X. Y.)
27		7	5
28			8
29			5
30			4
31			7
32			7
Total	*211*	*211*	*211*

One of the nine people who suffered an accident on the 0th day of their physical cycle is XY under serial number 1. In all three cycles I marked the "hiding place" of XY and NN in Table 1.2.3. The received results will be discussed later.

Below I will discuss the next data set I used. This data set was taken from the Hungarian Biographical Lexicon [Magyar Életrajzi Lexikon].[12] From the two volumes of this lexicon I wrote out the data of more than 6,000 people. In each entry I had to see whether there was a complete data of birth and death. I left out the persons who suffered a violent death, when biorhythm definitely did not have an effect on the day of death. Pencil, notebook, calculator…

I received my third data set from the Central Statistics Office, which includes the distribution of death cases in Hungary in 1982 (142,214 people), according to many different biorhythm cycles determined by myself. (I must thank András Klinger head of division and Mrs. János Kovács.) The number of death cases shown above is not identical with the statistical data of the Central Statistics Office for two reasons: 1. I asked them to leave our those who died before they were 28 days old, because the high death rate during the first days of life would have a distorting effect from the aspect of biorhythm. 2. In the case of certain deceased persons the data of birth and/or death was not complete. The program classed these people in the category "unknown". Finally I also received a complete list of death cases which I could have processed myself according to any cycle with hard work. I could have…

More than 15 years passed before I decided to ask for more data from the Central Statistics Office to check my earlier results. This time I asked them to process the data of 1998 according to four cycles only (23, 28, 33 and 38), classing the people according to their sex only. (This time I must thank Péter Józan head of division and Mrs. János Kovács, who gave me technical help again).

My results could still be questioned, but above the age of 75 I could not afford to wait for another 15 years. I asked the Central Statistics Office to give me the death data of the two years following l998 with respect to the same four cycles, men and women altogether. I must thank Tamás Mellár, chairman, Éva Gárdos, head of division and Mrs. János Kovács.

In 2002 I managed to add to my data set the complete list relating to the years l998-2000, classed according to year and sex. This resulted in a radically new situation. As opposed to the "sheets" (fold-outs) of the punched-card processing of l982 this time I received my "omnipotent" list on a disc, from which any cycle with respect to any age group can be examined on a PC. (Many thanks to Éva Gárdos and Mrs. János Kovács.)

[12] Magyar Életrajzi Lexikon [Hungarian Biographical Lexicon], Akadémiai Kiadó, Budapest, 1967.

Before starting to examine the smallest data set again, let us take a practical by-pass.

My Readers probably remember what I wrote about the breakdown tendency of biorhythm cycles and the behaviour of bisecting, quartile and octant points. With respect to these the development of Figure 1.1.2. seems to be justified. See Figure 1.2.1.:

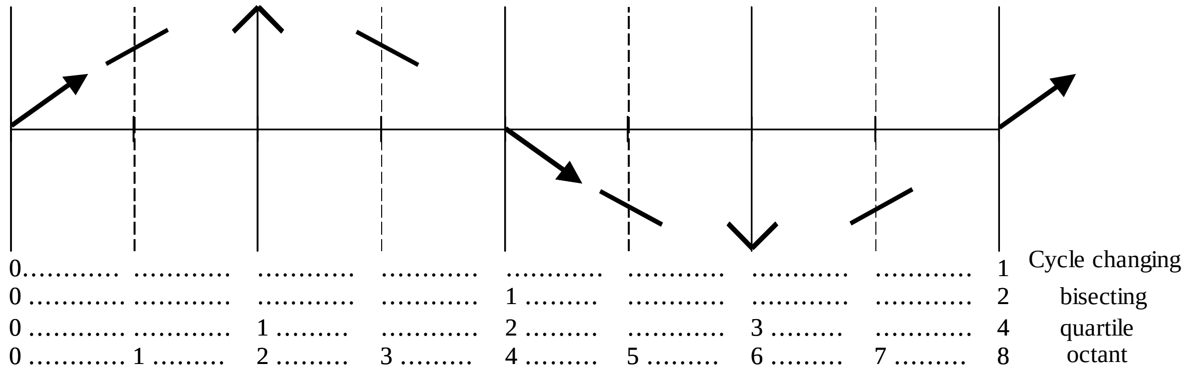

Figure 1.2.1.

The octant points of the biorhythm cycle

According to this the octant points of the given cycle are shown with rising or descending lines above or below the horizontal axis depending on which octant (with an odd serial number) is shown. (The ones with an even serial number are also cycle changing, bisecting or quartile points of division.) The ones with an odd serial number can be regarded as “real” octants.

The drawing of a given age expressed in days (A) – with an environment of a few days – made with the signs of figure 1.2.1 showing the state of several B-day cycles can be called a biorhythm map or biorhythm diagram. Below mostly the word “diagram” will be used. With respect to the cases divided by quartiles at the most we have seen such diagrams. (Figure 1.1.3., Figure 1.1.4., Figure 1.1.5., Figure 1.1.6.).

Let us make the drawing of the first accident according to table 1.2.1, the drawing of the accident of XY. We have seen that the age A=14283 days is the whole number product of the square of B=23. With respect to the cycle B=28 we determined that A/B= $\frac{14283}{28}=510{,}10714$. The fraction of this ratio is close to 1/8=0.125. As a result of this there is an octant points at $510{,}125\cdot 28=14283{,}5$. With the same procedure we can find the nearest octant point of the B=33 day cycle, and the diagram of the age of NN can be prepared in the same way[13].

[13] In chapter 1.1 the diagrams of the four sport events extended to a week or a longer period. From now on we shall use a method of preparation, which is for the purpose of mapping the relatively approximate environment of the examined day. The drawn network divides the days into four parts, so the place of the octant days can also be found. The number of days of the examined lifetime is shown completely, and only the last two figures of the number of the neighbouring days are shown. (My Readers are free to decide whether they want to look up the supplementary information relating to the preparation of the biorhythm diagram in the Annex (p. 128) now or later, after reading the 2nd part, or not read it at all.)

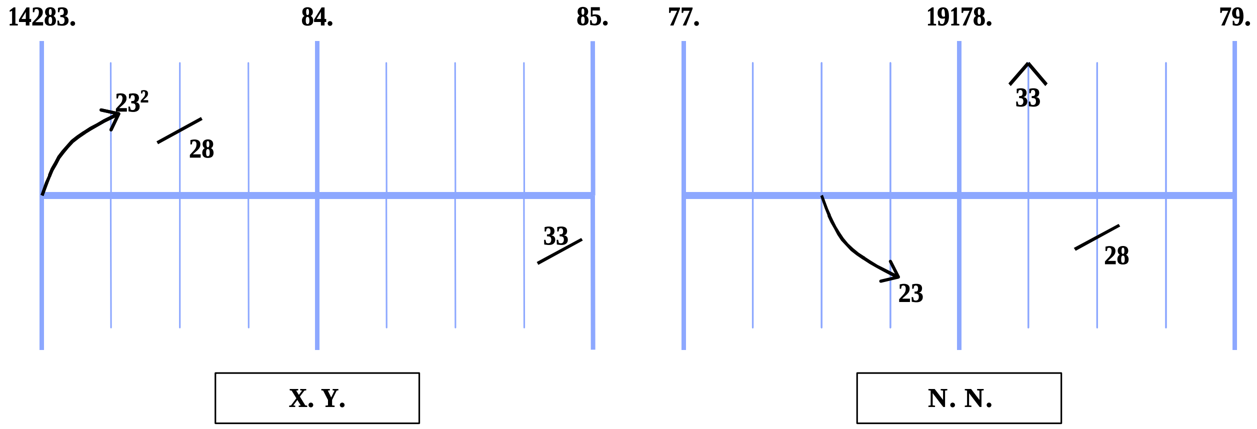

Figure 1.2.2.

The age of XY and NN on the day of the accident and in its environment

Now let us return to the diagrams of the cycles, for example the 23-day cycle. Figure 1.2.3. shows what is indicated by the corresponding column of Table 1.2.3..

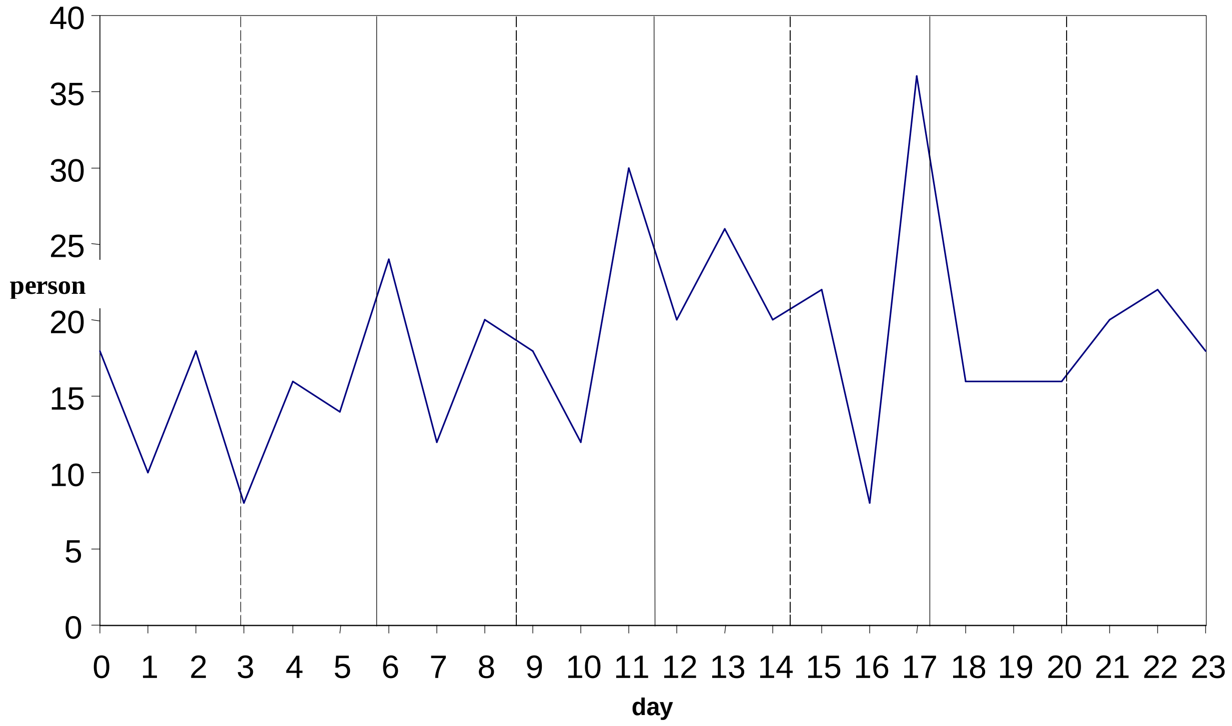

Figure 1.2.3.

The distribution of the 211 accidents according to the days of the 23-day cycle

The frequency belonging to $x = 0 = 23$ is shown at both ends of the horizontal axis of the diagram to make the graphic image of the cycle complete. The broken vertical lines running parallel to the vertical axis representing cycle change show the (real) octant points, the continuous lines show the "real" quartile points and the bisecting point ("not real" quartile point). It can be seen in the diagram that outstanding frequencies appear at the cycle changing, bisecting and quartile points and even at certain octant points. (No comment here.)

In Table 1.2.4. we show the distribution of three data sets according to the 23-day cycle. We have already seen the data of the 211 accidents (Table 1.2.3.), but let us see them again here for the purpose of comparison. The second column shows the distribution of 6050 items of data from the Hungarian Biographic Lexicon (MÉL), the third column shows the distribution of 142,214 accidents in Hungary in 1982 (Central Statistics Office – KSH) according to the day in the 23-day cycle (0-22) when the death case took place.

Table 1.2.4.

The distribution of three data sets according to the 23-day cycle with absolute, percentage and standardised frequencies

Serial No., x	Accident			MÉL			KSH		
	Main	*%*	*Std.*	*Main*	*%*	*Std.*	*Main*	*%*	*Std.*
0	9	98.1	-0.05	270	102.6	0.54	6101	98.7	-0.9
1	5	54.5	-1.25	267	101.5	0.31	6114	98.9	-0.75
2	9	98.1	-0.05	262	99.6	-0.08	6158	99.6	-0.27
3	4	43.6	-1.55	235	89.3	-2.18	6202	100.3	0.20
4	8	87.2	-0.35	245	93.1	-1.40	6122	99.0	-0.67
5	7	76.3	-0.65	264	100.4	0.07	6272	101.4	0.97
6	12	130.8	0.85	273	103.8	0.77	6298	101.9	1.25
7	6	65.4	-0.95	240	91.2	-1.79	6153	99.5	-.033
8	10	109.0	0.25	263	100.0	-0.00	6175	99.9	-0.09
9	9	98.1	-0.05	255	96.9	-0.62	6231	100.8	0.52
10	6	65.4	-0.95	273	103.8	0.77	6234	100.8	0.55
11	15	163.5	1.74	267	101.5	0.31	6405	103.6	2.42
12	10	109.0	0.25	262	99.6	-0.08	5990	96.9	-2.10
13	13	141.7	1.15	277	105.3	1.08	6192	100.1	0.10
14	10	109.0	0.25	269	102.3	0.46	6151	99.5	-0.39
15	11	119.9	0.55	250	95.0	-1.01	6300	101.9	1.27
16	4	43.6	-1.55	263	100.0	-0.00	6052	97.9	-1.43
17	18	196.2	2.64	266	101.1	0.23	6233	100.8	0.54
18	8	87.2	-0.35	275	104.5	0.93	6115	98.9	-0.74
19	8	87.2	-0.35	294	111.8	2.40	6247	101.0	0.69
20	8	87.2	-0.35	255	96.9	-0.62	6239	100.9	0.61
21	10	109.0	0.25	256	97.3	-0.55	6109	98.8	-0.81
22	11	119.9	0.55	269	102.3	0.46	6121	99.0	-0.68
Total	*211*			*6050*			*142214*		
Average	*9.174*	*100.0*	*0.00*	*263.04*	*100.0*	*0.00*	*6183.22*	*100.0*	*0.00*
Deviation	*3.339*		*1.00*	*12.879*		*1.00*	*91.79*		*1.00*

Beside the absolute numbers of the number of deaths two more data lines are shown in all three cases. One of them shows the relative number of deaths as a percentage of the average frequency. One would think that with the help of the percentage values the three data lines the magnitude order of which is rather different could be compared. In the case of showing absolute numbers the diagram of the largest population (KSH) would be dominant, but it is just the other way round. In the smallest set of accidents the role of accidental events is much greater, and although the manifestations of biorhythm also appear here, accidental events produce more prominent deviations. Accidents may be more sensitive to biorhythm than deaths, and this circumstance induces larger deviations in the case of accidents.

Due to the differences in the order of magnitude mentioned above the three percentage lines are compared in two diagrams. First the percentages of the accidents are compared with the MÉL percentages, then the data of MÉL and KSH is compared. (See Figure 1.2.4. and Figure 1.2.5.)

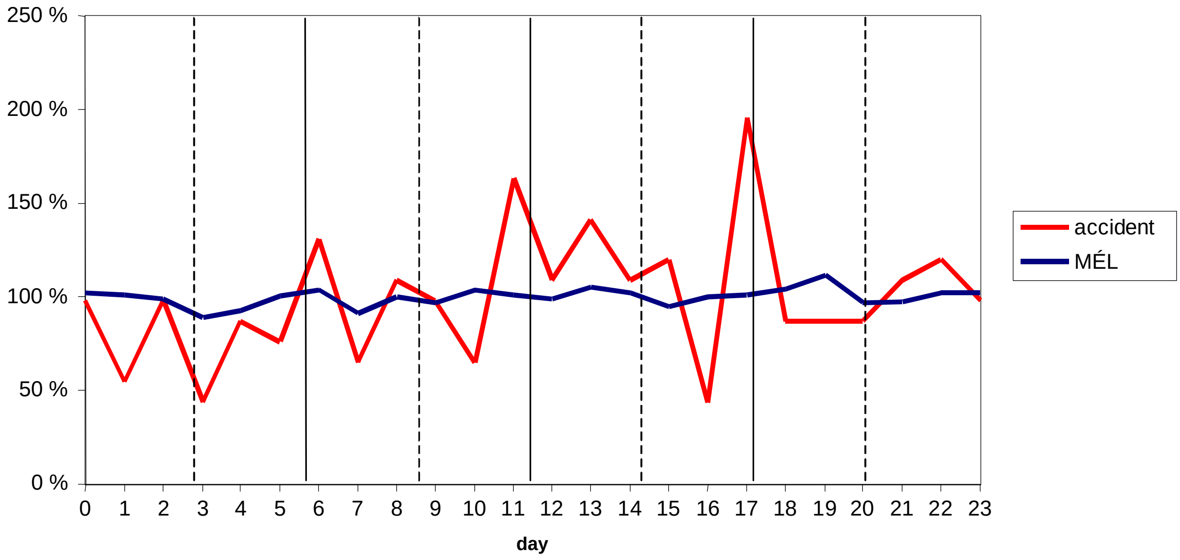

Figure 1.2.4.

Percentage frequencies of accidents and MÉL according to the 23-day cycle (from Table 1.2.4.)

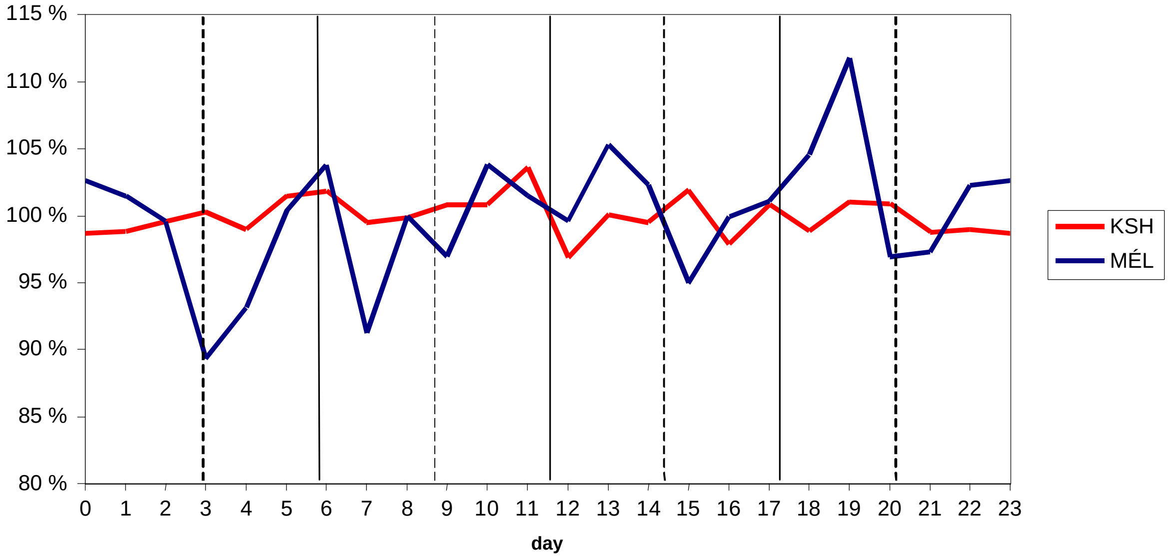

Figure 1.2.5.

KSH and MÉL percentage frequencies according to the 23-day cycle (from Table 1.2.4.)

In connection with the last diagram above and other similar diagrams it must be pointed out that breaking the vertical axis and deleting the empty field may mislead the observer by enlarging movements. However, in this case the systematic character of the shape of the curves is the most important.

In order to handle the problems pointed out above we introduce so-called standardised frequencies. (In the heading the table 1.2.4 the abbreviation “std.” is used). Apart from “equalising” average orders of magnitude in smaller and larger populations, similarly to percentages, these frequencies also equalise deviations. In the bottom line of table 1.2.4 the deviation[14] value (s) is also shown. Deviation shows here the average difference of frequencies from the average value (downwards and upwards). In the column of accidents the frequencies “dispersed” between 4 and 18 differ from the average value of 9.174 by an average of 3.339 people. (See deviation in the last line of the table and the average value above it.) Here the most people, 18 of them, died on the 17th day of the 23-day cycle. 18 is much more than the average value, by 2.64 times the deviation, because

$$\frac{18-9{,}174}{3{,}339}=\frac{8{,}826}{3{,}339}=2{,}64\,.$$

The smallest number of people, 4 of them, died on the 16th day of the cycle, which is smaller than the average by 1.55 times the deviation. My Readers can find these two results (2.64 and –1.55) in the table. Now let us compare the three data liens with the help of standardised frequencies.

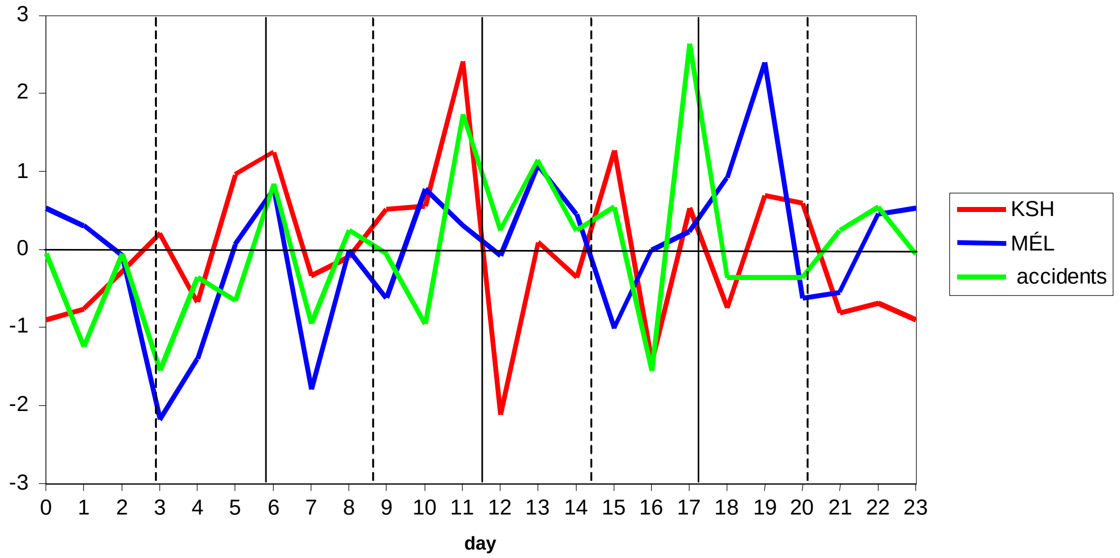

Figure 1.2.6.

The standardised frequencies of three data sets according to the 23-day cycle (from table Table 1.2.4.)

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[14] The frequencies shown in the “Main” column were given the sign (their average is $\bar{y}$), and deviation was calculated according to the following formula: $s=\sqrt{\dfrac{\sum_{i=0}^{B-1}(y-\bar{y})^2}{B-1}}$.

When comparing Figure 1.2.4. and Figure 1.2.5., at first sight the line of MÉL seems completely different, although the two lines show the same thing. Figure 1.2.6. makes the three data lines really comparable. Beside relatively significant differences basically the three lines behave as "expected". The great frequency of the first quartile is the most evident on the 6th day (23/4=5.75), and that of the bisecting point on the 11th day (theoretically it should be at 11.5). At the third quarter-cycle MÉL moved slightly to the "right". The cycle change (0=23) is good in the case of MÉL, and in the case of the accidents number 22 replaced 23. The KSH data line from 1982 compensates us with the first and last octant points. The other octant points show a variable picture.

With respect to the 28-day and 33-day cycles I only show the diagrams of percentage frequencies, this time relating to two types of KSH databases. See Figure 1.2.7. and figure Figure 1.2.8. In the former figure the similarly of the two lines can be seen well, it is not so obvious in the latter one.

I must point it out here that in the following two diagrams – similarly to figure 1.2.5. and many other further figures, but unlike figures 1.2.3. and 1.2.4. – the scale of the vertical axis does not start from 0. By omitting the empty field the attention is drawn to places "where something is happening". However, this method may mislead my Readers, it enlarges the shown movements although they may seem insignificant on a scale starting from 0. From the description it will turn out what real circumstances created the "shape" of the shown curve.

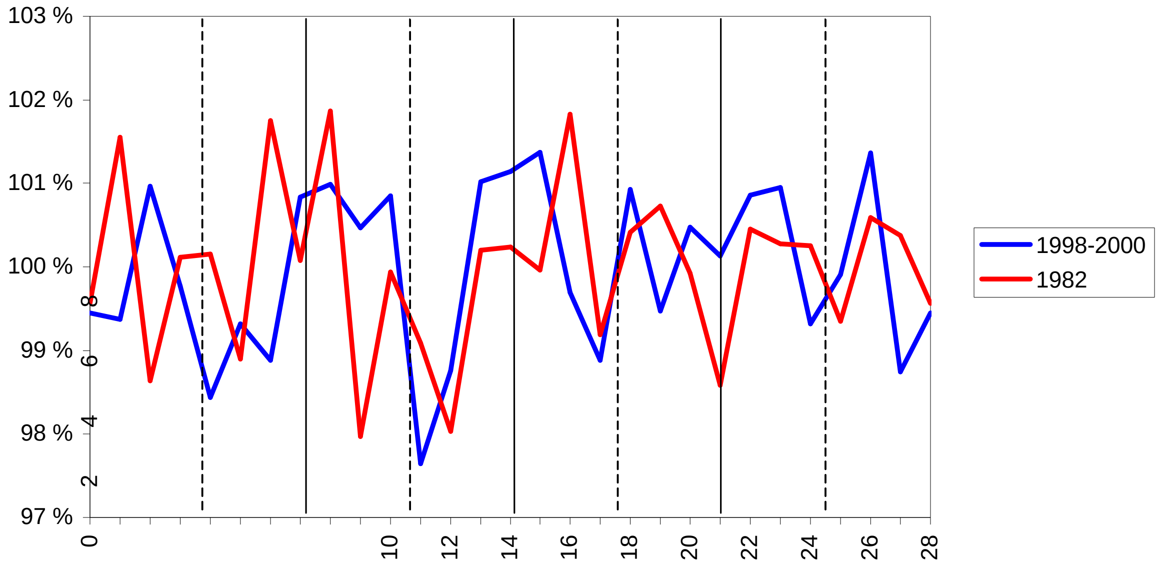


Figure 1.2.7.

Percentage frequencies according to the 28-day cycle in 1982 and 1998-2000

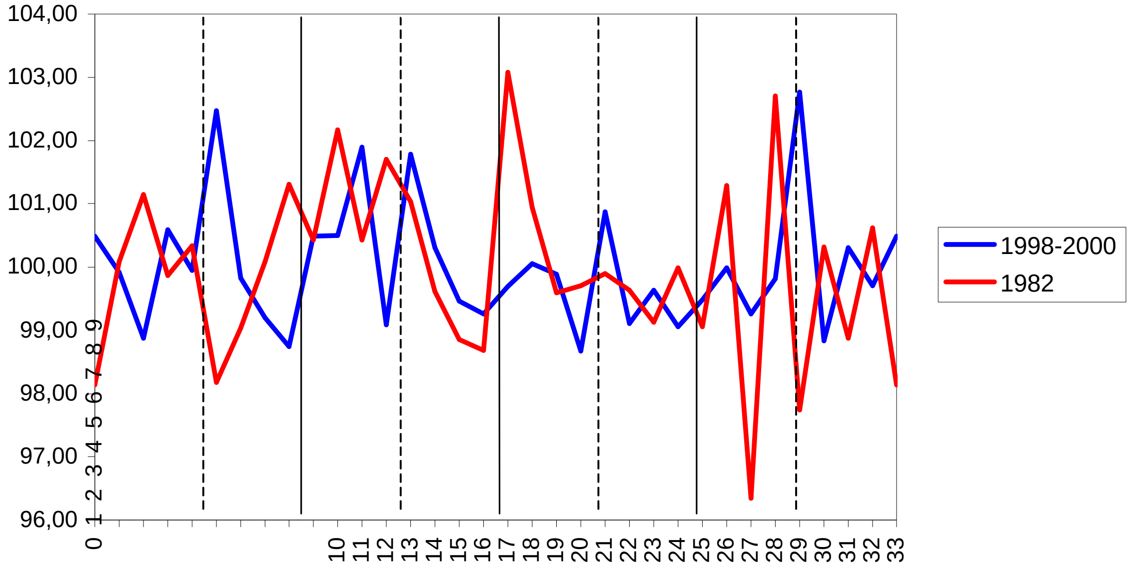


Figure 1.2.8.
Percentage frequencies according to the 33-day cycle in 1982 and 1998-2000

1.3. Further whole-day cycles

Knowing that there are three biorhythm cycles it is a forgivable frailty to presume that there may be even four cycles, and I will be the one who discovers the fourth one. What could be the fourth cycle? There is always five between the 23, 28, 33 series, so the fourth cycle should be a 38-day cycle! After doing the necessary checking calculations it turned out soon that this cycle also existed. According to my original intention and preparedness (unpreparedness) there was no way I could find a new field for the fourth cycle beside the physical, spiritual and intellectual cycles.[15] Below there are the percentage frequencies of the two data sets.

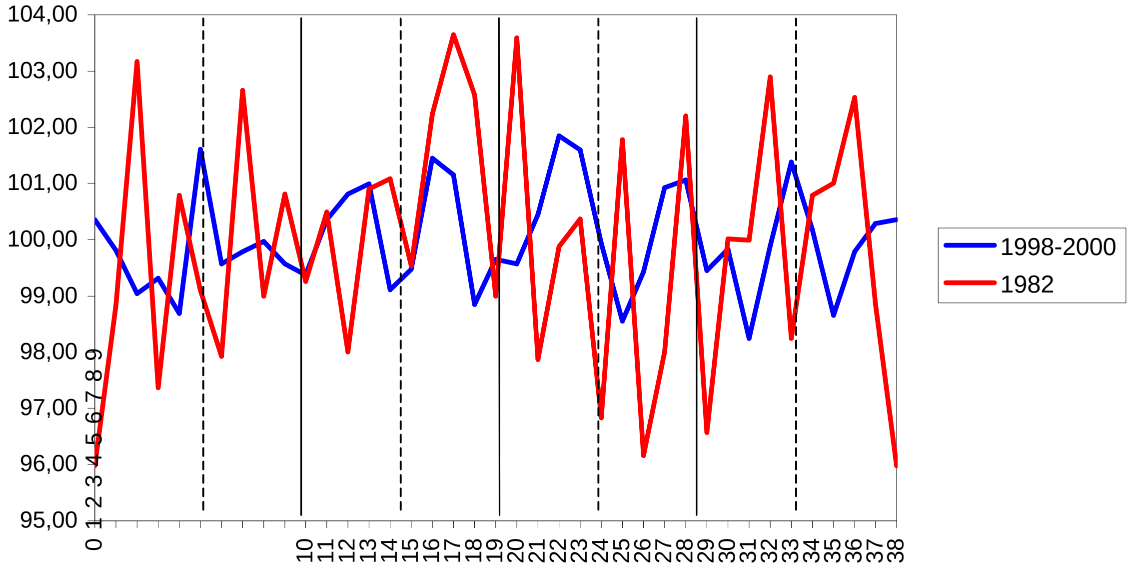


Figure 1.3.1.
Percentage frequencies according to the 38-day cycle in 1982 and 1998-2000

[15] According to some information that has not been checked yet somebody else also "discovered" the 38-day cycle. According to the source relating to it the 38-day cycle was declared to be the intuitive cycle.

The usual behaviour of the octant places can be seen here too.

After all this the idea seemed evident that if there are more than three cycles, then there may be more than four too, or it would be good to receive calculation results denying the existence of a cycle of a given length. To my great surprise several further randomly presumed cycle lengths led a positive result, and in the case of these the frequency of the different octant places is outstanding too. I show five cycles in figures 1.3.2–1.3.6. I believe that all of them exist.

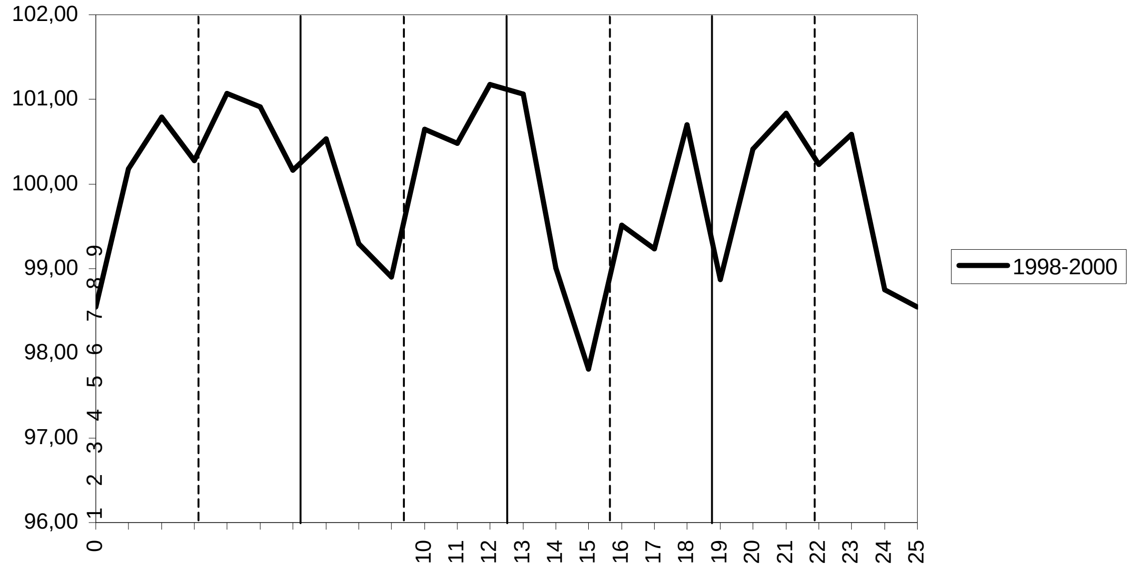


Figure 1.3.2.

Percentage frequencies according to the 25-day cycle in 1998-2000

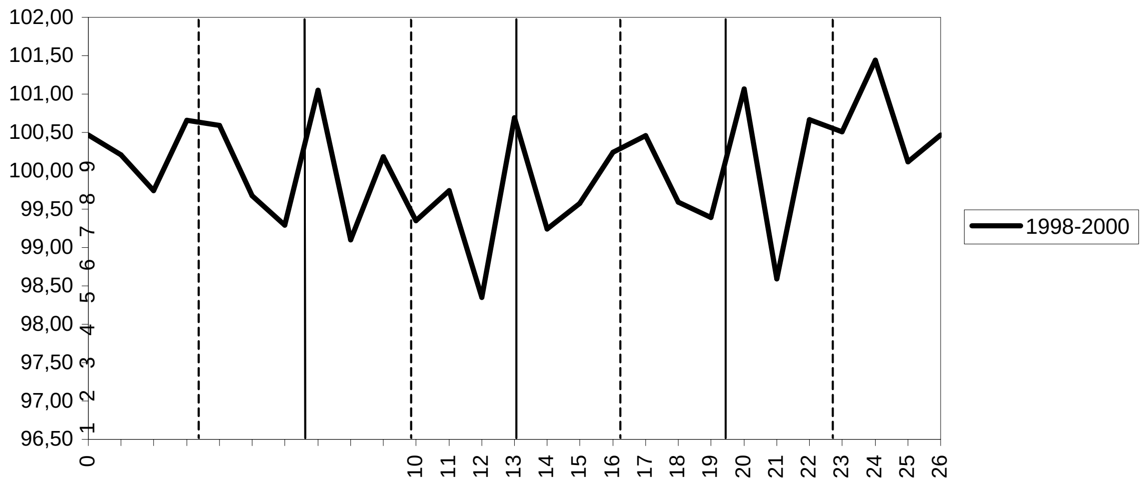


Figure 1.3.3.

Percentage frequencies according to the 26-day cycle in 1998-2000

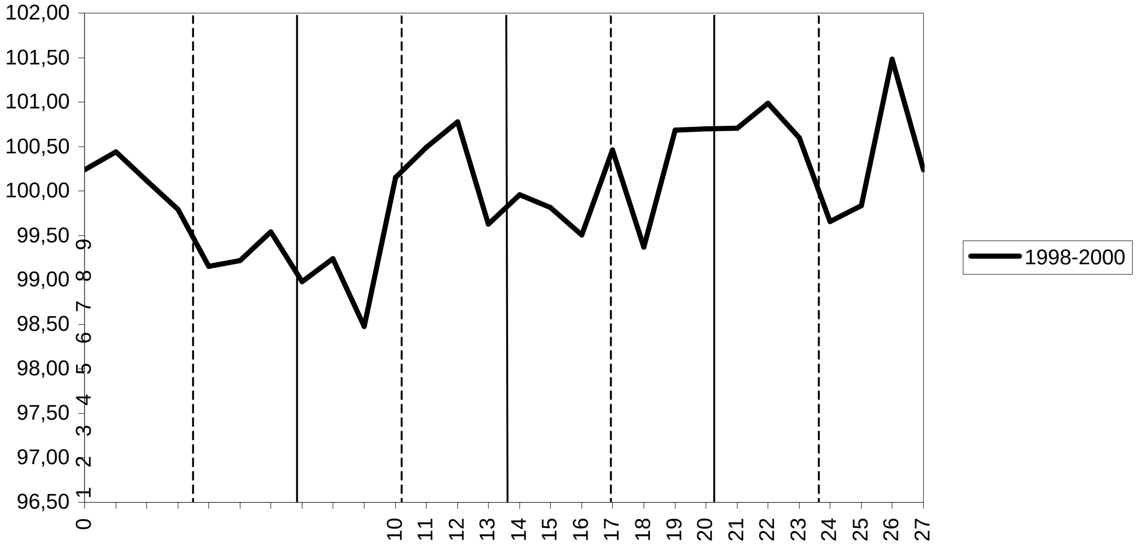


Figure 1.3.4.

Percentage frequencies according to the 27-day cycle in 1998-2000

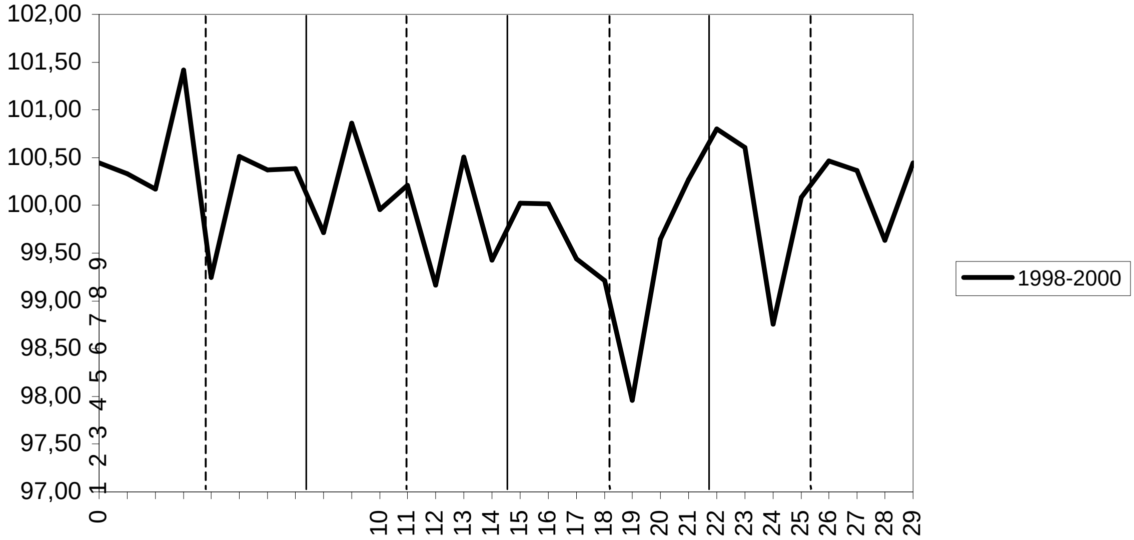


Figure 1.3.5.

Percentage frequencies according to the 29-day cycle in 1998-2000

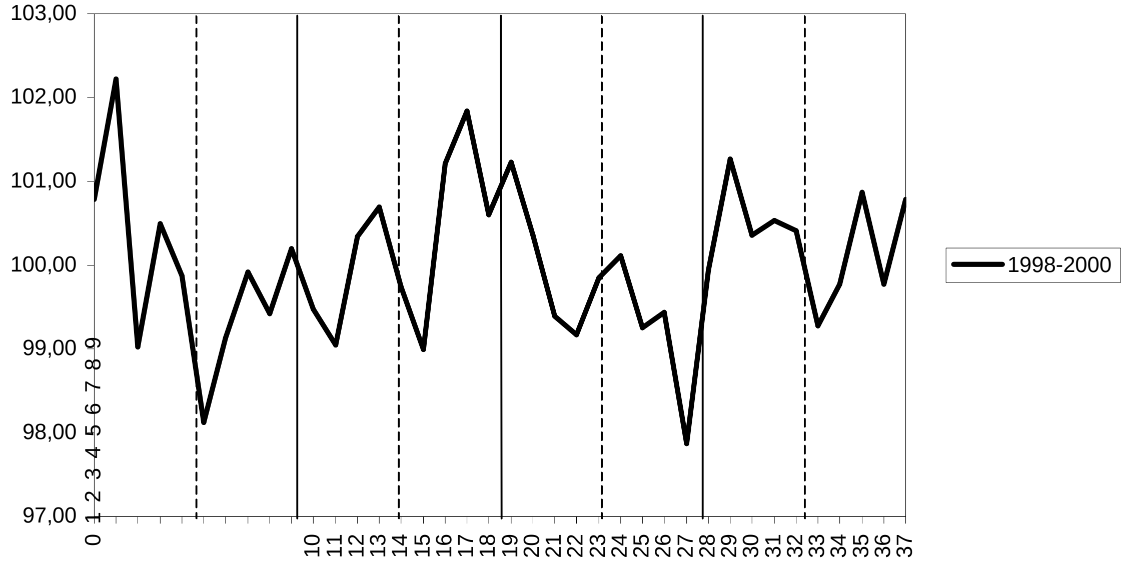


Figure 1.3.6.

Percentage frequencies according to the 37-day cycle in 1998-2000

An outstanding death ratio can be seen at the bisecting points of the 25-day and 37-day cycles with a rather wide "base". The situation is similar at the third quartile point of the 27-day and 29-day cycles. Several diagrams "slope" towards the centre. At all the eight prominent places of the 26-day cycle there is outstanding frequency as compared to the environment of these points, at least if we accept the fact that at the 3rd and 7th octant points there is a "church with two steeples". The two "steeples" can be seen at the two neighbours of the third octant place (9th and 11th day) and around the 7th octant place (22nd and 24th day).

We may be forced to make other "allowances" too, like for example connecting two neighbouring peaks, for example at the 3rd and 4th octant of the 25-day cycle (the latter point is the bisecting point). In this cycle we can look at the block including the 1st and 2nd octant in the same way. The complete 25-day cycle can be described as a cycle forming three symmetrical blocks. It is a prominent feature that there is a low mortality rate at the point where the cycles change.

Let us put aside ideas analysed later in connection with this, but it is practical to make a remark from a mathematical aspect that following the example of the 23-day cycle biorhythm numbers can be prime numbers (larger than 23), and following the example of the 28, 33 and 38-day cycles the products (powers) of prime numbers lower than 23 can be biorhythm numbers. On the basis of my experience not yet explained here low prime numbers have the following pairs or exponents: $5^2 = 25$, $2 \cdot 13 = 26$, $3^3 = 27$, $3 \cdot 17 = 51$. Prime numbers can have two or even three or four figures. Now these statements may seem rather arbitrary, later on it will be possible to put things relatively "in order".

1.4. Forming groups in the data set

If a data set used to describe biorhythm can be divided into parts from a certain aspect, then the examination can be carried out both with respect to the parts and the whole. In respect of accidents or death data distinction according to sex seems obvious in order to determine the distribution of men and women according to a certain biorhythm number. Is the distribution similar or characteristically different? Grouping according to age is also possible to find out whether younger and older generations have similar or different reactions to biorhythm or certain biorhythm numbers. A further aspect of grouping is the examined period. We have seen that we have the death data of three moving years (1998-2000). The calculations can be carried out according to a given cycle with respect to the individual years separately and with respect to the whole three-year period. Finally, when we know the distribution of a data set according to a certain biorhythm number, then the cases within the cycle with serial numbers 0, 1, 2, … B-1 can be examined according to another biorhythm number. For example the question can be what is the distribution according to the 28-day biorhythm cycle of those who died on the 6th day of the 23-day cycle. Let us see individual examples of the four types of grouping listed here.

1.4.1. Grouping according to sex

In Table 1.2.4. we saw the distribution of death cases in 1982 according to the 23-day cycle. In the following Table 1.4.1. we show the 142,214 death cases again grouped according to sex, so the death cases of men and women according to the 23-day cycle can be seen separately. Beside the absolute numbers the data expressed in a percentage of the average can also be seen. The results not grouped according sex can be seen again. It is obvious that the percentages of the total death cases in the individual lines are between the percentage numbers of men and women. The correlation expressed in sums in the case of absolute numbers is an average correlation here.[16] In the last column of table 1.4.1 the difference between the percentage values of men and women is also stated. (Men's percentage minus women's percentage.)

Table 1.4.1.

Death cases in 1982 according to the 23-day cycle, per sex and altogether, expressed in absolute numbers and percentages, men-women difference

x	*Men (number of persons)*	*Women (number of persons)*	*Total (number of persons)*	*Men (%)*	*Women (%)*	*Total (%)*	*Difference (%)*
0	3188	2913	6101	97.77	99.68	98.73	-1.91
1	3221	2893	6114	98.78	98.99	98.94	-0.21
2	3267	2891	6158	100.19	98.92	99.65	1.27
3	3228	2974	6202	98.99	101.76	100.36	-2.77
4	3241	2881	6122	99.39	98.58	99.06	0.81
5	3299	2973	6272	101.17	101.73	101.49	-0.56
6	3242	3056	6298	99.42	104.57	101.91	-5.15
7	3248	2905	6153	99.61	99.40	99.57	0.20
8	3306	2869	6175	101.39	98.17	99.92	3.22
9	3339	2892	6231	102.40	98.96	100.83	3.44
10	3311	2923	6234	101.54	100.02	100.88	1.52
11	3260	3145	6405	99.98	107.62	103.64	-7.64
12	3149	2841	5990	96.57	97.21	96.93	-0.64
13	3306	2886	6192	101.39	98.75	100.20	2.63
14	3324	2827	6151	101.94	96.73	99.53	5.20
15	3340	2960	6300	102.43	101.29	101.95	1.14
16	3174	2878	6052	97.34	98.48	97.93	-1.14

[16] More exactly: the percentage value relating to the total value is the weighted arithmetical average of the percentage values of men and women, where the weight is the number of male and female victims. E.g.: in the 0th line:

$$\frac{(3188 \cdot 0{,}9777 + 2913 \cdot 0{,}9968)}{3188 + 2913} = 0{,}9873$$

17	3202	3031	6233	98.20	103.71	100.86	-5.52
18	3199	2916	6115	98.11	99.78	98.95	-1.67
19	3292	2955	6247	100.96	101.11	101.09	-0.16
20	3349	2890	6239	102.71	98.89	100.96	3.82
21	3302	2807	6109	101.26	96.05	98.85	5.21
22	3211	2910	6121	98.47	99.57	99.05	-1.10
	74998	***67216***	***142214***				
Average	3260.78	2922.43	6183.22	100.00	100.00	100.00	0.00
Deviation	57.84	76.34	91.79				

Let us have a look at the two diagrams! Figure 1.4.1. shows the comparison of the total male and female percentage values. Figure 1.2.3. shows the difference itself. It can be seen in both figures that at the quartile places women have greater values, while men have greater values at the intermediate octant places. In the figure showing the difference the excess of men at the 3rd, 5th and 7th octant is completely obvious, the "church with two steeples" can be assumed at the 1st octant. If the figure is turned upside down, there are peaks at the quartile points in accordance with the "women minus men" difference.

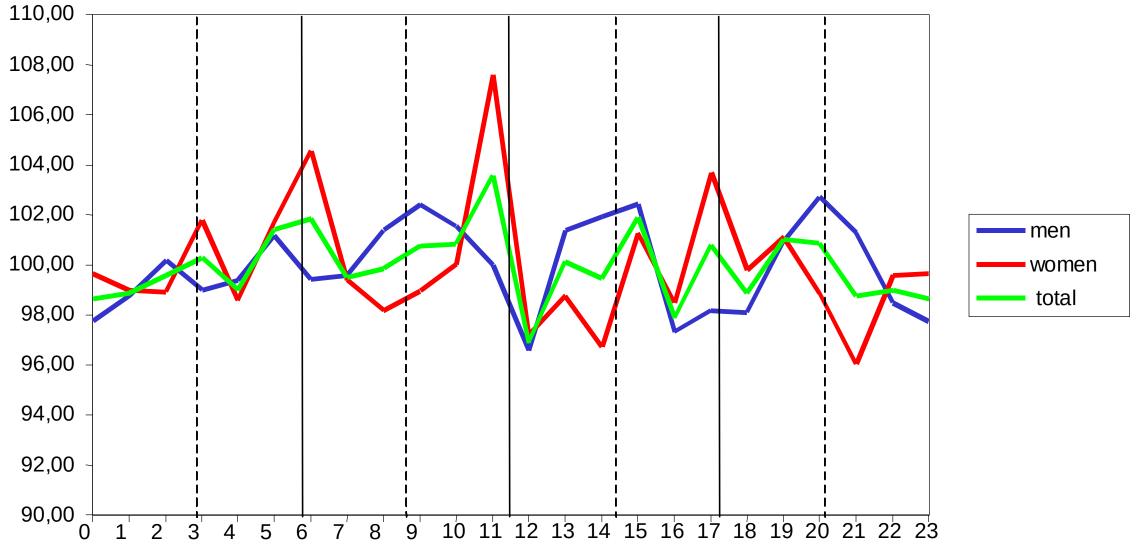


Figure 1.4.1.

Mortality rates in percentage in 1982 according to the 23-day cycle, per sex and altogether

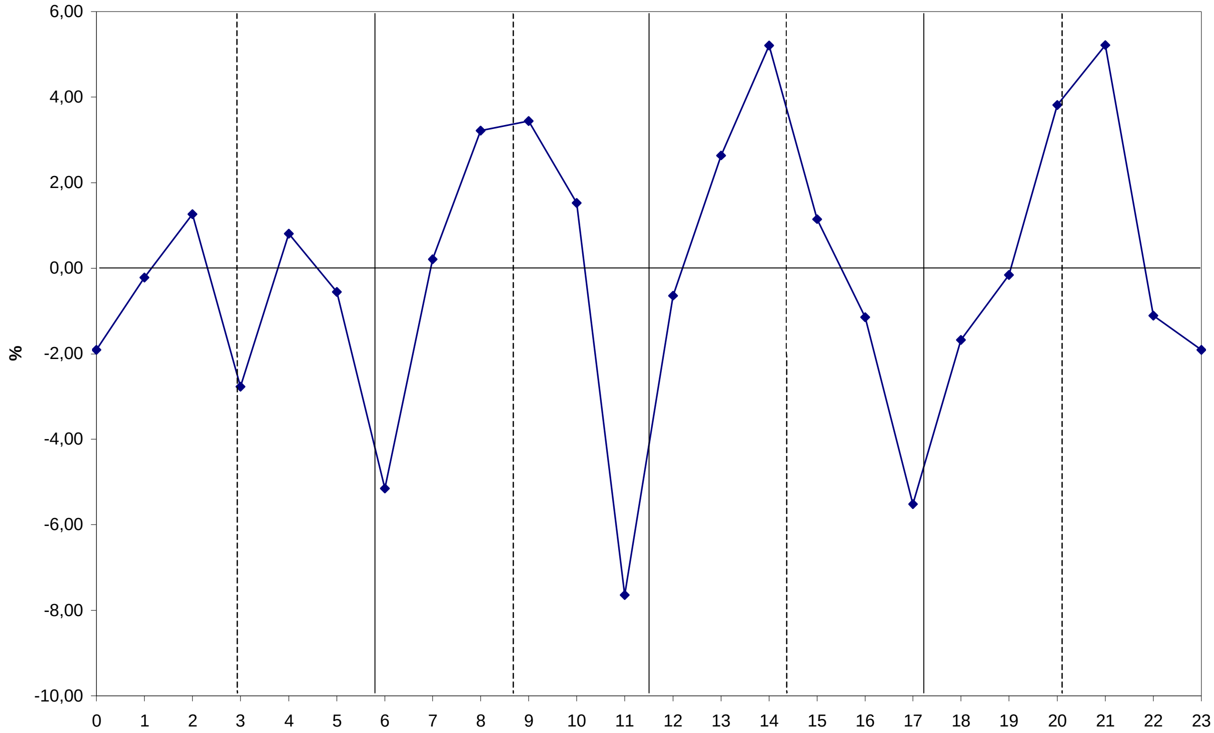


Figure 1.4.2.

Men's mortality excess in the 23-day cycle (percentage), 1982. (from Table 1.4.1.)

Disregarding the numerical data let us have a look at the comparison of standardised rates according to sex (Figure 1.4.2.)! (In Table 1.2.4. and with the help of Figure 1.2.6. we have seen the total data line.) In themselves the standardised rates of men, women and the total population show the same picture as the corresponding percentage rates, but the relation of the two sexes and the total lines to each other is different. The % figure is influenced by the circumstance that (in the present case) the fluctuations of the rates of women are greater than the rates of men. (The deviation of the female data is larger.) As we know the average of standardised rates is always 0 and their deviation is always 1. We saw in table 1.4.1 that the total percentage values are always the average (weighted arithmetical) values of the male and female percentage values. The situation is different in the case of standardised rates. In this case too total data "try" to appear as average data, but they do not always "succeed" in doing so. If we wanted to calculate the total data line by determining the average of the male and female data, the average would remain 0, but the deviation would be less than 1. If all three data lines are standardised, the fluctuations of men and women in the same direction is "awarded" by this procedures, and at these places the fluctuation of the total data is larger than that of men's data or women's data. See the 12th day.

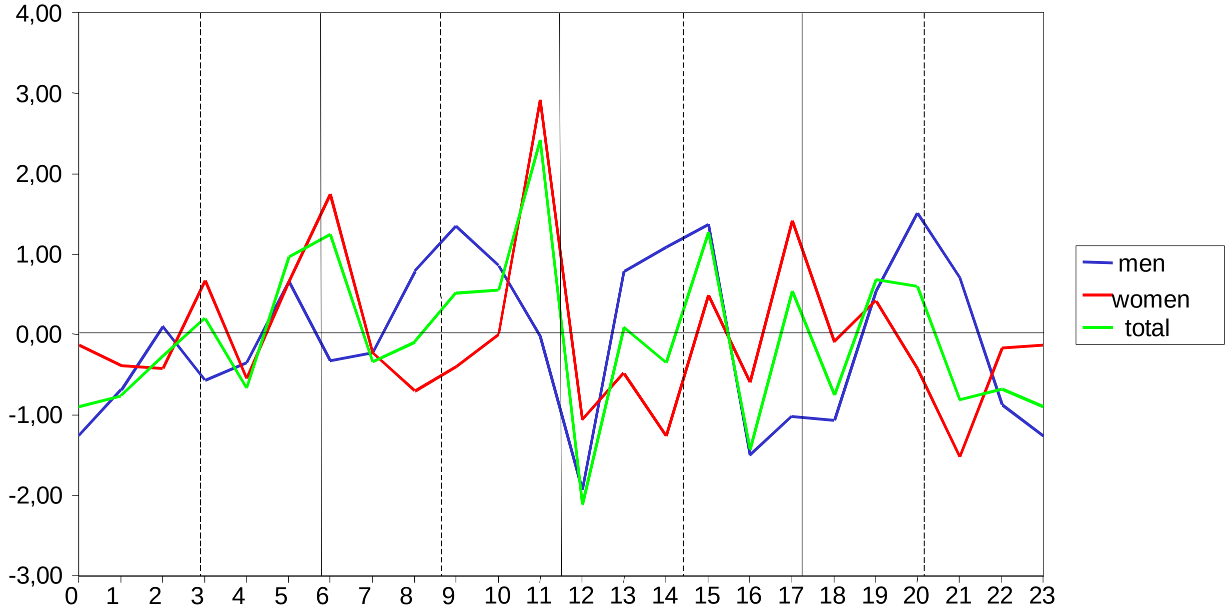


Figure 1.4.3.

Standardised rates of men, women and total victims in the 23-day cycle, 1982 (from Table 1.4.1.)

Let us see the data lines per sex in the 26-day cycle from 1982 again, see Table 1.4.2., Figure 1.4.4. and Figure 1.4.5..

Table 1.4.2.

Death cases in 1982 according to the 26-day cycle, per sex and altogether, expressed in absolute numbers and percentage values, male-female difference

x	*Men (number of persons)*	*Women (number of persons)*	*Total (number of persons)*	*Men (%)*	*Women (%)*	*Altogether (%)*	*Difference (%)*
0	2 865	2 557	5 422	99.32	98.91	99.13	0.41
1	2 908	2 593	5 501	100.81	100.30	100.57	0.51
2	2 863	2 654	5 517	99.25	102.66	100.86	-3.41
3	2 897	2 552	5 449	100.43	98.71	99.62	1.72
4	2 808	2 556	5 364	97.35	98.87	98.07	-1.52
5	2 805	2 540	5 345	97.24	98.25	97.72	-1.01
6	2 899	2 651	5 550	100.50	102.54	101.47	-2.04
7	2 918	2 547	5 465	101.16	98.52	99.91	2.64
8	2 992	2 573	5 565	103.73	99.53	101.74	4.20
9	2 880	2 503	5 383	99.84	96.82	98.41	3.02
10	2 961	2 484	5 445	102.65	96.08	99.55	6.57
11	2 902	2 508	5 410	100.61	97.01	98.91	3.59
12	2 838	2 558	5 396	98.39	98.95	98.65	-0.56
13	2 972	2 651	5 623	103.03	102.54	102.80	0.49
14	2 930	2 693	5 623	101.58	104.17	102.80	-2.59
15	2 821	2 563	5 384	97.80	99.14	98.43	-1.34
16	2 876	2 664	5 540	99.70	103.05	101.28	-3.34

17	2 958	2 585	5 543	102.55	99.99	101.34	2.56
18	2 865	2 591	5 456	99.32	100.22	99.75	-0.90
19	2 894	2 647	5 541	100.33	102.39	101.30	-2.06
20	2 771	2 640	5 411	96.06	102.12	98.93	-6.05
21	2 885	2 559	5 444	100.02	98.99	99.53	1.03
22	2 933	2 637	5 570	101.68	102.00	101.83	-0.32
23	2 905	2 524	5 429	100.71	97.63	99.25	3.08
24	2 827	2 606	5 433	98.01	100.80	99.33	-2.80
25	2 825	2 580	5 405	97.94	99.80	98.82	-1.86
	74 998	**67 216**	**142 214**				
Average	2 884.54	2 585.23	5 469.77	100.00	100.00	100.00	0.00
Deviation	55.55	55.25	79.15				

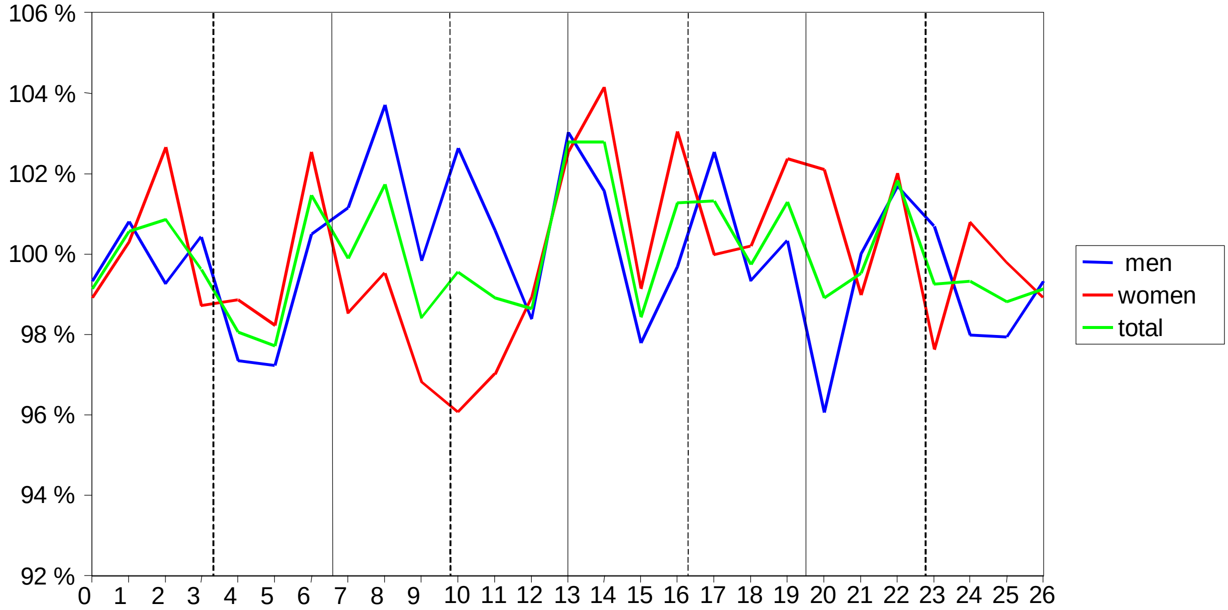


Figure 1.4.4.

1982 death rates in percentage according to the 26-day cycle, per sex and altogether (from Table 1.4.2.)

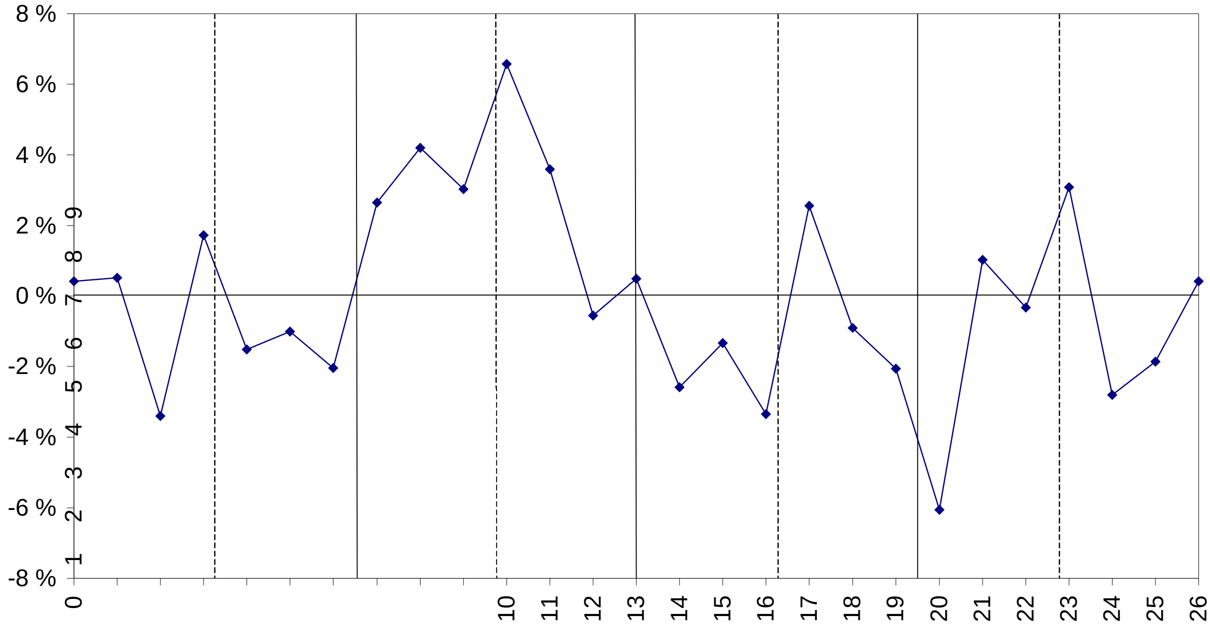


Figure 1.4.5.

Men's mortality surplus in the 26-day cycle (percentage), 1982. (from Table 1.4.2.)

The total column of figure 1.4.4. can be compared to the figures of 1998-2000. The outstanding values of the bisecting line rest on a wider basis here. This time the male-female difference can also be studied. The picture of figure 1.4.5. is similar, but it is less obvious than in the case of the 23-day cycle in 1982 (figure 1.4.2.). At the octant place there is a male excess again, but in this case female excess can only be detected at the 3rd quartile.

1.4.2. Grouping according to age

If we group the death cases of a given period according to the age of the deceased persons at the time of their death, we can find remarkable differences studying the distribution according to a given biorhythm cycle, but no sufficiently stable statements have been made so far. I find it necessary to call the attention to grouping according to age as a possibility, and I describe an thought provoking example in connection with it.

In the youngest age group of the 1982 KSH data (those who died under the age of 20), looking at women only, the 26-day cycle shows a rather specific picture. In this group the number of deceased persons is 729, which is less than 11% of all women (67,216). On each day of the cycle there is an average of $\frac{729}{26} = 28{,}038$ persons. The relating percentage values vary between 57.1 and 149.8, while in the complete female population not grouped according to sex the lowest percentage rate is 96.08 and the highest percentage rate is 104.17. As we have seen above, in the smaller and larger populations the role of accident or chance may also justify such deviations. However, if the shape of the diagram relating to the smaller population is similar enough to that of the larger population, we may think that here, among the youngest ones the role of biorhythm is greater. We can make it clear, if we compare standardised rates. See figure 1.4.6. Let us see the tables needed for this.

Table 1.4.3.

The distribution of women under the age of 20 and the total number of women according to the 26-day cycle, absolute, percentage and standardised rates

x	*Women (number of persons)*	*Up to the age of 20 (number of persons)*	*Women (%)*	*Up to the age of 20 (%)*	*Women (std.)*	*Up to the age of 20 (std.)*
0	2 557	18	98.91	64.20	-0.51	-1.49
1	2 593	25	100.30	89.16	0.14	-0.45
2	2 654	23	102.66	82.03	1.24	-0.75
3	2 552	31	98.71	110.56	-0.60	0.44
4	2 556	40	98.87	142.66	-0.53	1.77
5	2 540	33	98.25	117.70	-0.82	0.74
6	2 651	32	102.54	114.13	1.19	0.59
7	2 547	42	98.52	149.79	-0.69	2.07
8	2 573	16	99.53	57.06	-0.22	-1.78
9	2 503	17	96.82	60.63	-1.49	-1.64
10	2 484	22	96.08	78.46	-1.83	-0.89
11	2 508	30	97.01	107.00	-1.40	0.29
12	2 558	33	98.95	117.70	-0.49	0.74
13	2 651	33	102.54	117.70	1.19	0.74
14	2 693	30	104.17	107.00	1.95	0.29
15	2 563	33	99.14	117.70	-0.40	0.74
16	2 664	27	103.05	96.30	1.43	-0.15
17	2 585	22	99.99	78.46	0.00	-0.89
18	2 591	36	100.22	128.40	0.10	1.18
19	2 647	28	102.39	99.86	1.12	-0.01
20	2 640	35	102.12	124.83	0.99	1.03
21	2 559	23	98.99	82.03	-0.47	-0.75
22	2 637	26	102.00	92.73	0.94	-0.30
23	2 524	24	97.63	85.60	-1.11	-0.60
24	2 606	28	100.80	99.86	0.38	-0.01
25	2 580	22	99.80	78.46	-0.09	-0.89
	67 216	**729**				
Average	2 585.23	28.04	100.00	100.00	0.00	0.00
Deviation	55.25	6.75			1.00	1.00

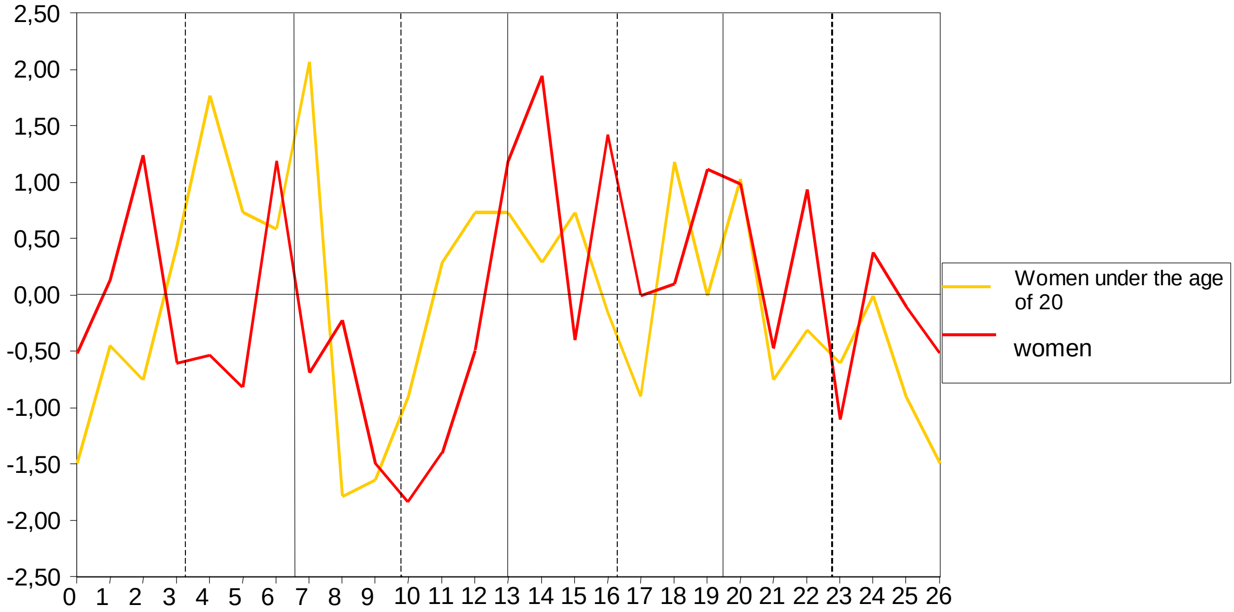


Figure 1.4.6.

Women under the age of 20 and the total number of women who died in 1982, according to the 26-day cycle, standardised

In the case of women under the age of 20 and the total number of women there are outstanding rates at the 1st, 2nd and 3rd quartile. The "pit" at the 3rd octant is a little earlier in the case of younger persons. Deviations can be found mainly in the first quarter.

1.4.3. Shorter and longer periods

Let us see (table 1.4.4.) the distribution according to the 23-day cycle in years 1998-2000 separately and altogether, with the corresponding percentage values. We find the same sort of relations here as in the case of grouping according to sex. (Obviously grouping according to sex could be combined with grouping according to age. We do not do this here.) The percentage values relating to the three years are average values of the annual percentage values relating to the same x value. Studying this table the question can be answered whether the same behaviour is seen in each year – with the inevitable accidental differences – or a certain trend of changing can be determined. It is easier to answer these questions with the help of a diagram again (figure 1.4.7.).

Table 1.4.4.

Distribution according to the 23-day cycle (number of persons and percentage in 1998-2000 per year and altogether)

x	*1998 (number of persons)*	*1999 (number of persons)*	*2000 (number of persons)*	*1998-2000 (number of persons)*	*1998 (%)*	*1999 (%)*	*2000 (%)*	*1998-2000 (%)*
0	6 228	6 278	5 828	18 334	102.15	101.24	99.32	100.93
1	5 919	6 122	5 835	17 876	97.08	98.73	99.44	98.40
2	6 043	6 099	6 001	18 143	99.12	98.36	102.26	99.87
3	6 196	5 975	5 930	18 101	101.63	96.36	101.05	99.64

4	6 132	6 230	5 708	18 070	100.58	100.47	97.27	99.47
5	6 103	6 157	5 842	18 102	100.10	99.29	99.55	99.65
6	6 251	6 163	5 776	18 190	102.53	99.39	98.43	100.13
7	5 979	6 135	5 869	17 983	98.07	98.94	100.01	98.99
8	6 169	6 194	6 048	18 411	101.19	99.89	103.07	101.35
9	5 972	6 212	5 934	18 118	97.95	100.18	101.12	99.74
10	6 027	6 172	5 919	18 118	98.86	99.53	100.87	99.74
11	6 145	6 313	5 868	18 326	100.79	101.81	100.00	100.88
12	6 189	6 176	5 858	18 223	101.51	99.60	99.83	100.31
13	6 183	6 288	5 805	18 276	101.41	101.40	98.92	100.61
14	6 165	6 278	5 840	18 283	101.12	101.24	99.52	100.65
15	6 030	6 174	5 844	18 048	98.91	99.57	99.59	99.35
16	6 085	6 187	5 789	18 061	99.81	99.78	98.65	99.42
17	6 059	6 273	5 931	18 263	99.38	101.16	101.07	100.54
18	6 206	6 263	5 820	18 289	101.79	101.00	99.18	100.68
19	6 050	6 208	5 870	18 128	99.23	100.11	100.03	99.79
20	5 970	6 192	5 943	18 105	97.92	99.86	101.28	99.67
21	6 148	6 319	5 889	18 356	100.84	101.90	100.36	101.05
22	5 976	6 213	5 820	18 009	98.02	100.19	99.18	99.14
Total:	**140 225**	**142 621**	**134 967**	**417 813**				
Average	*6 096.74*	*6 200.91*	*5 868.13*	*18 165.78*	*100.00*	*100.00*	*100.00*	*100.00*
Deviation	*95.94*	*78.06*	*75.27*	*134.69*				

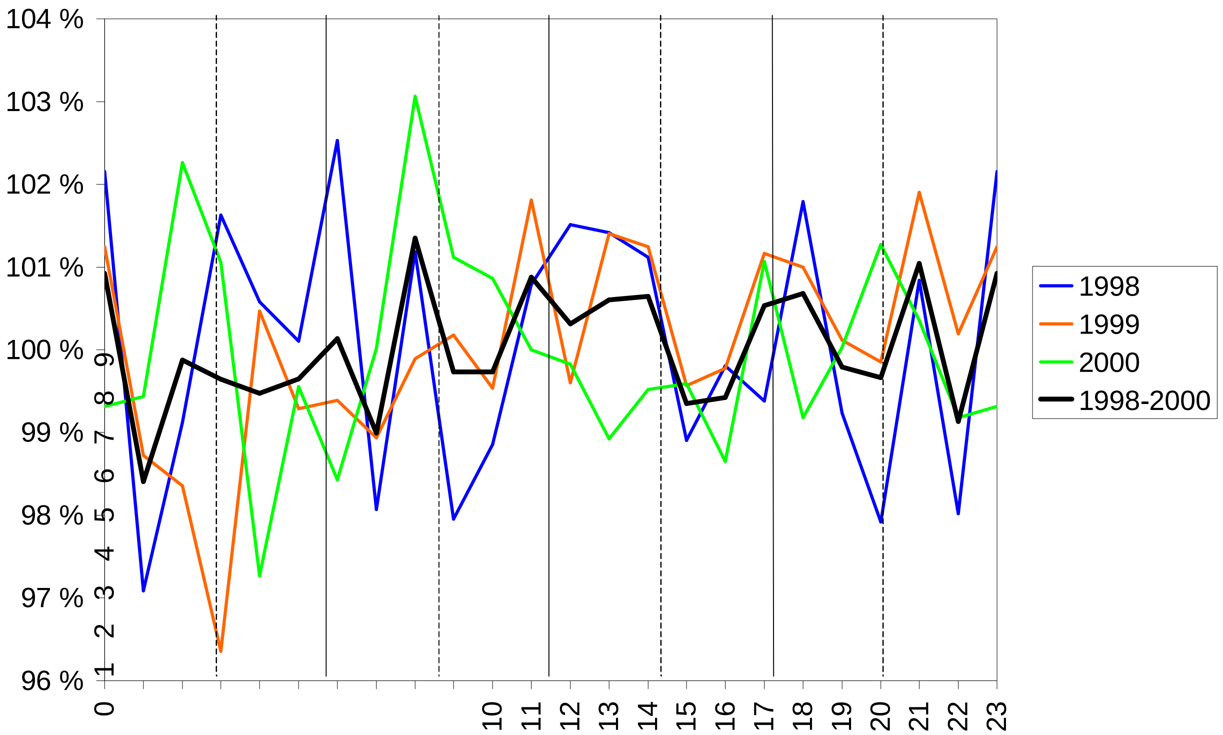


Figure 1.4.7.

The percentage values of the 23-day cycle in 1998-2000 per year and altogether

The differences between the three years are rather large, the individual years show different prominent places. The average of the three years shows a higher mortality rate at the “real” and “unreal” octant places, in “flattened” waves though.

1.4.4. Examining the two cycles together

Table 1.4.5. divides the total death cases of the years 1998-2000 into $23 \cdot 28 = 644$ parts according to the days of the 23-day and 28-day cycle on which the death cases took place. In the boundary lines of the table there is known data: in the bottom horizontal line the distribution according to the 23-day cycle is shown, while in the vertical column on the right the distribution according to the 28-day cycle is shown. Inside the table there are combined rates. On the basis of the table percentage values or standardised values can be calculated per column or line.

In the whole table the average rate is $417813/23\ 28$ = 648.78. The highest rate can be found on the 18th day of the 23-day cycle and on the 22nd day of the 28-day cycle, it is 730, which is 112.5 % of the average. The lowest rate is $4/23$, and it is on the day $2/28$, it is 569, which is 87.7 % of the average. If we examine the two-dimensional distribution more carefully, we can draw remarkable conclusions. We shall return to this table later. Obviously other cycles could also be paired, or even more than two cycles could be combined. We could group them according to sex. Several cycles could be examined together by grouping according to sex or some other aspect.

Table 1.4.5.

Joint distribution of the 23-day and 28-day cycles, 1998-2000

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
0	611	632	658	630	611	640	654	669	658	646	641	618	622	641	657	669	627	632	658	676	663	623	639	*14775*
1	668	615	649	643	649	653	709	619	660	650	587	630	654	689	681	640	643	636	627	607	695	674	636	*14914*
2	671	671	643	626	569	659	644	638	663	593	634	651	685	666	592	648	619	668	709	624	664	645	605	*14787*
3	666	654	600	654	677	645	629	635	671	658	611	632	672	646	681	654	647	642	645	670	628	640	642	*14899*
4	638	639	642	655	611	665	646	627	652	614	617	631	649	682	652	662	662	669	702	603	641	654	641	*14854*
5	662	602	596	659	632	652	587	609	639	665	654	678	629	660	659	627	668	680	644	644	619	650	671	*14786*
6	703	631	660	664	666	661	647	630	624	589	676	667	647	663	646	638	642	615	649	673	691	648	606	*14936*
7	649	646	677	644	607	645	674	634	677	682	659	646	679	647	657	657	634	651	676	646	612	645	656	*15000*
8	665	629	681	629	631	662	642	612	703	598	621	678	637	707	657	638	655	641	614	693	660	643	680	*14976*
9	676	673	672	673	701	647	642	611	645	641	656	659	666	644	700	619	661	664	617	629	681	656	580	*15013*
10	657	640	624	679	625	665	680	613	637	605	646	658	655	715	663	649	619	682	647	664	608	647	642	*14920*
11	666	641	626	588	667	614	665	680	624	623	622	622	615	629	652	634	699	656	634	663	649	649	619	*14737*
12	624	612	610	662	687	631	627	639	655	658	656	642	606	614	677	635	654	667	657	643	602	657	669	*14784*
13	629	640	647	677	645	690	613	652	674	666	650	672	631	640	653	636	666	668	641	627	663	642	658	*14980*
14	631	621	652	636	676	617	666	682	659	678	646	636	693	650	653	654	671	681	619	643	580	681	679	*15004*
15	659	682	728	706	631	677	588	649	599	653	642	652	642	684	694	709	631	671	667	634	666	646	627	*15137*
16	639	631	656	582	679	637	657	657	661	643	628	653	653	666	627	617	588	612	694	610	587	654	677	*14708*
17	660	649	626	603	668	660	555	623	648	659	630	679	717	628	634	645	671	627	640	659	671	663	630	*14845*
18	656	663	657	658	638	651	657	656	652	687	644	675	609	662	677	633	628	646	607	651	664	645	621	*14937*
19	669	607	652	655	637	619	703	603	656	632	646	668	630	655	638	678	620	690	673	654	681	646	621	*14933*
20	651	677	655	671	646	647	712	659	683	681	687	636	706	635	656	610	608	639	639	651	646	639	642	*15076*
21	656	605	657	643	718	614	699	645	669	618	674	655	629	641	655	675	628	630	610	670	640	671	635	*14937*
22	673	661	656	634	661	691	662	610	670	620	659	657	609	642	662	679	635	616	730	645	637	663	666	*15038*
23	629	641	663	683	682	629	681	660	629	643	684	671	648	600	669	655	687	676	667	641	671	685	637	*15131*
24	677	621	697	616	620	633	676	670	643	658	653	668	661	680	564	591	638	619	698	622	637	684	633	*14859*
25	610	607	592	642	585	627	629	667	660	663	668	665	712	641	623	648	680	702	660	644	631	689	647	*14892*
26	693	647	636	636	639	629	615	689	713	717	648	699	653	646	671	626	659	645	624	676	651	652	651	*15115*
27	646	639	631	653	612	642	631	645	687	678	679	628	614	603	633	622	621	638	641	666	667	665	699	*14840*
	18334	*17876*	*18143*	*18101*	*18070*	*18102*	*18190*	*17983*	*18411*	*18118*	*18118*	*18326*	*18223*	*18276*	*18283*	*18048*	*18061*	*18263*	*18289*	*18128*	*18105*	*18356*	*18009*	*417813*

1.5. The methods of statistical demonstration

What we have discussed above will either convince my Readers about the existence of biorhythm cycles or it will not. In the following chapter I shall introduce a few statistical methods to make things clear. Different amount of mathematical-statistical knowledge is needed to understand them. My Readers are free to decide what they do with the different methods.

1.5.1 The c^2 test

If we throw a dice several times and write down the occurrence of the numbers from 1-6, then speaking in terms of probability calculation we can expect even distribution. There is the same chance of the occurrence of each number. If the dice is not thrown many times, the occurrence of the six numbers may be erratic. If the dice is thrown many times, the competition of the six numbers becomes more balanced.

If there is no biorhythm, the situation is similar. In this case the chance of a certain death case to take place is the same on any day of the biorhythm cycle. If biorhythm does exist, we still must take chance into consideration, as people can die as a result many different causes on any day not "justified" by biorhythm, or the majority of "risky" days pass without anything wrong happening.

In order to "separate" the role of chance several methods have been elaborated in mathematical statistics. Here we carry out a goodness-of-fit test and we try to use the so-called. c^2 (chi-power) *test*. We test the *"zero hypothesis"* according to which there is no biorhythm, so our data line is theoretically *of even distribution*. In this case the value of the right "test function" (using a general formula especially with respect to even distribution) can be calculated with the following formula:

$$c^2 = \frac{(B-1)s^2}{\bar{y}}$$

where B is the biorhythm number, $\bar{y}$ is the average of the rate of a B number, s is their deviation. In the following table, in the column containing absolute rates relating to women it can be seen that $\bar{y} = 2922{,}43$, $s = 76{,}339$. The value of the number of the examined data line decreased by 1 is referred to as the *"degree of freedom"* in this methodological procedure. In our case it is $B-1$. The substitution:

$$c^2 = \frac{22 \cdot 76{,}339^2}{2922{,}43} = 43{,}9\,.$$

The "expected value" of the c^2 values calculated in this way is the same as the degree of freedom, that is if only chance counts here, then generally the result is $B-1$, in our case around 22. There is a certain probability that a higher value occurs only by accident, even in the case that the zero hypothesis is valid. But the higher the calculated c^2 value is, the lower the probability is, the so-called *significance level*.

In Table 1.5.1. there are c^2 critical values belonging to a few degrees of freedom and a few significance levels (expressed in percentage).[17] We are interested in rejecting the zero hypothesis, it is better for us, if the value of the test function is closer to the low significance level on the right side of the table.

[17] Using $B = 101$ calls our attention to the fact that in the case of higher B values the value of the test function increases more moderately as the significance level decreases.

Table 1.5.1.

A. c^2 (chi-power) test function critical values

B	*Degree of freedom*	*10*	*5*	*2,5*	*1*	*0,5*	*0,1*
		percentage significance level					
23	22	30.8	33.9	36.8	40.3	42.8	48.3
26	25	34.4	37.7	40.6	44.3	46.9	52.6
28	27	36.7	40.1	43.2	47.0	49.6	55.5
33	32	42.6	46.2	49.5	53.5	56.3	62.5
38	37	48.4	52.2	55.7	59.9	62.9	69.4
101	100	118.5	124.3	129.6	135.8	140.2	149.5

Our calculation result is 43.9, according to the table it is above the critical level belonging to the 0.5% significance level, so chance could play a role in half a percentage of all such cases, that is in every 200th case. We have a good reason to think that the calculated value of c^2 is due to biorhythm. It related to women. In the case of men $c^2 = 22{,}6$, it is only a tiny little bit above the degree of freedom. In respect of the total death cases $c^2 = 30$, which means a slightly higher significance lever than 10 %.

The results of the 38-day cycle proved the test rather well among the 1982 data. Here the c^2 values were 58.8 in the case of men, 56.4 in the case of women and 63.1 in the case of both sexes. The significance levels that can be seen in the table are always 2.5%, 2.5% and 0.5%. (In a more detailed table the value is 1.5% in the case of men.) I must point it out here that in the case of grouped populations (men and women in this case) the c^2 value of the total data is higher than that of the groups (as in our case), if the distribution of the groups according to the days of the biorhythm cycle is similar to each other. If the groups represent different tendencies, the c^2 value becomes worse, when the groups are put together. If the deteriorating and improving factors are in balance, the c^2 value of totalling has an intermediate result. In the case of the sexes both tendencies can happen. Generally the presence of biorhythm results in similar tendencies, but if women and men have different prominent quartile and octant places, the two different c^2 values will partly "eliminate" each other.

In the case of other biorhythm numbers the test does not have a convincing result. It is even more so in the case of the 1998-2000 data. We shall return to this problem later on in the summary.

1.5.2 Moving average determination

A well-known statistical method of examining time changes is the determination of the moving average. Its aim is to filter out the effect of accidental fluctuations, balance the time series and highlight its tendency. A certain "number of members" belongs to this method. For example three-member moving average determination means that an average value is allocated to each time unit in a way that the arithmetical average of the three items of data is calculated taking into consideration the time units preceding and following the given time unit. From the former three items of data the next one is allocated to the two latter ones, and this is how the average "moves on".

Usual times series become shorter after moving average determination is carried out, because the data preceding the first data and the data following the last data does not exist or it is unknown.

The situation is different in the case of our cyclic data series. The two ends of the cycle can be joint together, so a moving average can be allocated to each *x* value without shortening.

As the eighth of the length of the 23-day and 25-day cycles ($\frac{23}{8} = 2{,}875$ and $\frac{25}{8} = 3{,}125$) is close to 3, the three-member moving average values can be used well to study the behaviour of the octant places. In the case of the 28-day cycle the eighth of the length of the cycle is 3.5, and the aspect mentioned above is somewhat valid again. We show three-member moving average determination in the case of the 28-day cycle as we have further plans with this cycle. See Table 1.5.2. In figure 1.5.1 the percentage values calculated on the basis of the data stated in the table are illustrated.

Table 1.5.2.

Death cases in 1998-2000 per sex and altogether, according to the 28-day cycle, three-member moving average

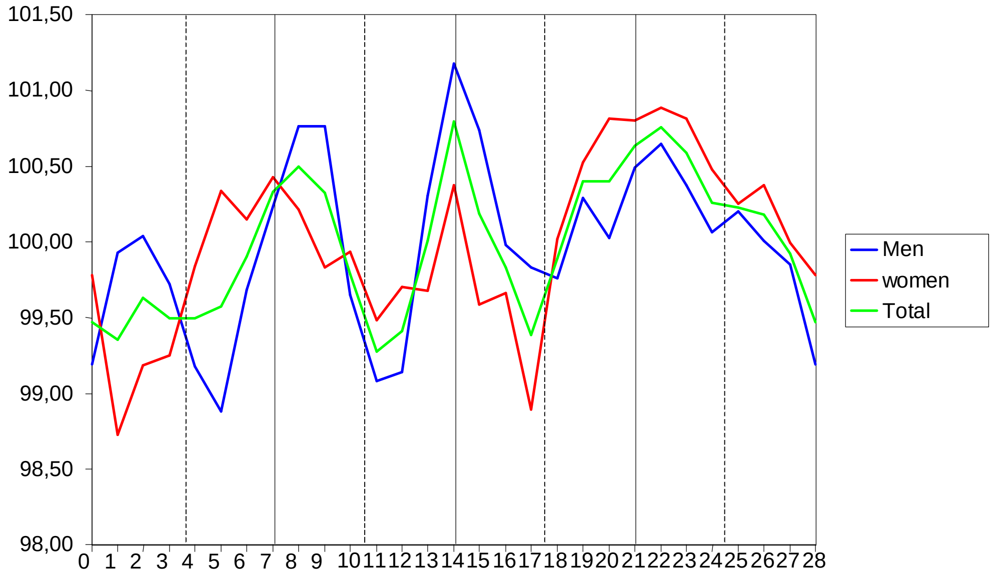


Figure 1.5.1.

Three-member moving averages in the 28-day cycle (1998-2000) per sex and altogether (the last three columns of Table 1.5.2, percentage)

Here we do not find octant places in the course of three-member moving average determination, only quartile places. If we expect moving average values to highlight the roles of quartile places, then we can try to calculate 28/4=7-member moving averages.

Table 1.5.3.

Death cases in 1998-2000 per sex and altogether, according to the 28-day cycle, seven-member moving average

	Deaths			*Three member moving average*			*Moving average*		
x	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
0	7754	7021	14775	54545	49677	104222	7792.14	7096.71	14888.86
1	7748	7166	14914	54430	49754	104184	7775.71	7107.71	14883.43
2	7872	6915	14787	54271	49584	103855	7753.00	7083.43	14836.43
3	7779	7120	14899	54282	49669	103951	7754.57	7095.57	14850.14
4	7675	7179	14854	54390	49786	104176	7770.00	7112.29	14882.29
5	7744	7042	14786	54516	49722	104238	7788.00	7103.14	14891.14
6	7710	7226	14936	54477	49987	104464	7782.43	7141.00	14923.43
7	7862	7138	15000	54561	49924	104485	7794.43	7132.00	14926.43
8	7874	7102	14976	54499	49869	104368	7785.57	7124.14	14909.71
9	7833	7180	15013	54455	49911	104366	7779.29	7130.14	14909.43
10	7863	7057	14920	54621	49789	104410	7803.00	7112.71	14915.71
11	7613	7124	14737	54645	49769	104414	7806.43	7109.86	14916.29
12	7700	7084	14784	54675	49900	104575	7810.71	7128.57	14939.29
13	7876	7104	14980	54615	49655	104270	7802.14	7093.57	14895.71
14	7886	7118	15004	54462	49733	104195	7780.29	7104.71	14885.00
15	7904	7233	15137	54718	49677	104395	7816.86	7096.71	14913.57
16	7773	6935	14708	54774	49770	104544	7824.86	7110.00	14934.86
17	7710	7135	14845	54732	49908	104640	7818.86	7129.71	14948.57
18	7869	7068	14937	54653	49920	104573	7807.57	7131.43	14939.00
19	7756	7177	14933	54613	49861	104474	7801.86	7123.00	14924.86
20	7834	7242	15076	54711	50186	104897	7815.86	7169.43	14985.29
21	7807	7130	14937	54745	50166	104911	7820,71	7166.57	14987.29
22	7864	7174	15038	54666	50200	104866	7809,43	7171.43	14980.86
23	7871	7260	15131	54813	50235	105048	7830,43	7176.43	15006.86
24	7744	7115	14859	54678	50134	104812	7811,14	7162.00	14973.14
25	7790	7102	14892	54625	50025	104650	7803,57	7146.43	14950.00
26	7903	7212	15115	54509	50017	104526	7787,00	7145.29	14932.29
27	7699	7141	14840	54510	49672	104182	7787,14	7096.00	14883.14
Total	*218313*	*199500*	*417813*	*1528191*	*1396500*	*2924691*	*218313*	*199500*	*417813*

In each column the first moving average is calculated by adding the data of the $x = 25$, 26, 27, 0, 1, 2, 3 from the right columns of the table and dividing the received amount by 7. In the case of the total column:

$$\frac{(14892+15115+14840+14775+14914+14787+14899)}{7}=\frac{104222}{7}=14888{,}86$$

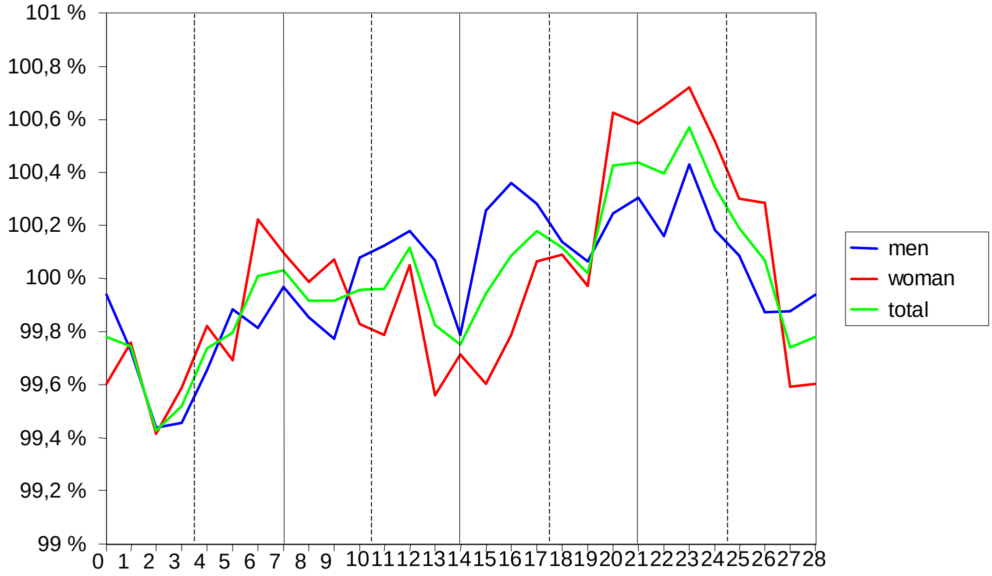


Figure 1.5.2.

Death cases in 1998-2000 per sex and altogether, according to the 28-day cycle, seven-member moving average, percentage

In the course of seven-member moving average determination the first and third quartile places are highlighted again, but it may be surprising that the second one (the bisecting place) is spread, because the low points situated along the edges of the seen-day wider environment are detected in the middle.

Let us see the same in the case of the 1982 data!

Table 1.5.4.

Death cases in 1982 per sex and altogether, according to the 28-day cycle, seven-member moving average

	Deaths			*Seven-member moving average*			*Moving average*		
x	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
0	2616	2441	5057	18932	16631	35563	2704.57	2375.86	5080.43
1	2757	2401	5158	18891	16713	35604	2698.71	2387.57	5086.29
2	2598	2412	5010	18860	16658	35518	2694.29	2379.71	5074.00
3	2729	2356	5085	18775	16813	35588	2682.14	2401.86	5084.00
4	2686	2401	5087	18794	16820	35614	2684.86	2402.86	5087.71
5	2664	2359	5023	18733	16897	35630	2676.14	2413.86	5090.00
6	2725	2443	5168	18733	16863	35596	2676.14	2409.00	5085.14
7	2635	2448	5083	18664	16923	35587	2666.29	2417.57	5083.86
8	2696	2478	5174	18654	16879	35533	2664.86	2411.29	5076.14
9	2598	2378	4976	18629	16860	35489	2661.29	2408.57	5069.86
10	2660	2416	5076	18571	16839	35410	2653.00	2405.57	5058.57
11	2676	2357	5033	18581	16837	35418	2654.43	2405.29	5059.71
12	2639	2340	4979	18608	16713	35321	2658.29	2387.57	5045.86
13	2667	2422	5089	18797	16720	35517	2685.29	2388.57	5073.86

14	2645	2446	5091	18785	16694	35479	2683.57	2384.86	5068.43
15	2723	2354	5077	18745	16801	35546	2677.86	2400.14	5078.00
16	2787	2385	5172	18835	16848	35683	2690.71	2406.86	5097.57
17	2648	2390	5038	18851	16818	35669	2693.00	2402.57	5095.57
18	2636	2464	5100	18796	16789	35585	2685.14	2398.43	5083.57
19	2729	2387	5116	18758	16852	35610	2679.71	2407.43	5087.14
20	2683	2392	5075	18588	16943	35531	2655.43	2420.43	5075.86
21	2590	2417	5007	18617	16968	35585	2659.57	2424.00	5083.57
22	2685	2417	5102	18708	16823	35531	2672.57	2403.29	5075.86
23	2617	2476	5093	18674	16850	35524	2667.71	2407.14	5074.86
24	2677	2415	5092	18801	16746	35547	2685.86	2392.29	5078.14
25	2727	2319	5046	18827	16770	35597	2689.57	2395.71	5085.29
26	2695	2414	5109	18899	16754	35653	2699.86	2393.43	5093.29
27	2810	2288	5098	18880	16690	35570	2697.14	2384.29	5081.43
Total	*74998*	*67216*	*142214*	*524986*	*470512*	*995498*	*74998*	*67216*	*142214*

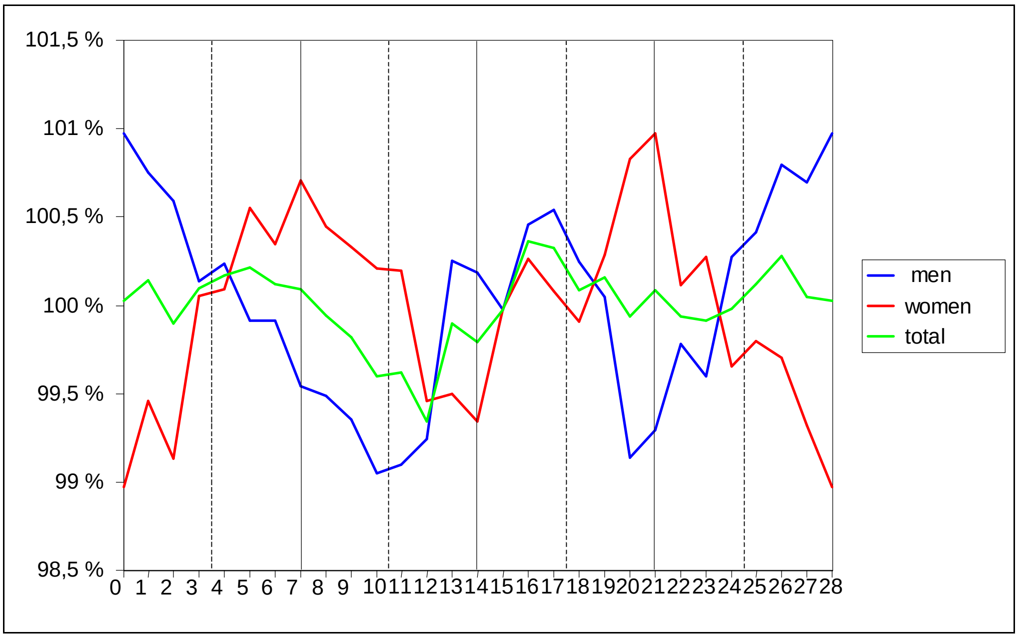


Figure 1.5.3.

Death cases in 1982 per sex and altogether, according to the 28-day cycle, seven-member moving average, percentage

We are very much interested how similar the 1982 results and the three-year results are to each other. WE can have a look at the two figures and do further calculations, and we can draw a further diagram. It can definitely prove similarity, if the series of the male-female differences are also found similar in the two periods. The comparability of the comparative diagram (figure 1.5.4.) made on the basis of the percentage values can be disturbed by the large difference. It also has its own significance. It shows that in the later years the manifestation of biorhythm was weaker.

Disregarding calculations here we also show the standardised values of the percentage differences. We must not forget that in both figures we compare comparisons.[18] It is easy to see the important things in the standardised diagram (figure 1.5.5.). On the one part there are high frequencies in the middle and on the edges in both periods, and on the other part in 1982 there is a higher hill where the cycles change (on the edges), while in 1998-2000 there is a hill at the bisector (in the middle).

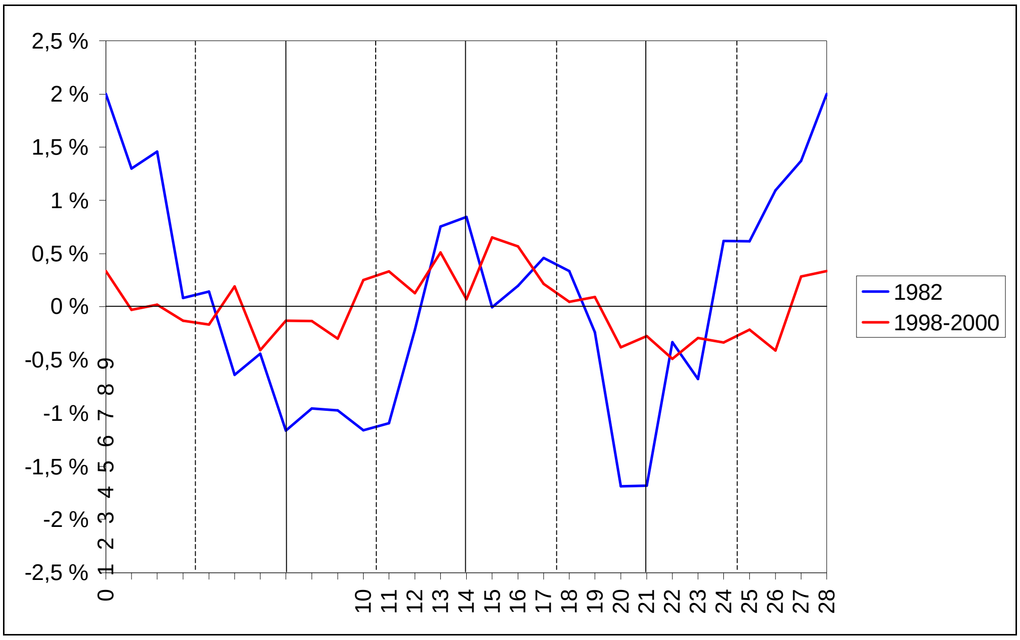


Figure 1.5.4.

Male-female differences of the 28-day cycle moving averages expressed in percentage, in two periods

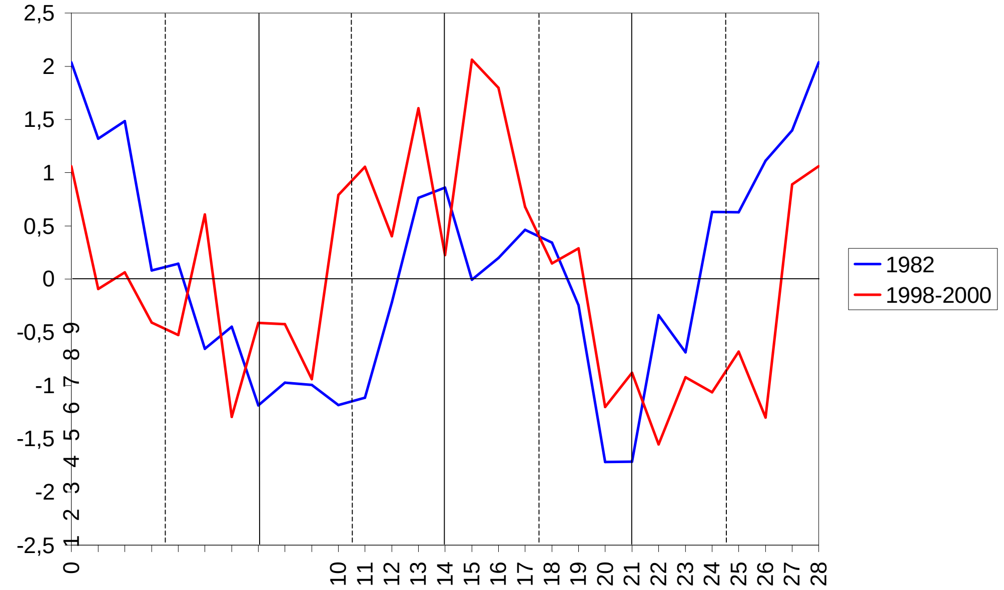


Figure 1.5.5.

Male-female differences of the 28-day cycle moving averages in two data sets, standardised

[18] The two types of comparisons of the comparisons can also be compared.

1.5.3 Quartile and octant concentration

When we say that in a biorhythm cycle there are prominent frequencies at the quartile and octant places, usually we must realise that the frequencies do not behave as we say at all the prominent places. The uncertainty is even greater, if the c^2 test does not help us.

This is why we try "concentration". It means "folding up" the cycle by the quarter and the eighth for the purpose of getting a general average picture of the quartile or octant places. This activity can be based on two different principles. The expression "folding up" relates to laying the parts on top of each other symmetrically. The other possibility is moving forwards in the cycle "step by step".

The 28-day cycle is an "easy case" of the step-by-step procedure, because the length of the cycle can be divided by 4. Quartering concentration can be realised by starting from the data with the serial number 0, 1, etc. and adding up every seventh data relating to the number of death cases. E.g.: in the case of 1982 male data (see table 1.5.4) the amount of the data with serial numbers 0, 7, 14, 21 is:

$$2616 + 2635 + 2645 + 2590 = 10486$$

Then we carry on with the same procedure as shown in table 1.5.5. We make a 7-day cycle of the 28-day cycle. Then 7 items of data in each case are expressed as a percentage of the average. We have taken a by-pass several times for the sake of our Readers who are less familiar with statistics. This time we do the opposite, we need to say something to our Readers who are statisticians. We call their attention to the fact that what we have done here is the procedure called "season-index calculation".[19]

Table 1.5.5.

Seven-day cycle in 1982

Serial No. of the data to be added up (x)	*Number of death cases*			*In percentage of the average*		
	Men	*Women*	*Altogether*	*Men*	*Women*	*Altogether*
0, 7, 14, 21	10 486	9 752	20 238	97.87	101.56	99.61
1, 8, 15, 22	10 861	9 650	20 511	101.37	100.50	100.96
2, 9, 16, 23	10 600	9 651	20 251	98.94	100.51	99.68
3, 10, 17, 24	10 714	9 577	20 291	100.00	99.74	99.88
4, 11, 18, 25	10 725	9 541	20 266	100.10	99.36	99.75
5, 12, 19 26	10 727	9 500	20 227	100.12	98.93	99.56
6, 13, 20, 27	10 885	9 545	20 430	101.60	99.40	100.56
Total	*74 998*	*67 216*	*142 214*	*700*	*700*	*700*
Average	*10 714*	*9 602*	*20 316*	*100.00*	*100.00*	*100.00*

[19] Not considering the nature of the examined time series cycle the 28-day period can be regarded as if we had data relating to four periods (quarter-cycles), within which we have one item of data relating to seven "seasons". In this way we have four items of data – also influenced by chance – relating to the different seasons, and we try to eliminate the role of chance by determining the average of these items of data (with more or less success). Technically the act of average determination could be omitted, because from the amounts we receive the same percentage values as we could have calculated from the average values. Thinking of "real" season-index calculation this is the simples possible case, if we do not have to deal with filtering out trend effects, because the time series is stationary, and apart from the role of biorhythm (the "seasonal effect") there is even distribution.

The same can be done with the data of years 1998-2000 (see Table 1.5.2). Disregarding calculations, beside the results of 1982 Figure 1.5.6. also shows the percentage values relating to the three years. (The serial numbers of the first quarter are shown, where “0=7”).

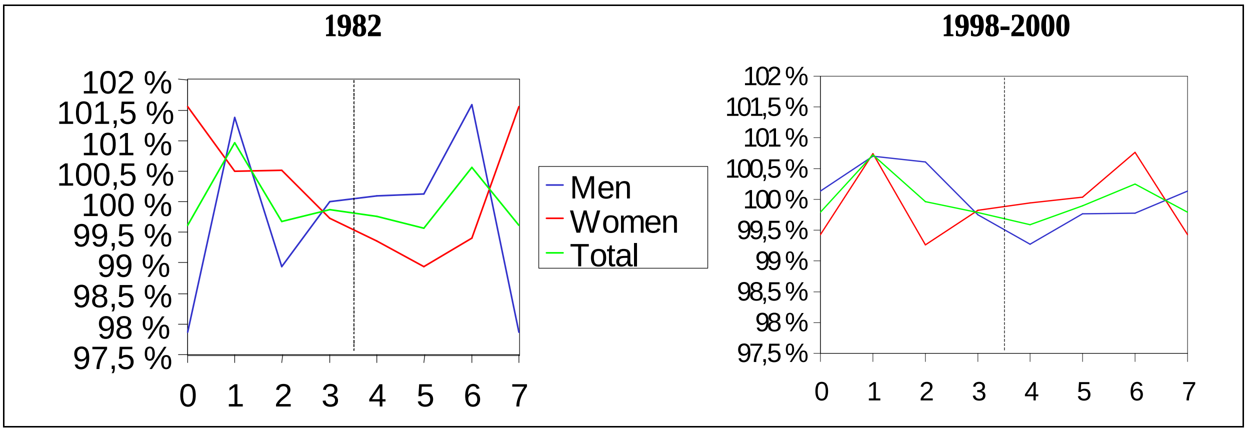


Figure 1.5.6.

Seven-day cycles in the two periods

In 1982 in the case of men “instead of” 0=7 the peak can be found at the neighbouring values (1 and 6). If we had a lower percentage value in the position x=5, the diagram could be more or less symmetrical, at the octant places (x=3 and 4) there would be percentage values standing out from their environment (local maximum). In the case of women at the place 0=7 there is a prominent maximum, there is no octant place, or it has “moved to the left”. In 1998-2000 there is less deviation, the role of biorhythm is weaker, and the male-female difference is just the opposite.

The situation is more complicated in the case of cycle lengths not divisible by 4. For example if we want to divide the 23-day cycle into two (fold it into two symmetrically), then the items of data with serial numbers adding up to 23 are added up (1+22, 2+21, … 11+12). 0 does not have a pair. Depending on the further procedure obviously something will happen to this number too. In the case of the 26-day cycle the “step-by-step” procedure seems evident. (As 26 is an even number.) This time the items of data at a distance of $26/2=13$ from each other are added up (0+13, 1+14, … 12+25). The data series divided into half are folded up again (somehow) and quartered. (See later tables 1.5.8. and 1.5.9.) The quartering can also be carried out with a direct procedure. It is a favourable circumstance in respect of this, if the structure of the cycle is $4k-1$, e.g.: $4\cdot 6-1=23$.

The fourth of the 23-day cycle is $23/4=5{,}75$. If we take steps in the cycle by jumping 6 numbers, then with every step we move a quarter of a day further in the “general” “quarter cycle”.[20] We step from 0 to 6, then to 12. 6 is a quarter of a day further as compared to 5.75, 12 is already half a day further from the 11.5 day bisector. The next step is $12+6=18$, which is ¾ of a day over the low point of the sine curve. The next step is $18+6=24$, but this 24 “equals” 1 ($24-23=1$). If we go on like this jumping 6 numbers all the time, the following numbers will be 7, 13, 19, 25 (that is $25-23=2$). The “skipped” serial number is marked u, and we make a rearranged version of Table 1.4.1.! Here we can concentrate three data lines (men, women, altogether) in one go, and we can also use the already calculated percentages.

[20] From the aspect of statistics it is a modified use of season-index calculation.

Table 1.5.6.

Concentrations of the 23-day cycle, 1982

	Quartile concentration						*Octant concentration*			
	Rearrangement			*Three-member moving average*			*Symmetrical average*			
U	*men %*	*women %*	*total %*	*men*	*women*	*total*	*men*	*women*	*total*	*x*
0	97.77	99.68	98.67	98.46	102.65	100.44	98.46	102.65	100.44	0
6	99.42	104.57	101.86	97.92	100.49	99.13	98.28	102.08	100.08	1
12	96.57	97.21	96.88	98.03	100.52	99.21	98.91	102.44	100.58	2
18	98.11	99.78	98.90	97.82	98.66	98.22	98.85	100.82	99.78	3
1	98.78	98.99	98.88	98.83	99.39	99.10	98.91	99.66	99.27	4
7	99.61	99.40	99.51	99.92	99.05	99.51	99.52	99.20	99.37	5
13	101.39	98.75	100.14	100.65	99.76	100.23	100.04	99.39	99.73	6
19	100.96	101.11	101.03	100.84	99.60	100.26	100.79	98.91	99.90	7
2	100.19	98.92	99.59	100.84	99.40	100.16	100.94	99.02	100.03	8
8	101.39	98.17	99.87	101.17	97.94	99.65	101.60	98.35	100.07	9
14	101.94	96.73	99.48	102.01	97.93	100.08	101.64	99.30	100.54	10
20	102.71	98.89	100.90	101.21	99.13	100.23	101.29	99.50	100.44	11
3	98.99	101.76	100.30	101.37	99.87	100.66				12
9	102.40	98.96	100.77	101.27	100.67	100.99				13
15	102.43	101.29	101.89	102.03	98.76	100.49				14
21	101.26	96.05	98.80	101.03	98.64	99.90				15
4	99.39	98.58	99.01	100.73	98.22	99.54				16
10	101.54	100.02	100.82	99.42	99.03	99.24				17
16	97.34	98.48	97.88	99.12	99.36	99.23				18
22	98.47	99.57	98.99	98.99	99.93	99.44				19
5	101.17	101.73	101.44	99.87	102.97	101.34				20
11	99.98	107.62	103.59	99.78	104.35	101.94				21
17	98.20	103.71	100.81	98.65	103.67	101.02				22
Average:	*100.00*	*100.00*	*100.00*	*100.00*	*100.00*	*100.00*				

The *u* series also consists of 23 members, like the *x* series (the same items of data in different order), but they still do not give a complete picture of the cycle, they only represent a quarter of a cycle: the average, general quarter cycle. However, this quarter cycle is shown in greater detail. In this situation we can afford the luxury of carrying out concentration and balancing (the moderation of the extremity of the fluctuation) at the same time. The method of three-member moving average determination is good for this purpose. The three data series received in this way are shown in Figure 1.5.7.

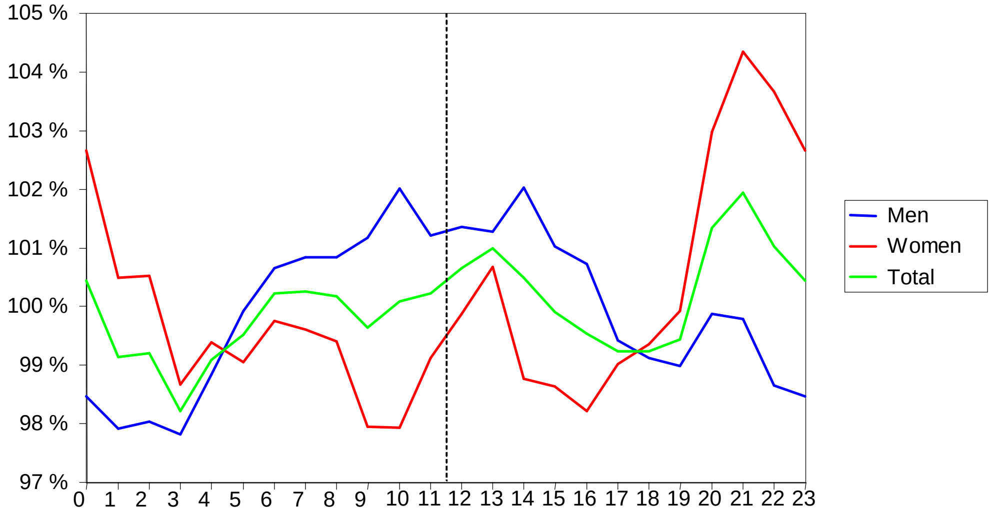


Figure 1.5.7.

Quartering concentration of the 23-day cycle in 1982, men, women and altogether

On the horizontal axis of the diagram, in position 0 and 23 it is not the place where the cycles change, but the place of "quarter change". In the middle of the scale (broken vertical line) there is the centre of the general quarter, the "general octant place". It is not necessary to show further vertical dividing lines. (We should not forget this in the course of the further analysis of the diagram.)

First let us see the line relating to the total number of death cases. It can be said to be more or less symmetrical. In the environment of the octant axis, in the "centre" there is a hill with a dent somewhere in the middle. On the two sides of the diagram the curve goes up high. The peak is not at 0=23, but at 21, but let's disregard this small difference. The section containing positions 21, 22, 23 should be seen as a section continued by 0, 1, 2, 3. In this way the curve parts on the sides can be accepted as peaks around 0=23. So inside the general quarter cycle the quartile is on the sides, while the octant is in the middle.

If we look at the curve of men and women now, we can see that in the case of men the octant, while in the case of women the quartile is "more intensive". The octant is dented in both curves. The dent can be explained by that in the individual concrete quartile positions the octant positions "behave" differently. We must not forget that concentration was carried out with a "step-by-step" procedure assuming that the real concrete quartile positions line up next to each other with the same shape. Symmetrical concentration would probably show a different picture.

In the last three columns of Table 1.5.6. there are the symmetrical averages of the data of the previous three columns. Value 0 is not affected by the average determination, so the percentage belonging to it is simply carried over. Below at $x=1$ the averages of $x=(1;22)$, at $x=2$ the averages of $x=(2;21)$ are given, and so on Figure 1.5.8. shows these averages. The "even octants" are represented on the left side of the 0-11 scale, while the "odd octants" are represented on the right side. According to this women are "strong" at the cycle changing, bisecting and quartile positions, while men at "real" octants, rather significantly. The line of both sexes is balanced in respect of the hills on the sides.

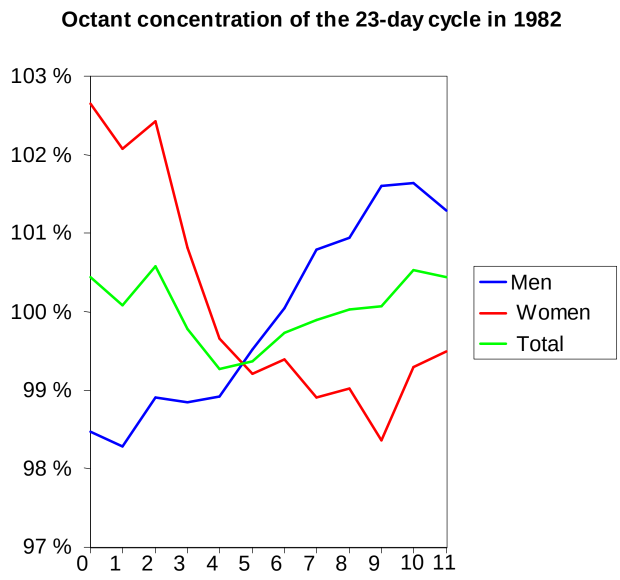


Figure 1.5.8.

Octant concentration of the 23-day cycle in 1982, men, women and altogether

Still working with the data of 1982 and the 23-day cycle, but also using grouping according to age Figure 1.5.9. (disregarding calculations) compares the quartering concentration of the 5th and 6th age group of men (between the age of 70-80 and above 80). Taking into consideration the characteristic shape and symmetrical position of the two curves of the figure our suspicion is confirmed that age is a significant factor. We might even interpret the figure saying that the oldest men "became feminine" in respect of the characteristic features of the given cycle.

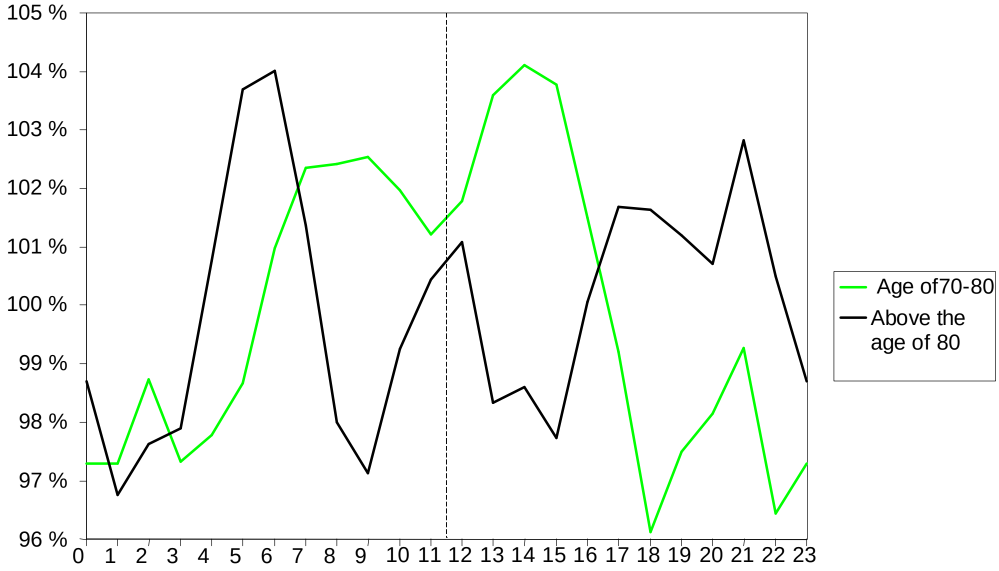


Figure 1.5.9.

The quartering concentration of the 23-day cycle in 1982, in two groups of men above the age of 70

Everything we have seen in connection with the data of 1982 may be seen again, change or disappear if we study further data. This time comparison is carried out by restricting our studies to one age group. Table 1.5.7. shows the 4th age group (between the age of 60-70), per sex and altogether. Here we only make a “virtual” table, the horizontal lines of the present table each represent a column of the tables in the Annex. (The data x=0 is shown to make searching in the Annex easier.)

Table 1.5.7.

Deceased person between the age of 60-70 per sex and altogether, in 1982 and between 1998-2000, according to the days of the 23-day cycle

Serial No.	*Year*	*Sex*	*x=0*	*Altogether*
1	1982	men	676	15363
2	1982	women	468	10405
3	1982	altogether	1144	25768
4	1998-2000	men	2176	48805
5	1998-2000	women	1282	29132
6	1998-2000	altogether	3458	77937

The real table contains $3 \cdot 3 \cdot 23 = 207$ items of data (altogether, without any derived data). A table of the same structure can be made from this data, containing percentages.

For the purpose of quartering and octant concentration, on the basis of the percentages we can carry out all the calculations included in table 1.5.6. relating to the complete population of 1982 (including all age groups). Here, disregarding calculations, figure 1.5.10. shows quartering concentration created from the data of 1998-2000 relating to the mentioned age group. In the diagram the dented central part occupies a large place as an octant, but on the sides the presence of the quartering part is also obvious, with a different emphasis per sex.

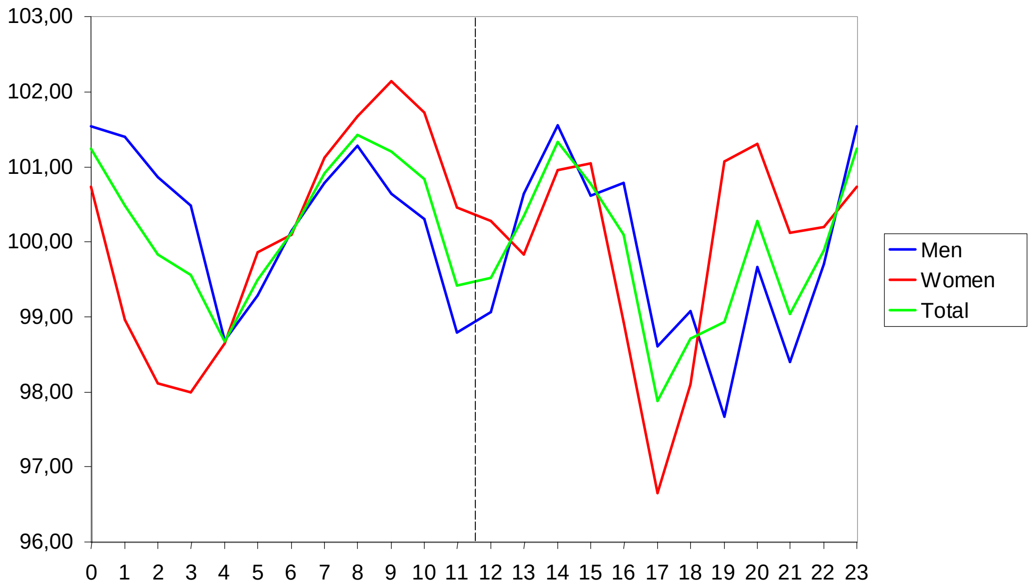


Figure 1.5.10.

23-day cycle, 1998-2000, 4th age group (between the age of 60-70), quartering concentration of three-member moving averages, percentages

Finally let us perform octant concentration with the data of 1982 and 1998-2000. Above we disregarded numbers, now let us get back to them. Table 1.5.8. contains data of the same content with respect to the age group between 60-70 as the last columns of table 1.5.6. in respect of the 1982 data totalled from the aspect of age.

Table 1.5.8.

Octant concentration of the 23-day cycle (between the age of 60-70) in 1982 and 1998-2000

	Octant concentration (symmetrical average)					
	1982			*1998-2000*		
x	*men*	*women*	*altogether*	*men*	*women*	*altogether*
0	99.06	101.83	100.18	99.15	100.95	99.83
1	99.86	99.51	99.72	100.66	99.57	100.25
2	99.18	99.21	99.20	99.74	99.11	99.51
3	100.23	99.73	100.03	100.18	99.64	99.98
4	97.99	101.61	99.45	98.28	99.85	98.87
5	98.38	99.84	98.97	99.29	98.97	99.17
6	96.96	98.77	97.69	99.48	98.36	99.06
7	100.23	98.55	99.55	100.90	100.02	100.57
8	100.61	100.80	100.68	101.05	101.35	101.16
9	102.48	100.32	101.61	101.21	101.54	101.34
10	102.13	100.91	101.64	100.58	100.77	100.65
11	102.43	99.84	101.38	99.04	100.36	99.53

Figure 1.5.11. shows octants relating to the three-year period. The difference between the sexes has disappeared (as compared to 1982), and the role of the sexes seems to have changed to the opposite.

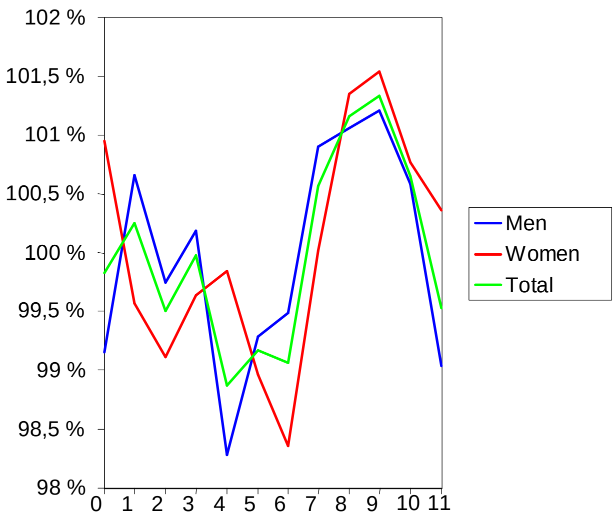


Figure 1.5.11.

The octant concentration of the 23-day cycle (between the age of 60-70), 1998-2000

In figure 1.5.12. the octants totalled without distinction according to sex are compared with respect to 1982 and the three-year period.

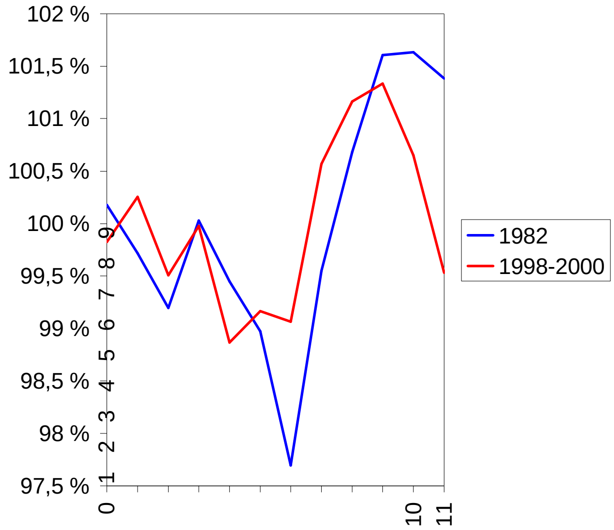


Figure 1.5.12.

Octant concentration of the 23-day cycle (between the age of 60-70), in 1982 and 1998-2000

Let us take a "not 23-day cycle" from the data set of the three-year period, e.g.: the 26-day cycle. From this line of an even number first let us make a stepping (0+13, 1+14, … 12+25) l3! The frequencies at a distance of 13 days from each other are added up. The first 13 serial numbers (0, 1, … 12) are the "denominators". See Table 1.5.9., Figure 1.5.13. There are quartile laces on the sides and in the centre of the diagram, and there are some octants among them. The "biorhythmic" behaviour is evident.

Table 1.5.9.

Bisection of the 26-day cycle in 1998-2000, percentage

	Absolute numbers			*Percentages*		
x	*Men*	*Women*	*Altogether*	*Men*	*Women*	*Altogether*
0	16 967	15 359	32 326	101.03	100.08	100.58
1	16 747	15 304	32 051	99.72	99.73	99.72
2	16 680	15 350	32 030	99.33	100.03	99.66
3	16 850	15 435	32 285	100.34	100.58	100.45
4	16 779	15 529	32 308	99.91	101.19	100.52
5	16 746	15 275	32 021	99.72	99.54	99.63
6	16 732	15 196	31 928	99.63	99.02	99.34
7	17 023	15 457	32 480	101.37	100.72	101.06
8	16 569	15 200	31 769	98.66	99.05	98.85
9	16 943	15 333	32 276	100.89	99.91	100.42
10	16 715	15 401	32 116	99.53	100.36	99.93
11	16 940	15 390	32 330	100.87	100.29	100.59
12	16 622	15 271	31 893	98.98	99.51	99.23
Average:	16 793.31	15 346.15	*32 139.46*	100.00	100.00	*100.00*

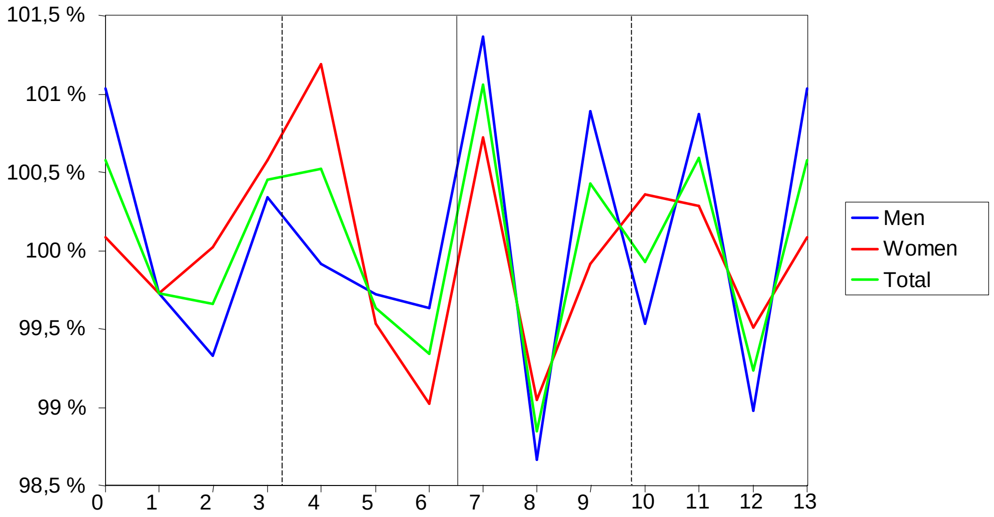


Figure 1.5.13.

Bisection of the 26-day cycle in 1998-2000, percentages

Moving on from the bisector to the quartile the method of "skipping" can be used. This time we take steps skipping seven numbers and step over the quarter 26/4=6.5 by half a day each time. Then by symmetrical average determination we receive octants. The percentage belonging to 0 is left unchanged, and we calculate the average values according to the serial numbers (1+12)/2, (2+11)/2, … (6+7)/2. We can disregard moving average determination here, because in the first step by adding up two numbers we already did something in the interest of restricting the role of chance. See Table 1.5.10., figures 1.5.14. and 1.5.15.

Table 1.5.10.

Dividing the 26-day cycle into quarters and eighths, in 1998-2000, percentages

	Rearranging			*Dividing into eighths (symmetrical average)*		
u	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
0	101.03	100.08	100.58	101.03	100.08	100.58
7	101.37	100.72	101.06	100.50	99.87	100.20
1	99.72	99.73	99.72	99.35	99.62	99.48
8	98.66	99.05	98.85	99.19	99.29	99.24
2	99.33	100.03	99.66	100.10	100.16	100.13
9	100.89	99.91	100.42	100.40	100.55	100.47
3	100.34	100.58	100.45	99.94	100.47	100.19
10	99.53	100.36	99.93			
4	99.91	101.19	100.52			
11	100.87	100.29	100.59			
5	99.72	99.54	99.63			
12	98.98	99.51	99.23			
6	99.63	99.02	99.34			
Average	100.00	100.00	*100.00*	100.00	100.00	*100.00*

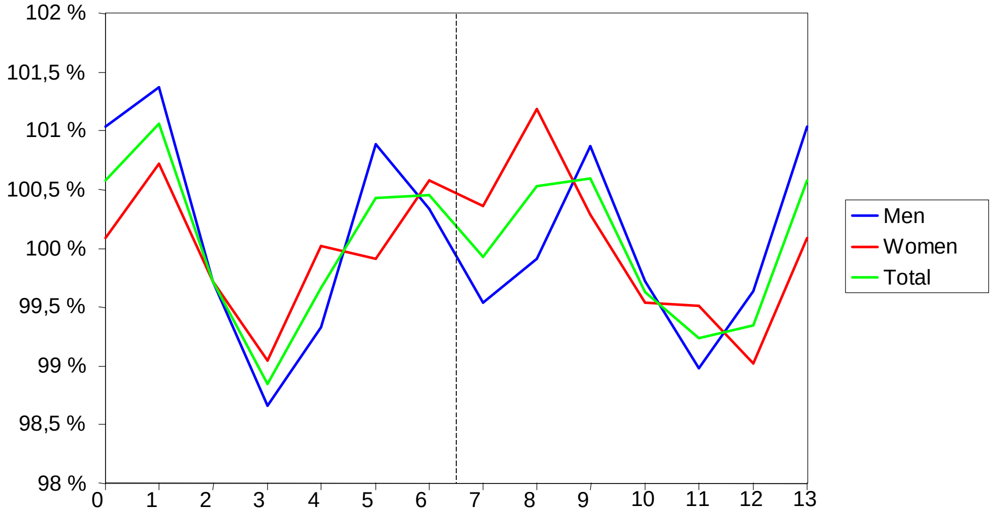


Figure 1.5.14.

26-day cycle in the three-year period, quartiles

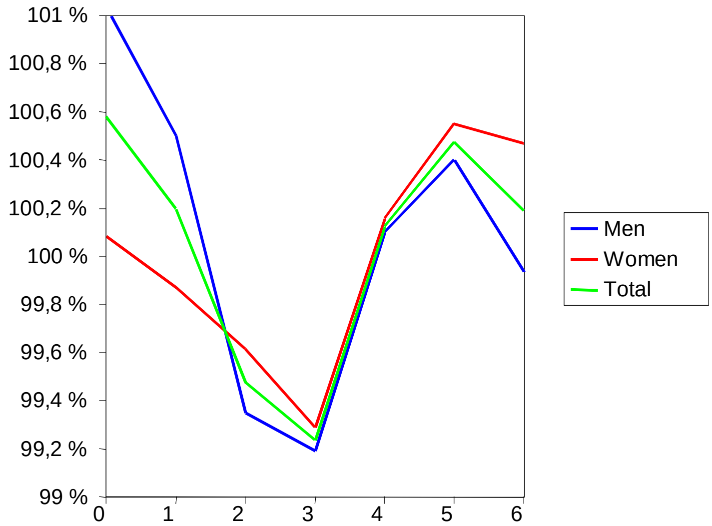


Figure 1.5.15.

26-day cycle in the three-year period, octants

In the figures we can see a very characteristic behaviour. On the two sides of figure 1.5.14 and on the left side of figure 1.5.15. we can see quartile places, while in the centre of the former figure and on the right side of the latter figure we can see octant places. As compared to what we experienced in respect of the data of l982 (see Figure 1.5.4.) there is a significant change. The quartile trend of women and the octant trend of men has become less intensive, it even turned back.

If after studying figure 1.5.14. we look at the quartering concentration of the 23-day cycle again in figure 1.5.10., the similarity can hardly be doubted. We can say that the quartile of the 26-day cycle is " prettier" than that of the 23-day cycle. In the same way the octant shown in figure 1.5.15. confirms our statement better than figure 1.5.11. It cannot be doubted that the message is the same.

Let us see the data of the 38-day cycle from the data of the Hungarian Biographical Lexicon (MÉL) relating to 6038 persons.[21] As 38 is an even number, it is easy to perform bisecting concentration by simply adding up data taking steps (adding up data with serial numbers 0+19, 1+20, etc.). Quartering concentration means bisecting the bisector. 19 is an odd number, this time we "skip" 10 numbers at a time to get to the end of the data line with 19 members in a way that the new data line creates the general quarter cycle. See table 1.5.11 and figure 1.5.16.

Table 1.5.11.

MÉL 38-day cycle quartering concentration

x	No. of persons	*x*	No. of persons	19-day cycle	*u*	Rearranged	Total	In percentage of the average
0	162	19	146	308	0	308	946	99.23
1	152	20	155	307	10	311	926	97.13
2	169	21	151	320	1	307	965	101.22
3	153	22	145	298	11	347	974	102.16
4	172	23	166	338	2	320	976	102.37
5	154	24	163	317	12	309	927	97.23
6	130	25	171	301	3	298	918	96.29
7	147	26	154	301	13	311	947	99.33
8	134	27	170	304	4	338	988	103.63
9	168	28	159	327	14	339	994	104.26
10	150	29	161	311	5	317	976	102.37
11	160	30	187	347	15	320	938	98.39
12	156	31	153	309	6	301	965	101.22
13	160	32	151	311	16	344	946	99.23
14	171	33	168	339	7	301	953	99.96
15	169	34	151	320	17	308	913	95.77
16	157	35	187	344	8	304	940	98.60
17	161	36	147	308	18	328	959	100.59
18	175	37	153	328	9	327	963	101.01
Total	3000	-	3038	6038	-	6038	18114	100.00

[21] I must admit here that the data of MÉL were processed in two ways and the number of total cases is not the same in the two places.

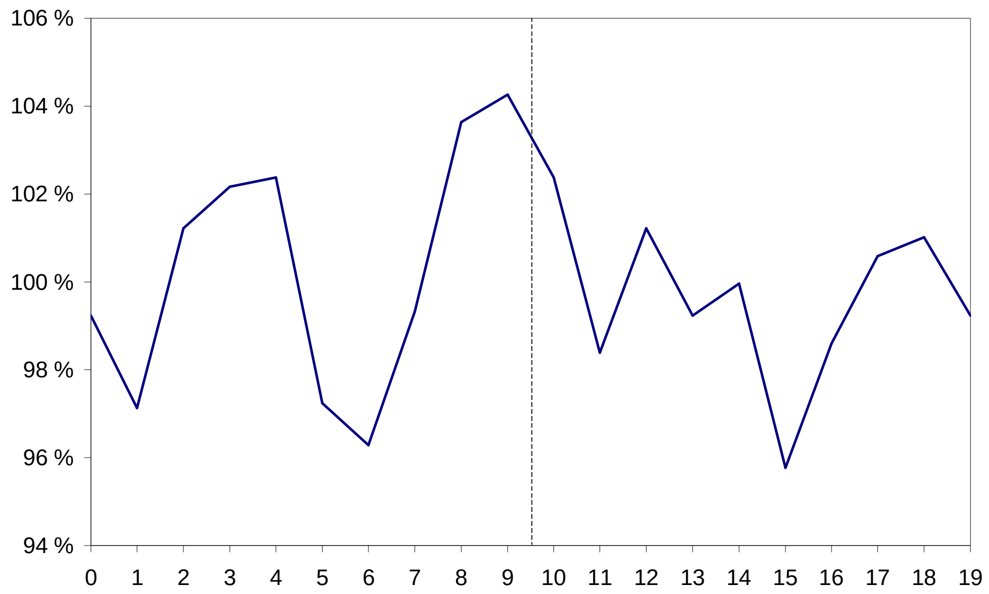


Figure 1.5.16.

Quartering concentration of the 38-day cycle in the MÉL

We could have shown quartering concentration other than usual, not (only) with the quarter cycle on the sides and the octant in the centre, but the other way round. On the x axis of the following figure instead of stating numbers from 0-19 we put 0 in the middle, which means that on the sides of the scale of the "half-cycle shaped quartile" consisting of 19 positions the octants will be cut into two and the quartile will be in the centre. The division of the horizontal scale makes identification per position possible in the two figures.

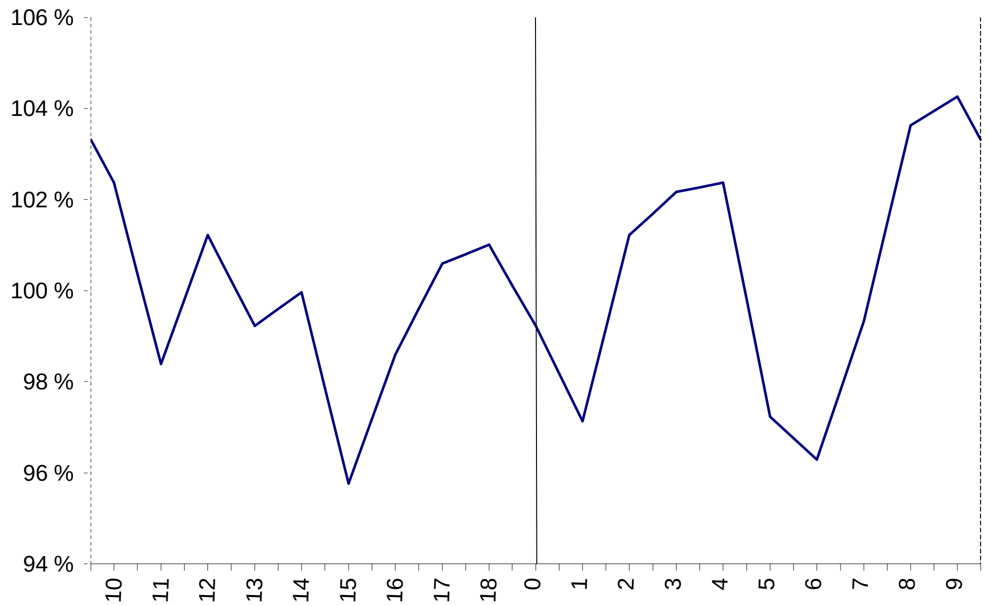


Figure 1.5.17.

Different quartile

Obviously this figure shows the same thing as the previous one. The borders of the octant and quartile block can be found at the 6th and 15th day. Do not forget that – in accordance with the conventions – in the previous figure the broken line representing the octant is in the middle, and in the latter figure it is on the sides.

1.5.4 Correlation, autocorrelation

The closeness of the relationship between identical types of data lines belonging to the same units can be measured with a correlation coefficient[22] (r) ($-1 \le r \le 1$).

We saw in Figure 1.5.12. that the octants of the 23-day cycle in the data sets of 1982 and the three-year period were very similar to each other. This similarity can also be measured with the help of correlation calculus, and it can be expressed with a numerical value. From the appropriate members of the two data lines 12 data pairs are made, which can be allocated to serial numbers 0, 1, … 11 according to Table 1.5.8..

In Figure 1.5.18. the 12 data pairs are represented by 12 points. Each point on the horizontal axis is situated according to the 1982 percentage number and on the vertical axis according to the three-year percentage number. Near the bottom left corner there are the points according to serial numbers 2, 4, 5, 6. The value pairs belonging to these include the lowest percentages both in respect of 1982 and the three-year period, while both items of data of serial numbers 8, 9, 10 in the opposite corner are high. The ascending balancing line (which is the result of linear regression estimation) illustrates positive correlation.[23] The value of the correlation coefficient is rather high (positive!) $r = 0{,}667$.

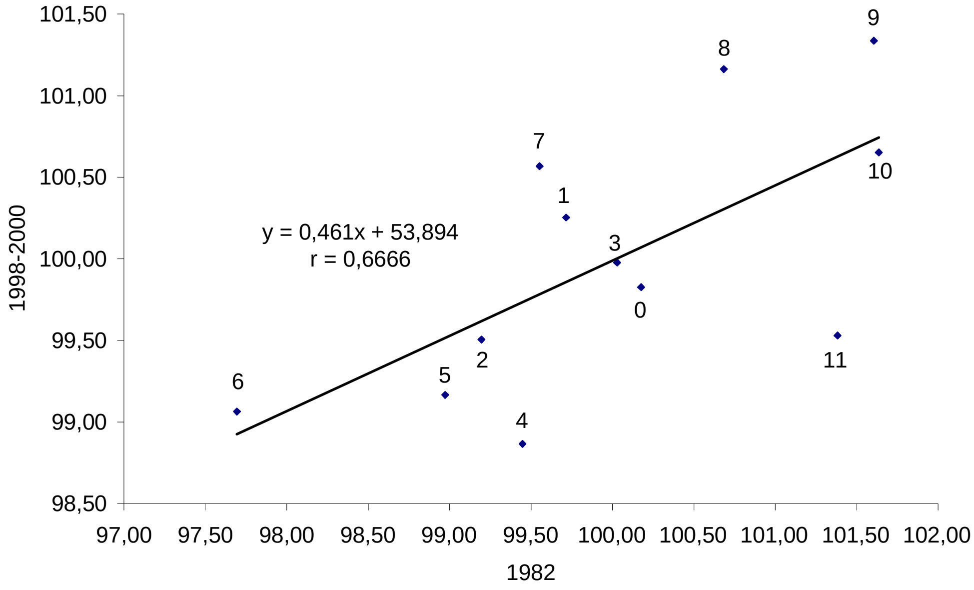


Figure 1.5.18.

The connection between the octant concentration of two periods in the 23-day cycle, dot-diagram with regression line

Let us see a few more examples to confirm positive correlation.

[22] The value of the coefficient may relate to a function-like positive (1) or negative (-1) connection, or between these two values a positive or negative stochastic (probability) connection, or the lack of a connection (0). There can be loose or average connections depending on the closeness to or the distance from the whole numbers mentioned above.

[23] If the points were on the line, we could say that the positive connection is function-like. Otherwise there is only a “stochastic” connection.

In the case of the quartering and octant concentration in the 26-day cycle there is also a rather close connection (around 0.5, more intensive than the average) between the percentages of men and women. In the case of the quartile number pairs of the men and women columns of Table 1.5.9. $r = 0{,}545$, while in the case of the octant number pairs $r = 0{,}593$.

A possible way of using correlation calculus to prove the existence of biorhythm cycles is the calculation of the so-called autocorrelation or serial correlation coefficients. In this case the correlation calculus is based on one single data line. A new artificial data line is created by "shifting" the days of the cycle by k number of days, and the connection between the original and the shifted data line is examined. We assume that within a period of k days always (or mostly) something similar would happen. So if for example we examine the 28-day cycle and perform shifting by $k = 7$ days, we will see the parallel behaviour of the days of the quarter cycles in the same position.

If we do not have "prejudices" regarding the "ideal" number of days we intend to shift the days of the cycle, then we can calculate the coefficients r_1, r_2, r_3, etc. received with $k = 1, 2, 3$, etc. Behaviour in the same direction is shown by a positive coefficient, while behaviour in the opposite direction is shown by a negative coefficient. It is easy to see that $r_0 = 1$, because "shifting" by 0 days means that we examine the connection of the data line with itself. It can also be seen that there is a certain symmetry. The symmetrical pairs of the k values, the amount of which is B, give the same r_k result. In the case of a cycle of B days $r_k = r_{B-k}$, that is in the case of a 23-day cycle $r_k = r_{23-k}$ So it is enough to calculate the coefficients from r_1 to r_{11}. To make it easier to understand Table 1.5.12. shows all the possible shifting of the 23-day cycle of the accidents. The symmetry can be checked on the basis of the last line and in figure 1.5.16.

Table 1.5.12.

Accidents, the frequencies and autocorrelation coefficients of the 23-day cycle received by k=1, …, 22-day shifting

	k=																						
x	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*
0	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9
1	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5
2	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9
3	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4
4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8
5	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7
6	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12
7	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6
8	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10
9	9	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9
10	6	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6
11	15	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15
12	10	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10
13	13	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13
14	10	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10
15	11	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11
16	4	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4
17	18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18
18	8	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8
19	8	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8
20	8	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8
21	10	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10
22	11	9	5	9	4	8	7	12	6	10	9	6	15	10	13	10	11	4	18	8	8	8	10	11
	Total: 211 persons																							
r_k	*1.00*	*-0.30*	*0.25*	*-0.10*	*0.16*	*-0.07*	*0.22*	*-0.19*	*-0.08*	*-0.07*	*-0.27*	*-0.04*	*-0.04*	*-0.27*	*-0.07*	*-0.08*	*-0.19*	*0.22*	*-0.07*	*0.16*	*-0.10*	*0.25*	*-0.30*	*1.00*

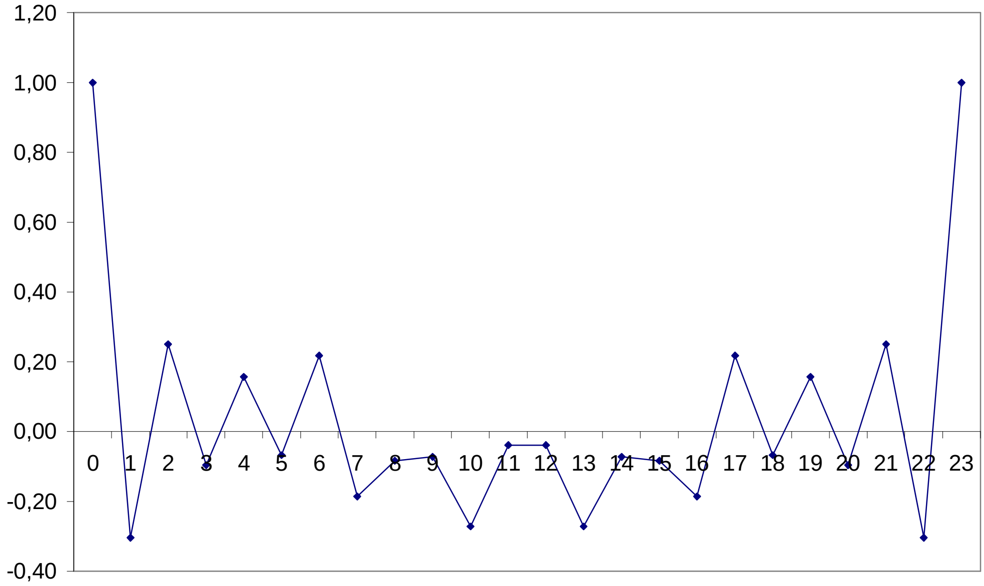


Figure 1.5.19.

The autocorrelation coefficients of the accidents according to the 23-day cycle

With respect to the 23-day cycle of 1982 (men, women, altogether) let us see the series of the autocorrelation coefficients in a figure (Figure 1.5.20.), disregarding calculations. Here we only show the r_k values relating to k = 0, 1, … 11, taking symmetry into consideration. Both in the case of men and women r_6 touching the quartile seems prominent. It is not a result of the higher frequency of quartile points, but a result of that days at a distance of a quarter of a cycle from each other behave in a similar way. So if (as we have seen it above in the case of men in 1982) the frequency of octant points is the most prominent, then their distance from each other is a quarter of the cycle! The negative coefficient of the octant place (in the case of men $r_3 = -0{,}604$) is negative, which means that the quartile and octant points behave in an opposing way. The similarity or difference of the male and female line can be easily seen, but the green line of the total data line may be confusing. It does not seem average as compared to the two other lines (we have seen something like this before), and it goes over the male-female interval always on the "female side". (We have seen something like this in the case of standardised frequencies, when the male+female results were not the average values of the male and female numbers.)

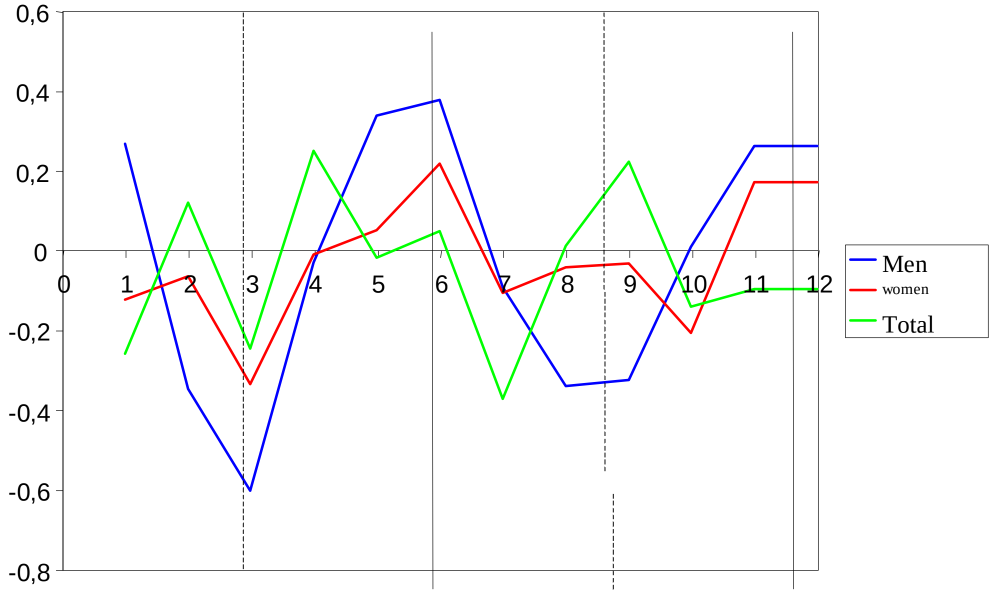


Figure 1.5.20.

The autocorrelation coefficients of the 23-day cycle on the basis of the data of 1982 (k=1-11)

If we want to understand the "cross tables" described in sub-chapter 1.4.4. more deeply, from the lines and columns of these tables we can calculate the series of the right autocorrelation coefficients. They can show us how the situation according to a given cycle influences the behaviour of another cycle. This examination may take us far, here we only want to reveal the possibility of using a research method. Now we take a few details from the 23-28 table.

First let us see the coefficients measured in the 28-day cycle in a few lines according to the 23-day cycle, namely in lines 2/23, 7/23, 8/23, 10/23 from lines x/23 (where x = 0, 1, … 22). With respect to symmetry it is enough to calculate the coefficients r_k /28 until $k = 14$. They are shown graphically. Two of each four designated series are paired in the diagram. We tried to create similar and contradictory pairs. See Figure 1.5.21. and Figure 1.5.22.. The symmetry of both figures, the similarity and difference of the series indicate that there is no point in assuming the role of chance here. Symmetry here is not the kind of automatic symmetry as a result of which we only deal with half of the cycle here, but a stochastic symmetry inside the half-cycle, which can be regarded as an unmistakable sign of the presence of biorhythm.

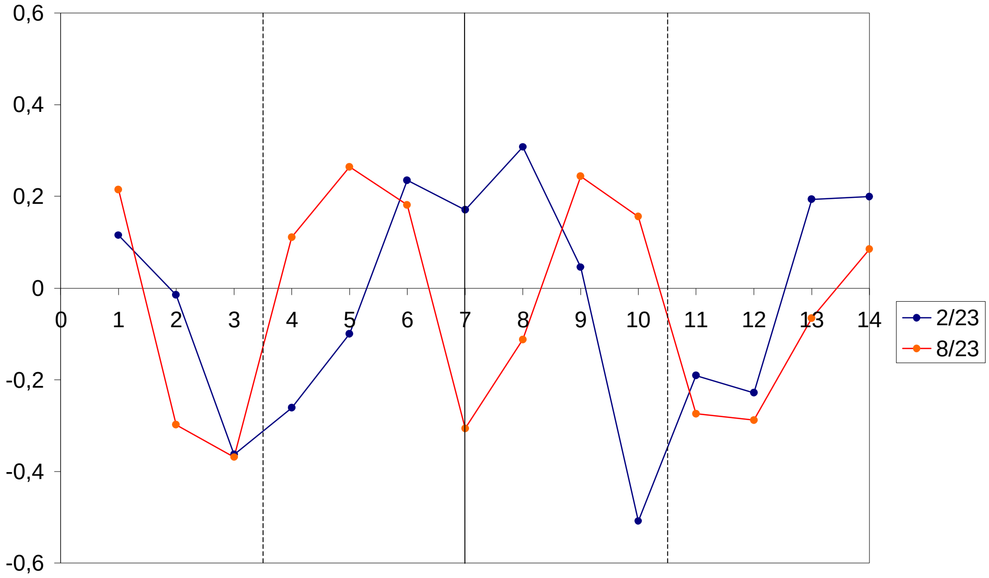


Figure 1.5.21.

The autocorrelation coefficients of elements 2/23 and 8/23 of the 28-day cycle, 1998-2000, total

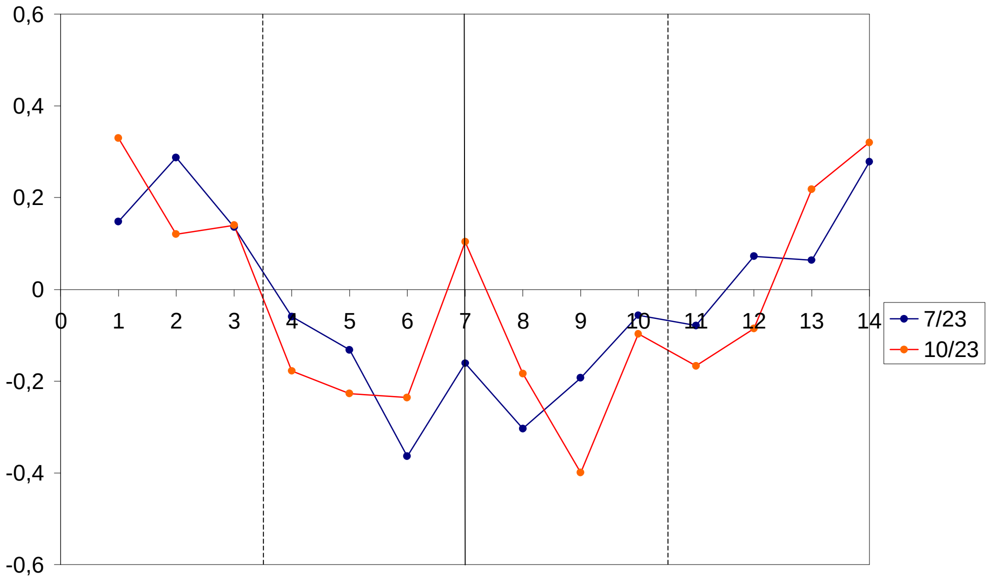


Figure 1.5.22.

The autocorrelation coefficients of elements 7/23 and 10/23 of the 28-day cycle, 1998-2000, total

Six lines were selected in the opposite direction, three pairs were created from them with respect to values k = 0, 1, … 11. (We know that $r_{11}=r_{12}$, symmetric continuation can be imagined here too.)

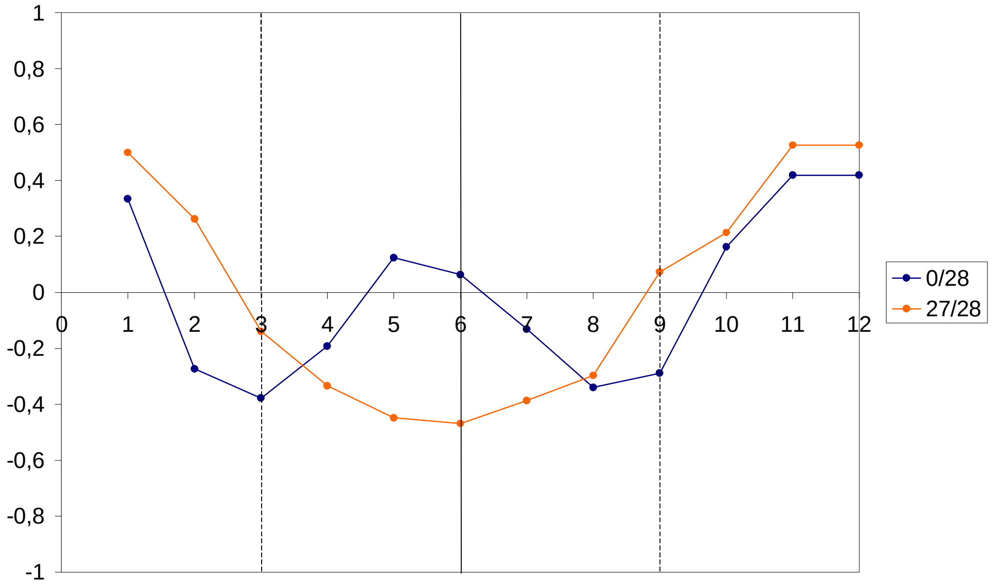


Figure 1.5.23.

The autocorrelation coefficients of elements 0/28 and 27/28 of the 23-day cycle, 1998-2000, total

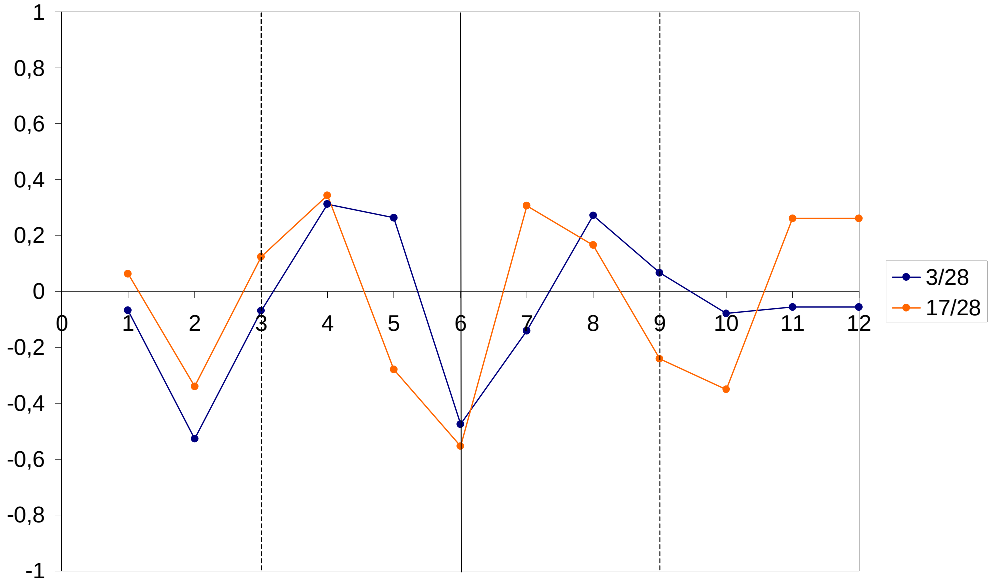


Figure 1.5.24.

The autocorrelation coefficients of elements 3/28 and 17/28 of the 23-day cycle, 1998-2000, total

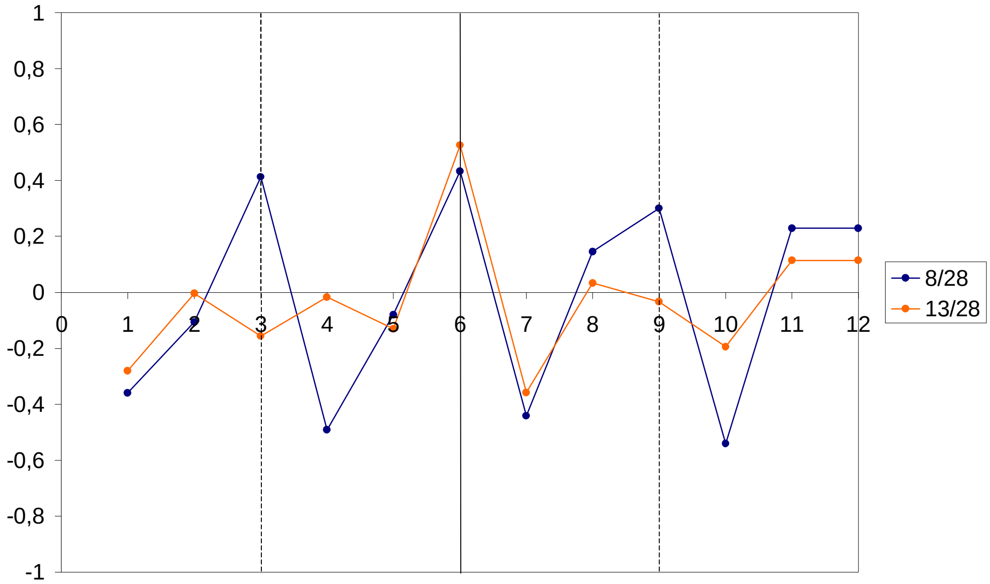


Figure 1.5.25.

The autocorrelation coefficients of elements 8/28 and 13/28 of the 23-day cycle, 1998-2000, total

I do not intend to make generalising statements. However, in general it can be said that we have found regularities worth explaining.

1.5.5 Examining days of high frequency

Obviously we need a procedure to help us to decide whether a given cycle number involves a real biorhythm cycle. Such a method is “cycle-doubling”. It means that instead of a c-day cycle we examine a $2c$-day cycle. If the two parts of the double cycle are very similar, then c is “the real one”. I “decided” that the 26-day and 51-day cycles exist partly on the basis of this method, as opposed to other products of 13 and 17. For reasons not described in detail here this procedures can be doubted. Here we deal with a more reliable method.

The data set to be used is the so-called omniscient list. In this list (those who died when they were 0-28 days old are omitted) starting from those who died when they were 29 days old the numbers of those who died when they were A days old are listed up to the greatest lifetime data of thirty–something thousand days.

If there is a cycle of a given length, then the outstanding frequencies in the produced distribution can be interpreted as signs proving the existence of the cycle. Obviously chance always creates “greater” frequencies too. If the zero-hypothesis rejecting the existence of biorhythm reflects the real situation, then examining A days of the highest frequency can be regarded as an accidental procedure. If a distribution relating to the given cycle is produced from the frequencies belonging to the examined A numbers (or even from the individual A numbers, unweighted), then there are two possibilities: biorhythm exists or it does not exist. In the previous case the biorhythm cycle, which already seemed real in the whole population, can be seen again, while in the latter case the accidental fluctuation, misleading us in the complete cycle, changes into a completely different type of accidental fluctuation.

“Great” frequencies can be examined per sex, separately or altogether. The limits can be drawn in several different ways. In the case of the examination method shown here A days representing more than 18 death cases in the case of men and more than 21 death cases in the case of women are examined.

In Table 1.5.13. we show a part of the omniscient list supplemented with x serial numbers according to three B cycles (23, 28, 33). (My Readers can check the calculations!)

Table 1.5.13.

A part of the omniscient list

Days (A)	*Men*	*Women*	*Altogether*	*23*	*28*	*33*
28001	12	11	23	10	1	17
28002	16	**26**	42	11	2	18
28003	18	18	36	12	3	19
28004	12	19	31	13	4	20
28005	**22**	16	38	14	5	21
28006	**23**	**24**	47	15	6	22
28007	14	17	31	16	7	23
28008	15	**22**	37	17	8	24
28009	**25**	**22**	47	18	9	25
28010	**19**	14	33	19	10	26

In this old group there are several frequencies that must be pointed out. They are shown in bold numbers. The greatest number is 26, among women it is on the second place. Those who died when there were 28002 = 3x26x359 days old (42 of them altogether) were before the bisector of the 23-day cycle on the day when they died. (The 11th day has a high mortality rate, also see the next table and both figures!) This day is the 0th day of the 26 and 359 (if there is such) day cycle, as we se among the factors of 28002. On the basis of further calculations it turns out that the according to the annual cycle (Y) exactly two-thirds of the year has passed on the 28002nd day (28002/365,2422=76,667).

Of course selection is not "cycle-dependant". On the basis of the above aspect 36288 men and 34854 women (altogether 71142 persons) were selected. This method of selection filters out age groups represented by a smaller number of people. This was not among our aims, but we can accept it. In table 1.5.13. distribution according to the 23-day cycle is shown. Figure 1.5.26. shows the percentage data of the table. At first sight it shows a picture that suits what we have learnt about the 23-day cycle before. But if we examine the division of the vertical axis, we are faced with a significantly greater deviation of the percentages than usual. This circumstance can be evaluated as a definitely positive factor in respect of the aim of our examination.

However, if we want to compare our new results with the known numbers of the whole population – and this is what we should do first of all –, we must see standardised frequencies. This comparison is performed with the three diagrams of Figure 1.5.27. with respect to all persons and per sex. In the next two figures the whole population and the selected population is compared with respect to the 28-day and the 33-day cycle (only altogether). Of course we could try any other cycle.

Table 1.5.14.

The distribution of days selected on the basis of high frequency (1998-2000) according to the 23-day cycle, with absolute, percentage and standardised numbers

x	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
0	1 568	1 654	3 222	99.38	109.15	104.17	-0.07	0.88	0.53
1	1 348	1 282	2 630	85.44	84.60	85.03	-1.72	-1.48	-1.91
2	1 340	1 326	2 666	84.93	87.50	86.19	-1.78	-1.20	-1.76

3	1 477	1 425	2 902	93.61	94.04	93.82	-0.75	-0.57	-0.79
4	1 704	1 564	3 268	108.00	103.21	105.65	0.95	0.31	0.72
5	1 698	1 543	3 241	107.62	101.82	104.78	0.90	0.17	0.61
6	1 578	1 531	3 109	100.02	101.03	100.51	0.00	0.10	0.07
7	1 580	1 250	2 830	100.14	82.49	91.49	0.02	-1.68	-1.08
8	1 634	1 408	3 042	103.57	92.91	98.35	0.42	-0.68	-0.21
9	1 579	1 604	3 183	100.08	105.85	102.91	0.01	0.56	0.37
10	1 494	1 506	3 000	94.69	99.38	96.99	-0.63	-0.06	-0.38
11	1 972	1 723	3 695	124.99	113.70	119.46	2.95	1.32	2.48
12	1 560	1 622	3 182	98.88	107.04	102.87	-0.13	0.68	0.37
13	1 730	1 421	3 151	109.65	93.77	101.87	1.14	-0.60	0.24
14	1 663	1 501	3 164	105.40	99.05	102.29	0.64	-0.09	0.29
15	1 666	1 543	3 209	105.59	101.82	103.75	0.66	0.17	0.48
16	1 534	1 559	3 093	97.23	102.88	100.00	-0.33	0.28	0.00
17	1 610	1 855	3 465	102.04	122.41	112.02	0.24	2.15	1.53
18	1 484	1 624	3 108	94.06	107.17	100.48	-0.70	0.69	0.06
19	1 532	1 308	2 840	97.10	86.31	91.82	-0.34	-1.31	-1.04
20	1 574	1 331	2 905	99.76	87.83	93.92	-0.03	-1.17	-0.78
21	1 535	1 773	3 308	97.29	117.00	106.95	-0.32	1.63	0.89
22	1 428	1 501	2 929	90.51	99.05	94.69	-1.12	-0.09	-0.68
Total	**36 288**	**34 854**	**71 142**	**2 300**	**2 300**	**2 300**	**0**	**0**	**0**
Average	1 577.74	1 515.39	*3 093.13*	100.00	100.00	*100.00*	0.00	0.00	*0.00*
Deviation	133.52	157.82	*242.56*	8.46	10.41	*7.84*	1.00	1.00	*1.00*

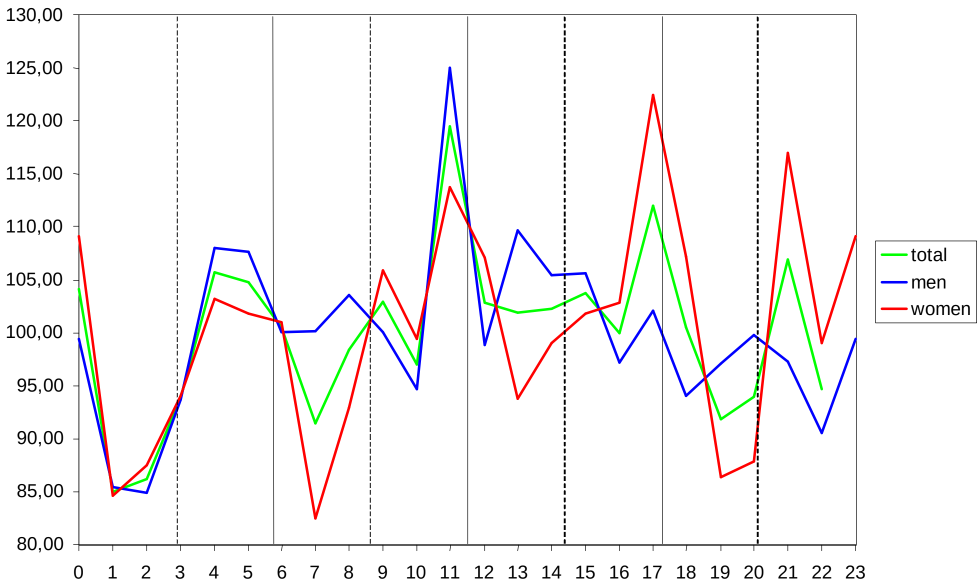
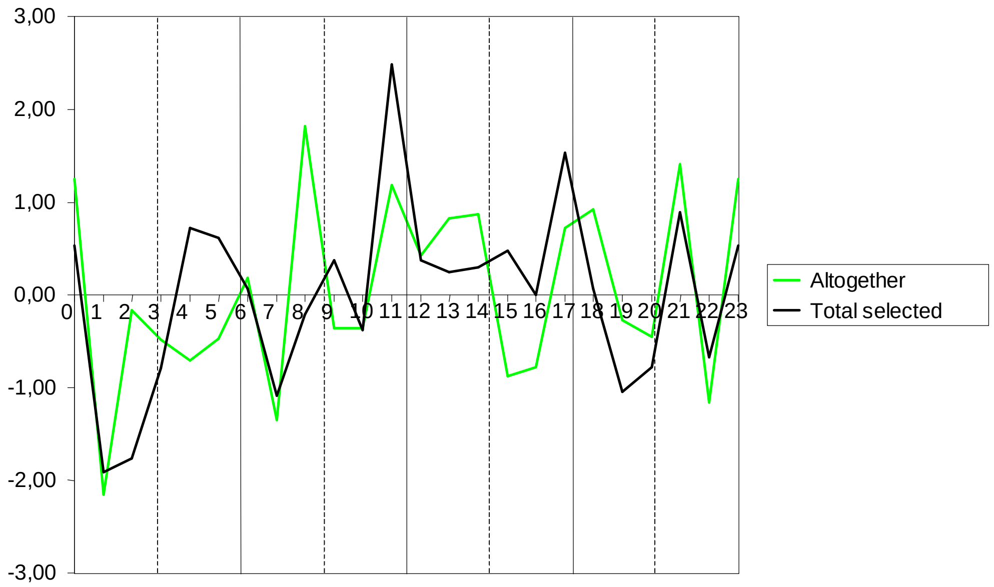
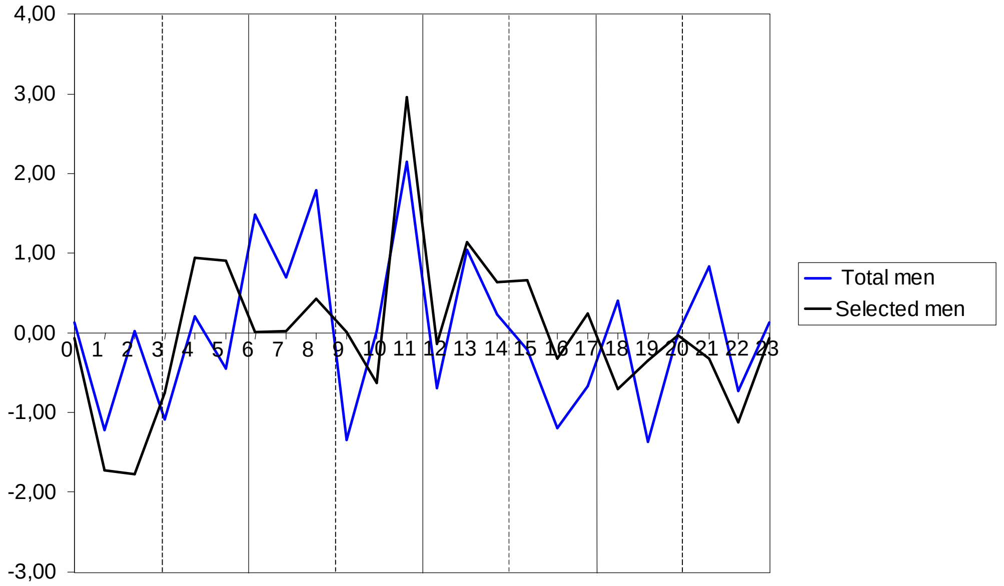


Figure 1.5.26.

Outstandingly high frequency according to the 23-day cycle in percentage of the average (men and women, 1998-2000)

All three lines or data lines of the above diagram are from table 1.5.14. As opposed to this all three diagrams of the following figure show a series of the standardised data of the table each, comparing them to the standardised data lines of the whole population “before selection”.


3,00
2,00
1,00
0,00
-1,00
-2,00
-3,00
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Altogether
Total selected


4,00
3,00
2,00
1,00
0,00
-1,00
-2,00
-3,00
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Total men
Selected men

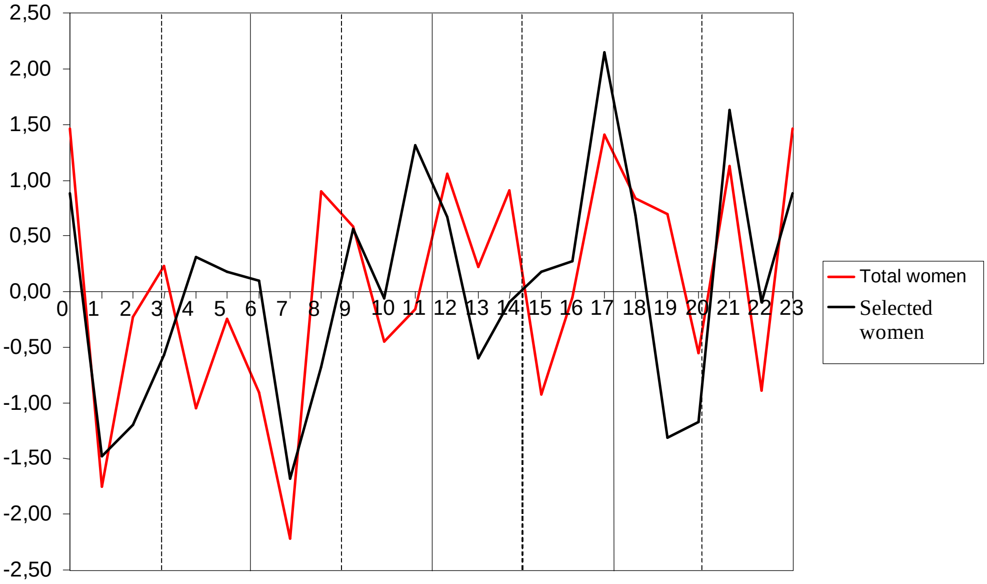


Figure 1.5.27.

Total and selected frequencies (standardised) according to the 23-day cycle, per sex, with respect to the three-year period

In the following two figures we can see the same thing as the first diagram of the previous figure showed with respect to the 23-day cycle, but this time with respect to the 28-day and 33-day cycles.

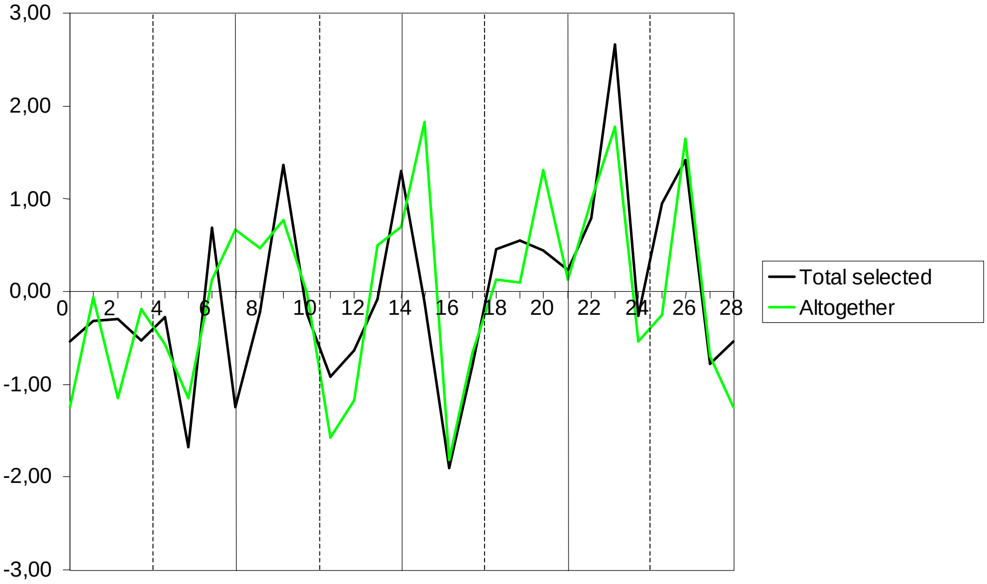


Figure 1.5.28.

Total and selected frequencies (standardised) according to the 28-day cycle, men and women altogether, with respect to the three-year period

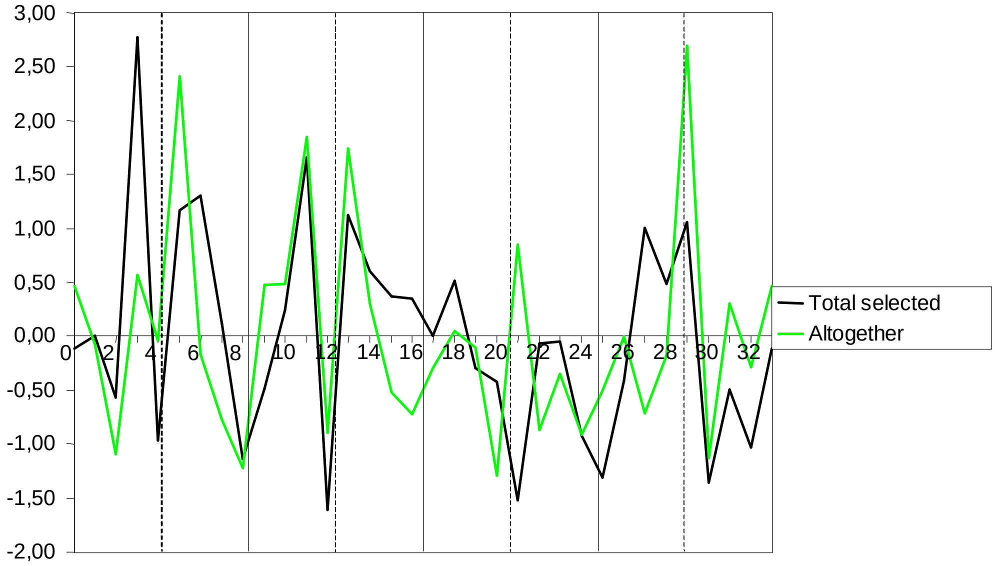


Figure 1.5.29.

Total and selected frequencies (standardised) according to the 33-day cycle, men and women altogether, with respect to the three-year period

1.6. Other types of cycles

„all my organs are clocks,
working adjusted to the stars"
(*Attila József*: It will be good to remember)[24]

As I was wondering from where living creatures obtain their information needed for measuring time, in the first years of the research I came to the conclusion that beside whole biorhythm numbers known so far there are also *fractional* biorhythm numbers, first of all astronomical constants, like, for example, the synodic revolution number of the Earth around the Sun and the Moon around the Earth expressed in days ($Y = 365{,}2422$, $M = 29{,}530588$). These numbers can also be divided into eight or other proportions can also be taken into consideration. The interpretation (and diagrammatic representation) of cycles of not a whole number is slightly different as compared to what we have seen so far.

Table 1.6.1. and figure 1.6.1. show the distribution of the KSH death data according to the point of *the moon cycle counted from the day of birth* at which the death case took place. With respect to the cycle length of a fractional number the horizontal axis has a percentage division. The processing took place with 2% class ranges.

The position of the significant peaks and low points at the octant (etc.) places more or less suits our expectations.

[24] I "stole" this quotation from Endrel Czeizel (Attila József and biology, Új írás, Aug. 1980). This quotation was the motto of the first version of my study (1996), and the title of the study was "Adjusted to the Stars". I decided not to use this title after all, because I did not want my Readers to think about horoscopes.

Table 1.6.1.

The Moon Cycle in the years 1998-2000, per sex and altogether

		Absolute numbers			*Percentage differences*		
Class range	*Top limit*	*Men*	*Women*	*Altogether*	*Men*	*Women*	*Altogether*
0.01	0.02	4346	4040	*8386*	99.54	101.25	*100.36*
0.03	0.04	4426	4048	*8474*	101.37	101.45	*101.41*
0.05	0.06	4331	4075	*8406*	99.19	102.13	*100.60*
0.07	0.08	4438	3979	*8417*	101.64	99.72	*100.73*
0.09	0.10	4296	3997	*8293*	98.39	100.18	*99.24*
0.11	0.12	4398	3907	*8305*	100.73	97.92	*99.39*
0.13	0.14	4372	4005	*8377*	100.13	100.38	*100.25*
0.15	0.16	4436	4002	*8438*	101.60	100.30	*100.98*
0.17	0.18	4358	4009	*8367*	99.81	100.48	*100.13*
0.19	0.20	4335	4020	*8355*	99.28	100.75	*99.98*
0.21	0.22	4328	3978	*8306*	99.12	99.70	*99.40*
0.23	0.24	4272	4069	*8341*	97.84	101.98	*99.82*
0.25	0.26	4420	3899	*8319*	101.23	97.72	*99.55*
0.27	0.28	4193	3934	*8127*	96.03	98.60	*97.26*
0.29	0.30	4333	3857	*8190*	99.24	96.67	*98.01*
0.31	0.32	4384	3981	*8365*	100.41	99.77	*100.10*
0.33	0.34	4496	3894	*8390*	102.97	97.59	*100.40*
0.35	0.36	4228	4014	*8242*	96.83	100.60	*98.63*
0.37	0.38	4335	4006	*8341*	99.28	100.40	*99.82*
0.39	0.40	4301	3980	*8281*	98.51	99.75	*99.10*
0.41	0.42	4309	3894	*8203*	98.69	97.59	*98.17*
0.43	0.44	4318	4030	*8348*	98.89	101.00	*99.90*
0.45	0.46	4365	4001	*8366*	99.97	100.28	*100.12*
0.47	0.48	4370	4148	*8518*	100.09	103.96	*101.94*
0.49	0.50	4331	3948	*8279*	99.19	98.95	*99.08*
0.51	0.52	4362	4003	*8365*	99.90	100.33	*100.10*
0.53	0.54	4398	4071	*8469*	100.73	102.03	*101.35*
0.55	0.56	4424	4039	*8463*	101.32	101.23	*101.28*
0.57	0.58	4228	4072	*8300*	96.83	102.06	*99.33*
0.59	0.60	4448	3995	*8443*	101.87	100.13	*101.04*
0.61	0.62	4419	4043	*8462*	101.21	101.33	*101.27*
0.63	0.64	4375	3922	*8297*	100.20	98.30	*99.29*
0.65	0.66	4438	3969	*8407*	101.64	99.47	*100.61*
0.67	0.68	4367	4003	*8370*	100.02	100.33	*100.16*
0.69	0.70	4417	4043	*8460*	101.16	101.33	*101.24*
0.71	0.72	4367	3930	*8297*	100.02	98.50	*99.29*
0.73	0.74	4474	3935	*8409*	102.47	98.62	*100.63*
0.75	0.76	4332	3933	*8265*	99.22	98.57	*98.91*
0.77	0.78	4349	3995	*8344*	99.60	100.13	*99.85*

0.79	0.80	4449	4027	*8476*	101.89	100.93	*101.43*
0.81	0.82	4446	4042	*8488*	101.83	101.30	*101.58*
0.83	0.84	4425	4053	*8478*	101.35	101.58	*101.46*
0.85	0.86	4401	4015	*8416*	100.80	100.63	*100.71*
0.87	0.88	4331	4009	*8340*	99.19	100.48	*99.81*
0.89	0.90	4296	3960	*8256*	98.39	99.25	*98.80*
0.91	0.92	4476	3967	*8443*	102.51	99.42	*101.04*
0.93	0.94	4337	3799	*8136*	99.33	95.21	*97.36*
0.95	0.96	4341	3927	*8268*	99.42	98.42	*98.94*
0.97	0.98	4412	4022	*8434*	101.05	100.80	*100.93*
0.99	1.00	4282	4011	*8293*	98.07	100.53	*99.24*
	Total	218 313	199 500	*417 813*	5 000	5 000	*5 000*
	Average	4 366.26	3 990.00	*8 356.26*	100.00	100.00	*100.00*
	Deviation	66.07	62.51	*90.27*	1.51	1.57	*1.08*

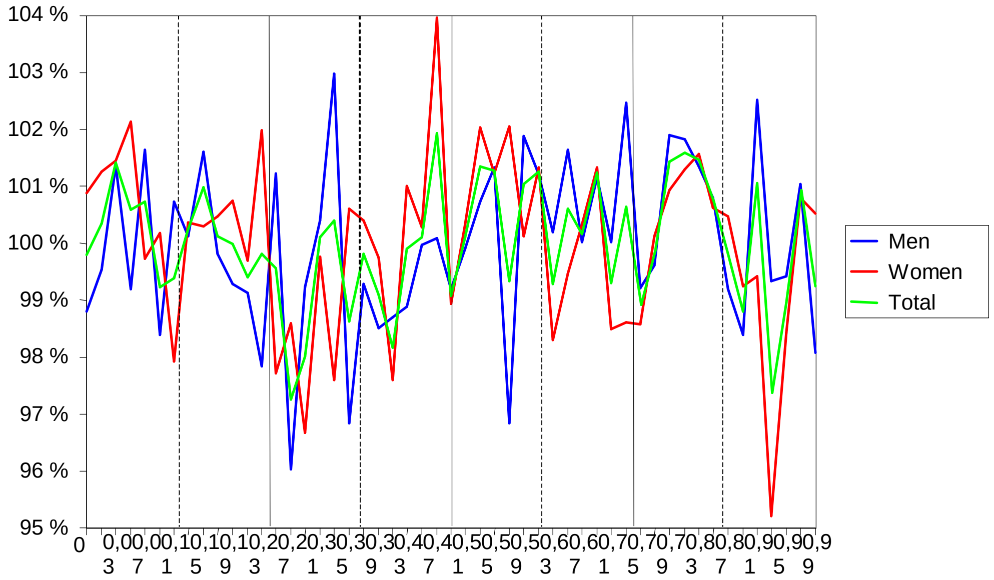


Figure 1.6.1.

The Moon Cycle in the years 1998-2000, per sex and altogether

In the lines of figure 1.6.1. we can discover adjustment to the dividing points already seen in biorhythm cycles, as well as the relative similarity of the data of men and women.

Let us examine the annual (365.2422-day) cycle in a similar way. (

Table 1.6.2. and Figure 1.6.2.)

Table 1.6.2.

The annual cycle, 1998-2000, per sex and altogether

		Absolute numbers			*Percentage differences*		
Class range	*Top limit*	*Men*	*Women*	*Altogether*	*Men*	*Women*	*Altogether*
0.01	0.02	4520	4067	*8587*	103.52	101.93	*102.76*
0.03	0.04	4438	4062	*8500*	101.64	101.80	*101.72*
0.05	0.06	4344	4014	*8358*	99.49	100.60	*100.02*
0.07	0.08	4487	3975	*8462*	102.77	99.62	*101.27*
0.09	0.10	4365	3993	*8358*	99.97	100.08	*100.02*
0.11	0.12	4402	3899	*8301*	100.82	97.72	*99.34*
0.13	0.14	4305	3995	*8300*	98.60	100.13	*99.33*
0.15	0.16	4352	4106	*8458*	99.67	102.91	*101.22*
0.17	0.18	4350	3813	*8163*	99.63	95.56	*97.69*
0.19	0.20	4448	3986	*8434*	101.87	99.90	*100.93*
0.21	0.22	4310	3967	*8277*	98.71	99.42	*99.05*
0.23	0.24	4405	4132	*8537*	100.89	103.56	*102.16*
0.25	0.26	4464	4014	*8478*	102.24	100.60	*101.46*
0.27	0.28	4419	4013	*8432*	101.21	100.58	*100.91*
0.29	0.30	4359	4027	*8386*	99.83	100.93	*100.36*
0.31	0.32	4392	3915	*8307*	100.59	98.12	*99.41*
0.33	0.34	4318	4124	*8442*	98.89	103.36	*101.03*
0.35	0.36	4305	3932	*8237*	98.60	98.55	*98.57*
0.37	0.38	4363	3980	*8343*	99.93	99.75	*99.84*
0.39	0.40	4360	4036	*8396*	99.86	101.15	*100.48*
0.41	0.42	4358	3902	*8260*	99.81	97.79	*98.85*
0.43	0.44	4293	3946	*8239*	98.32	98.90	*98.60*
0.45	0.46	4339	3919	*8258*	99.38	98.22	*98.82*
0.47	0.48	4324	3961	*8285*	99.03	99.27	*99.15*
0.49	0.50	4333	4079	*8412*	99.24	102.23	*100.67*
0.51	0.52	4425	3884	*8309*	101.35	97.34	*99.43*
0.53	0.54	4357	3950	*8307*	99.79	99.00	*99.41*
0.55	0.56	4277	3934	*8211*	97.96	98.60	*98.26*
0.57	0.58	4437	3995	*8432*	101.62	100.13	*100.91*
0.59	0.60	4354	3966	*8320*	99.72	99.40	*99.57*
0.61	0.62	4284	3922	*8206*	98.12	98.30	*98.20*
0.63	0.64	4404	4016	*8420*	100.86	100.65	*100.76*
0.65	0.66	4368	3927	*8295*	100.04	98.42	*99.27*

0.67	0.68	4400	3874	*8274*	100.77	97.09	*99.02*
0.69	0.70	4296	3872	*8168*	98.39	97.04	*97.75*
0.71	0.72	4242	4006	*8248*	97.15	100.40	*98.70*
0.73	0.74	4405	3998	*8403*	100.89	100.20	*100.56*
0.75	0.76	4348	3986	*8334*	99.58	99.90	*99.73*
0.77	0.78	4331	3995	*8326*	99.19	100.13	*99.64*
0.79	0.80	4291	4062	*8353*	98.28	101.80	*99.96*
0.81	0.82	4448	3968	*8416*	101.87	99.45	*100.71*
0.83	0.84	4330	4000	*8330*	99.17	100.25	*99.69*
0.85	0.86	4329	4028	*8357*	99.15	100.95	*100.01*
0.87	0.88	4338	3991	*8329*	99.35	100.03	*99.67*
0.89	0.90	4335	4008	*8343*	99.28	100.45	*99.84*
0.91	0.92	4444	4109	*8553*	101.78	102.98	*102.35*
0.93	0.94	4411	4057	*8468*	101.02	101.68	*101.34*
0.95	0.96	4450	3967	*8417*	101.92	99.42	*100.73*
0.97	0.98	4267	4084	*8351*	97.73	102.36	*99.94*
0.99	1.00	4389	4044	*8433*	100.52	101.35	*100.92*
	Total	218 313	199 500	*417 813*	5 000	5 000	*5 000*
	Average	4 366.26	3 990.00	*8 356.26*	100.00	100.00	*100.00*
	Deviation	61.37	68.86	*98.18*	1.41	1.73	*1.17*

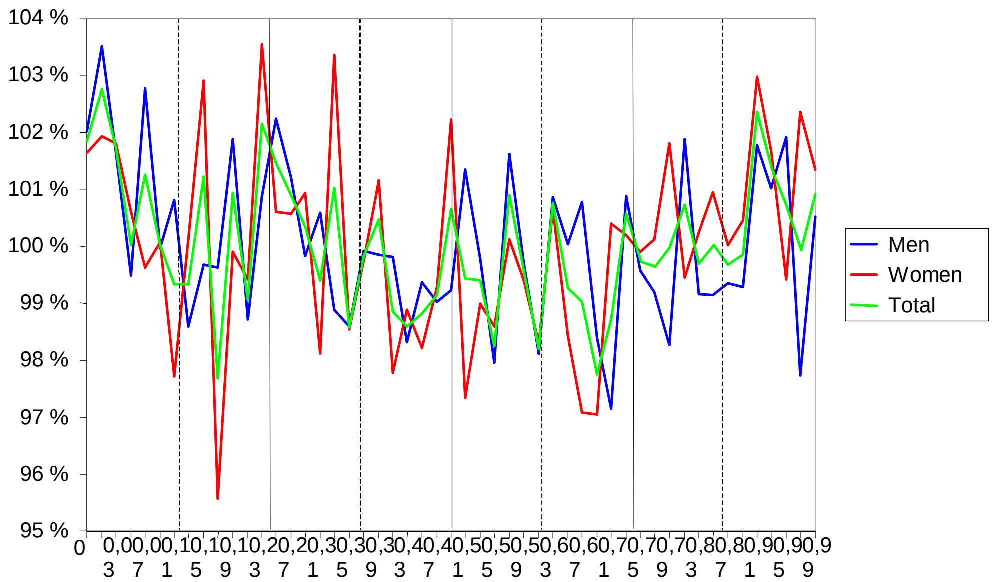


Figure 1.6.2.

The annual cycle, 1998-2000, per sex and altogether

We have similar experience.

When we compare Figure 1.6.1. and Figure 1.6.2., we have the suspicion that the process of the two astronomical cycles are very similar to each other. As opposed to cycles of a whole number, with respect to the same division of the horizontal axis (0-100%), the possibility arises to unite the two types of cycles. It can be done easily by adding the appropriate data of the two tables. E.g.: the first data of men will be

$$4346 + 4520 = 8866$$

and so on. The total data will be doubled. The number of total death cases in the totalling table will be $2 \cdot 417813 = 835626$. The percentages are also calculated. This time my Readers are expected to imagine this table, but we show two figures made on the basis of it. Figure 1.6.3. shows the role of sexes in the united cycles, and Figure 1.6.4. compares the two types of cycles in the data not grouped per sex.

The observation made earlier (page 22) according to which the cycles examined there descend towards the centre, can also be characteristic of these figures.

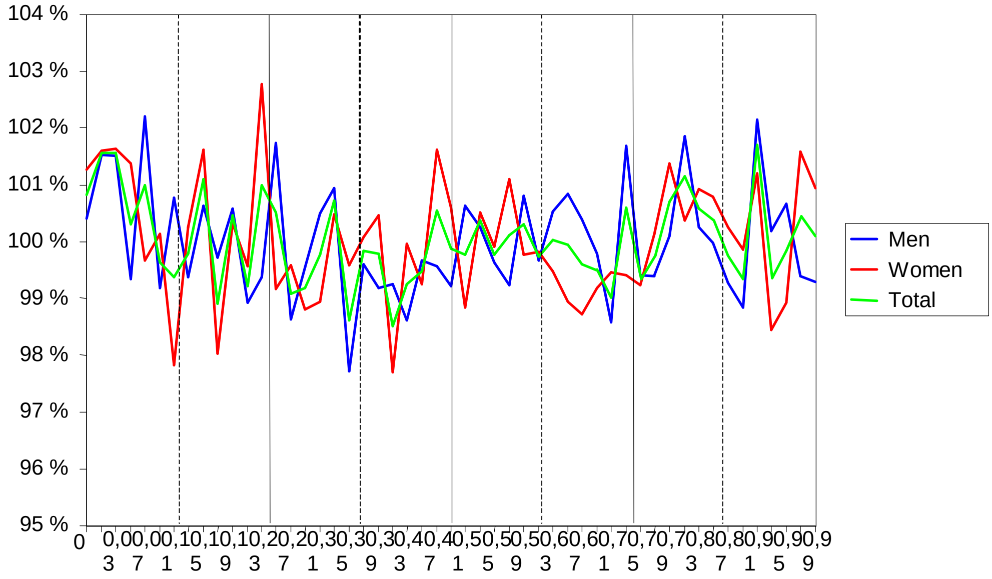


Figure 1.6.3.

The sum of the Moon cycle and the annual cycle in the three-year period, per sex and altogether

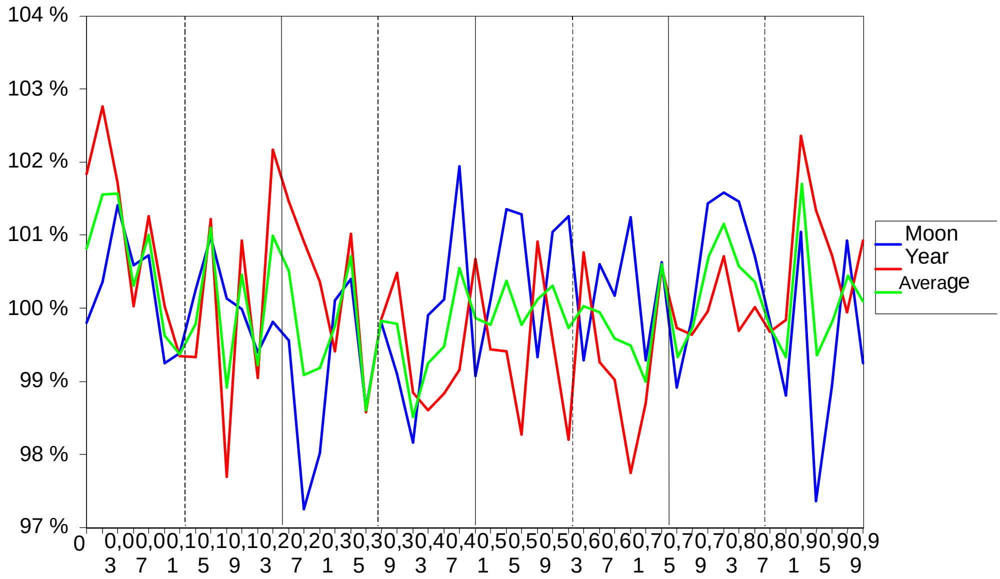


Figure 1.6.4.

Moon cycle, annual cycle and their average in the three-year period, per sex and altogether

This figure proves our hypothesis that the process of the two cycles is very similar.

A few more additions to the role of the Moon cycle (M = 29.530588) and other astronomical constants in biorhythm. Beside recognising the role of the constants known exactly from astronomy it is also possible to determine the term of certain constant cycles not measured exactly so far, with the help of biorhythm. On the basis of this I came to assume – *on the basis of experience that cannot be said to be significant* – that *the cycle of solar flares known as an 11.1 year cycle, is more exactly H = 8107.3 days*, that is 22.19705 years. First I detected the relatively frequent occurrence of this number in the course of examining birth data. Its seventh may be important. H/7 = 1158.1857 days. The further dividing numbers are also valid here.

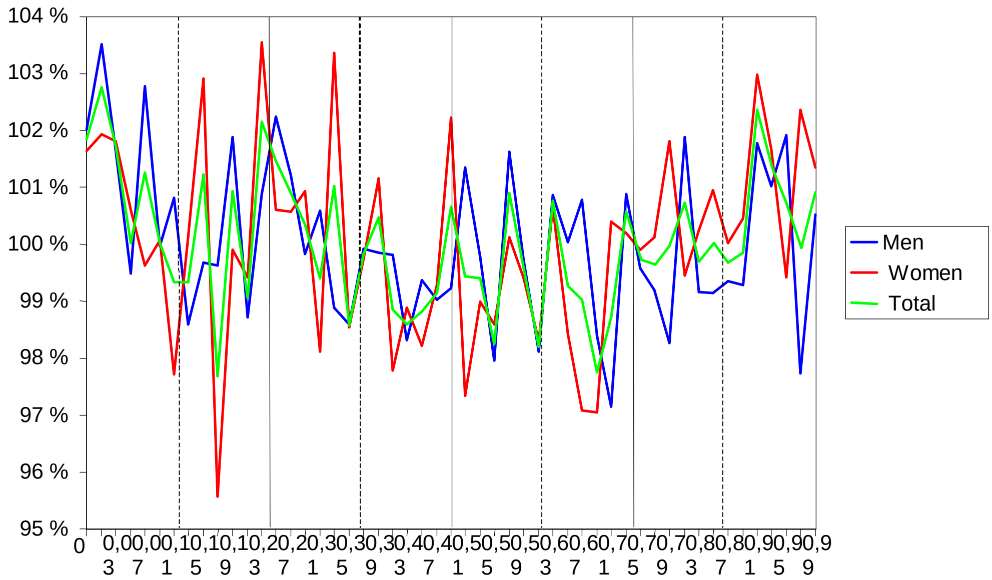


Figure 1.6.5.

Sun/7 cycle 1998-2000

At this point we introduce a procedure also used later called "*aggregation*". A fractional biorhythm number can be approximated from above and from below with the ratio of two whole numbers (E and e). E.g.:

$$\frac{E}{e} = \frac{2 \cdot 251}{17} = \frac{502}{17} = 29{,}529412 < 29{,}530588 = M$$

It is possible that prime numbers above 23 or prime numbers of 3, 4 or even more figures become biorhythm numbers on the condition that they play a role in approximating a fractional biorhythm number (generally an astronomical number). This is how 251 could become a biorhythm number on the basis of the example shown below. The ratio of $E = 502$ and $e = 17$ approaches the revolution number of the Moon from below. As the numbers approximating from above and from below are added up (aggregated) the approximations become more exact. For example ratio

$$\frac{E}{e}=\frac{3^2\cdot 5\cdot 7}{2^5}=\frac{945}{32}=29{,}531250>M$$

approximates M from above. In the case of the former two examples we get a more exact approximation, if the amount of the former two counters are divided by the amount of the denominators.:

$$\frac{E}{e}=\frac{502+945}{17+32}=\frac{1447}{49}=29{,}530612>M$$

The general formula of further approximations:

$$\frac{a\cdot 502+b\cdot 945}{17+b\cdot 32}$$

where α and β are whole numbers. An approximation better than the ones above:

$$\frac{8\cdot 502+7\cdot 945}{8\cdot 17+7\cdot 32}=\frac{10631}{360}=29{,}5305556<M$$

The values of Y and H are approximated in a similar way.

I must make a remark here that certain ratios of "astronomical" cycles not yet mentioned here also proved to be biorhythm cycles. In this way for example Year / 40, Moon / 7, Sun / 875.

1.7. Summary and conclusions

1.7.1. Review

The existence of the 23, 28, 33-day cycles can be statistically demonstrated independently from their physical, spiritual or intellectual characteristics. The existence of further cycles can also be assumed or proved. The length of these cycles expressed in days is partly the product or power of prime numbers below 20 or prime numbers above 20. The latter ones can have 2, 3 or 4 figures. It would be difficult to check the existence of cycles longer than these, because human life is rarely longer than 100 years (36524 days).

It is also questionable whether we can talk about cycles in the case of larger prime numbers with respect to larger dividers occurring in such cases. The original theory of biorhythm divided the cycle into two sections (positive and negative), but on the basis of the picture of the sine curve the possibility of dividing the cycle into four parts was also given. In the course of my own research the power of 2 as a divider was increased by 1 first and than it was increased even further (2^3, etc.). "Low prime numbers" above 2 appeared (3, 5, 7, … ?) at the first or higher power as dividers. (These and "biorhythm-balances" will have a more significant role in the 2nd and 3rd part of the book.)

In the course of my research the circle of biorhythm numbers was also extended by including certain natural (first of all astronomical) constants. Probably there is a connection between the two groups of biorhythm numbers mentioned above, if whole day numbers are created as a result of the aggregation of natural constants.

We may also think that in most cases cycles apart from the three "classic" cycles cannot be regarded as cycles but rather as tools of the operation of a biological computer based on prime numbers. In connection with this we can distinguish cycle-based operation of biorhythms (positive-negative phases, peak and low point) and the appearance of ratio places as stimulating or disturbing factors.

In order to prove my statements I used several databases.

The actuality of 211 accidents cannot be proved, but the circumstance that according to any cycle also found in other databases "biorhythmic" behaviour can be detected is telling for the Readers. Nevertheless my Readers are not expected to take this accident data set seriously apart from the fact that with respect to the small number of data it is extremely suitable for introducing methods, from dates relating to individual people to "spectacular" diagrams showing distribution according to the cycles. (See the first three tables of section 1.2 and Figure 1.2.3..)

In the course of using significantly bigger databases relating to death cases the situation is completely different. Working with the lexicon I had to use individual data as a starting point, but I do not need to put this burden on my Readers. The Central Statistics Office was kind enough to make distributions processed according to biorhythm cycles available for me. My Readers can imagine the beginning of the mortality statistics and hopefully they have been able to follow the way from the beginnings to the diagrams showing calculations proving our hypotheses.

It was not our task to research biorhythm as the "cause" of the occurrence of an accident or death case. With the means of statistics we tried to find an answer to the question whether on different days of a certain biorhythm cycle the number of accidents and death cases can be expected to be significantly different from the average, and whether the examined cycle of B length influences the chance of accidents and death cases. For this reason we created series of frequencies, and in order to recognise regularities we calculated percentage and standardised frequencies and made diagrams.

As for the types of diagrams shown above first there is a "theoretical" figure (Figure 1.1.1.) with sine curves, which is followed by its "technical" versions introduced by the author (Figure 1.1.2., Figure 1.2.1.), which show the signs replacing the sine curve with respect to a (general) cycle. Then comes the "biorhythm drawing", or shortly the "drawing", which also appears along the horizontal time axis, but only in a few days' extent, mostly showing the actual position of different cycles in the direct environment of a prominent date. These drawings play an essential role in the 2nd and 3rd part of this book. (My Readers may interpret this reference as a careful warning that from now on it is important to be able to make and interpret such drawings.)

The diagrams with a horizontal and a vertical axis are different. The horizontal axis represents time again, but strictly within a cycle, from its starting point (0) to its final point (B), mostly showing the distribution of a large number of observations according to the days of a given cycle. Frequency can be found on the vertical axis in absolute or relative (percentage or standardised) unit. Such diagrams must also be examined considering cycles. At the two ends of the horizontal axis there are the same values, $0 = B$ (0=23 etc.). In the 23-day cycle 22 is next to 0 and 1. The axis can be extended in both directions. We found it important to divide the cycles into two, four and eight The prominent points gained in this way "attract" (or maybe repel) the individual events of the examined phenomenon.

Our data sets were grouped in several ways in the interest of deeper examination. First there was grouping according to sex. There are many differences regarding the distribution of the death cases of men and women according to the days of the biorhythm cycle. We also found signs showing that as time goes on there is a change in the behaviour of the sexes, the differences between the sexes become less significant or they even disappear. This change in time may also mean that the role of biorhythm becomes less significant both in the case of men and women, probably due to the development of medicinal procedures and medical sciences. From our aspect it could mean that we should rather use other types of data to demonstrate the existence of biorhythm.

Grouping according to age may reveal differences from the aspect of biorhythm. The manifestation of biorhythm may be different in the case of young people and old people. In the course of processing the KSH data in a given data set everybody died in the same year, but people were born at different times. People of the same age who died at the same time lived in the same period. In the case of using lexicon data those who were of the same age when they died lived in rather different periods of time. It may be the subject of further research to find out how significant different time relations are. It may also be possible that differences according to age and sex have influence each other.

In sub-chapter 1.4.4. two cycles are combined. The 23-day and the 28-day cycles are combined here, and other combinations are also shown in the Annex. We also deal with the method of utilising possibilities given in this way, by using autocorrelation coefficients. A new direction of research is brought up by introducing "astronomical" cycles.

1.7.2. Cycles do exist!

The most convincing way of demonstrating the existence of biorhythm cycles is introducing quartile and octant concentration. Their diagrammatic pictures reminds us of the sine curve. This curve is also present in the theoretical introduction of biorhythm starting from birth, see the first figure of this book. Here we are talking about something else. That sine curve (from 0 to 360 degrees) describes the assumed operation of the biorhythm wave showing the intensity of its physical, spiritual and intellectual manifestation and its positive or negative nature. Here the sine curve "governs" the observed frequency of a certain event influenced by biorhythm inside the cycle, showing several peaks and low points depending on the prominent points of the cycle. Let us see the quartile points of the 23-day and 26-day cycle in figures 1.5.6., 1.5.8 and 1.5.13. Here we find peaks at the beginning, in the middle and at the end of the cycle, and if we interpret these peaks from the aspect of the sine curve, the extent of the complete cycle is two times 360 degrees.

In order to demonstrate the above Figure 1.5.14 showing the quartile of the 26-day cycle is changed in two aspects: instead of percentages the standardised values are shown and the standardised sine curve is drawn too.

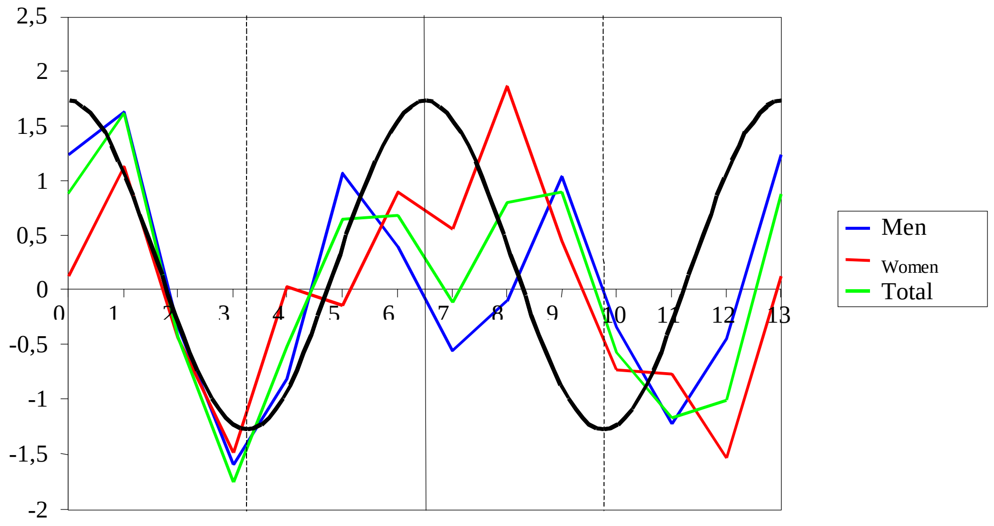


Figure 1.7.1.

The 26-day quartile with sine curve

If we look at the figures of octant concentration (e.g.: figures 1.5.10 and 1.5.14.), one unit of sine extent (from 90 degrees to the following 90 degrees) can be allocated to them.

The quarter cycle can be described with two sine curves, if the hills of the quartile and octant places of more or less of the same order of magnitude. If the octant places are not prominent, or if their extent can be neglected, the picture of the quarter cycle can be a sine-extent from one peak to another. E.g.: in figure 1.5.7. men cover a section of the sine cure between a low point and a peak, while women cover a section between a peak and a low point. The curve of all deceased persons (with a significantly smaller amplitude) can be described with a sine curve extending from peak to peak.

Obviously the possibility of the placement of sine curves can be extended even further. In figure 1.5.13. the sine curve can be placed on the prominent peaks of bisecting, in figure 1.5.15. on the two extreme octant peaks and low points. And the complete cycle can be given the 8 peaks and 8 low points of the sine curve.

Let us see quartering concentration in the case of astronomical cycles!

In sub-chapter 1.6 Moon and Year cycles were united. The Sun/7 cycle was also introduced. Now all three of them are united, but only with respect to the complete population grouped according to sex. Only a short version of the summarising table is shown here. (The data is from tables 1.6.1. and 1.6.2.)

Table 1.7.1.

Moon, Year and Sun/7 cycles united

Class range	*Top limit*	*Moon*	*Year*	*Sun/7*	*Total*
0.01	0.02	8386	8587	8291	25264
0.49	0.50	8279	8412	8372	25063
0.51	0.52	8365	8309	8323	24997
0.99	1.00	8293	8433	8420	25146
	Amount	*417 813*	*417 813*	*417 813*	*1 253 439*

After performing bisecting concentration (see the first column of table 1.7.4.) the following aim is quartering concentration. In the course of bisecting the cycle let us make 25 groups out of the 50 groups. It is more difficult to divide 25 into two, as it is an odd number. Using the method of "jumping" mentioned several times, the class ranges are "mixed". The method of "mixing" will be shown using the example of a better arranged population. Here calculations are put aside and the absolute frequencies received in 25 groups are expressed in percentage of the average values. The percentage quartile is shown in Figure 1.7.2.. It can hardly be doubted that the figure shows us the well-known picture of quartering concentration.

Table 1.7.2.

The quartering concentration of the united cycles

Numbers to add up	*Technical serial No. (x)*	*Mixed serial No.*	*Symmetric bisector*	*Mixing*	*Three-member moving sum*	*In percentage of the average*	*Class range*
0.01 + 0.51	1	1	50261	50261	150306	99.93	0.02
0.03 + 0.53	2	14	50670	49870	150801	100.26	0.06
0.05 + 0.55	3	2	50436	50670	150522	100.07	0.10
0.07 + 0.57	4	15	50377	49982	151088	100.45	0.14
0.09 + 0.59	5	3	50003	50436	150695	100.19	0.18

0.11 + 0.61	6	16	50100	50277	151090	100.45	0.22
0.13 + 0.63	7	4	50196	50377	150953	100.36	0.26
0.15 + 0.65	8	17	50272	50299	150679	100.18	0.30
0.17 + 0.67	9	5	49981	50003	150180	99.85	0.34
0.19 + 0.69	10	18	50065	49878	149981	99.71	0.38
0.21 + 0.71	11	6	49633	50100	150203	99.86	0.42
0.23 + 0.73	12	19	50312	50225	150521	100.07	0.46
0.25 + 0.75	13	7	50175	50196	150473	100.04	0.50
0.27 + 0.77	14	20	49870	50052	150520	100.07	0.54
0.29 + 0.79	15	8	49982	50272	150482	100.05	0.58
0.31 + 0.81	16	21	50277	50158	150411	100.00	0.62
0.33 + 0.83	17	9	50299	49981	149957	99.70	0.66
0.35 + 0.85	18	22	49878	49818	149864	99.64	0.70
0.37 + 0.87	19	10	50225	50065	149701	99.53	0.74
0.39 + 0.89	20	23	50052	49818	149516	99.40	0.78
0.41 + 0.91	21	11	50158	49633	149823	99.61	0.82
0.43 + 0.93	22	24	49818	50372	150317	99.94	0.86
0.45 + 0.95	23	12	49818	50312	150893	100.32	0.90
0.47 + 0.97	24	25	50372	50209	150696	100.19	0.94
0.49 + 0.99	25	13	50209	50175	150645	100.15	0.98
Amount			*1 253 439*	*1 253 439*	*3 760 317*	*2 600*	

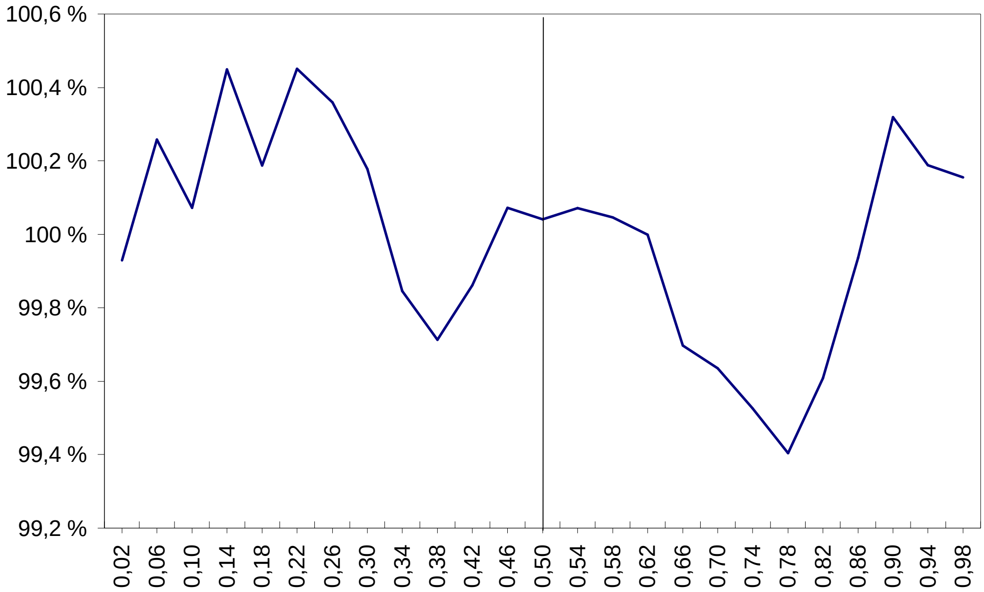


Figure 1.7.2.

Quartering concentration of the three united cycles Moon, Year, Sun/7)

The group created from three astronomical cycles can also be made by using other type of databases. We could also use the data set of 211 accidents the authenticity of which was not guaranteed by the author, but author's approach is slightly ambivalent. We might confuse the Readers completely now!

We are using the distribution $3 \cdot 211 = 633$ received as a result of the unification of the distributions according to the three cycles. 25 class ranges were created here. The class ranges are replaced by "technical serial numbers". A quarter of 25 is 6 ¼. If we start from serial number 13 following bisector 25/2, "going backwards" in steps of 6 we proceed in the general quarter cycle by one step each time. Further explanation can be found in the top lines of the table.

Table 1.7.3.

Quartering concentration of the accidents according to astronomical cycles (uniting the Sun, Moon, Sun/7 cycles)

Class range	*Technical serial No. (x)*	*Mixed serial No.*	*Number of accidents*				*Mixed frequencies*	*Three-member moving amount*	*Percentage distribution*
			Year	*Moon*	*Sun/7*	*Total*			
02	1	13	11	12	7	30	28	81	106.6
06	2	7	6	8	3	17	28	86	113.2
10	3	1	13	13	14	40	30	83	109.3
14	4	20	10	10	5	25	25	78	102.7
18	5	14	4	14	9	27	23	78	102.7
22	6	6	6	3	9	18	30	70	92.2
26	7	2	13	4	11	28	17	73	96.1
30	8	21	7	8	15	30	26	65	85.6
34	9	15	14	4	13	31	22	79	104.0
38	10	9	5	8	6	19	31	93	122.4
42	11	3	6	9	5	20	40	101	133.0
46	12	22	14	6	9	29	30	94	123.7
50	13	16	12	10	6	28	24	73	96.1
54	14	10	7	9	7	23	19	68	89.5
58	15	4	10	7	5	22	25	69	90.8
62	16	23	7	6	11	24	25	77	101.4
66	17	17	10	5	12	27	27	72	94.8
70	18	11	2	8	5	15	20	74	97.4
74	19	5	10	9	6	25	27	64	84.3
78	20	24	7	10	8	25	17	59	77.7
82	21	18	7	13	6	26	15	61	80.3
86	22	12	7	13	10	30	29	62	81.6
90	23	6	7	7	11	25	18	79	104.0
94	24	25	6	7	4	17	32	75	98.7
98	25	19	10	8	14	32	25	85	111.9
Total			*211*	*211*	*211*	*633*	*633*	*1899*	

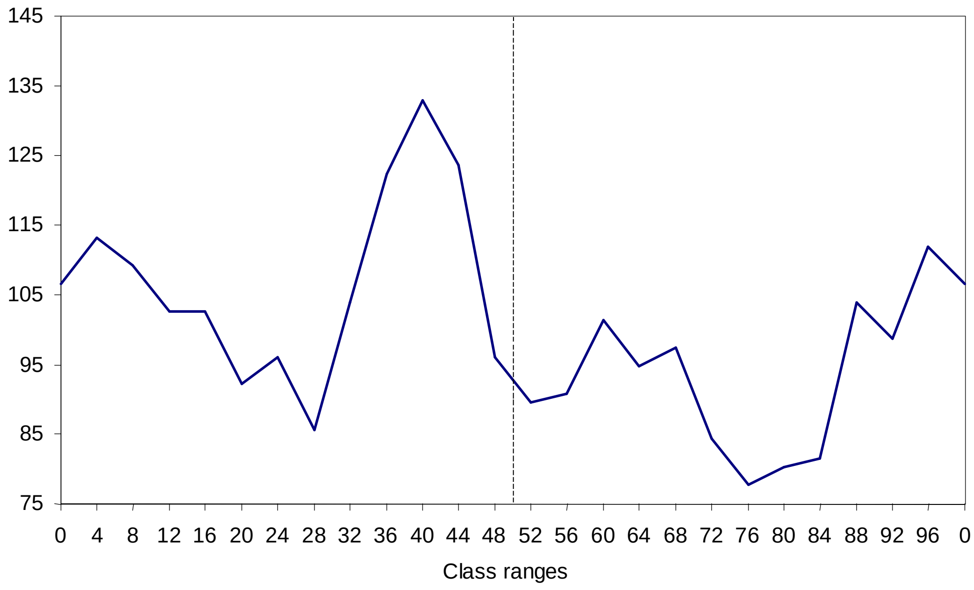


Figure 1.7.3.

Quartering concentration of the accidents according to astronomical cycles (uniting the Sun, Moon, Sun/7 cycles)

At the octant place there is a church with two steeples, but a part of the steeples is missing. This figure is significantly different from any earlier quartering concentration from the aspect that the percentage frequencies are in an unusually large interval. We know that in a small population there is large accidental fluctuation, but in this case accidental is accidentally very similar to non-accidental.

The author, who is a statistician, believes that by consequently using quartering and octant procedures a convincing material was , which is more or less comprehensible even for Readers who are not familiar with statistics, while even those Readers who are familiar with statistics do not call for mathematically more elegant procedures, such as spectral analysis. ("Constructing" the stochastic process from sine and cosine waves of different frequencies.) With the help of the developed methods of time series analysis even the question can be cleared whether there are other types of waves not examined so far, e.g.: a wave extending over the whole cycle. (In several cases we had the feeling that the cycle "descends" towards the centre.)

We end the first part of our study by stating that the existence of biorhythm cycles is statistically proved. If mostly (or exclusively, if the Readers regard accident data as an example) death data was used to prove it, it does not mean that this part of the study was about death cases. Obviously it is about biorhythm starting at birth. We did not try to answer the question when people would die or how long people would live. (Everyone has the same biorhythm.) We survive many critical days, and the mortality rate of most of these days is only slightly above that of the days in their environment. If we had been able to examine the accidents appropriately, we could have been able to draw a different conclusion from them.

The situation is the same in respect of the following two sections of the book. However, the author continues to describe his hypotheses and tries to prove that they are right.

2. The interpretation of dreams with biorhythm

2.1. Dreams and biorhythm

I have been studying the biorhythm of dreams since the February of 1982. The idea came from a television programme. In this programme a lady was "sent back" to her childhood in hypnosis. She was only given a year, but she mentioned an exact date. On what basis did she choose this day? I suspected the role of biorhythm.

Whatever is valid in connection with hypnosis can be valid in connection with dreams or even pictures seen on the border of waking up – I thought. This is how a new hypothesis was formed.

According to this everything that happens to us during our life (or things selected from it according to a certain aspect) is recorded in a subconscious diary under the serial number of the actual day in our life. When we dream, we turn the pages of this diary according to key numbers that suit the biorhythm position of the day of the dream. The biorhythm of the day of the dream recalls days from the past as well as people we know, following the instructions of biorhythm numbers gained from the age difference between the dreamer and the person he/she dreams about. The most intensive personal appearance can be expected when the event happening in connection with the person and the right person himself/herself are both actual from the aspect of biorhythm. As several events or persons can be allocated to a certain day of dream biorhythm, there can be combinations.

My work was significantly supported by the circumstance that I have kept a diary since I was at secondary school, so in many cases the past events I dreamt about are suitable for biorhythm examinations (provided that these events can be recognised in the dreams). I found it important to process the dreams of well-known persons apart from my own dreams and family dreams. The chapters following chapter 2.1. are only about the dreams of well-known persons. (They never even "dreamt" about what I would do with their dreams.)

Here I must mention something I got to know only later on. Sigmund Freud also mentioned biorhythm in his work "The Interpretation of Dreams"[25].

As I already pointed it out in the Introduction, Freud knew about the theory of biorhythm of Fliess and others. H. Swoboda and H. Ellis also used it in respect of dreams. (Freud quoted work, p. 124), and even Freud was interested in it. In his quoted work he writes the following about Swoboda (p. 77): "In his clever essay (1904) he tried to reveal the mystery of dreams with it". Later on he adds: "However, I is not good for the meaning of dreams: according to this their content could be explained by the meeting of all memories that for the first time on the given night fill a biological period for the n-th time". This aspect of "jealousy" appears again (p. 124): "It would not change significantly the interpretation of dreams, even if it was proved, but a new source would be created in respect of the origin of dreams."

Freud even examines a few of his own dreams on the basis of biorhythm. It turns out that he (and probably Swoboda too) would accept the role of biorhythm, if there was a period of 23 or 28 days (or their multiple) between the event, which is the subject of the dream, and the day of the dream.

The situation is much more complex in my own system. It is not enough, if the intermediate period is somehow related to the 23 or 28-day period, but the age of the dreamer at the time of the event dreamt about and on the day of the dream must be characterised by a "prominent" number. It also relates to the period between the event and the dream. On the other hand I also allow that certain fractions of the 23 and 28 days may also be prominent. Furthermore I think

25 The first edition of the book was published in 1900, the last Hungarian edition came out in 1985 (Helikon).

that many other types of cycles also play a role. Finally neither Swoboda nor Freud gives a biorhythm explanation relating to the person appearing in the dream and the role of the age difference, they only considered the events.

In order to prove my statements I come up with two types of dream descriptions: my own recorded dreams and the dreams of other people published in books or other publications, provided that the necessary dates were also available. The former ones obviously do not have any demonstrative force. However in order practice analysis I still introduce some of my own dreams and then I shall continue my work by describing documented dreams.

The first time I recorded a dream for the purpose of studying biorhythm was on 24th February 1982, which was the 20695th day of my life (I was born on 28th June 1925). According to the recorded dream my father was in a sad mood of saying good-bye and said: "Call over Susie (a pretty girl next door), I would also love to have a chat with her." (It was a real Freud-like desire fulfilling dream with respect to the time of the dream.) So I went to get her, but instead of going next door, I went to my grandparents to whom we used to go next door when we lived somewhere else. I was looking for Susie, but I only found my aunt there. In a room that looked like my grandparents' room, under the table (where I also used to hide as a child) I caught sight of Susie, who did not look like herself.

After I woke up I concentrated on the event I dreamt about, and I did not think of creating a hypothesis relating to the persons appearing in my dream. I searched for the origin of the "sad mood of saying good-bye" and found 26th January 1941 in my diary, which was a Sunday. On that day I was 5691 days old. (There was a period of 41 years between the event and the dream!) On the said day we had a good reason to be in a mood of saying good-bye. My father was called up. He had to join the army in the town of Baja on the following day, Monday. I myself was a student commuting between the town of Hódmezővásárhely and the town of Szeged, but during those weeks I had to stay in Szeged all week because trains always arrived with great delay. I spent weekends at home, and I had to travel back to Szeged on Sunday evening. Later on I also examined the personal line, I needed to know that my father was 9937 days older than me and my auntie was 4613 days older than me. I do not know Susie's date of birth. (My father was born on 13th April 1898 and my aunt was born on 10th November 1912.)

The day of the dream: $20965 = 5 \cdot 4139$. This four-figure prime number closely approximates the day of the event as an octant: $11 \cdot 4139 = 8 \cdot 5691$. But the sixth of $9 \cdot 73$ and the thirtieth of 547 also connects the day of the dream and the day of the event. In this way table 2.1.1. can be created. (Here and in the tables below the column on the side contains age data A to be explained, the top line contains biorhythm numbers B and dividers d, and inside the table there are the m multipliers of the biorhythm number.)

Table 2.1.1.

Saying good-bye mood, event

Name	Day	$4139/8$	$9 \cdot 73/6$	$547/30$
Dream	20695	40	189	1135
Event	5691	11	52	312

The "direct hit" of the four-figure prime number (the eighth of which extends over nearly 18 months), but the readers may sniff at the two other B/d numbers, which are much less spectacular. They should not be sniffed at either, because it turns out that – with modifying dividers – the same three biorhythm numbers explain the connection between the dream and the age difference with respect to my father. See table 2.1.2.

Table 2.1.2.

Saying good-bye mood, my father

Name	Day	$4139/5$	$9\cdot 73/8$	$547/6$
Dream	20695	25	252	227
My father	9937	12	121	109

It is important that my father's fictive age (by then he had already died)[26] on the day of the dream was:

$20695+9937=30632=2\cdot 28\cdot 547$, which is a whole number multiplier of prime number 547. In the case of my aunt from the three biorhythm numbers pointed out above the thirtieth of 547 functions (as in the case of the event): $253\cdot 547-1=30\cdot 4613$.

A joint table can also be made of the persons and the event. See table 2.1.3. (Here the dividers are the lowest common multiples of the earlier factors.)

Two persons and the event.

Table 2.1.3.

Two persons and the event

Name	Day	$4139/40$	$9\cdot 73/24$	$547/30$
Dream	20695	200	756	1135
My father	9937	96	363	545
Event	5691	55	208	312
Aunt	4613	-	-	253

I also have an example of the connection between several dreams.

J. van Yzeren (hereinafter referred to as Y, born on 4th July 1914), a nice Dutch colleague of mine visited Budapest several times. The last time I dreamt about Y was on 8th February 1999 (I was 26888 days old then). I was hanging around some rails and I was thinking about Y. When I woke up I assumed that I must have been at a tram stop somewhere in Budapest. I did not have hopes that I could find the day of the event.

Let us see the personal data instead – I said to myself. Y is 4012 days older than me. I calculated from this that $67\cdot 4013-1=10\cdot(26888-1)$, so the proportion of the day of the dream and the age difference can be said to be $67:10$. Prime number 4013 is 1 more than the age difference.

Looking at earlier Y dreams I found a dream I had on 21st August 1997 (26352 days), in which case if we take the eighth of biorhythm number 4538 the proportion of the day of the dream and the age difference is 46 : 7. If we examine the actual dream with the same number, 4583, we can only work with a ratio of 120th, so in the case of 26888 days the multiplier is 704, in the case of 26352 the multiplier is 690, and in the case of the age difference the multiplier is 105.

Looking at the event belonging to the earlier dream (20th October 1985, the 22029th day of my life) I found that on that day I went to see Y at Keleti railway station, and according to the description of the dream I was occupied with Y's hat. At this point I realised that in the actual dream the rails were not tram rails but railways tracks. It means that in my dream I had I n 1997 the event of the few minutes right after Y's arrival appeared, and in the dream I had in 1999 the subject of the dream was the time while I was waiting for him. The present dream and the event

[26] Obviously I am not saying that my father was watching my dreams from heaven, but the age difference data hidden in my head was "working".

can be expressed with 4583/150, with multipliers 880 and 721. Looking at the dream I had in 1997 the relationship between the dream and the event was revealed as shown in table 2.1.4.

Table 2.1.4.

Keleti railway station

Name	Day	$16 \cdot 27$	$\frac{3 \cdot 1049}{8}$	$\frac{27 \cdot 61}{8}$	$\frac{16 \cdot 61}{7}$	$\frac{5 \cdot 7 \cdot 19}{8}$	$\frac{2543}{80}$
Dream	25352	61	67	128	189	317	829
Event	22029	51	56	107	158	265	693

The summarising results of studying the two dreams together are shown in table 2.1.5., this time with the help of one single biorhythm number and several dividers.

Table 2.1.5.

Two dreams with the same topic

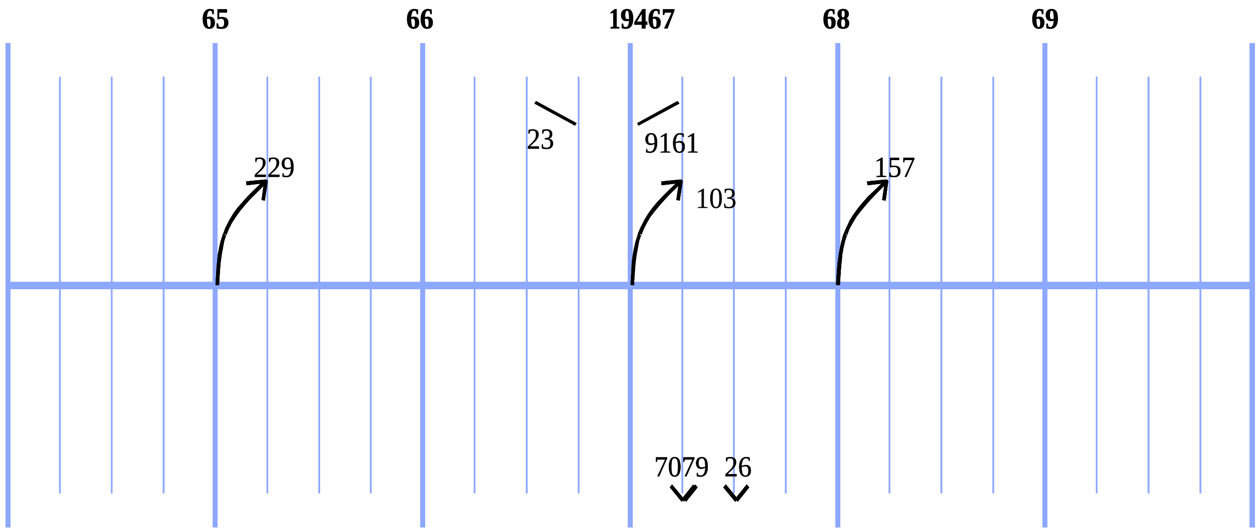
Name	Day	$\frac{4583}{8}$	$\frac{4583}{60}$	$\frac{4583}{120}$	$\frac{4583}{150}$	$\frac{4583}{300}$
Dream	26888		352	704	880	1760
Dream	26352	46	345	690		1725
Y	4012	7		105		
Event	22029				721	1442

2.2. Persons and events in the dream

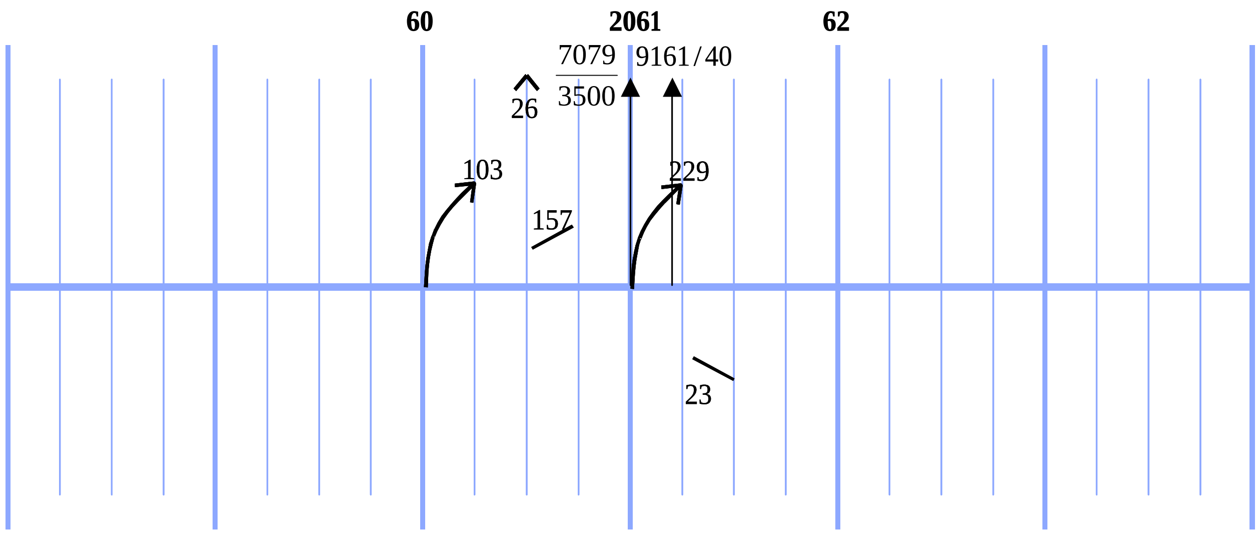
In his book “Memoranda 1946-1960” (Szépirodalmi K. 1987) Gyula Illyés writes the following under the date 17th March 1957 (p. 446): “A week ago Flóra had a mysterious dream, which is disquieting: Lőrinc (Lőrinc Szabó – another Hungarian poet) appeared in her dream and they agreed to meet on 16th. It was yesterday. This morning we admitted it to each other laughing that we were both anxious about it.”

If the interpretation of the dream is based on biorhythm and the biological diary – instead of the dream-book – then we find that the dream is not an extrapolation of the future, but it recalls the past. This is why it is not an extraordinary thing to dream about someone who has already died, and we can agree with a dead person in our dream to meet on a certain day.

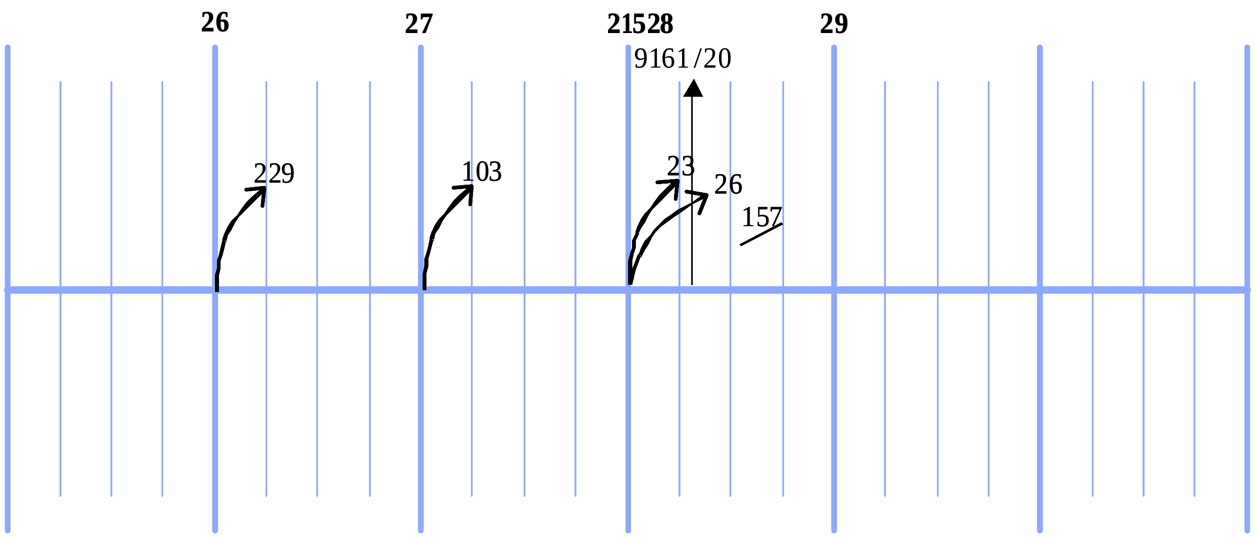
The necessary dates are: Flóra’s birthday: 21st November 1905, Lőrinc Szabó’s birthday: 31st March 1900, the day of Flóra’s dream: 10th March 1959 (?). So on the basis of this Lőrinc was 2061 days older than Flóra, Flóra was 19467 days old on the day of the dream, on the same day Lőrinc would have been 21528 days old. It is worth studying the biorhythm of the latter day just for a check. It is obvious that the biorhythm numbers that appear both in the age difference and in the age of the person dreaming must also be present in the age of the person appearing in the dream (whether it is the actual age or the fictive age, if he/she is not alive). Below the diagrams of all three items of data are composed in a way that only the biorhythm numbers playing a decisive role are shown.



Flóra’s dream about Lőrinc



Age difference



The fictive age of Lőrinc

Figure 2.2.1.

The dream of Mrs. Gyula Illyés about Lőrinc Szabó

In connection with the two four-figure prime numbers appearing in the dream, 9161 appearing with 8 as a divider and 7079 with 4 as a divider, it must be seen that

$$9 \cdot (9161 - 1) = 40 \cdot 2061$$

$$1019 \cdot 7079 - 1 = 28 \cdot 125 \cdot 261$$

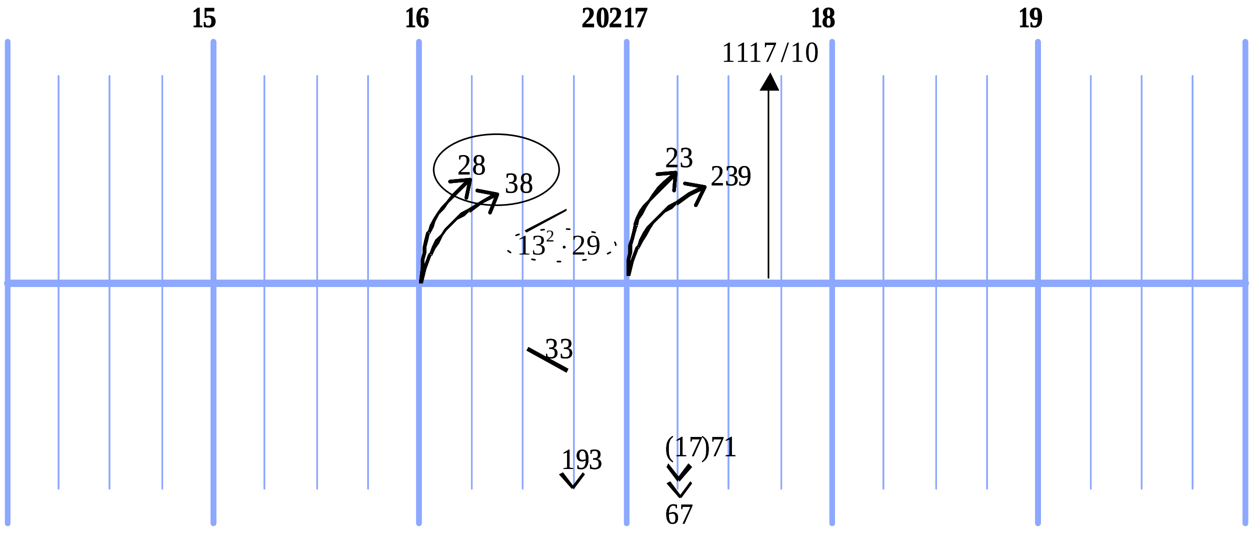
On the right of both equations the age difference, 2061, plays the main role. We must see that ±1 representing "allowed deviation" may also appear inside the brackets (multiplying the result). ($2061 = 9 \cdot 229$, so the first equation could be simplified to $9161 - 1 = 40 \cdot 229$, but here we took the "main participant" into consideration.) If multiplier 40, which is situated on the right of the equations, and multiplier $28 \cdot 125 = 3500$ are rearranged appropriately, they are the dividers of 9161 and 7079. A large divider like 3500 can only be accepted, if it can be put in some "±1" equation, so the examined biorhythm number closely fits the explained age (age difference).

In May 1952 Péter Veres writes the following in his Diary of 1949-53 (Szépirodalmi K. Bp. 1984): "I dreamt about Attila József. I met him in person, he was sitting on the floor somewhere and I sat down facing him and said hello to him overcome by emotion. The same dream haunted me all night, I kept waking up but it returned again and again until morning… it is the middle of May now".

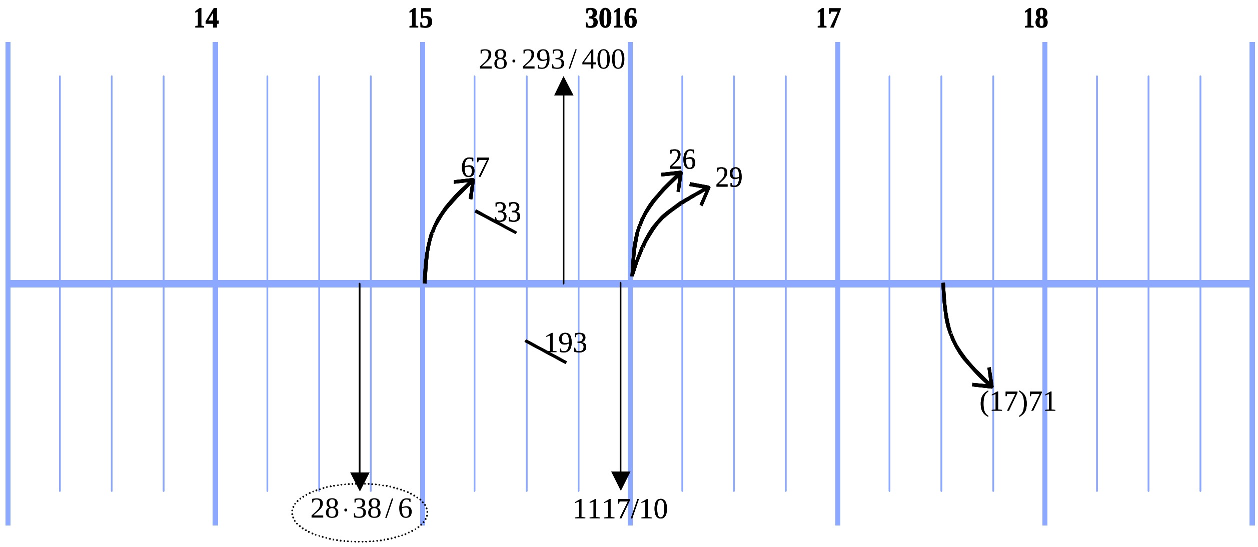
The exact day of the dream is not stated in the text. One of the possibilities of using biorhythm is determining the exact date. It can be assumed that the middle of May was on 15th May. The necessary data is:

- Péter Veres, date of birth: 6th January 1897
- Attila József, date of birth: 11th April 1905
- The (assumed) day of the dream: 15th May 1952

Péter Veres was 20217 days old on the day of the dream, the fictive age of Attila József was 17201 days, the age difference is 3016 days. (Figure 2.2.2. and table 2.2.1.)



Dream



Age difference

Figure 2.2.2.

The dream of Péter Veres about Attila József

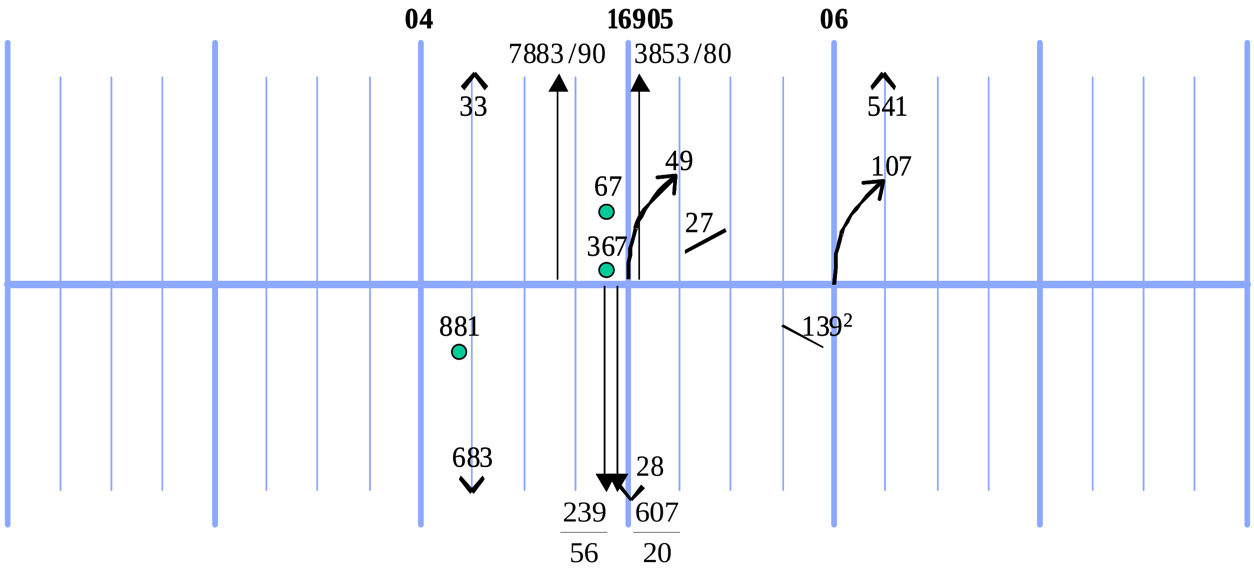
Table 2.2.1.

The biorhythm relationship between Péter and Attila on the day of the dream

Participants	Age	a	b	$b-a$	$a+2b$	$a+3b$	$5b-a$	$7b-a$
		$\frac{17\cdot 71}{4}$	$\frac{1117}{10}$	$\frac{28\cdot 38}{6}$	$\frac{13\cdot 29}{8}$	$\frac{8\cdot 29}{7}$	$\frac{193}{8}$	$\frac{23\cdot 293}{400}$
Péter	20 217	67	181	114	429	610	838	1 200
Attila	17 201	57	154	97	365	519	713	1 021
P – A	3 016	10	27	17	64	91	125	179

István Széchenyi describes a large number of dreams in his diary[27]. In the lexicons I did not find the dates of birth of the most common participants in his dreams. Miklós Wesselényi was also problematic. (The lexicons only state the year when he was born and they are not sure about the exact day.) On the basis of the book "Chatting Diaries"[28] (p. 99) we may assume that he was born on 30th December 1796. Széchenyi was born on 21st September 1791, so he was 1927 days older.

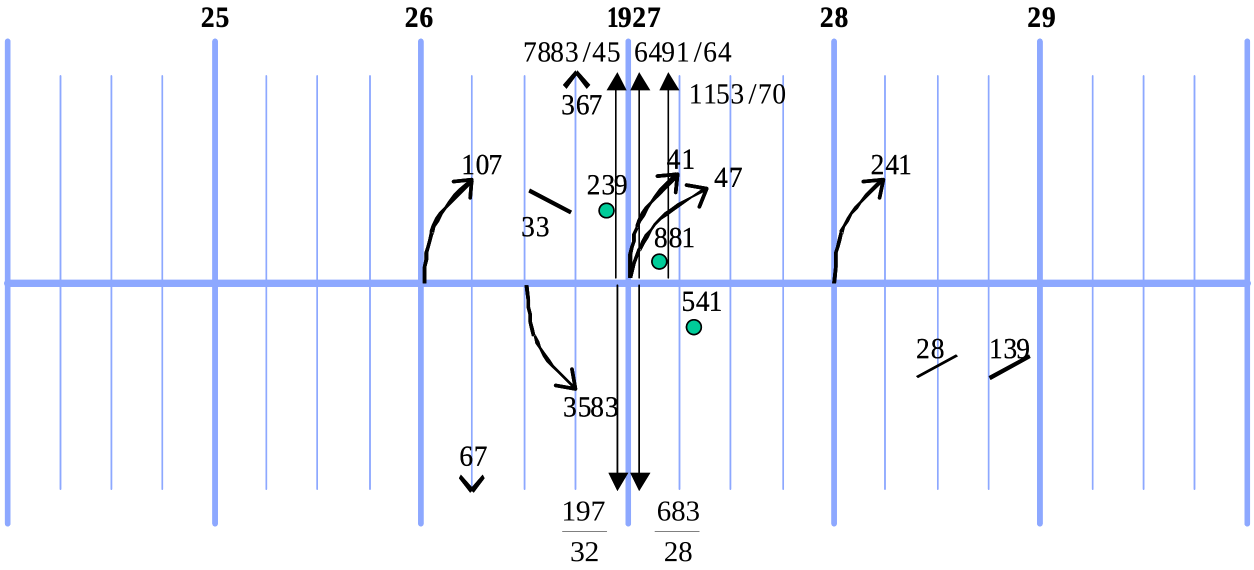
On 3rd January 1838, when Széchenyi was 16905 days old, he saw Wesselényi beheaded in his dream. (Diary, p. 852) As he was not really beheaded, as a result of biorhythm this day also had to be the memorial day of some "beheading" event for the dream to be created. It may seem impossible to find an event like this in the diary, I still think that I found it. On page 74-76 of the Diary Széchenyi describes an execution he had to (was expected to or had the chance to?) attend as an officer. Széchenyi was upset by the execution. The soldier who was executed was sentenced to death for desertion, and he was drunk as a swine when he was taken there. He did not want to and he was not able to stand in front of the firing squad. They pushed him on the ground like a dog and he was shot in the head. It was not beheading, but execution aimed at the head. First his head touched the ground and then he was killed. Széchenyi was 9801 days old on the day of the execution. I also included a further event in the examination, which is the day when the dreaming person and the person appearing in his dream met for the first time, 10th August 1920, when Széchenyi was 10548 days old. (Figure 2.2.3.)



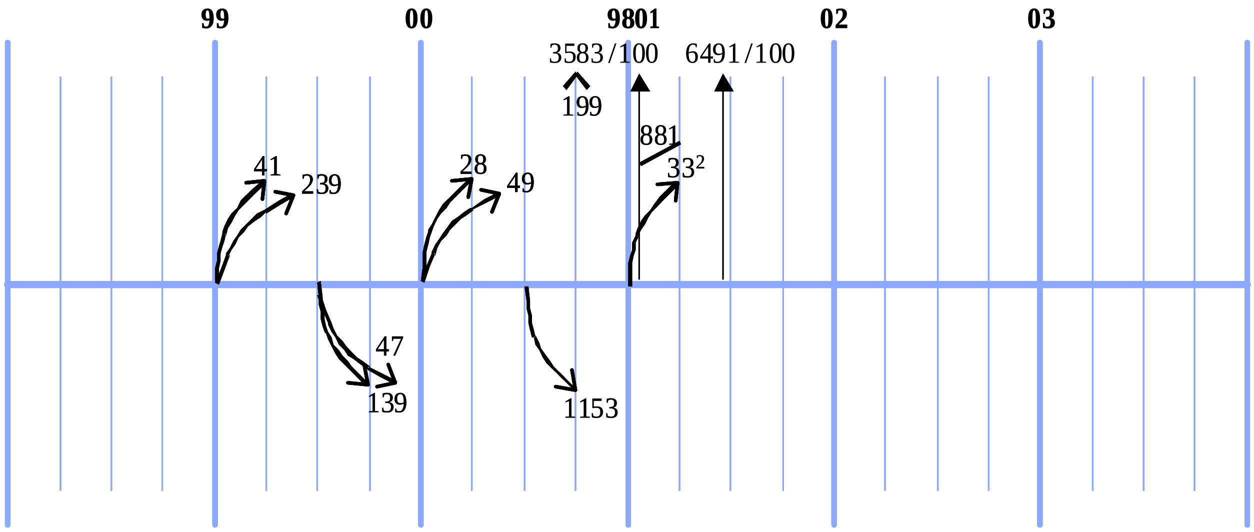
Dream

[27] István Széchenyi: Napló [Diary], Gondolat, Bp., 1978.

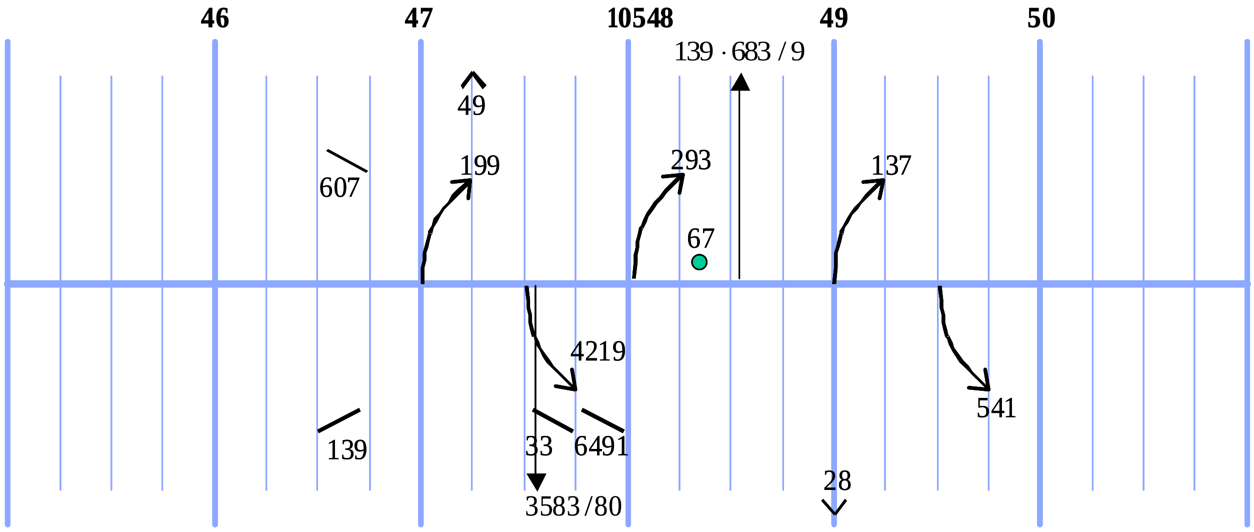
[28] István Széchenyi - Miklós Wesselényi: Feleselő naplók. Egy barátság kezdetei. [Chatting diaries. The starting of a friendship.] Helikon K. Bp., 1986.



Age difference



Execution



First meeting

Figure 2.2.3.

István Széchenyi's dream about Miklós Wesselényi

In the prison diary written by Árpád Szakasits[29] there are also many descriptions of dreams similarly to Széchenyi's diary. Apart from several members belonging to the family of the persons taking part in the dreams many well-known figures of the labour movement, politics and public life appear in his dreams. On page 275 of the book including the prison diary we can read the following: "Sunday, 30th March 1952. I dreamt about Klári and Gyuri. I was working on something with Gyuri, and Klári was tinkering with a strange old radio built in the wall, but she could not make it work. I went to help her with a bundle of aluminium keys, I don't know whether I could help her, because I woke up. Little Palkó also appeared in my dream."

On page 114 of her book "Holtvágányon 1950-1956 [On a blind siding]" (Könyvértékesítő V., Bp 1987.) Klára Szakasits writes the following about the time when she was staying in hospital in 1952: "When I was alone I was normally turning the buttons on the radio trying to find music." On the following page she says: "I don't know what you think about it, but all my life I believed in intuitions. I was still surprised to read the following in my father's prison diary:" And then she quotes the sentences I quoted above from the diary.

Árpád Szakasits was born on 6th December 1888, his daughter Klára was born on 6th September 1918. The age difference is 10865 days. On the day of the dream Árpád was 23124 days old, Klára was 12259 days old. (See figure 18.1.)

Table 18. 1. compares Árpád's age and the age difference.

[29] Szakasits Árpád emlékkönyv [memorial book]. Kossuth Kiadó, Budapest. 1988.

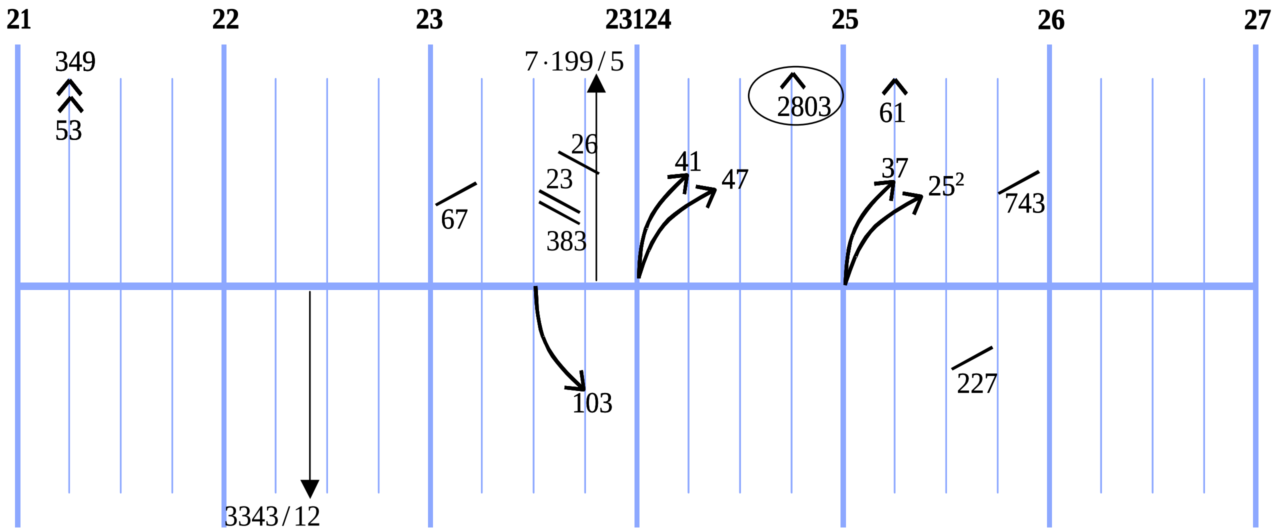
Table 2.2.2.

The day of the dream and the age difference

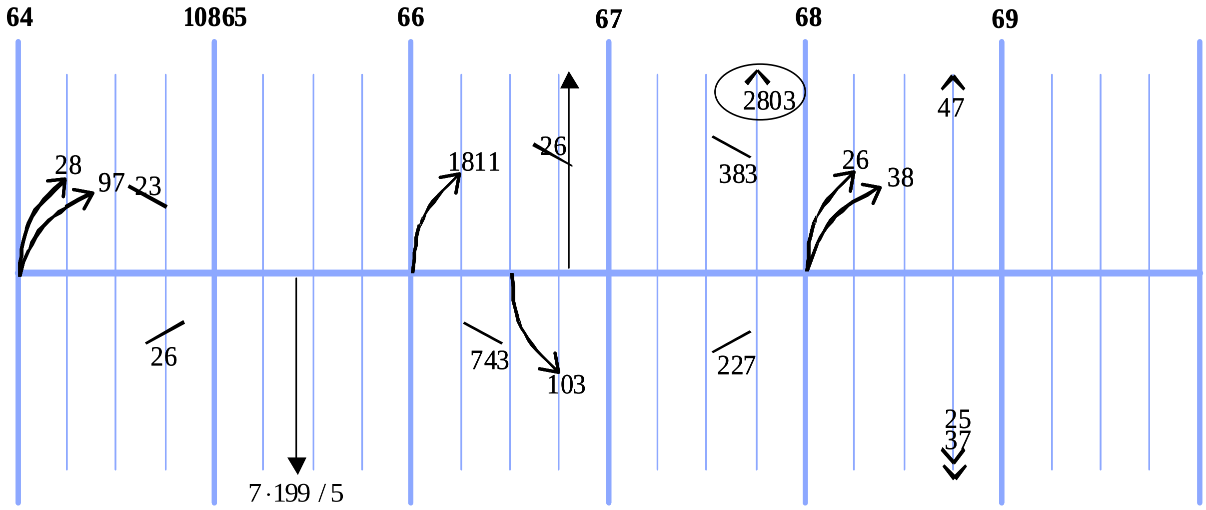
Name	No. of days	a	b	$7b-2a$	$4b+3a$	$6b+a$	$5b-3a$	$7b+a$	$13b-4a$	$11b+a$
		$\frac{2803}{8}$	$\frac{3343}{12}$	$\frac{103}{2}$	$\frac{349}{8}$	41	$\frac{679}{18}$	$\frac{1787}{50}$	$\frac{227}{8}$	$\frac{1181}{5}$
Day of the dream	23 124	66	83	449	530	564	613	647	815	979
Age diff.	10 865	31	39	211	249	265	288	304	383	460

The 41-day cycle gives an exact proportion, as this number is the factor of the age difference and the day of the dream (of course in the case of the person taking part in the dream too). It can also be one of the conditions of telepathy. 2803, which is one of the two four-figure prime numbers of outstanding significance, is only in a position near the centre in the figure of the dream as a quartile, in the case of the age difference it is an octant shifted to the left, and in the case of Klára's age it is an octant shifted to the "right". In the case of the age different 3343 is in a rather central position as a quartile, it plays a role in the case of Klára divided by 3 and in the Árpád's dream divided by 12, on both places it is a little bit left from the centre. Because of the abundance of the data we left $7 \cdot 199/5$ out of the table, which represents proportion "b" similarly to 3343.

I just mention it as an interesting thing that on the same night Árpád also dreamt about his son Gyuri and his grandson Palkó (Pál Schiffer). The factors of the day of the dream are: $2^2 \cdot 3 \cdot 41 \cdot 47$. From these factors 41 can be clearly seen in the case of Klára, $2 \cdot 47$ in the case of Gyuri with similar precision (the age difference is $10058 = 2 \cdot 47 \cdot 107$), and $2 \cdot 41$ in the case of Palkó with only one-day deviation ($18451\text{-}1 = 9 \cdot 25 \cdot 2 \cdot 41$).



Dream



Age difference

Figure 2.2.4.

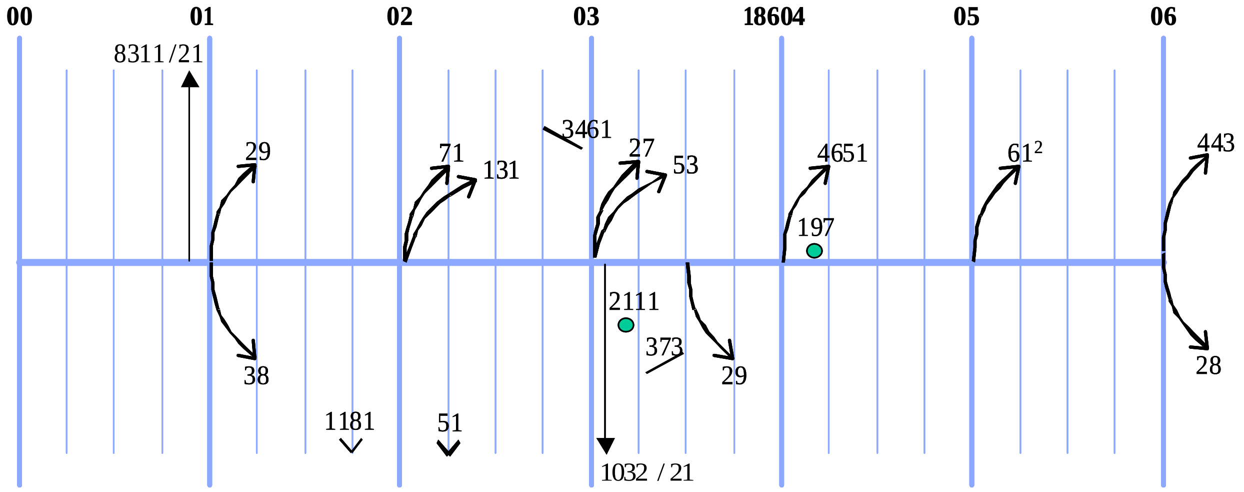
The dream of Árpád Szakasits about his daughter

2.3. Dreams about several persons

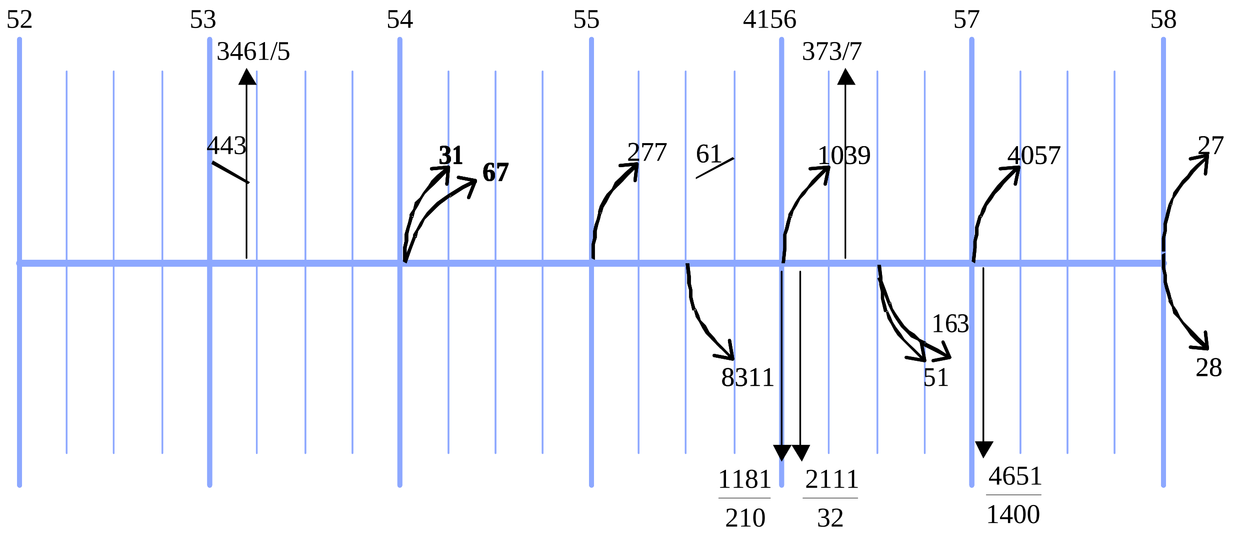
In his book “Lélektani napló” [Psychological Diary] (Osiris kiadó, Bp, 1998.), Ferenc Mérei analyses many of his own dreams. I only analyse one of them here. Here is a part of the description of his dream No. 187 about his memories of the time he spent in prison:

“I was telling someone that I had a rehabilitation hearing, obviously the situation was hopeless, because Ernő Gerő (EG) started the hearing and his wife (Mrs. EG) continued it.”

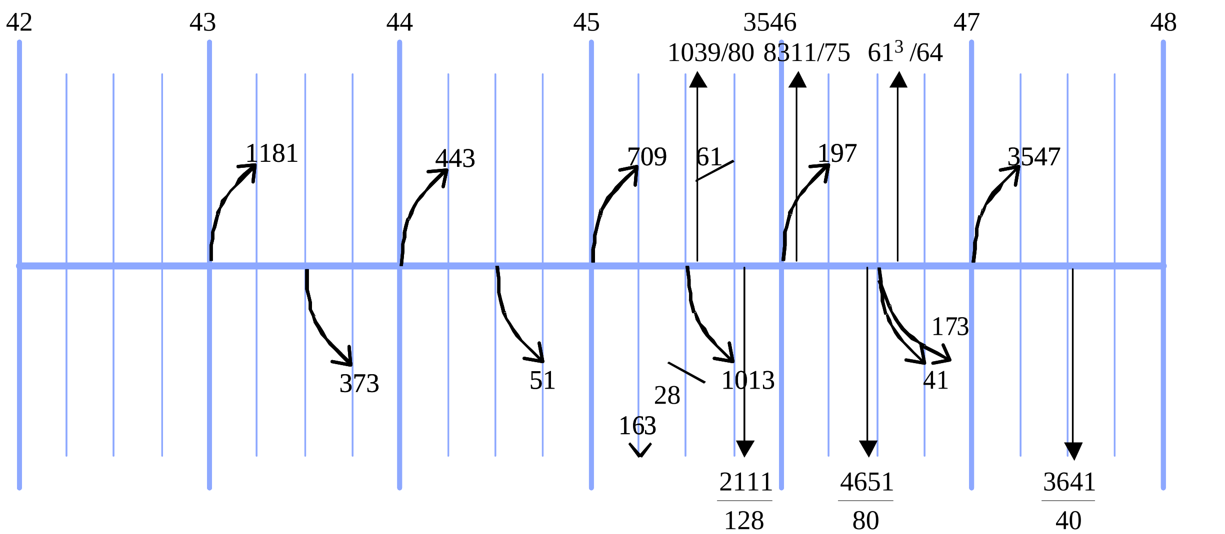
I do not deal with Mérei’s analysis here. The following data is needed for my own examination: Mérei was born on 24th November 1909, EG was born on 8th July 1898, Mrs. EG was born on 10th March 1900. The day of the dream can only be approximately determined on the basis of the description, I think it was on 3rd November 1960, which was the 18604th day of Mérei’s life. Mérei was 4156 younger than EG and 3546 days younger than Mrs. EG. It may be useful to determine the age difference between the two persons “conducting the hearing”, the husband was 610 days older than his wife. It turns out quickly that the age difference between the husband and the wife can be divided by 61, and adding 1 to the age of the dreamer: $18604+1=5\cdot 61^2$. We may even think that both the husband and the wife have a factor of 61 raised to the power of 2. 61 divided into eight is present in the two age difference values of the dreamer, necessarily in the same position and at the same distance from the centre.



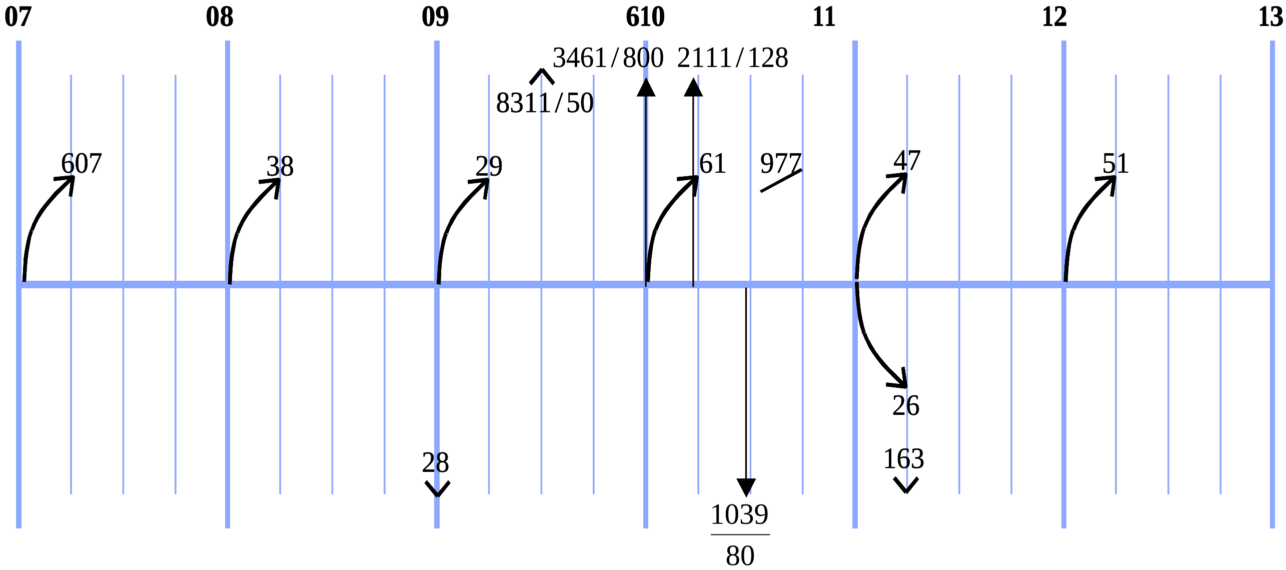
Dream



The age difference between Gerő and Mérei



The age difference between Mérei and Mrs. Gerő



The age difference between Gerő and Mrs. Gerő

Figure 2.3.1.

Mérei's dream about Gerő and his wife

Let us have a look at figure 2.3.1., where only the "prominent" **B** numbers are shown. A few more observations: The main factor of the dream is 4651, in GE 4156 it can only be proved with a rather high divider (1400), but with a "simple" member -1. In the case of GE the divider is 80, but it may be interesting that the multiplier is 61. Prime number 3461 appears as an octant, in the case of GE as a fifth, in the case of Mrs. GE with a ratio of 40, in the age difference between Gerő and his wife with a higher divider, but with –1. It is also interesting that apart from 61/8 the prominent number 61, which was raised to the power of two in the dream, can be found in the case of GE raised to the power of three, with 64 as a divider (and with 1 as a multiplier!) a=so that by inserting +1 members divider 64 can be composed in steps: $4\cdot 8\cdot 2$:

$$61^3 = 4\cdot(8\cdot(2\cdot 3456+1)+1)+1$$

Three B numbers (163, 373, 443) can be easily found with which all four **A** numbers can be explained. According to 443/8:

$$\text{álom} : \text{GE} : \text{GE-né} : \text{utóbbiak különbsége} = 336:75:64:11\,.$$

The first two multipliers can be simplified by 3, so according to $3\cdot 443/8$

$$\text{álom} : \text{GE} = 113:25\,.$$

The following proportions should also be highlighted both according to 1039/21 and 8311/42:

$$\text{álom} : \text{GE} = 94:21\,.$$

On the basis of 2657/3 and 1181/4 Dream: Mrs. EG = 21:4, finally on the basis of 3 · 163/4

$$\text{GE} : \text{GE} - \text{né} = 34:2\,.$$

Graham Greene's book "A World of My Own: A Dream Diary" was published in Hungarian in 2000 (Ulpius-ház Könyvkiadó Bt., 2000.) (Graham Greene was born on 2nd October 1904). The famous English writer recorded his dreams for years and at the end of his life he published a selection of his dreams. The original diary could be a treasure mine for me, but unfortunately the selection was not made for my purposes: the exact dates of the dreams are not given most of the time. Generally only the year and the month is stated.

I already analysed a dream without an exact date (the dream of Péter Veres about Attila József). In this case a "reversed" task needs to be solved (we sew the coat to the button). The day of the dream (within the period of a month) can be determined on the basis of the age differences. I am making it too easy for myself – my critics might say. My answer to this is that one must be very lucky to find a "suitable" (± 1 day) day in a given period.

Although in the selection there are a few dreams the exact dates of which are given, I chose a different one as a representative example. It is also a source of convincing force when there are several persons or events in the dream. I did not find any events in the Dream Diary the exact date of which I could determine, but in one of G. Greene's dreams in December 1983 three well-known French politicians appeared. The dream is described according to the following on p 40 of the quoted book (supplemented by me with the dates of birth):

"In December 1983 I met president Mitterand (26th October 1916) in London. He was crossing Hyde Park to get to Paddington Railway Station. I told him how much I liked Chirac (29th November 1932) and I would have also mentioned Giscard d'Estaing (2nd February 1926), but that moment Giscard joined us."

The age differences:

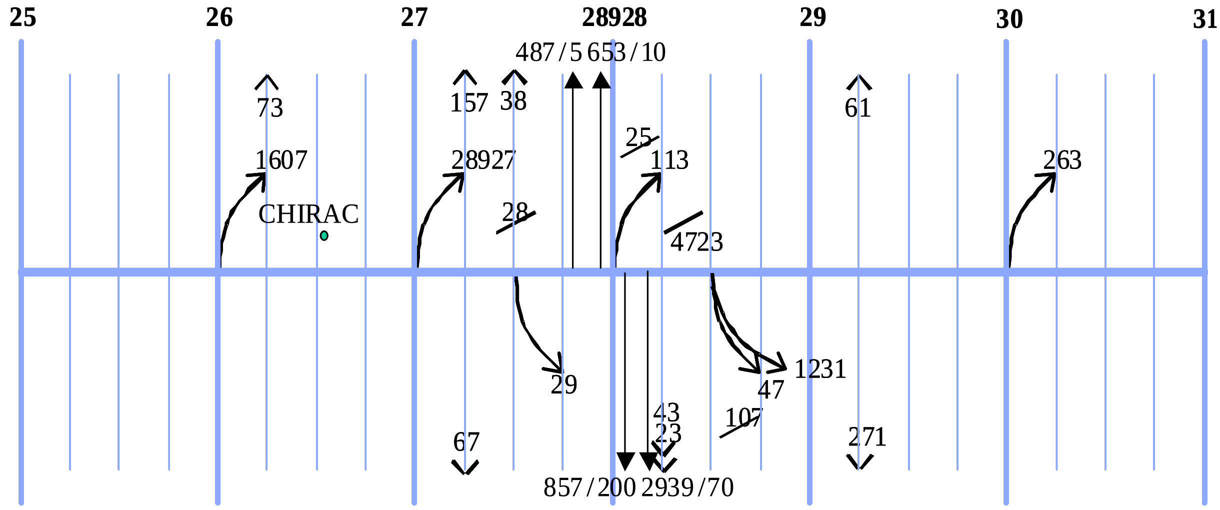
G. Greene - F. Mitterand	4407
G. Greene - J. Chirac	10285
G. Greene - V. Giscard d'Estaing	7793

Looking for the day of the dream I found 15th December 1983 in the middle of the month mentioned in the dream. On this day the dreamer was 28928 = $2^8 \cdot 113$ days old. It was a "shocking" result, as Mitterand was $4407 = 3 \cdot 13 \cdot 113$ days younger than the dreamer, and taking away two days from Chirac's age difference we get $10285 - 2 = 7 \cdot 13 \cdot 113$ days. 113, the main prime factor of the assumed number can be found in both. In the case of the two Frenchmen 13 is also there beside 113, so the age differences of the two politicians with respect to Greene show a proportion of 3:7, "cheating" two days in the case of Chirac. (We can "play" with these two days by dividing them into two: Mitterand's age plus 1 and Chirac's age minus 1, the difference is $4 \cdot 13 \cdot 113$, and $7 - 3 = 4$.)

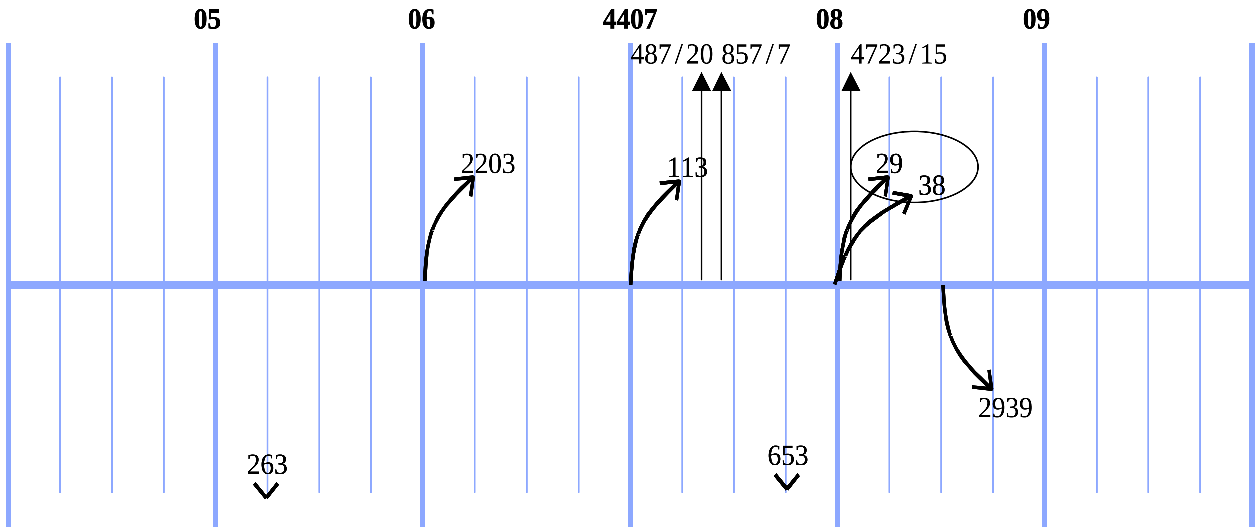
In the case of Giscard (7793) 113 only appears four days later, that is $7793 + 4 = 3 \cdot 23 \cdot 113$. However, the appropriate biorhythm balance can be written down according to the following:

$$7793 = 3 \cdot (23 \cdot 113 - 1) - 1 \text{ or } 7793 + 1 = 3 \cdot (23 \cdot 113 - 1)$$

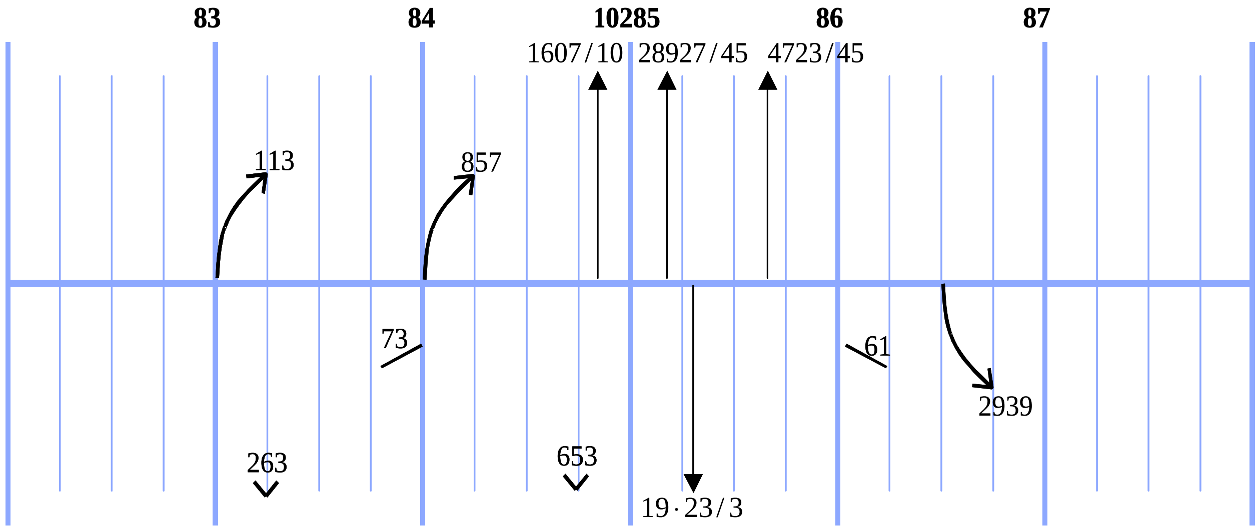
that is the rule of ± 1 is asserted here. In respect of Mitterand – taking into consideration common multiplier 3 next to 113 – it would mean a proportion of 13:23, with a deviation of four days, which seems a bit to much. Finally, not only on the basis of 113, I decided to use 15th December, which I tested first.



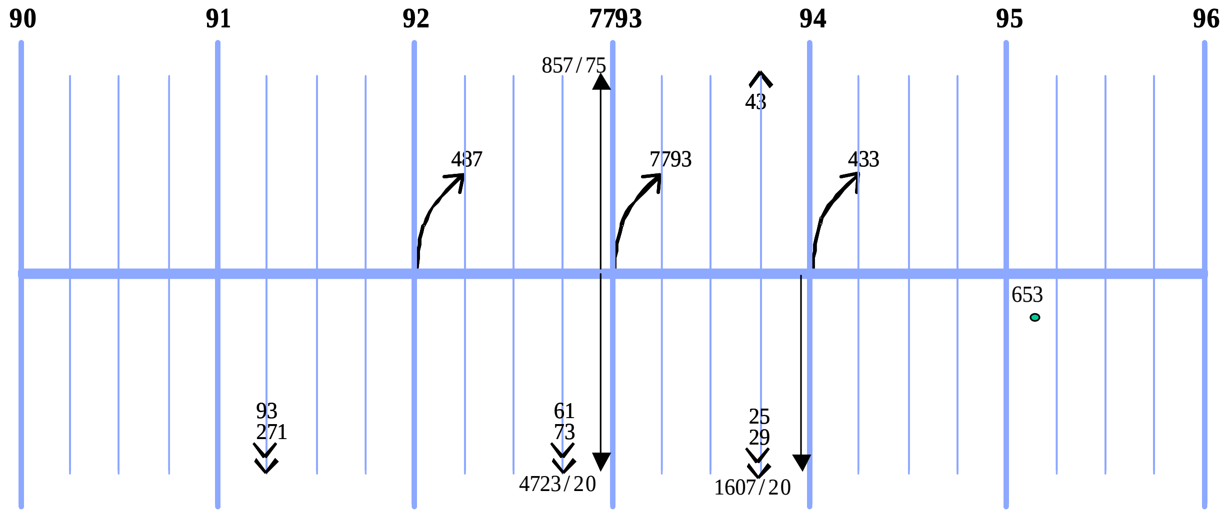
Dream



Mitterand



Chirac



Giscard D'Estaing

Figure 2.3.2.

Graham Greene's dream

Let us look at the most important B numbers. We have already mentioned the 113-day cycle. Sometimes cycles can be arranged into groups on the basis of the relationships between them. Such a relationship is for example that identical multipliers can be connected to them.

In one of these groups going "from left to right" the first cycle (in this case a pair of cycles) is the product of 29 and 38. In a "clear" form it can be found in the case of Mitterand at 4408 days. In the dream 38 appears with a quartile, 29 appears with a bisector, multiplied with each other in the same position again. At the other two places the dividers are 3 and. 7. (In the latter case the divider of $29 \cdot 38$ would be 14, but we could also write $19 \cdot 29/7$.)

The following cycle in this group is "giant" prime number 6857, which is in a bisecting position in the case of Chirac. The third one appears in the case of Chirac in an elemental form: the product of 37 and 139. There are two octants in the dream: above the axis and below the axis in the given position. At the other two places 7 is the dominant divider, and at one place 7 raised to the power of two.

Let us look at a different relationship. The 653-day cycle is in a position near the centre quartered at the first two age differences, it is one of the most "convincing" cycle numbers. It appears in the dream even closer to the centre decimator. Giscard d' Estaing does not react to this number. This B number gives an example of aggregation in the sense explained above. E.g.: in the case of Mitterand a reducible version: 3 is the multiplier of $13 \cdot 113$, 24 is the multiplier of the cycle pair $37 \cdot 139$ received in the case of 28 as a divider, 27 is the multiplier o f653 valid with 4 as a divider, and $3+24=27$. The amount of two multipliers results in a third multiplier. In the case of Chirac, with cycles interpreted in the same way: $7+56=63$.

The 487-day (nearly exactly $4/3$-year!) cycle in Giscard minus 1 day position is a whole number. At other places 20, 8 and 5 are the dividers.

The 61 and 73-day cycles keep "answering back" to each other. In the case of Mitterand one of them is present in the close environment of the centre in a quartered form and the other one in an octant form. In the case of Chirac they appear further away from the centre, nearly symmetrically with respect to it as octants, 73 “on the left” and 61 “on the right”. The situation is nearly the same in the dream, but in this case both cycles are quartered. Giscard gives us a happy ending as the two cycles – near the centre – are in the same position, at the low point.

In the case of the two French presidents 2939 is bisected in the same position as compared to the centre. My Readers may not share my enthusiasm in connection with this, because in the dream this cycle lasting for more than 8 years fits with 70 as a divider. Let us see the balance to “settle the debate”!

$$10 \cdot (7 \cdot 28928 + 1) = 689 \cdot 2939 - 1$$

The message of Figure 2.3.2. is also shown in a table.

Table 2.3.1.

Graham Greene’s dream about three persons. Biorhythm number, dividers (B / d) and multipliers (m)

Name	Nap	113	61/8	73/8	487/40	4723/360
Dream	28928	256	3794	3170	2376	2205
Miterrand	4407	39	578	483	362	336
Chirac	10285	91	1249	1127	845	784
Giscard	7793	69	1022	854	640	594

2.4. Dreams and statistics

So far in the course of examining the biorhythm of dreams the role of statistics was to prove the existence of biorhythm. At the same time we described individual cases to make it “believable” that the content of dreams depends on biorhythm. If we manage to examine the dreams of one person about the same person with mass data, then statistics can play a role again. It was only a question of time for me to collect dream records relating to the most common participants of my most common dreams. Obviously these records cannot be checked, so they cannot be used for the purpose of demonstration. However, among documented dreams there were some that suited the purpose.

Árpád Szakasits in his prison diary described 38 dreams in which his wife (and mostly other people too) appeared. Earlier on we saw that we needed a lot of accidents and even more death cases to exclude the role of chance. The situation turned out to be different in the case of dreams.

Table 2.4.1. shows the basic data of the 38 wife-dreams with certain calculation results. The date of birth of the dreamer and the person appearing in the dream is needed.

The age difference is 306 days. Its diagram is Figure 2.4.1.

Table 2.4.1.

The dreams of Árpád Szakasits about his wife and the serial numbers of the days of ten cycles on the day of the dream, from the aspect of the dreamer

Serial No.	Day of dream	No. of days	25	26	31	33	37	43	47	49	51	61
1	1951.01.24	22693	18	21	1	22	12	32	39	6	49	1
2	1951.02.04	22704	4	6	12	0	23	0	3	17	9	12
3	1951.08.21	22902	2	22	24	0	36	26	13	19	3	27
4	1951.08.22	22903	3	23	25	1	0	27	14	20	4	28

5	1951.08.24	22905	5	25	27	3	2	29	16	22	6	30
6	1951.09.04	22916	16	10	7	14	13	40	27	33	17	41
7	1951.09.29	22941	16	9	1	6	1	22	5	9	42	5
8	1951.10.11	22953	3	21	13	18	13	34	17	21	3	17
9	1951.10.18	22960	10	2	20	25	20	41	24	28	10	24
10	1951.10.19	22961	11	3	21	26	21	42	25	29	11	25
11	1951.10.24	22966	16	8	26	31	26	4	30	34	16	30
12	1951.10.28	22970	20	12	30	2	30	8	34	38	20	34
13	1951.11.07	22980	5	22	9	12	3	18	44	48	30	44
14	1951.11.09	22982	7	24	11	14	5	20	46	1	32	46
15	1951.11.10	22983	8	25	12	15	6	21	0	2	33	47
16	1951.11.16	22989	14	5	18	21	12	27	6	8	39	53
17	1952.01.07	23041	16	5	8	7	27	36	11	11	40	44
18	1952.01.21	23055	5	19	22	21	4	7	25	25	3	58
19	1952.01.22	23056	6	20	23	22	5	8	26	26	4	59
20	1952.01.23	23057	7	21	24	23	6	9	27	27	5	60
21	1952.02.04	23069	19	7	5	2	18	21	39	39	17	11
22	1952.02.15	23080	5	18	16	13	29	32	3	1	28	22
23	1952.02.21	23086	11	24	22	19	35	38	9	7	34	28
24	1952.02.25	23090	15	2	26	23	2	42	13	11	38	32
25	1952.03.21	23115	15	1	20	15	27	24	38	36	12	57
26	1952.04.14	23139	14	25	13	6	14	5	15	11	36	20
27	1952.04.19	23144	19	4	18	11	19	10	20	16	41	25
28	1952.04.24	23149	24	9	23	16	24	15	25	21	46	30
29	1952.05.01	23156	6	16	30	23	31	22	32	28	2	37
30	1952.05.27	23182	7	16	25	16	20	5	11	5	28	2
31	1952.06.06	23192	17	0	4	26	30	15	21	15	38	12
32	1953.07.30	23611	11	3	20	16	5	4	17	42	49	4
33	1953.09.13	23656	6	22	3	28	13	6	15	38	43	49
34	1953.10.30	23703	3	17	19	9	23	10	15	36	39	35
35	1954.01.07	23772	22	8	26	12	18	36	37	7	6	43
36	1954.03.19	23843	18	1	4	17	15	21	14	29	26	53
37	1954.05.25	23910	10	16	9	18	8	2	34	47	42	59
38	1954.06.24	23940	15	20	8	15	1	32	17	28	21	28

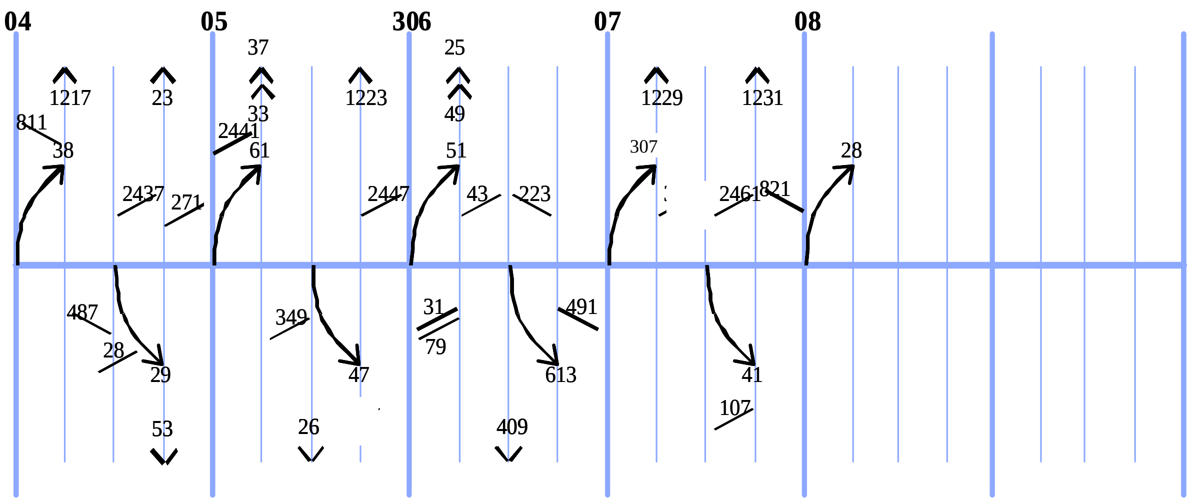


Figure 2.4.1.

The age difference between Árpád Szakasits and his wife

In table 2.4.1 the dream days are characterised according to cycles, which are of outstanding significance in the age difference. We examine the distribution according to the 31-day cycle. With respect to the rather small population we can have a better picture after quartering concentration. The u values jump in steps of 8 with respect to that $31/4=7{,}75$. See table 2.4.2. and figure 2.4.2.

Table 2.4.2.

The dreams of Szakasits about his wife, 31-day cycle, quartering concentration

Original serial No. (x)	*Jumped serial No.*	*X* frequency	*u* frequency	*Three-member moving sum*	*Percentage*
0	0	0	0	4	109
1	8	2	2	3	82
2	16	0	1	5	136
3	24	1	2	5	136
4	1	2	2	6	163
5	9	1	2	4	109
6	17	0	0	4	109
7	25	1	2	2	54
8	2	2	0	2	54
9	10	2	0	2	54
10	18	0	2	5	136
11	26	1	3	6	163
12	3	2	1	5	136
13	11	2	1	3	82
14	19	0	1	3	82
15	27	0	1	4	109
16	4	1	2	5	136
17	12	0	2	7	190
18	20	2	3	5	136
19	28	1	0	4	109
20	5	3	1	3	82
21	13	1	2	4	109
22	21	2	1	3	82
23	29	2	0	1	27
24	6	2	0	0	0
25	14	2	0	2	54
26	22	3	2	4	109
27	30	1	2	5	136
28	7	0	1	3	82
29	15	0	0	3	82
30	23	2	2	2	54
31	0	0	0	4	109
Total		*38*	*38*	*114*	
Average				*3.68*	

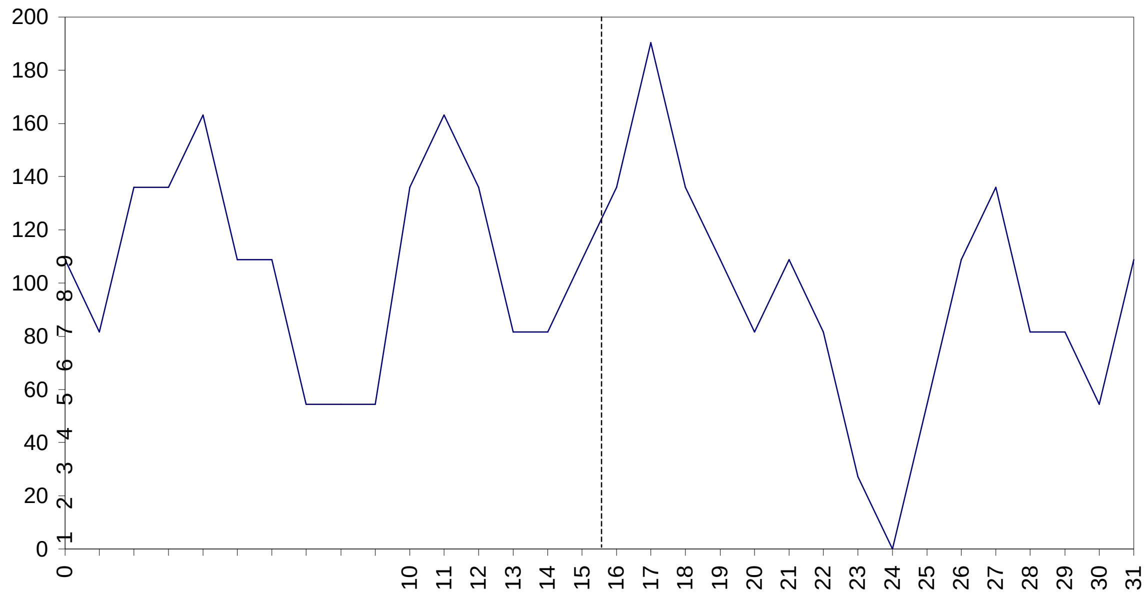


Figure 2.4.2.

Quartering concentration of the wife-dreams according to the 31-day cycle

As we already know on the left of the figure there is the right side of the quartering block, while on the right of the figure there is the left side of the quartering block. This time in the centre the octant block extends from the 7th-9th day to the 24th, around the middle (slightly to the left) there is a dent in the 12-16-day interval, which can also be observed in other figures.

Let us look at a longer cycle, taking into consideration the suggestions of the age difference figure. With respect to the $5 \cdot 61 = 306$ balance, let us choose 61. Instead of quartering concentration here the picture is made more compact by creating class ranges. Let us create class ranges of 3 units from the serial numbers of the 61-day cycle allowing a little "cheating" as 61 cannot be divided by 3. The extent of the class range around 0 is regarded 4 instead of 3. In order to perform further compacting we calculate 3-member moving sums and then percentages. As quartering or similar concentration was not performed here, the picture of the complete 61-day cycle appears in the figure.

Table 2.4.3.

Wife dreams according to the 61-day cycle, calculations

Days of the cycle	Frequency	Three-member moving sum	Percentage
60-2	3	9	158
3-5	2	5	88
6-8	0	3	53
9-11	1	3	53
12-14	2	4	70
15-17	1	4	70
18-20	1	3	53
21-23	1	5	88
24-26	3	8	140

27-29	4	11	193
30-32	4	10	175
33-35	2	7	123
36-38	1	4	70
39-41	1	5	88
42-44	3	6	105
45-47	2	6	105
48-50	1	5	88
51-53	2	3	53
54-56	0	6	105
57-59	4	7	123
Total	38	114	2000.00

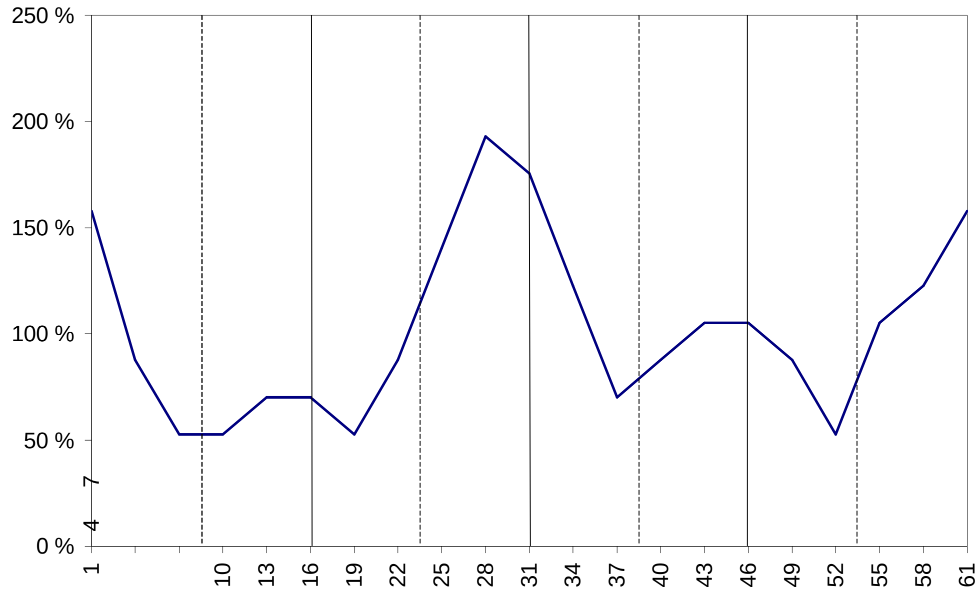


Figure 2.4.3.

The distribution of wife-dreams according to the 61-day cycle in percentage of the average

2.5. Summary

Biorhythm determines or influences the content of dreams in two respects: 1. About whom we dream, 2. What we dream, what sort of past event is recalled in the dream. Dreams are not about the future, they do not predict anything and they do not convey messages of deceased people. This last sentence could be read in any scientifically accepted dream theory. I need to state it in order to avoid any misunderstanding. On the basis of biorhythm the “new thing” is that we explain the appearance of motives deriving from the past.

As the author is not a psychologist or a researcher of dreams, he can only report on what he “realised” as an amateur dreamer and a not professional statistician. What I wrote in the Preface and in chapter 2.1 about human abilities assumed by me is the simple logical deduction of what I seemed to recognise about the relationship between dreams and biorhythm. It means two things. A past event may influence our dream when on the day of the event and on the day of the dream we were in a “similar” biorhythmic situation. Persons appear in our dream when the characteristic biorhythm cycles of our age difference expressed in days appear on the day of the dream.

In a period of more than 20 years I recorded at least a thousand dreams, and in a rather large proportion of these my explanation “worked”. I do not think that any of my experience could be against scientifically accepted statements. Obviously my observations about my own internal world cannot be used to demonstrate anything. They “only” help me to prove the rightness of my “heuristic” realisations for myself. In order to be able to prove my realisations for the “outside world” I had to work with other people’s recorded dreams, which were obviously independent from my research. In respect of the “documented” dreams I stay away from any “dream researching” attitude again apart from trying to demonstrate the role of biorhythm.

Even in the case of documented dreams the introduction of individual data may seem deliberate. In this case my Readers could doubt again whether the 7 “good” dreams were selected from 1000, 1000, 100 or 7 dreams. Still, there is one situation, where convincing demonstration becomes possible. If there is a documented series of dreams (or possible more, as many as possible) deriving from one dreamer, and the subject of the dreams is a certain person, then statistics can be used. It is important that the series is processed without leaving anything out. It can be checked from the document whether this condition was fulfilled.

Such a series is the 38 dreams of Árpád Szakasits about his wife. In mortality statistics 38 is a very low number. 38 would be regarded as very few even in the case of accidents. 38 dreams may be enough. The occurrence of death cases and accidents may be influenced by many important other factors apart from biorhythm. These events can take place completely independently from the given biorhythm situation. Dreams are also influenced by other circumstances, but according to the signs biorhythm cannot be “avoided” in dreams. If at the time of the dream the biorhythm picture of a friend or an event in the past becomes “actual”, such dreams may not be created. But it is not true the other way round. We cannot dream about X person or Y event, if biorhythm does not suit it. Persons or events that “want” to enter dreams must get through the “filter” of biorhythm first. We know this, because otherwise the spectacular statistics made about the “Emma dreams” could not have been created. I have the courage to regard my examinations relating to the 31 and 61-day cycles. In figure 2.4.2, in the quartering concentration of the 31-day cycle it would be difficult not to notice the quartering and the octant block. Let us put the sine curve on it like we did in Figure 1.7.1.

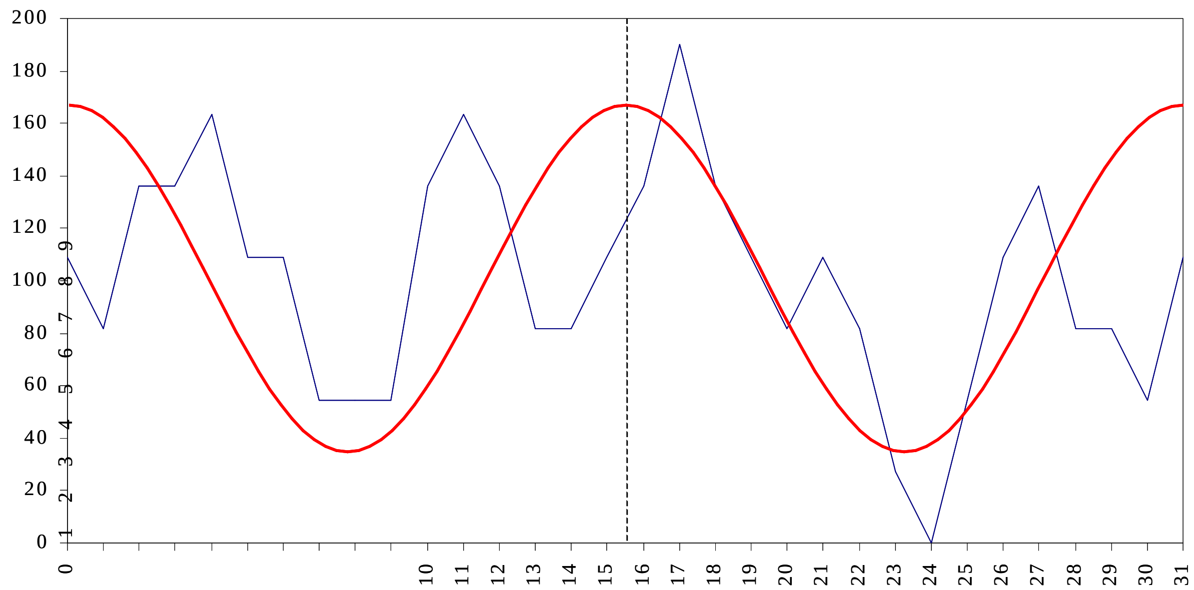


Figure 2.5.1.

The 31 quartile with a sine curve

Figure 2.4.3 shows us the complete process of the 61-day cycle. Biorhythm “shouts” at us here even without any concentration.

When in part 2 I dealt with the role of biorhythm in dreams, obviously I did not want to question any of the results of dream research.[30] I think that different dream interpretations do not exclude each other. I could describe a few motives of my own dreams where beside the role of a non-biorhythmic” dream source (such as the appearance of symbolic elements) the role of biorhythm can also be demonstrated. I need to mention it here that a generally accepted characteristic feature of dreams is that “deposits” of a given day just passed appears in dreams. It does not contradict biorhythm either, as if the day of the dream and the day of the event appearing in the dream is the same day, then biorhythm is the same too. Rule ”±1 day” also allows events from that happened on the previous day. And if the day of the dream is dominated by some long wave, the “prominent place” may extend over several days.

30 Beside the books by Freud and Jung also see in Hungarian: Dr. Goldschmidt, Dénes – Dr. Halász, Péter: „Alvás, álom, álmatlanság” [Sleeping, dreams, sleeplessness], Medicina, Bp., 1983. and Bódizs, Róbert: „Alvás, álom, bioritmusok” [Sleeping, dreams, biorhythms], Medicina, Bp., 2000. The title of the latter book does not relate to biorhythm dealt with in the present study.

3. Birth, conception, choosing partners

We have seen several age differences so far. In part 1 the basic data was the number of days between the birth and death of a person, or the time between birth and an accident. In part 2 the question was how many days old we were when we dreamt about someone or something, and we needed to calculate further age differences and periods of time. In part 3 the age difference between a married couple or the parents of a child counts.

The first example is the age difference between Sándor Petőfi and his wife Júlia Szendrey. Sándor was born on 1st January 1823, Júlia was born on 29th December 1828. The age difference between them was 2189 days. Let us see the drawing of 2189 in the Annex. If you turn to the right page, you can study the explanation given there as much as you like.

3.1. The birth of Zoltán Petőfi and the biorhythm background

Our initial idea may be that the members of families and their generations are also connected by biorhythmic relationships. Men and women choose their partners according to many different motives, and – subconsciously –biorhythm may also play a role among them. Assuming this what is our aim? We are looking for a partner, who "suits" the biorhythm system of our own family. If the "biorhythm content" of the age difference between a man and a woman expressed in days is more or less similar to that of their relationship with their own parents (or maybe more distant relatives), then the given person "likeable" – in respect of subconscious motives. ("Love at first sight".) It is not excluded that their sexual relationship can only be successful (in respect of having children), when a sufficient number of biorhythm cycles playing a role in the age difference between the man and the woman can be allocated to the day of conception and birth. The biorhythm of conception and the biorhythm of birth may have different biological functions.

When examining dreams we assumed that we have a subconscious ability to guess the age of others (whom we know in some way to some extent) expressed in days, and we can sense how big the age difference is and what its biorhythmic state is like (or the other way round). In this way for example for Sándor Petőfi – in the background of everything else we are aware of – Júlia Szendrey is "only" $11 \cdot 199$ or $83 \cdot 211$, etc. The same stands the other way round.

Now we need the assumed extent of the pregnancy period ("9 months"). From the aspect of biorhythm $3 \cdot 7 \cdot 13 = 273$ days, which can be related to the 28 and 26-day cycles seems acceptable. Below I always assume that the period of pregnancy is 273 days. (If the day of the conception is known, any deviations from the 273-day period can be demonstrated with the help of biorhythm.)

The first example is the conception and birth of Zoltán Petőfi. We already know the parents' date of birth, we have seen the drawing of their 2189-day age difference. Let us have a look at it again as shown in the Annex, with only the B numbers this time, without arrows and other signs.

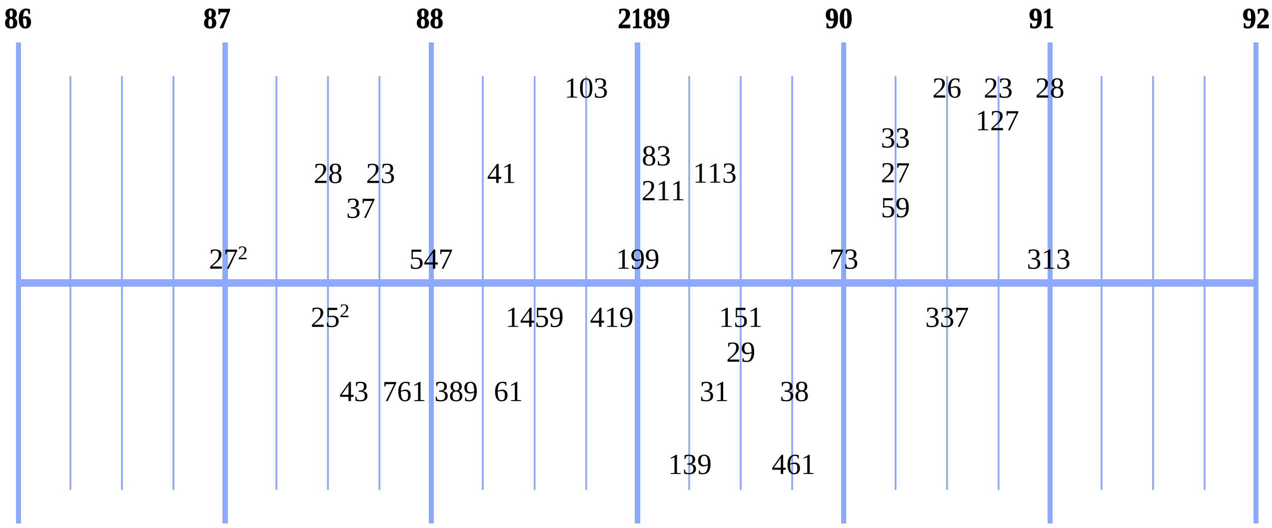


Figure 3.1.1.

The age difference between the Petőfi couple

Zoltán was born on 15th December 1848. First let us see the biorhythmic situation of the day of conception. Assuming that the conception took place 273 days before the birth, at the time of the conception the father was 9207 days old and the mother was 7018 days old. The biorhythmic relations of the two pieces of age data and the connections between them can be studied in table 3.1.1. We could also make drawings about the age of the father and the mother on the day on the conception similarly to the drawings used in the case of dreams.

We must find cycle numbers, which can be found on the imagined figure of the father and the mother, and also on the figure of the age difference. Here we only use the table method.

Table 3.1.1.

The conception of Zoltán Petőfi

Parents	Age	$\frac{877}{2}$	$\frac{1459}{16}$	$\frac{27^2}{8}$	$\frac{151}{2}$	$\frac{5\cdot 103}{8}$	$\frac{449}{8}$	$\frac{199}{4}$	$\frac{11\cdot 27}{8}$	$\frac{139}{4}$	$\frac{211}{8}$	11
		a	b	b	$a+b$	$2a+b$	$3a+b$	$4a+b$	$7a+b$	$3a+2b$	$7a+2b$	$11a+6b$
Sándor	9207	21	101	101	122	143	164	185	248	265	349	837
Júlia	7018	16	77	77	93	109	125	141	189	202	266	638
S - J	2189	5	24	24	29	34	39	44	59	63	83	199

Looking at the first column "a" we can see that two days before the conception Júlia was $8\cdot 877$ days old, and a day and a half after the conception Sándor was $10{,}5\cdot 877$ days old. The proportion of the two multipliers with respect to each other is $\frac{21}{16}$ from the aspect of Sándor. Two further "a" approximations could be read from the figure: $\frac{21\cdot 167}{8}$ and $\frac{3\cdot 2339}{16}$. (On the scale of Júlia's figure not shown here we could find (21)167 and (3)2339 as whole numbers.) Under sign "b" the proportion is $\frac{101}{77}$.

The $\frac{101}{77}$ proportion according to 27^2 is the same as the $\frac{1459}{16}$ proportion. Proportion $\frac{122}{93}$ suiting $\frac{151}{2}$ can be deduced from proportions “a” and “b” so that the amount of the counters of the fractions expressing the proportions $(21+101=121)$ is taken as the new counter, and the amount of the denominators $(16+77)$ is taken as the new denominator. Such “aggregation” – as we have seen above – is an important method in the course of comparing two pieces of age data on the basis of biorhythm. In the present case the sign of the deduced proportion is “$a+b$”. Both ages (and also the age difference) can be divided by 11. (According to our “records” 11 is not a biorhythm number, or only as $\frac{33}{3}$.) 11 can be found in $\frac{11\cdot 27}{8}$, which has the 7a+b formula, and it can also be found in $\frac{11^2\cdot 29}{8}$, which is not in our table (“a”). I must also point it out that the age difference between Sándor Petőfi’s parents, István Petrovics and Mária Hrúz is 11 days too, the mother was older. See Czeizel’s book[31], p. 84.

Let us start examining the birth data with the help of Table 3.1.2.. Some of the cycles that played a role at the time of the conception also appear here, but there are also different cycle numbers in the case of the two events. Obviously these are all shown in the drawing of the age difference between the two parents. (Signs “a” and “b” were chosen arbitrarily, independently from each other in the case of the conception and the birth.) I supplemented Table 3.1.2. with a line as compared to Table 3.1.1. to show the Sándor/Júlia ratios too. It can be seen that the ratios signed with different letters approximate the actual $\frac{S}{J}$ proportion ($\frac{9207}{7018}=1{,}30023$) partly from below and partly from above.

Table 3.1.2.

The birth of Zoltán Petőfi

Parents	Age	27^2	$\frac{19\cdot 307}{8}$	$\frac{1459}{2}$	$\frac{2917}{4}$	$\frac{199}{8}$	$\frac{283}{4}$	$\frac{113}{8}$	$\frac{509}{40}$
		a	a	a	a	b	$b-19a$	$2b-7a$	$28a+b$
Sándor	9480	13	13	13	13	381	134	671	745
Júlia	7291	10	10	10	10	293	103	516	573
S-J	2189	3	3	3	3	88	31	155	172
S/J	1.30023	1.30000	1.30000	1.3000	1.30000	1.30034	1.30097	1.30039	1.30017

31 Dr. Czeizel, Endre: Költők, gének, titkok. A magyar költőgéniuszok családfaelemzése [Poets, genes, secrets. Analysis of the family trees of Hungarian poet geniuses]. Galenus Kiadó, 2000.

If the multipliers signed "a" here are multiplied by 8 (and so proportion $\frac{13}{10}$ is replaced by $\frac{104}{80}$), then we are in harmony with multipliers "b" $\left(\frac{101}{77}\right)$ present at the conception. We may also say that at the time of the conception and on Zoltán's birthday the proportion of ages in the case of Sándor was $\frac{101}{104}$, and in the case of Júlia it was $\frac{77}{80}$.

3.2. *The British royal family*

We shall examine the birth data of the British royal family from several aspects. Prince Philip was born on 10th June 1921, and Queen Elisabeth II was born on 26th April 1926. The age difference between them is 1781 days. (See Figure 3.2.2..) For further data see Table 3.2.1.

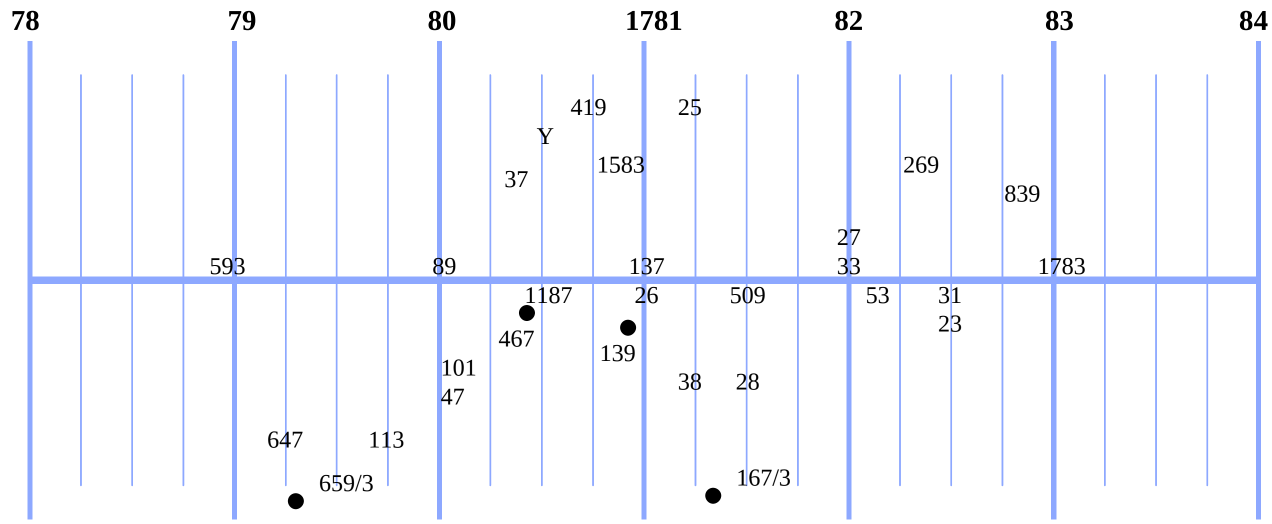


Figure 3.2.1.

The age difference between the British royal couple

Table 3.2.1.

Children born in the royal family

Name	Date of birth	Mother' age at child's birth	Father's age at child's birth	Mother's age at child's conception	Father's age at child's conception
Charles	14th Nov 1948	8238	10019	7965	9746
Anna	15th Aug 1950	8877	10658	8604	10385
Andrew	19th Feb 1960	12352	14133	12079	13860
Edward	10th March 1964	13833	15614	13560	15341

The figures and tables relating to the first-born Charles (the heir to the throne) would reveal numerous connections. I only highlight one of these: all four items of data in the first line of table 3.2.1. can be characterised by $\frac{137}{8}$. The four multipliers are:

	birth	conception
mother	481	465
father	585	569

With the octants of the 137-day cycle the 4 or 5-figure birth and conception age data could be reduced to the above four 3-figure numbers. Let us see the complete biorhythm balances too!

Mother's age at birth $8\cdot(8231-1)+1=481\cdot 137$

Father's age at birth $8\cdot 7965=15\cdot(31\cdot 137+1)$

Mother's age at conception $8\cdot(10019-1)=585\cdot 137-1$

Father's age at conception $2\cdot(2\cdot(2\cdot(9746-1)-1)-1)=569\cdot 137+1$

If the multipliers relating to birth are simplified by 13 (see multiplier $\frac{26}{2}$ in the centre of the age difference too!) we receive proportion $\frac{37}{45}$. Also, at one of the diagonals (taking into consideration the time of conception in the case of the mother and the time of birth in the case of the father) there is $\frac{15\cdot 137}{8}$, the multipliers are the fifteenth of the above numbers, that is 31 and 39. The appearance of 137 on all four places was supported by the circumstance that 137 days is more or less half of the pregnancy period. We shall state other facts about 137 later.

With respect to the next three children I must point out a few important things. First of all the 137 factor of the age difference of the patents (both in the case of birth and conception) appears divided into five in the case of Anne and divided into six in the case of Andrew. In the case of Edward 137 is (questionably) close as a whole number, 4 days "late" at birth and 3 days "late" at conception (calculated as usual). At Anne's birth 38, 89, 269, 317 (with divider 8 at the maximum), at her conception 1187 appear as a quartile. At Andrew's conception 33 is present in the centre, at his birth it is present in the form $\frac{6\cdot 33}{8}$. Once 151 appears as a whole number, in the case of the other three items of data it appears as a quintile.

$\frac{151}{5}$ is also present in the case of Edward, but in his case the role of year octants is more interesting (there is an eighth octant among them). Prince Philip conceived his son Edward on the day next to his 42nd birthday (or on hi birthday). In the case of Philip the bisector of 503 appears after conception, (13560.5), in the case of Elisabeth it appears half a day before the birth (13832.5). It is due to the fact that age difference minus pregnancy period is "good" for 503:

$$1781-273=3\cdot 503-1.$$

As a result of the position of the bisectors as mentioned above the amount of the two pieces of age data can be broken down with the help of the 503 factor:

15614+13560 = 29174 = 2·29·503.

Now let us see the family created with Charles's marriage.

Prince Charles, the successor to the throne of the United Kingdom, and his wife Lady Diana had two children: William and Henry. The necessary birth data:

Charles	14th Nov 1948
Diana	1st July 1961
William	21st June 1982
Henry	15th Sept 1984

The age difference between the parents: 4612 days. See Figure 3.2.2.. The data relating to the (assumed) conception and birth of the two children can be found in Table 3.2.2.! Four further tables contain the demonstrable B numbers and their multipliers.

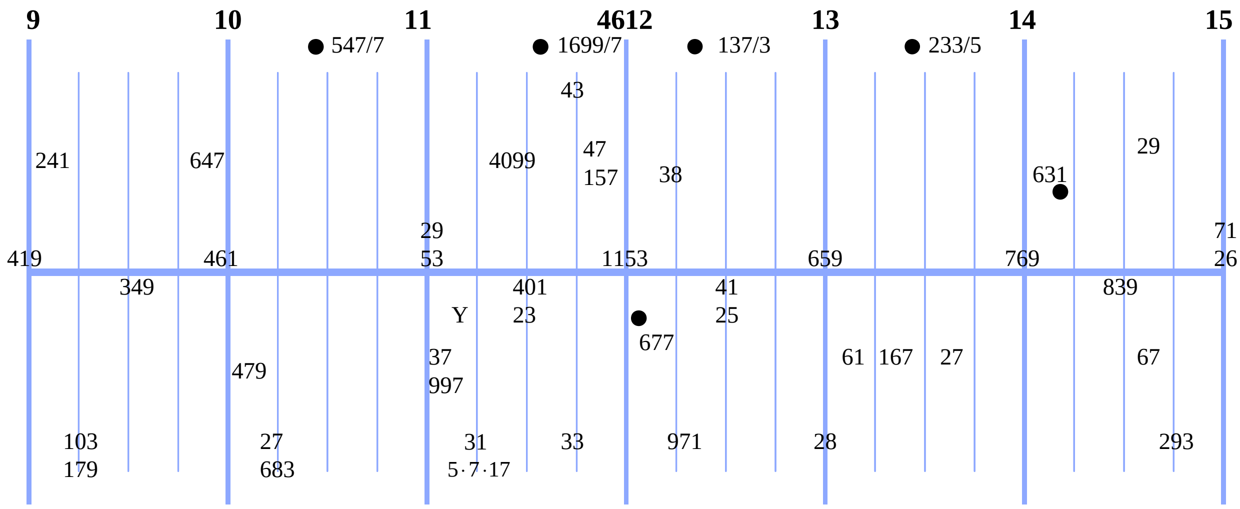


Figure 3.2.2.

The age difference between Charles and Diana

Table 3.2.2.

The parents' age in days at the time of the conception and birth of their children

Parent	Child	At conception	At birth
Charles	William	11999	12272
Diana	William	7387	7660
Charles	Henry	12816	13089
Diana	Henry	8204	8477

Table 3.2.3.

William's conception

Age of parents (days)	$13\cdot 71$	$\frac{5\cdot 7\cdot 17}{12}$	$\frac{7\cdot 61}{10}$	$\frac{653}{16}$	$\frac{2\cdot 25}{2}$	$\frac{1153}{32}$	$\frac{971}{28}$
	a	b	$3a+b$	$4a+b$	$6a+b$	$7a+b$	$8a+b$

Charles	11999	13	242	281	294	320	333	346
Diana	7387	8	149	173	181	197	205	213
$\frac{Károly}{Diana}=$	1.62434	1.62500	1.62416	1.62428	1.62431	1.62437	1.62439	1.62441
Direction of deviation		+	-	-	-	+	+	+

Studying William's conception we can start from the right side of the age difference diagram with the proportion 13:8 (a) determined by the $71 \cdot 13 = 923$ product, prime number 769 and the age difference itself or its prime factor. The product of 923 multiplied by 13 gives us the exact age of the father, in the case of the mother the products of $8 \cdot 923$ is "wrong" by 3 days. (If conception took place 1-3 days earlier, then this deviation is distributed differently.) Both he product of 769 multiplied by 6 and the products of 1153 multiplied by 4 (that is the age difference) must be divided by 5 in order to demonstrate the proportion 13:8, but these are too far from the centre (to the left) in the parents' drawing. However, if 1153 is divided by 32, we get good approximation.

It seems practical to explain the notion of "approximation" more deeply in general. Looking at the father/mother proportions stated in Table 3.2.3. the proportions according to the actual age can be compared with the proportions characteristic of the individual approximations. In this way we see that approximation "a" is the worst, the difference between the actual and the approximate proportion is $1{,}62500 - 1{,}62434 = 00066$, the two best approximations are $4a + b$ and $6a + b$, in these cases the difference is 3 in the fifth (rounded) decimal in either direction. In the last line of the table the direction of the deviations is shown. The algebraic signs are also important from the aspect that "$a + b$" etc. type aggregations are always based on a positive and a negative antecedent.

Here in the case of $\frac{1153}{32}$ $(7a + b)$ the biorhythm number is in the centre of the age difference.

$\frac{5 \cdot 7 \cdot 17}{12}$ marked b is worth mentioned among further approximations. Here the counter does not "seem" to be a biorhythm number, although we could say that it is $\frac{25 \cdot 28 \cdot 51}{720}$. Product $5 \cdot 7 \cdot 17 = 595$, with partly different dividers, is present nearly everywhere, its presence could not be demonstrated only in the case of Henry's conception. $\frac{3 \cdot 25}{2}$ can be taken out of the age difference plus half a day, and so the approximate proportion of the two ages is $\frac{320}{197}$ $(6a + b)$. The exact age difference (4612) is divided by 2^7, and 1153 is divided by 2^5, which results in a proportion of $\frac{333}{205}$. $8a + b$ type aggregation means using the further division of the quartered 971 by seven, which can be seen in the close environment of the age difference $\left(\frac{971}{28}\right)$, in this case the proportion is $\frac{346}{213}$.

Table 3.2.4.

William's birth

Age of parents (days)		$\frac{569}{8}$	$\frac{7\cdot 67}{6}$	$\frac{5\cdot 7\cdot 17}{8}$	$\frac{5\cdot 227}{16}$	$\frac{677}{16}$	$\frac{7^3}{3^2}$	$\frac{16\cdot 59}{5\cdot 7}$	$\frac{53}{2}$	$\frac{4099}{160}$	$\frac{383}{3\cdot 8}$
		b	$a+b$	$2a+b$	$3a+b$	$2b-a$	$2b+3a$	$3b+a$	$3b+2a$	$3b+4a$	$5b+3a$
Charles	2272	149	157	165	173	290	322	455	463	479	769
Diana	7660	93	98	103	108	181	201	284	289	299	480
$\frac{Károly}{Diana}=1.602089$		+	-	-	-	+	-	+	-	-	-

In the case of William's birth proportion $\frac{8}{5}$ is accepted as an "axis" (a), but we cannot get good approximation by this. The eighth of the age difference plus one day, $\frac{659}{8}$, the 56th of the age difference and $\frac{1153}{14}$ result in a proportion of $\frac{149}{93}$ (b), which can be characterised by relatively lower multipliers. A well approximating aggregation $(5b+3a)$ also results in an unexpected number, $\frac{383}{8\cdot 3}$. The idea of the number 383 was given by Diana, because she had her first child on the $20\cdot 383$ th day of her life.. In the father's age $\frac{383}{8\cdot 3}$ is multiplied by 769, which is already a well-known number. For further detail see Table 3.2.4..

Table 3.2.5.

Henry's conception

Age of parents (days)		$\frac{3\cdot 683}{4}$	$\frac{461}{5}$	$\frac{547}{7}$	$\frac{5\cdot 7\cdot 31}{16}$	$\frac{13\cdot 33}{8}$	$\frac{6\cdot 89}{11}$	$\frac{653}{16}$	$\frac{157}{8}$
		a	b	$a+b$	$2a+b$	$4a+b$	$5a+b$	$7a+b$	$15a+2b$
Charles	12816	25	139	164	189	239	264	314	653
Diana	8204	16	89	105	121	153	169	201	418
$\frac{Károly}{Diana}=$	1.56216	+	-	-	-	-	-	+	+

Number 769 may also appear at Henry's conception (Table 3.2.5.), divided into three this time. It shows a rather simple $\frac{25}{16}$ proportion (a), similarly to the quartered 683 on the left side of the age difference. In the diagram of the age difference the fifth of 461, which is close to 683, gives us a fix point marked b. The proportion is $\frac{139}{89}$. On the basis of a $15a+2b$ formula with $\frac{157}{8}$ closely adjusting to the age difference we get an aggregated approximation $\left(\frac{653}{418}\right)$.

In the case of Henry's birth (see Table 3.2.6.) the approximating proportions "support" against the $\frac{17}{11}$ "axis", but $\frac{17}{11}$ itself is a weak approximation, the father's and the mother's multipliers go too far from the centre in the opposite direction. However, we could choose tow approximations, in the case of which the difference between the counters is 17, and the difference between the denominators is 11. These are proportions $\frac{88}{57}$ (a) and $\frac{105}{68}$ (b), which are represented in Table 3.2.6. by $\frac{5 \cdot 7 \cdot 14}{4}$ and $\frac{997}{8}$ situated to the left of the centre in the diagram of the age difference. Choosing names a and b in the given way we can find several aggregation formulas where the multiplier of "a" is negative, and $\frac{17}{11}$ itself can be characterised by formula "$b-a$".

Table 3.2.6.

Henry's birth

Age of parents (days)		$\frac{5\cdot7\cdot17}{4}$	$\frac{997}{8}$	$\frac{839}{10}$	$\frac{5\cdot7\cdot31}{16}$	$\frac{1153}{20}$	$\frac{5\cdot71}{8}$	$\frac{7\cdot251}{40}$	$\frac{5\cdot227}{32}$	$\frac{157}{8}$
		a	b	$4b-3a$	$a+b$	$3b-a$	$7b-5a$	$a+2b$	$3a+b$	$4a+3b$
Charles	13089	88	105	156	193	227	295	298	369	667
Diana	8477	57	68	101	125	147	191	193	239	432
$\frac{Károly}{Diana}=$	1.54406	-	+	+	-	+	+	-	-	-

I also need to point out correspondences, which make it possible to connect several tables. Looking at the birth data (

Table 3.2.4. and Table 3.2.6.) according to $\frac{5 \cdot 7 \cdot 17}{8}$ in the case of William the father's age was 165, the mother's age was 103 units, in the case of Henry 176 and 114 "units". (Here in the interest of comparability from Table 3.2.6. data $2a$ needed to be taken into consideration as here the divider of the biorhythm number was not 8 but 4.) On the basis of this it can also be stated that the age difference between the parents was 62 times the biorhythm number, and the age difference between the children was 11 times the biorhythm number.

In the case of Henry conception and birth can be connected (Table 3.2.5. and Table 3.2.6.). On the basis of $\frac{5 \cdot 7 \cdot 31}{16}$ at the conception the rate of the parents is $\frac{189}{121}$ at the birth it is $\frac{193}{125}$. Here the age difference between the parents is 68 units, the pregnancy period is 4 units. In the two tables referred to there is another common biorhythm number: $\frac{157}{8}$. Here the proportion at conception is $\frac{653}{418}$, at birth it is $\frac{667}{432}$. This time the age difference between the parents is 235 units, the pregnancy period is 14 units.

3.3. The Varga family with 17 children

It does not need to be explained too much that examining families with many children involves great possibilities. I obtained the data of the Varga family with 17 children from Pusztavám and the Lukács family with 20 children from Fácánkert (thanks to Mrs. József Varga and Mrs. Ernő Lukács.)

The data of Csongor, Tünde and the others (Varga family) are included in Table 3.3.1.. In order to examine the assertion of the 28-day cycle I also included in the table the days of the week on which the children were born.[32] According to this the mother's birthday, which was on a Tuesday was copied by 8 children, and the first 4 children were among them. If a neighbouring day is joined on each side to the 2 neighbouring birthdays of the parents, only 4 children are beyond this range, including 2 children born on a Saturday, who are only at half a week's distance (octant!) from their parents' birthday within the week. (I do not mind if the Reader regards all this as an accident, because in the other big family the picture is not so spectacular.)

Table 3.3.1.

Varga family, Pusztavám

x	*Name*	*Date of birth*			*Day of the week*	*At birth the age of*		*At conception the age of*	
	Father *Mother*	*20.* *26.*	*5.* *8.*	*5.* *10.*	*Wednesday* *Tuesday*	*father*	*mother*	*father*	*mother*
1.	József	48.	9.	14.	Tuesday	10359	8071	10086	7798
2.	Anikó	50.	1.	17.	Tuesday	10849	8561	10576	8288
3.	Irén	51.	1.	2.	Tuesday	11199	8911	10926	8638
4.	Olga	52.	6..	17.	Tuesday	11731	9443	11458	9170
5.	Ildikó	53.	12.	17.	Thursday	12279	9991	12006	9718
6.	András	55.	1.	13.	Thursday	12671	10383	12398	10110
7.	Emese	56.	4.	14.	Saturday	13128	10840	12855	10567
8.	Ilona	57.	12.	17.	Tuesday	13740	11452	13467	11179
9.	Csaba	59.	4.	1.	Wednesday	14210	11922	13937	11649
10.	Andrea	60.	7.	4.	Monday	14670	12382	14397	12109
11.	Csilla	62.	7.	2.	Monday	15398	13110	15125	12837
12.	Enikő	63.	8.	9.	Friday	15801	13513	15528	13240
13.	Tünde	65.	1.	16.	Saturday	16327	14039	16054	13766
14.	Csongor	66.	5.	17.	Tuesday	16813	14525	16540	14252
15.	Tímea	68.	7.	28.	Sunday	17616	15328	17343	15055
16.	Mónika	69.	12.	30.	Tuesday	18136	15848	17863	15575
17.	Zoltán	72.	10.	24.	Tuesday	19165	16877	18892	16604

Figure 3.3.1 shows the biorhythm content of the parents' age difference.

[32] Obviously the contingency of the calendar system does not influence our examination.

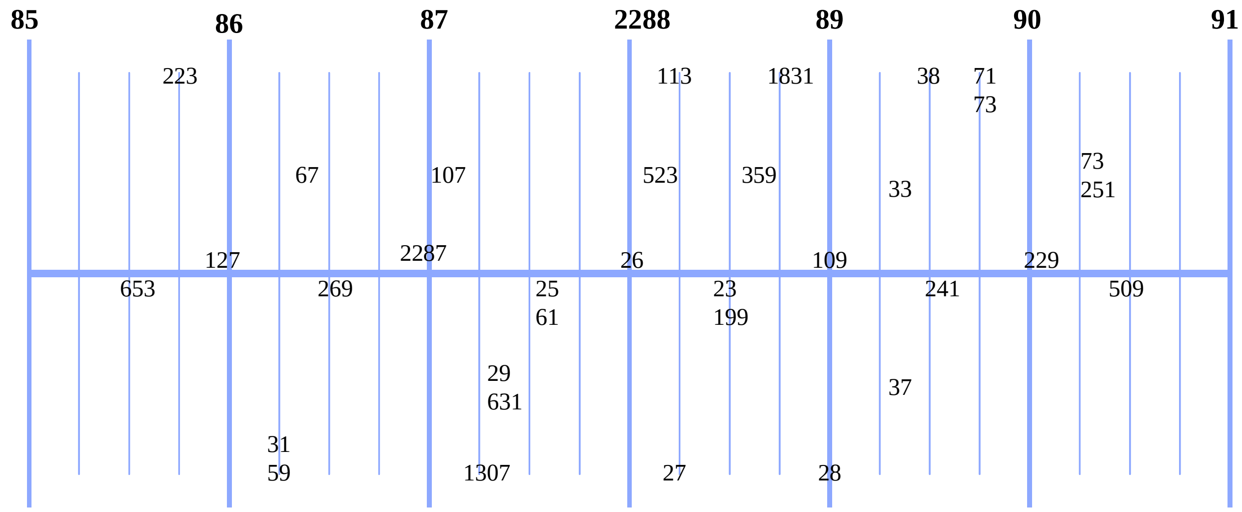


Figure 3.3.1.

The age difference of the Varga parents

Obviously all 17 conceptions and births were examined in detail. In the individual cases different components of the parents' age difference gained significance, but the individual prominent cycles played a role in the case of several children, and in accordance with this several "clubs" can be composed from the children of the Varga family. E.g. prime number 229 can be found in the case of 9 children appearing as a whole number, bisected, quartered or divided into eight. So club 229 has 9 members. At the same time all club memberships extend to the father's and the mother's age too. In principle it is possible that a membership like this means four data. The condition of this is that the biorhythm number should be "good" in the age difference and in the 273-day pregnancy period too. There is definitely at least one number like this in the Varga family, which is number 26, as $2288 = 88 \cdot 26$ and $273 = 21 \cdot 13$.

Club 229 is shown in Table 3.3.2. from the *father's* aspect. It is stated which ratio of 229 should be multiplied by which number in the case of the birth or conception of the individual club members to receive the approximate value of the parent's age (the father's age in the table) belonging to the right events. In this way for example in the case of József, serial No. 1., 229 appears quartered, a quarter of $181 \cdot 229$ is 10362.25. The actual age of the father is 10359 days. In the case of the mother the difference is only 1.25 days. I also showed the multipliers of the ratios, which are lower than the actual ratio, in the case of József the multiplier of the eighth is obviously double the quarter multiplier, $2 \cdot 181 = 362$. In this way with respect to all club members, instead of 4-5-figure age data we received comparable 3-figure numbers. (When Csilla was born the *mother's* age was 13110 days. $\frac{229^2}{4} = 13110{,}25$!)

Table 3.3.2.

Club 229 in the Varga family from the father's aspect

Name of child	*Event*	*1/8*	*1/4*	*1/2*	*1*	*3/2*	*3/1*
		Multiplier of ratios					
1. József	birth	362	181	-	-	-	-
2. Anikó	birth	379	-	-	-	-	-
5. Ildikó	birth	429	-	-	-	-	-

8. Ilona	birth	480	240	120	60	40	20
11. Csilla	birth	538	269	-	-	-	-
12. Enikő	birth	552	276	138	69	46	23
15. Tímea	conceptio	606	303	-	-	-	-
16. Mónika	conceptio	624	312	156	78	52	26
17. Zoltán	conceptio	660	330	165	-	55	-
Age difference	-	80	40	20	10	-	-

We could also make 113, 269, 509, 523, 631 and 2287 clubs, although they are smaller than the 229 club.

Studying the data of Table 3.3.2. we got convinced of how the conception or birth data of nine children can be explained with biorhythm number 229 adjusting to the 2288-day age difference of the Varga parents $(2288+1=10\cdot 229-1)$, how the eighth, fourth or half or the whole of number 229 approximated the 80th, 40th or 10th of the age difference with the right multiplier. In the last column of Table 3.3.2. it can be checked that with low multipliers $3\cdot 229$ approximates (or in the father's case exactly hits) the birth data of two children and the conception day of one child:

Ilona's (8) birth	the father was $20\cdot(3\cdot 229)=13740$ days old
Enikő's (12) birth	the father was $23\cdot(3\cdot 229)=15801$ days old
Mónika's (16) conception	the father was $26\cdot(3\cdot 229)=17862+1$ days old

So this time the multiple (3 times) of 229 could also be found.

I call the readers attention to a few interesting details.

Emese (7) was born when the father was $13128=24\cdot 547$ days old. So far number 547 did not have a place in the diagram of the 2288-day age difference. However, it can be demonstrated that

$$2677\cdot 547+1=640\cdot 2288.$$

As a result of this 547 can be detected in the mother's age at the time when Emese was born with 640 as a divider:

$$12683\cdot 547-1=640\cdot 10840.$$

640 is a rather large divider, but the presence of +1 or -1 in the right balance justifies divider $2^7\cdot 5=640$. We can also see that on the day of the conception the father was 12855 days old, and half a day earlier the bisector of 547 appears. Here the father's age is not related to the mother's age, but the birth and conception dates contain the same biorhythm number. The background of this is that the 273-day pregnancy period "likes" prime number 547 as $\frac{547}{2}=273{,}5$. In the mother's case half a day before the conception:

$$1263\cdot 547-1=640\cdot 10566{,}5.$$

Number 547 was also present around the first child, József. There is a close 16th in the father's data at birth:

$$303\cdot 547-1=16\cdot 10358{,}75\text{, or}$$

$$303\cdot 547-1=4\cdot(10359-1).$$

269 can also be detected in the case of József (1), which is an example of that beside its bisecting role in the age difference it is also close to the pregnancy period. In this way, 269 appears in the environment of all four pieces of observed age data at a smaller or greater distance.

It may happen to any prime factor of any age data that it does not take part in explaining relations to the age difference. For example 4723 can be said to be a number like this in the father's conception data in the case of Zoltán (17). (See the figure). But if the 2288-day age difference is divided by this number and the ratio is multiplied by increasingly higher powers of 2, it turns out that 31 times the 64th of prime number 4723 is close to 2288. It can be concluded from this that in the case of Zoltán the right product of $\frac{4723}{64}$ is also close to the mother's conception data. If we start "looking", at Mónika's (16) birth, who was before Zoltán, in the case of the father we find divider 25 and in the case of the mother we find divider 2000 for 4723. At Tímea's (15) conception we receive a 16th in the case of the mother and 64th in the case of the father. In the case of the mother if we move "to the left" half a day as compared to 15055 days, and then a sixteenth "to the right", we get to the right $\frac{4723}{16}$ place. If in the case of the father we start from 17343 days and move a quarter day to the left, a quarter day to the right and a 64th day to the right again.

The latter case can be described with the following balance:

$$235 \cdot 4723 = 16 \cdot (4 \cdot (17343 - 1) + 1) + 1 \,.$$

Divider 64 of biorhythm number 4723 can be found on the right side of the balance as $16 \cdot 4$ allowing for the interference of ± 1-s.

As during the first approach we did not consider 16th in the course of examining the biorhythm of the age difference between the Varga parents (Figure 3.3.1), now subsequently we can examine "real" 16th (of odd serial numbers) in some close environment (e.g. ±½) of the age difference. The first one of the eight numbers like this can be found at $2288 - 0{,}5 + 0{,}0625 = 2287{,}5625$, and if it is multiplied by 16 the result is $17 \cdot 2153$. Number 2153 appears right at the birth of József (1) (as a 16th in the case of the father and as an 8th in the case of the mother).
There is another thing that must be mentioned in connection with the Varga family's biorhythm. Above we mentioned the lunistice (M), and the biorhythm cycle. M (with not a close approximation) plays a bisecting role in the age difference between the Varga parents and it is a quartile in the pregnancy period. It makes it possible to demonstrate the presence of the lunistice in all four items of data of the 3rd and 4th Varga children. It also appears in the case of the 16th child in two items of data: $M/7$ and $M/3$.

3.4. The Lukács family with 20 children

In the Lukács family with 20 children from Fácánkert the parents' date of birth is:

- Ernő Lukács: 3rd June 1943, Thursday
- Mrs. Ernő Lukács: 30th July 1944, Sunday

The age difference is 423 days. The data of the age difference between the children is contained in Table 3.4.1., its drawing is shown in Figure 3.4.1..

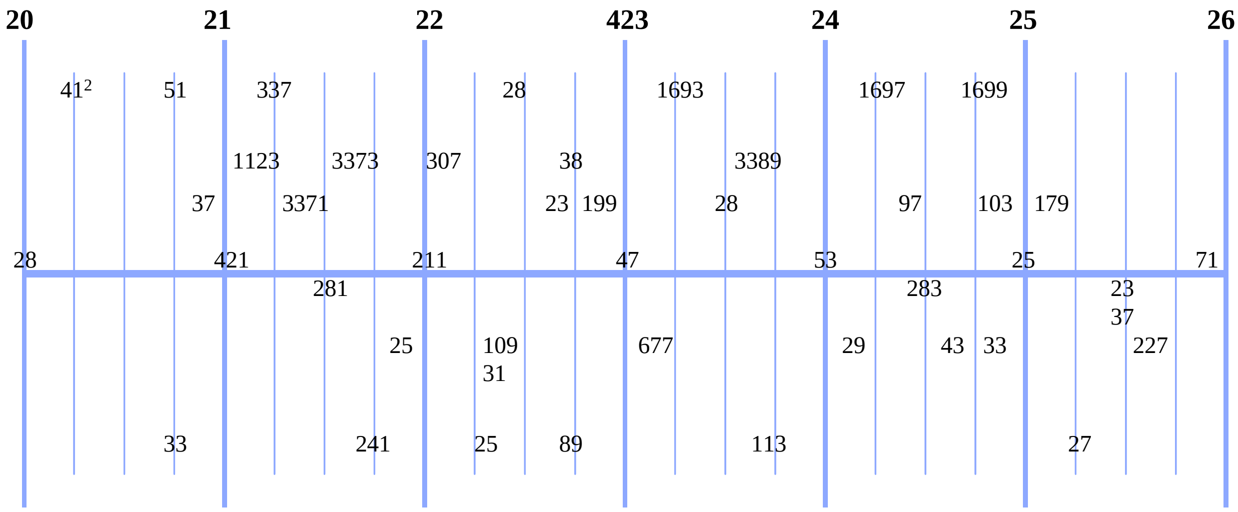


Figure 3.4.1.

The age difference between the Lukács parents

Table 3.4.1.

Lukács family, Fácánkert

Serial No.	*Name*	*Date of birth Year, month, day*	*Day of the week*	*At birth the age of father*	*mother*	*At conception the age of father*	*mother*
				in days			
1.	Edina	65. 09. 07.	Tuesday	8132	7709	7859	7436
2.	Andrea	66. 12. 31.	Saturday	8612	8189	8339	7916
3.	Ernő	68. 04. 05.	Friday	9073	8650	8800	8377
4.	Zoltán	71. 02. 22.	Monday	10126	9703	9853	9430
5.	László	72. 03. 27.	Monday	10525	10102	10252	9829
6.	János	73. 07. 16.	Monday	11001	10578	10728	10305
7.	Krisztina	74. 08. 16.	Friday	11397	10974	11124	10701
8.	Anita	75. 10. 18.	Saturday	11825	11402	11552	11129
9.	Lilla } twins	76. 11. 25.	Thursday	12229	11806	11956	11533
10.	Gábor } twins	76. 11. 25.	Thursday	12229	11806	11956	11533
11.	Julianna	77. 12. 23.	Friday	12622	12199	12349	11926
12.	Zsuzsanna	79. 03. 28.	Wednesd	13082	12659	12809	12386
13.	Edit	80. 05. 16.	Friday	13497	13074	13224	12801
14.	Ferenc	81. 05. 16.	Saturday	13862	13439	13589	13166
15.	Klára	82. 10. 25.	Monday	14389	13966	14116	13693
16.	Katalin	83. 12. 16.	Friday	14806	14383	14533	14110
17.	Ágnes	85. 01. 22.	Tuesday	15209	14786	14936	14513
18.	Ildikó	86. 09. 09.	Tuesday	15804	15381	15531	15108
19.	Hajnalka	89. 07. 10.	Monday	16839	16416	16566	16143
20.	Éva	90. 07. 23.	Monday	17217	16794	16944	16521

The most prominent cycle number are: $(9)\cdot 47$, 89, 109, 211, 241, 337, 421, 563, 1123, 1699.

It is probably not an accident that number 2153, which proved to be prominent in the Varga family, is also prominent in the Lukács family. The balance that can be allocated to the age difference of 423 days:

$$2^2(2\cdot 7\cdot 423-1)=11\cdot 2153+1.$$

The divider of 2153 is $2^3\cdot 7=56$. In respect of the birth of Andrea (2) we have a direct hit, the father's age is $8612=4\cdot 2153$. As a result of the above in the case of the mother divider 56, which appears in the age difference, is asserted. At the conception 2153 appears again, slightly ”shifted” to the right. The seventh octant appears four days but an octant after the mother's assumed age at the conception (8339). In the case of the father the place with a divider containing factor 7 should also be practically found four days later. And we do find the age suiting $\frac{2153}{28}$ in the close environment of 7920. At the same time $\frac{2153}{560}$ can also be found in the environment of 7916.

The data set of the Lukács family seems to support the hypothesis according to which not only the biorhythm relations of the age difference between the parents and the pregnancy period (273) play a decisive role, but also the combinations of the two, namely age different plus/minus the pregnancy period, which in the case of the Lukács family is $423-273=150$ and $423+273=696$. The former one may result in that in the case of younger parents the same biorhythm appears in the age at birth, while in the case of older parents it appears in the age at conception. Prime numbers 149 and 151 are close to 150. We can find examples mainly of the latter one (4^{th}, 5^{th}, 7^{th}, 8^{th}, 14^{th} and 16^{th} child). In the case of Ernő (3) number 607 and 1193 play the same role. Studying Ernő's data the biorhythm number connecting the other two events is 349. (“It looks well” in 696.) The amount of the two pieces of appropriate age data is $8377+9073=17450=50\cdot 349$. 349 appears 1 day earlier as compared to the mother's age at conception (8376), and it appears 1 day later as compared to the father's age at birth (9074).

3.5. Statistical approach

A family of many children (or even two families together) may form a large enough statistical population to study according to a given cycle also taking into consideration that two types of conception and birth data (the father's and the mother's data) belong to each child (even if such items of data are not independent from each other). Below I describe the results of two examinations.

In the interest of examining the 89-day cycle, which closely suits the 423, $(19\cdot 89+1=4\cdot 423)$ (considering the uncertainty of the date of conception) omitting the twins, I processed four types of data of 18 births (72 items of data altogether) “in bulk”. Making use of the circumstance that 89 is “nearly” dividable by 8, I grouped the numbers from 0 to 88 $(89=0)$ into groups of 11 members – leaving 44 of 0 frequency out of the two numbers in the middle (44 and 45) – so that 0 and all numbers corresponding to it are in the centre. (The first “real” octant place: $\frac{89}{8}=111{,}25$. In table 3.5.1. each x, y column-pair represents an octant. In the central line separated by lines we go from 0 to 44 stepping 11 at a time, and then backwards from 89 in steps of 11.) The first (small) x data is obviously 84 to be able to get “$89=0$” in the middle.

Table 3.5.1.

Aggregated distribution of the octants of the 89-day cycle (from 4 items of data of 18 children each)

Octants																*Summary*			
x	*y*	*x*	*y*	*x*	*y*	*x*	*y*	*x*	*y*	*x*	*y*	*x*	*y*	*x*	*y*	*X*	*S*	*S*	*A*
84	2	6	2	17	2	28	0	39	1	51	1	62	2	73	3	-5	13	25	8.33
85	1	7	0	18	1	29	0	40	2	52	1	63	1	74	1	-4	7	20	6.67
86	0	8	0	19	0	30	0	41	0	53	0	64	0	75	0	-3	0	12	4.00
87	0	9	0	20	0	31	0	42	0	54	3	65	0	76	2	-2	5	13	4.33
88	2	10	1	21	2	32	1	43	0	55	1	66	0	77	1	-1	8	24	8.00
0	2	11	1	22	0	33	1	45	2	56	1	67	3	78	1	0	11	27	9.00
1	1	12	2	23	1	34	2	46	0	57	0	68	1	79	1	1	8	23	7.67
2	1	13	0	24	0	35	0	47	0	58	1	69	1	80	1	2	4	15	5.00
3	0	14	0	25	0	36	0	48	2	59	0	70	1	81	0	3	3	15	5.00
4	1	15	1	26	1	37	0	49	1	60	1	71	1	82	2	4	8	16	5.33
5	1	16	0	27	2	38	0	50	0	61	1	72	0	83	1	5	5	26	8.67
S	*11*		*7*		*9*		*4*		*8*		*10*		*10*		*13*		*72*	*216*	*72.00*

Chart of symbols:

x	Serial No.	*S*	Amount of frequencies
y	Frequency	*S*	Three-member moving sum
X	Serial No. of the totalled octant adjusted to the centre	*A*	Three-member moving average

From $4 \cdot 20 = 80$ items of data of, leaving out the twins 8 items of data, processing according to the 89-day cycle was performed in a way that each data was divided by 89 and the division remainder was determined. Edina's first data is 8132. If it is divided by 89, the result is 91.37078.... . If the fraction of the ratio is multiplied by 89, the result is 33. When Edina was born, the father was on the 33rd day of the 89-day cycle. It can be seen in table 3.5.1. that it was the only data of this nature, but it is one of the 11 cases when we have a "direct hit" in the centre of the aggregated octant. (The 33rd day of the 89-day cycle is at the third octant, as $89 \cdot 0{,}375 = 33{,}375$.)

In table 3.5.1., after the double vertical separating line there is the totalled frequency of the horizontal line (capital X). (The amount line at the bottom helps us to check the amounts.) In the last two columns I performed 3-member moving averaging – in order to moderate the role of accident.

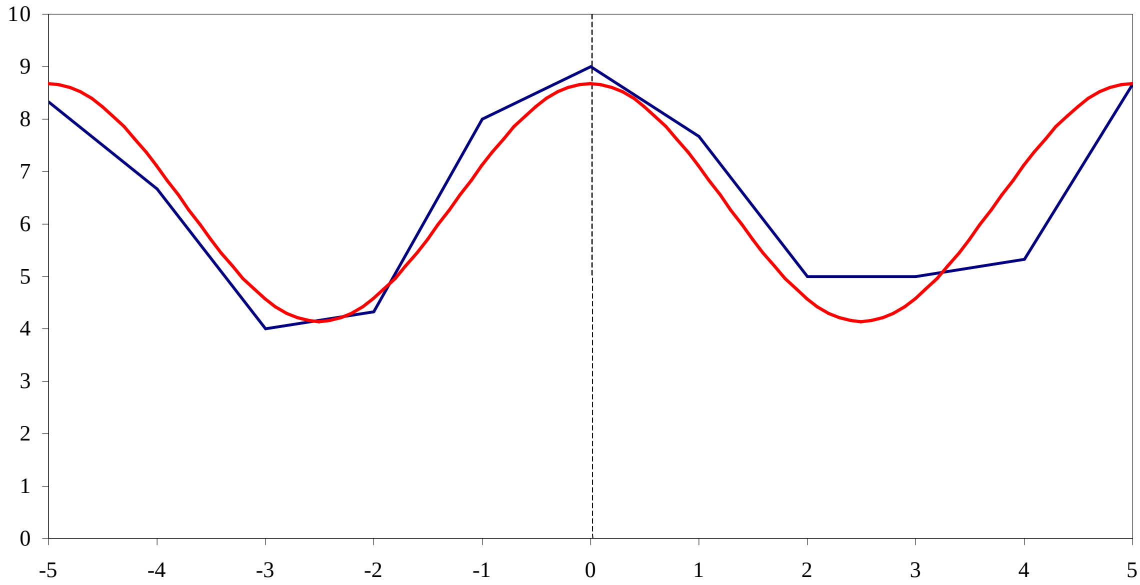


Figure 3.5.1.

The octant of the 89-day cycle in the Lukács family

We can state without doubt that the frequencies at the octant (at the two ends of the horizontal axis) and 16th (in the middle of the axis) stand out of their environment – if we expected 89 to be divided into 16 rather than 8 parts unlike shorter cycles. (The octant places obviously include quartile, bisecting and whole 89 places too.)

There may be biorhythm numbers, which function in both families with many children (2288 and 423) and in the 273-day pregnancy period too. Such number is 109, because:

$$21 \cdot 109 = 2288 + 1$$

$$31 \cdot 109 + 1 = 4 \cdot (2 \cdot 423 - 1)$$

$$5 \cdot 109 + 1 = 2 \cdot 273$$

We can examine the data of the two families “in bulk” according to cycle number 109. The aggregated conception and birth data of the two families both in respect of the father and the mother is regarded as the units of the same population.

Table 3.5.2.

Bisecting concentration of the frequencies of the two families with many children according to the 109-day cycle

S	*V*	*L*	*T*	*Mix*	*5t*
0	0	0	0	0	5
1	0	2	2	2	6
2	0	2	2	2	8
3	1	1	2	2	8
4	2	0	2	2	8
5	1	1	2	0	9
6	1	2	3	2	9
7	1	0	1	3	10
8	0	1	1	2	12
9	1	0	1	3	11
10	1	0	1	2	11
11	0	3	3	1	12
12	1	1	2	3	10
13	2	0	2	3	9
14	1	2	3	1	9
15	0	1	1	1	6
16	1	1	2	1	4
17	1	0	1	0	4
18	0	0	0	1	4
19	0	3	3	1	4
20	0	0	0	1	7

S	*V*	*L*	*T*	*Mix*	*5t*
21	0	1	1	1	10
22	0	0	0	3	11
23	0	0	0	4	11
24	0	1	1	2	12
25	0	0	0	1	13
26	1	1	2	2	12
27	3	0	3	4	12
28	2	0	2	3	12
29	1	0	1	2	10
30	1	0	1	1	8
31	1	0	1	0	7
32	1	2	3	2	6
33	0	0	0	2	6
34	0	1	1	1	6
35	1	1	2	1	5
36	1	1	2	0	6
37	0	0	0	1	7
38	0	0	0	3	6
39	0	1	1	2	7
40	1	0	1	0	7
41	1	0	1	1	4
42	1	0	1	1	2
43	1	1	2	0	2
44	0	0	0	0	1
45	0	1	1	0	0
46	0	1	1	0	1
47	0	0	0	0	2
48	1	1	2	1	2
49	1	2	3	1	3
50	1	0	1	0	5
51	1	0	1	1	7
52	0	0	0	2	9
53	0	3	3	3	12
54	0	0	0	3	13
55	0	2	2	3	12
56	0	2	2	2	10
57	0	0	0	1	8
58	2	1	3	1	6
59	2	1	3	1	4
60	1	0	1	1	4
61	1	2	3	0	5
62	0	1	1	1	7
63	0	0	0	2	8
64	1	0	1	3	8
65	1	0	1	2	8
66	0	4	4	0	7
67	1	0	1	1	4
68	2	2	4	1	4
69	1	1	2	0	6
70	0	0	0	2	7
71	1	1	2	2	8
72	1	0	1	2	8
73	0	1	1	2	6
74	0	2	2	0	4
75	0	1	1	0	3
76	0	0	0	0	2
77	0	0	0	1	3
78	0	0	0	1	4
79	0	1	1	1	5
80	0	1	1	1	5
81	3	0	3	1	5
82	3	0	3	1	5
83	1	0	1	1	5
84	1	0	1	1	6
85	0	0	0	1	6
86	1	1	2	2	5
87	1	1	2	1	4
88	0	1	1	0	4
89	0	0	0	0	3
90	1	1	2	1	3
91	1	1	2	1	4
92	0	0	0	1	4
93	0	1	1	1	4
94	1	0	1	0	5
95	1	0	1	1	6
96	1	0	1	2	8
97	1	0	1	2	10
98	0	1	1	3	10
99	0	0	0	2	9
100	0	1	1	1	8
101	0	1	1	1	6
102	1	0	1	1	4
103	1	1	2	1	5
104	0	2	2	0	7
105	1	0	1	2	7
106	1	0	1	3	6
107	0	2	2	1	6
108	0	1	1	0	6
Amount	*68*	*76*	*144*	*144*	*720*

<u>Chart of symbols</u>

S	serial No.
V	the Varga family's frequencies
L	the Lukács family's frequencies
T	Total frequency (V+L)
Mix.	Mixture: serial numbers 55, 56, 57, etc. are inserted between 0, 1, 2, etc.
5m	five-member moving sum from the previous one

The first step of reduction (also taking into consideration that 109 is an odd number) is "alternate stepping". The 55th day, which is half a day after the bisector, is put between the 0th and the 1st data, the 56th day is put between the 1st and the 3rd data, and so on. From the totalled and mixed data of the two families a five-member moving sum is calculated. Figure 3.5.2. shows the last column of the table. What we see is the picture of the bisecting data line "dressed up" as number 109. In the middle we see the average picture of the two "real" quartiles, on the sides there is the average of the bisecting blocks, at the usual quartile points there are octants, and at the octant points there are 16th.

There is a dent on the two sides of the diagram. If the sectors on the sides are joint together, we may have to imagine an extensive block, which is dented in the middle and the sides of which merge into the neighbouring 16th points. The 16th point to the right of the centre of the figure also shows a church with two steeples.

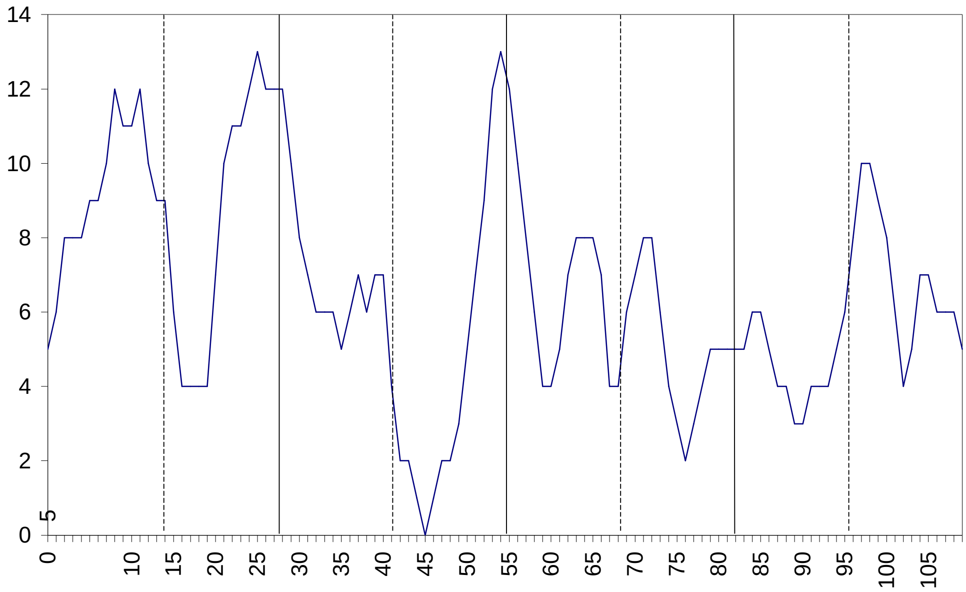


Figure 3.5.2.

The bisecting concentration of the 109-day cycle with five-member moving sums

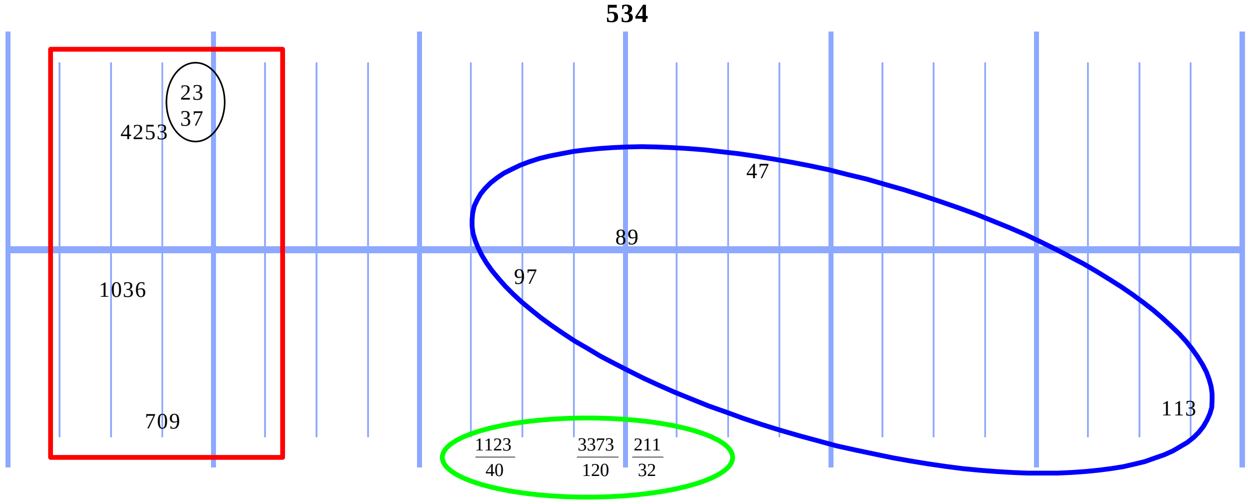
3.6. The biorhythm of choosing partners, triangles

3.6.1. The Lukács couple

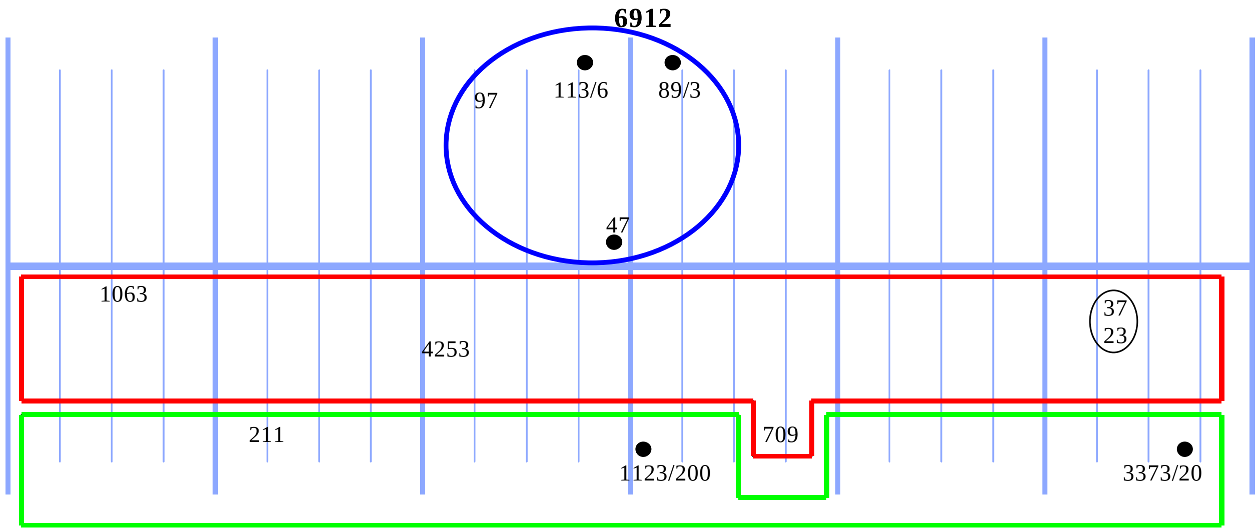
What brought the Lukács couple together? All I know about it is what biorhythm tells me. I also obtained the dates of birth of the grandparents in the Lukács family. These are the following:

Father's father	Ernő Lukács	19th July 1906
Father's mother	Anna Risvay, Mrs. EL	31st January 1905
Mother's father	János Csath	21st April 1905
Mother's mother	Anna Kocza, Mrs. JCs	24th March 1924

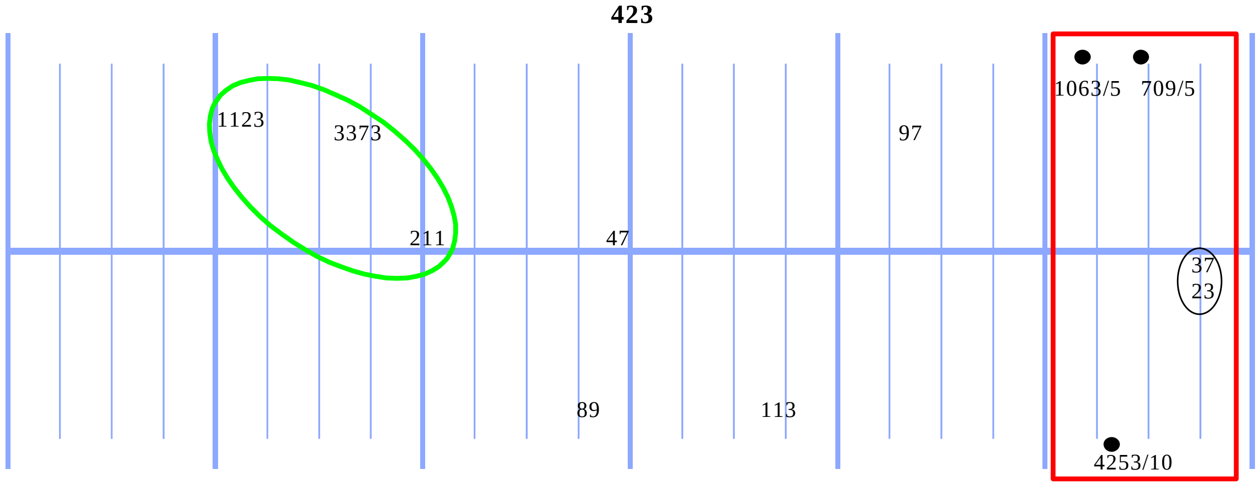
The age difference between the father's parents is 534, where the mother was older. In the case of the mother's parents the father was 6912 days older. (See figure 3.6.1.)



Grandparents on the father's side



Grandparents on the mother's side



Parents

Figure 3.6.1.

The biorhythm rendezvous of the Lukács couple

As we have pointed it out above all men and women instinctively try to choose partners, who fit in their own families from the aspect of biorhythm. The man with a heritage of a 534-day age difference between his parents and the woman with a biorhythm heritage of 6912 days found each other likeable, attractive even subconsciously, because there were important connections between numbers 534 and 6912, which can also be found in the *423*-day age difference between them.

The most important number in 534 (see figure 3.6.1.) is 89, which appears in 6912 near the centre, divided into three, and in 423 it appears quartered. The most important number of 423 is 47, which appears in 534 divided into 8 and in 6912 it appears divided into 16. In all three figures (bisecting, quartering, octant versions) we can see 97. It is a rate thing that the octant of a four-figure prime number can be found in two compared environments. In this case 4253 is a number like this in respect of the age difference between the parents of the father and the mother. 1123 and 3373 are two more four-figure prime numbers, octants, appearing in 423 (we can see that $3\cdot(1123+1)+1=3373$), and with larger dividers then can also be related to 534 and 6912.

We can also find numbers demonstrating the relationship between 534 and 6912 (e.g.: 709 and 1063), but it is not easy to prove their relationship with 423. They appear in the children's conception and birth data several times, maybe as a sign of that relationship with the ancestors can also be established directly and not only through the parents, that is the evaluation of such relationships is also a part of the process of finding partners.

Figure 3.6.1. shows the framed groups of the numbers. The numbers framed in a *rectangular* shape are identical in all three age differences. On the basis of these the proportion of the age differences between the two sets of grandparents is $1:13$, and taking into consideration the age difference between the parents the proportion of the three age differences to each other is $5:65:4$. The width of the rectangles in the three figures (the interval occupied by them on the horizontal axis) obviously suits the above proportions.

What we see here is the biorhythm background of how a man and a woman found each other on the basis of an "attraction system". Maybe not everybody chooses their partner on such a well-founded basis from the aspect of biorhythm. But not many couples have 20 children either.

Apart from the fact, or as an indirect consequence of that biorhythm connections could be demonstrated between the age differences of the two grandparent couples (explaining the choice of partners in this way) according to certain signs "cross-pairing" the members of the two grandparent couples may also prove to be successful. Its spectacular manifestation is that the following stands with respect the age difference between the grandfather on the father's side and the grandmother on the mother's side:

$$6458+1=3\cdot 2153$$

that is if we add 1 to the age difference, we get three times the prominent prime number 2153.

I also had the chance to study the biorhythm relationship between the grandparents and their grandchildren in the Lukács family, as well as the intermediate link, the relationship of the parents to their own parents, of which we have already examined the connection between the differences governing from the aspect of choosing partners.

I was very happy to see the Lukács family in a television programme with András Kepes.

3.6.2. The heir to the throne

We can also examined how the heir to the British throne chose his partner. As we only have the data of the husband's parents, we could only make a figure of two parts. We can compare the two figures we have already drawn. Let us see the relationship between the two age differences in a table too.

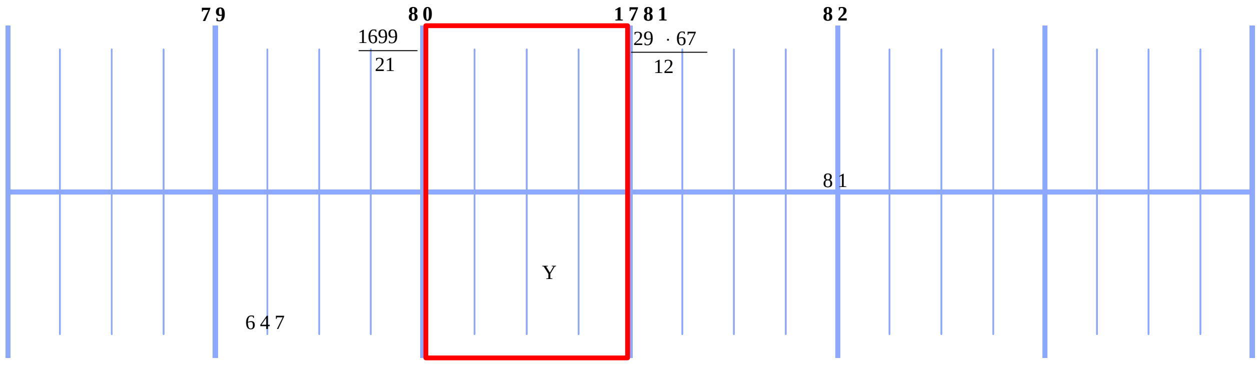
Table 3.6.1.

Comparing the age difference of Charles and Diana and the royal couple

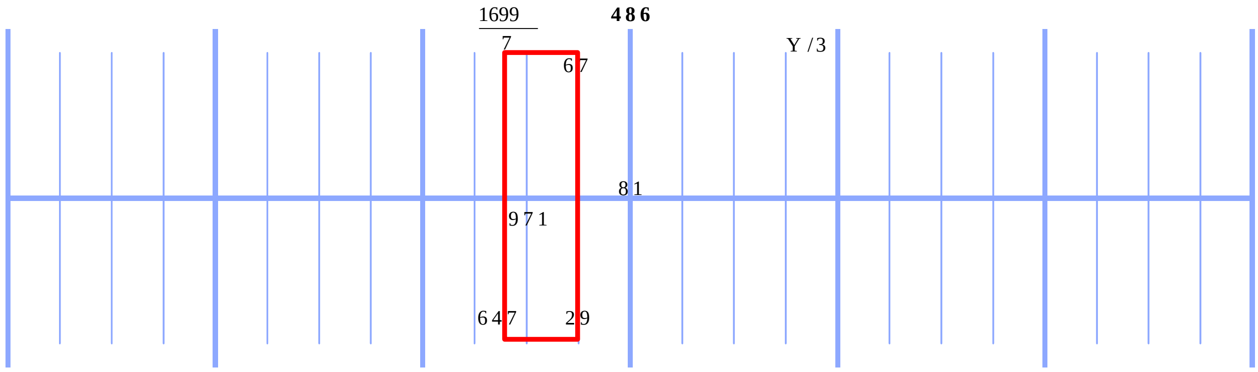
Age difference	$\frac{419}{4}$	$\frac{5\cdot7\cdot37}{16}$	$\frac{593}{9}$	$\frac{137}{3}$	$\frac{7\cdot28}{2}$	$\frac{3\cdot53}{5}$	$\frac{467}{16}$	$\frac{401}{18}$	$\frac{75}{4}$	$\frac{1187}{5\cdot14}$	$\frac{9\cdot827}{20\cdot28}$	$\frac{1153}{4\cdot28}$
4612	44	57	70	101	127	145	158	207	246	272	347	448
1781	17	22	27	39	49	56	61	80	95	105	134	173

We listed several biorhythm numbers (12) with two multipliers belonging to them each. In the top line the series “biorhythm number per divider” could be continued, e.g.: by $\frac{33}{4}$, apart from this some of the shown biorhythm numbers – with the same multipliers – could be replaced by new numbers. E.g.: apart from $\frac{419}{4}$ proportion $44:17$ (the 3rd one in the list) could also be represented by $\frac{839}{8}$ or $\frac{4\cdot131}{5}$.

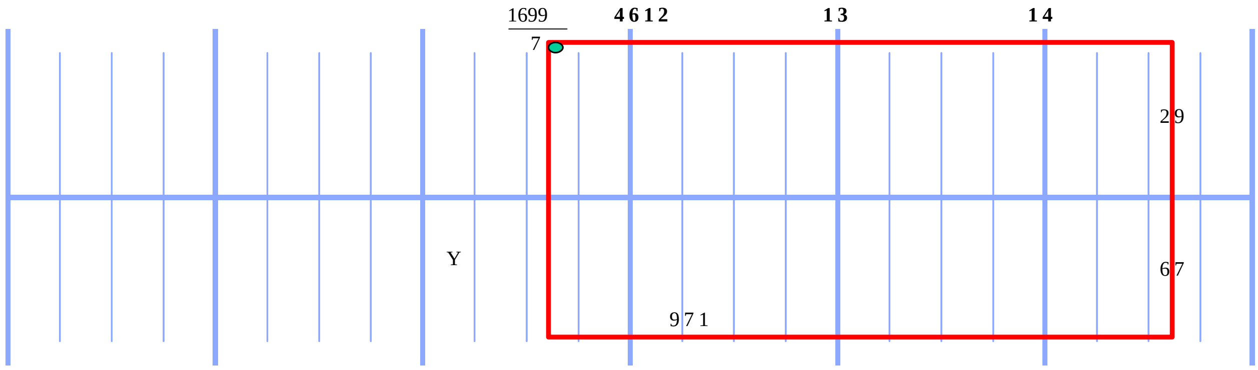
It is known that before his marriage Prince Charles had another partner, Camilla Parker Bowles (17th July 1947). Figure 3.6.2. shows the appearance of a few prominent cycles in the four age differences.



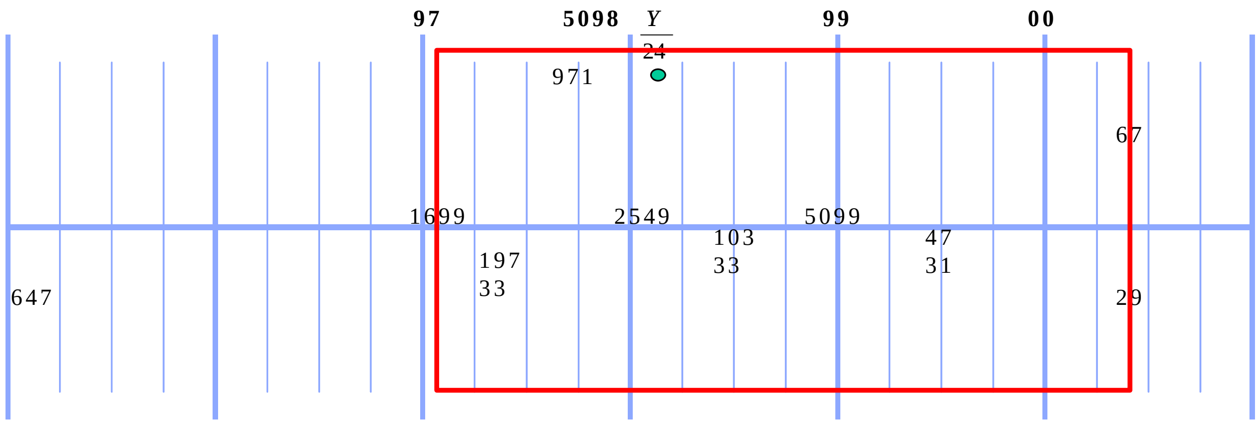
Charles's parents



Camilla-Charles



Charles-Diana



Camilla-Diana

Figure 3.6.2.

The age difference between Charles's parents and the age differences inside the triangle

In the interest of comprehensibility in the environment of the age difference of the royal couple (the age difference is 1871 days) an interval of 2.75 is highlighted. Its bottom border is shown by the low point of the 647 cycle, and the top border is shown by three times the 27-day cycle (from this point on we will talk about the 81-day cycle). A similar interval can also be found in the environment of the other age differences, which nicely demonstrates a close biorhythm relationship. In one case (Camilla – Charles 486) the top border coincides with the centre (with the place suiting the age difference), and to the left of this there is only a 0.75-day interval.

In the case of all four age differences the intervals are divided by prime number 971 in a proportion of 1:2, with dividers (2, 4, 6). 971 is in an internal interval the borders and other prominent biorhythm numbers of which can be found in the age difference of the two ladies (5098) mostly without a divider. In the case of the other three age differences the dividers mostly consist of prime numbers 3 and 7 or the powers of 2 and 3. This internal interval is shown in the table inside a rectangle. What we can easily see in the separated part of the large interval belonging to the 5098-day age difference "does not fit" in the drawing of the age differences with shorter intervals. In the case of the upper three age differences only the borders of the internal interval are given by showing the 1699 and the 29·67 biorhythm cycle. (Those who study Table 3.6.2. will also be able to imagine the cycles left out.)

We must mention the 81-day cycle separately. In two cases the cycle starting point is rather far from the centre (at a distance of 5 days). As the multipliers are the same here as in other cycles shown, it has a place here too. Its necessity is also supported by the circumstance that in the case of the two large age differences the 15th 16th preceding the 81 starting point precedes the centre by one 16th (see the 16th point). Obviously 81/16 results in other multipliers than the ones belonging to 81 as a whole number. In the figure there is an "astronomical" cycle, the year (Y), and a ratio of it. In two cases there is an eighth of a year, and in one case there is a third of a year, in the case of 5098 the age difference that can be compared with the eighth of a year is the product of 8 and 3 (24), and the age difference of the royal couple and the couple of Charles and Diana can be compared with an eighth of a year proportion of 29:101.

Table 3.6.2.

The dividers of biorhythm numbers with the same multiplier in the case of the four age differences

Age difference	Days	Multipliers of common dividers	1699	23·197	971	2549	33·103	5099	13·137	29·67	81
Philip-Elisabeth	1781	22	3·7	4·7	2·3	9·7	3·7	9·7	1	4·3	1
Camilla-Charles	486	6	7	4·7	2	3·7	3·7	3·7	11	4	1
Charles-Diana	4612	57	7	8·7	4	9·7	2·7	3·7	2·11	8	1
Camilla-Diana	5098	63	1	8	4	1	2	1	2·11	8	1
Common divider			3·7	8·7	3·4	9·7	6·7	9·7	2·11	8·3	1

The common root of the four age differences can be revealed with respect to the sphere of validity of the multipliers according to the above table. It is the 1-day interval between 647 and 648 (that is 80·81), which is shown in Figure 3.6.3..

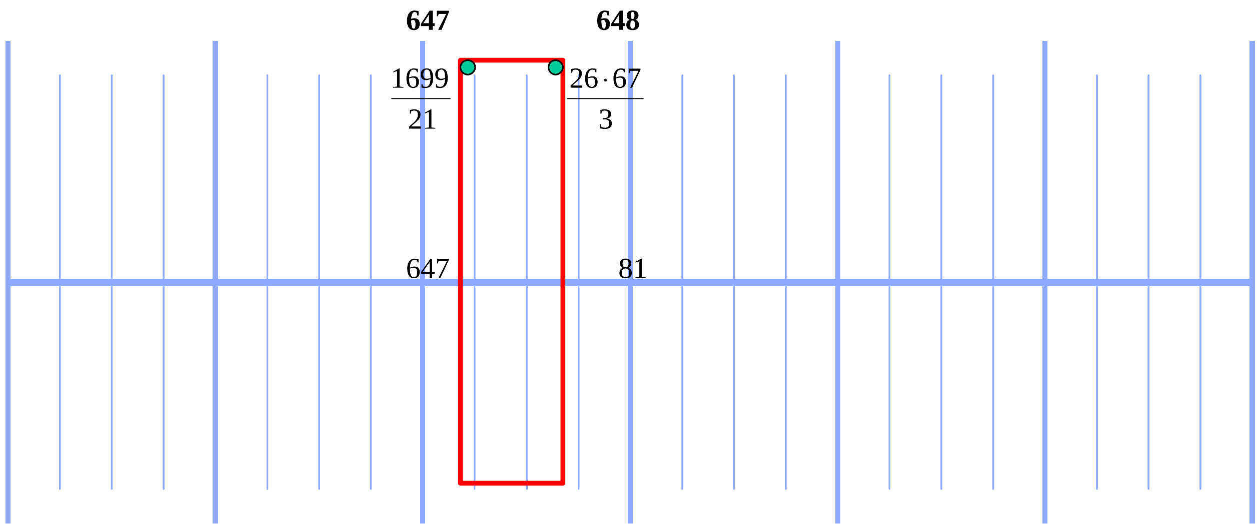


Figure 3.6.3.

The root of the four age differences

The picture would be complete, if the age differences between the ladies' parents would also be taken into consideration. Here we can only state that Prince Charles took into consideration his parents' "biorhythm message" in both cases.

One more interesting thing: the direct connection between the top and the bottom data of Figure 3.6.2.:

$$229 \cdot 1781 - 1 = 8 \cdot (10 \cdot 5098 + 1)$$

It may be interesting to compare more love affairs or friendships of the same person on the basis of biorhythm. Below we shall study cases similar to the "Charles-triangle". I do not examine (I do not know) the parents' age difference, I compare the biorhythm with respect to the two alternative partners in each case.

3.6.3. The Flóra-triangle

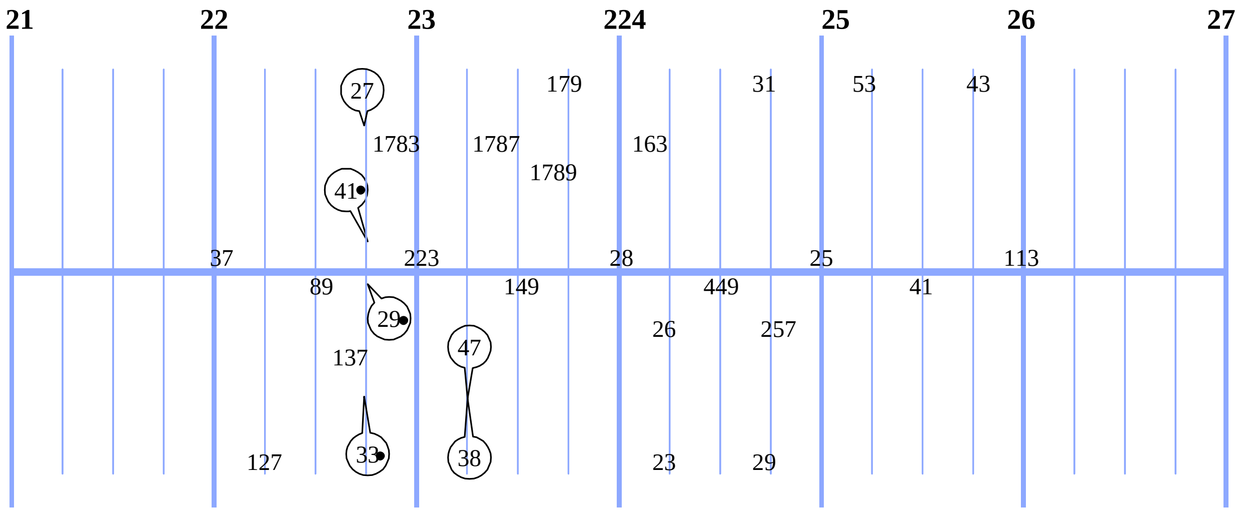
The members of the first triangle are Gyula Illyés (2nd November 1902), Attila József (11th April 1905) and Flóra Kozmutza (21st November l905).

If we calculate the age differences we get a slightly surprising result – allowing one-day deviations – that two age differences are whole-number multiples of the third one. With the help of prime number 223 we reveal the following relationship:

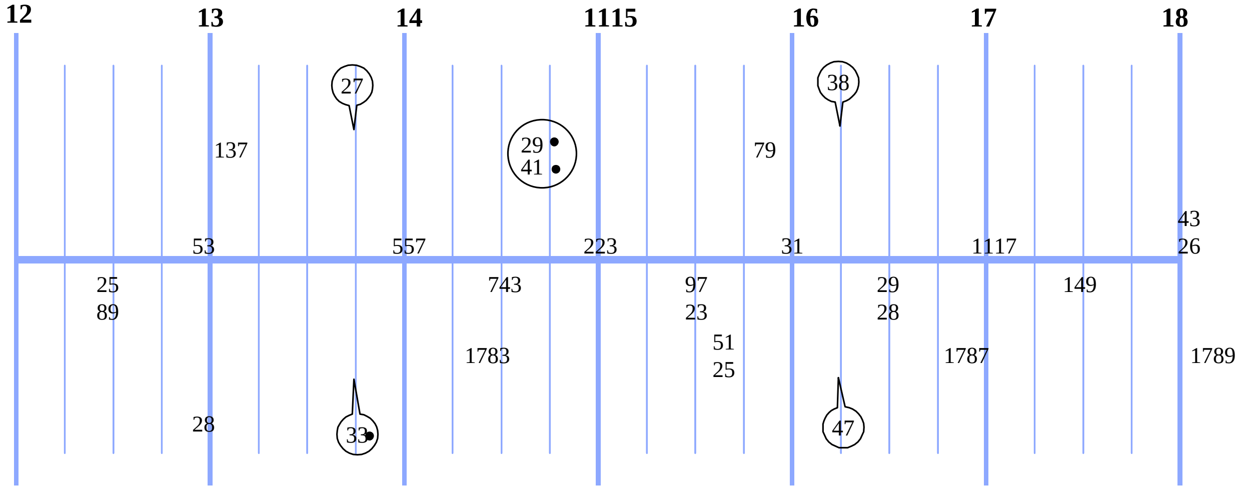
Attila was	224 = 1 · 223 + 1	days older than Flóra
Gyula was	891 = 4 · 223 – 1	days older than Attila
Gyula was	1115 = 5 · 223	days older than Flóra

It is interesting to state that the emotional cycles of Flóra and Attila coincide as $224 = 8 \cdot 28$. At the same time the intellectual cycles of the two poets were the same too as $891 = 27 \cdot 33$. However, it may be more important that the ±1-day coincidence of the 223-day cycle in the "Flóra-triangle" and the joint appearance of a few further longer cycles – related to the 223 cycle

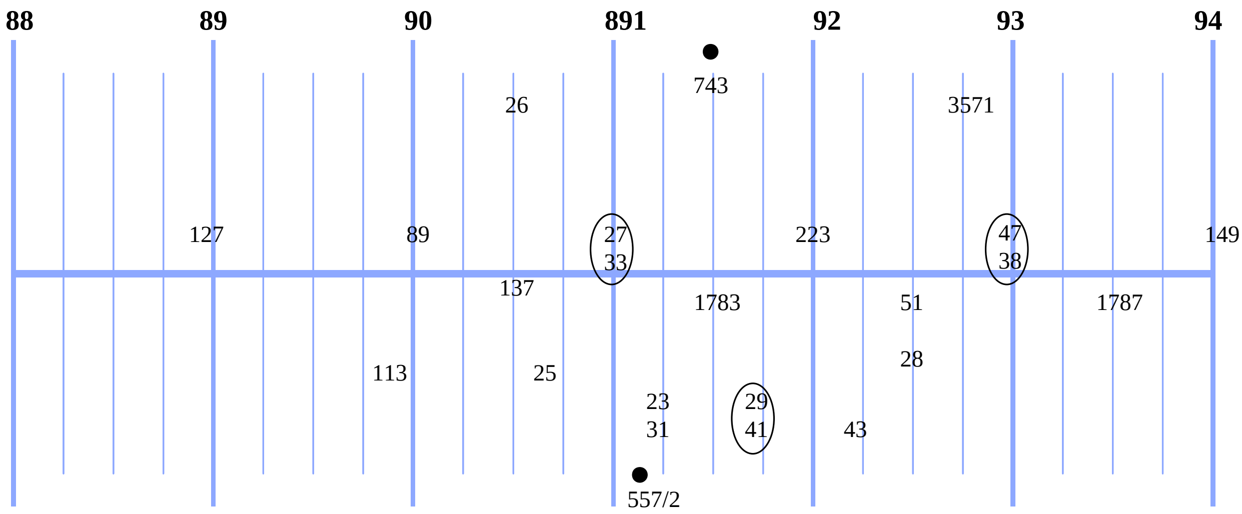
– (743, 1873, 1117 etc.) with the co-operation of dividers. The circled numbers seem to play a role similar to larger biorhythm numbers.



Attila-Flóra



Gyula-Flóra



Gyula-Attila

Figure 3.6.4.

The Flóra-triangle

The book written by Mrs. Gyula Illyés “On the last months of Attila József” contains a lot of diary records, which make it possible to study the biorhythm background of the personal relationship first of all between Attila and Flóra and also in the complete triangle. This background means that on days mutually critical from the aspect of biorhythm they may show a stronger inclination to settle their affair. Probably the main thing here is not that on such days they could settle their “affair” more successfully (from the aspect of which party?), but it can be expected that *both parties turn to the other one so that they are more prepared emotionally than at other times.* Whether the “problem” can be solved or not could be manifested better than in the case of a more indifferent biorhythm situation. Reconcilement, arguments, breaking up tend to take place on critical days.

For example Mrs. Gyula Illyés describes a case when Attila József – in an advanced stage of his illness, on 28th October 1937 – started to strangle Flóra. On page 110 of the book we can read the following:

“When I entered he stepped up to me excitedly. What is between me and dr. Bak? He asked a lot of questions about Gyula Illyés. Does he love me? And d I love him? He will divorce his wife and marry me! I tried to calm him down but I couldn’t. When finally I wanted to leave he ran after me, burst out in tears and tried to hold me back. Then suddenly – as I was sitting in the armchair – from behind he put both his hands around my neck very strongly and wanted to strangle me. His grip was so strong that everything went black in front of my eyes, I could not even utter a sound.”

Let us see the biorhythm state of the strangler and the strangled person as well as the person subconsciously strangled on this day, when Attila was 11888 days old, Flóra was 11664 days old and Gyula was 12779 days old.

One of the factors of Attila’s age is 743, which is already known. In the other two items of data it appears as a quintile or decimal. Two days later product $29 \cdot 41$, which is also known already, appears. Counting with 743 the proportion of the three ages on 28th October, starting with Flóra and ending with Gyula is 157:160:172. With respect to the two men this proportion can be simplified to 40:43, and this is what we directly get with the help of $29 \cdot 41$. (The proportion that can be characterised with smaller numbers is “better”.) These proportions can be supported not only with 743 but also with other numbers.

The strangling took place on a day when Attila had a “Flóra-day” and (necessarily) a “Gyula-day” at the same time.

The diary of Mrs. Gyula Illyés gives us the idea to explain other dates too. We do not deal with it here.

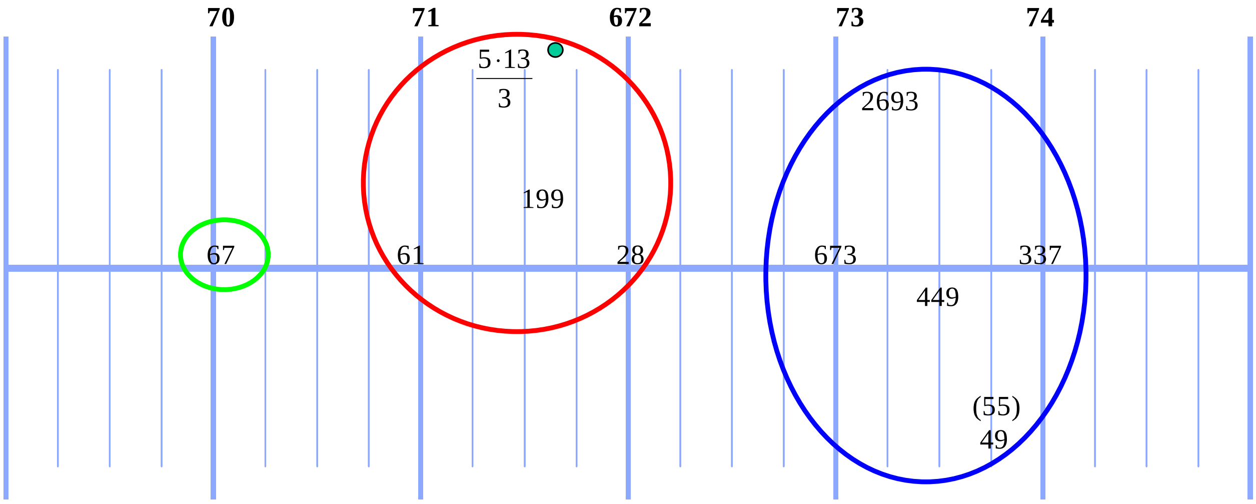
3.6.4. The Fellini-triangle

A newspaper article (Népszabadság, 2nd December 1995, Csaba Nagy: “Gombócka mesél”) called my attention to another affair including a man and two women this time, which I refer to as the *Fellini-triangle* (Frederico Fellini, 20th January 1920). Luckily the author also stated the necessary dates. According to this the famous film director (“the most faithful faithless husband”) beside his wife Gulietta Masina (22nd November 1921) also had a secret lover, Anna Giovannini (25th November 1915) (“the sense of his life, the inspirer of his art”) for 36 years. The 80-year-old Anna published her secrets.

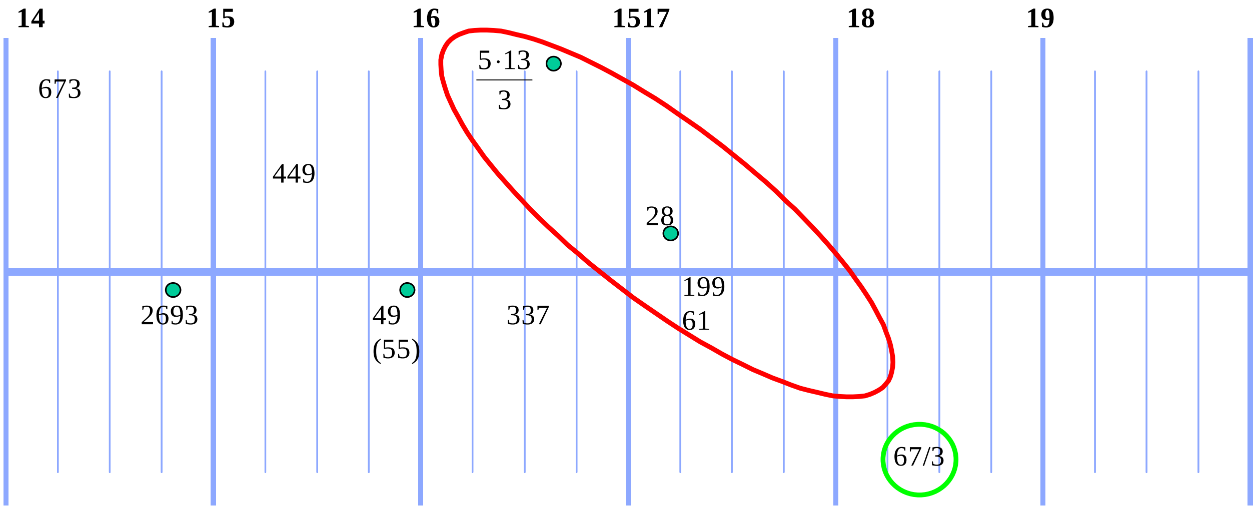
The three age differences (Anna-Gulietta

Figure 3.6.5.):

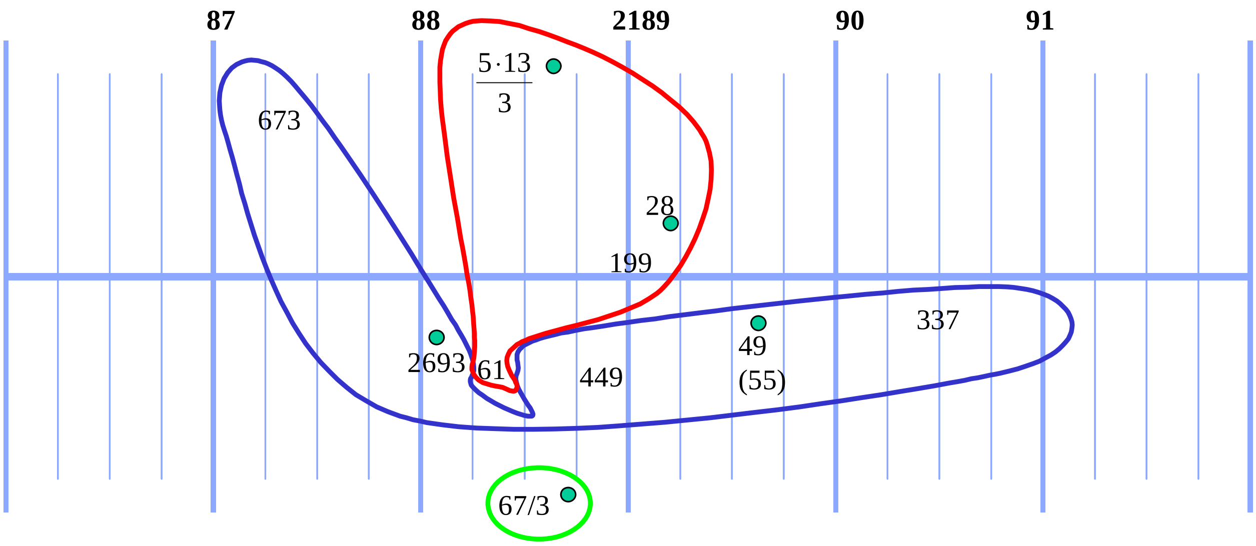
Frederico - Giulietta	672 days
Anna - Frederico	1517 days
Anna - Giulietta	2189 days



Federico-Gulietta



Anna-Federico



Anna-Gulietta

Figure 3.6.5.

In the drawings only the cycles are shown, which play an important role in the comparison, and certain groups of numbers are circled to make it easier to realise outstanding similarities. In the upper part of the diagram on the basis of the 5 types of cycles in the 673-674-day interval the age difference of the two women with respect to Fellini shows a proportion of 4:13, and so the proportion of the age difference between the wife and the film director is 9. (In the case of all three age differences these five numbers are circled with a blue line.)

The proportion 15:34:49 circled in blue is represented by two-thirds of the 67 cycle. The further cycles derive from the mixture of the proportions marked in blue and green. The mixed proportions are in the centre of the figure, the corresponding cycle numbers are circled in red. As compared to the figure of Fellini and his wife the circled cycles are in a reversed order in the figure of the director and his lover.

As Anna is older and Giulietta is younger than Federico, the age difference between the two women equals the amount of the two age differences above (interpreted without a positive or negative sign). It corresponds to the central position of each one of the three groups at the bottom of the figure. The groups "are sitting in each other's lap". (The blue group is extended, because the age difference itself is bigger than the former age differences.) Fellini chose two "identical" women from the aspect of biorhythm – this is what turns out of the figure.

It is an interesting accident that the age difference between Anna and Giulietta is the same as the age difference between the Petőfi couple. In both figures biorhythm numbers 61, 199, 337 and 449 can be found. Apart from these different numbers are significant here and there. In the present case 2189 must also be "suitable" as the amount of two other age differences.

From what Anna says it is known that Guiletta knew about Anna. According to the author of the newspaper article referred to "Giulietta .... undertook this too ... Probably the question why will never be answered… There was a place in Fellini's part for both women." The question why may (partly) be answered with the help of biorhythm.

3.6.5. The Ady-triangle

The members of the triangle are the poet, his wife Berta Boncza (Csinszka) and his lover Adél Brüll (Léda). I also use the age difference between Ady's parents, unfortunately I do not know the dates of birth of Csinszka's or Léda's parents. The dates of birth taken into consideration are:

Lőrinc Ady	15th August 1851
Mária Pásztor	4th July 1858
Léda	1st September 1872
Endre Ady	22nd November 1877
Csinszka	7th June 1894

For the age differences see in the next table and with the help of figure 3.6.1.

Table 3.6.3.

Ady's parents and the Ady-triangle

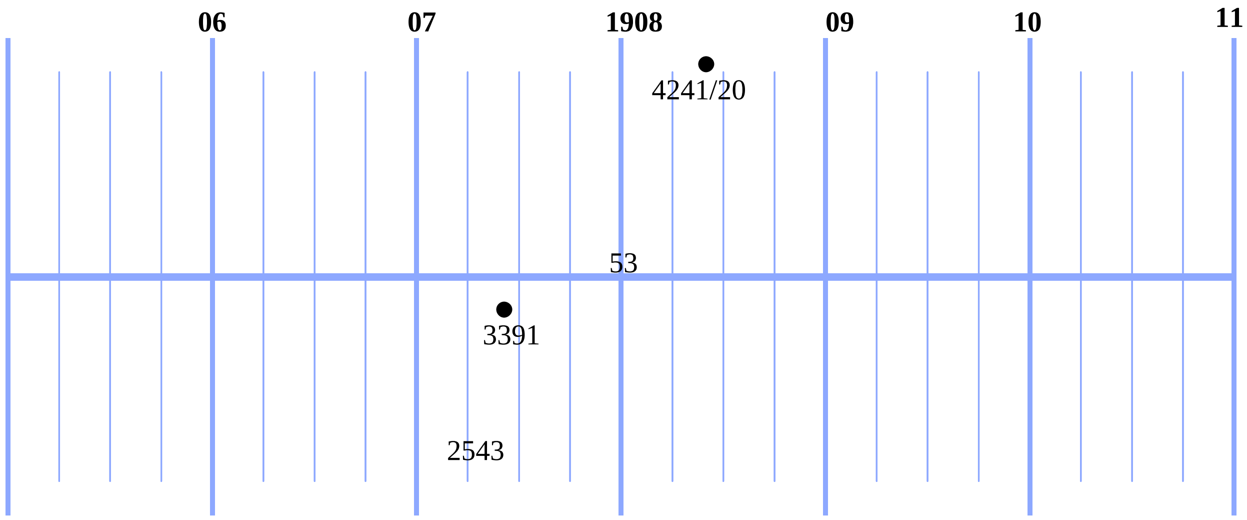
Name	Age diff.	$\frac{53}{2}$	$6\cdot53$*	$\frac{5\cdot53}{2}$	$\frac{27\cdot31}{2}$	$\frac{503}{5}$	$\frac{607}{21}$	$\frac{38}{4}$	$\frac{353}{40}$	$\frac{353}{8}$	$\frac{521}{6}$
Ady's parents	2515	95	-	19	6	25	87	265	285	57	29
Léda-Ady	1908	72	6	-	-	19	66	201	216	-	22
Ady–Csinszka	6041	228	19	-	-	60	209	636	685	137	-
Csinszka–Léda	7949	300	25	60	19	79	275	837	901	-	-

*With the same multipliers $\frac{2543}{8}$, $\frac{3\cdot3391}{32}$, $\frac{3\cdot4241}{40}$ too.

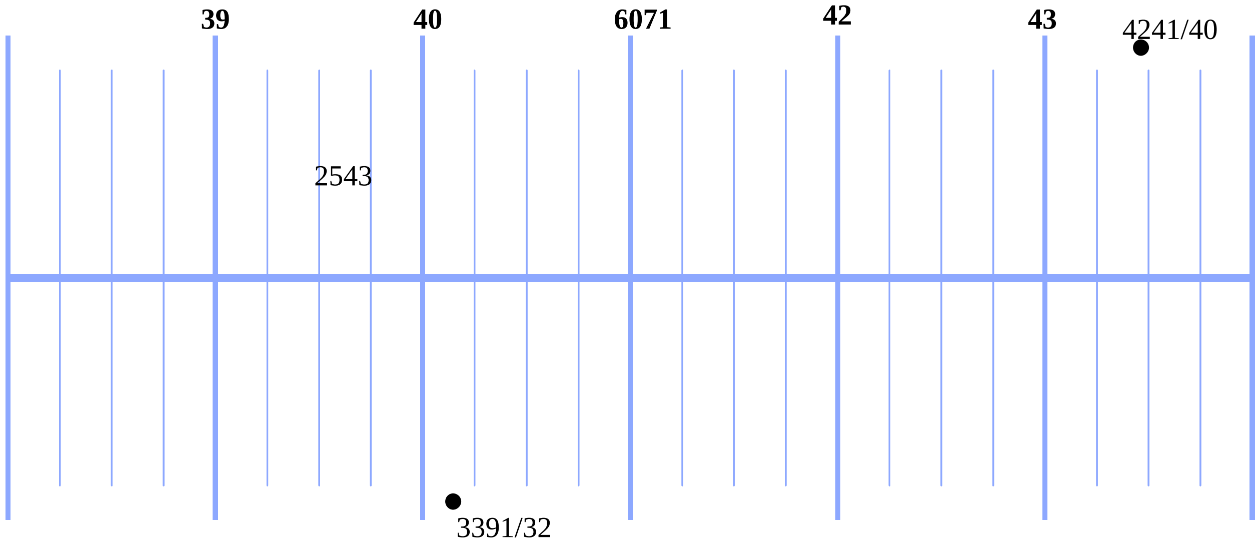
Let us highlight five B numbers: 38, 53, 503, 353, 607. The five numbers are closely related to each other. Each of them can be "explained" with 53 and even 503, according to the following:

$$7\cdot38=5\cdot53+1 \qquad 57\cdot353=40\cdot503+1$$
$$3\cdot353=20\cdot53-1 \qquad 29\cdot607+1=35\cdot503-1$$
$$2\cdot503=19\cdot53-1 \qquad 53\cdot38-1=4\cdot503+1$$
$$42\cdot607=481\cdot53+1$$

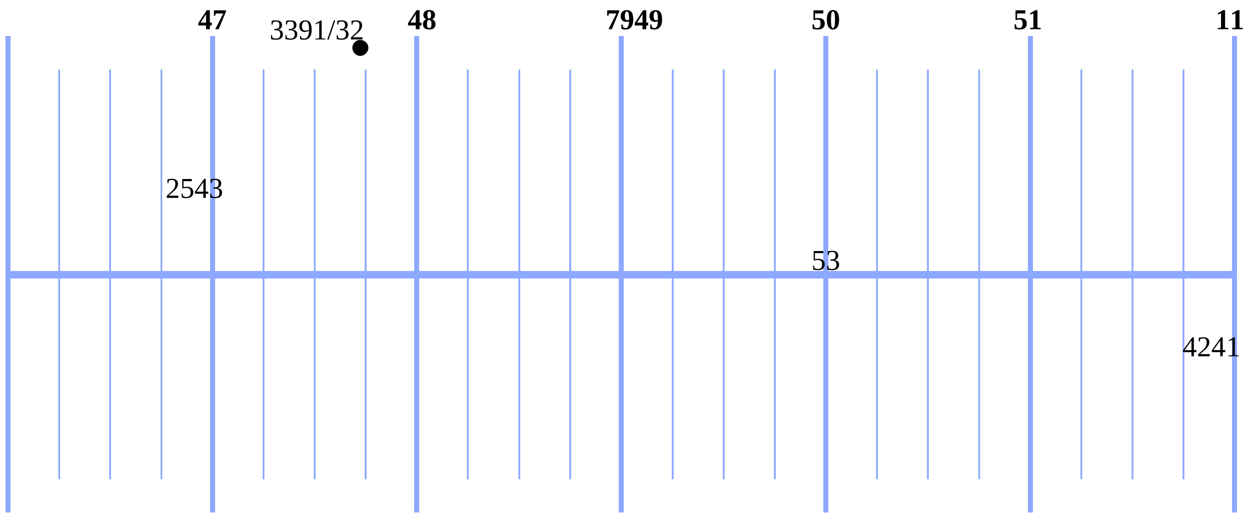
On the left the other four numbers are deduced to 53, on the right there is one line less, because 53 and 38 are explained together with 503.



Léda-Ady



Ady-Csinszka



Léda-Csinszka

Figure 3.6.6.

The Ady-triangle, four B numbers with identical multipliers

Léda-Csinszka

Figure 3.6.6. shows the four biorhythm numbers, which characterise the age differences of the Ady triangle (and the age difference between the Ady parents not shown here) with the same *m* series. The other three numbers can be deduced to 53 again.

$$2543 = 48 \cdot 53 - 1$$

$$3391 = 64 \cdot 53 - 1$$

$$4241 = 80 \cdot 53 + 1$$

On the left side of the balances there are no multipliers, and the identical character of the *m* series is due to this.

Endre Czeizel in his book “Költők, gének, titkok” [Poets, genes, secrets][33] (p 115) says that Ady was the father of Léda’s daughter born still in Paris. I think it is also demonstrated by biorhythm (rather spectacularly), although I would say that the day of conception is a few days earlier than written in the book (26th November instead of 4th December).

In table Table 3.6.4. I show the biorhythm situation of the day of conception and birth in the case of the mother and the assumed father and in the case of their age difference. I think that the appearance of the known numbers related to biorhythm number 53 is rather convincing, in certain cases with a small divider[34].

The message of Ady’s parents was also received by their still-born grandchild. It would be useful to see the data of Léda’s parents.

Table 3.6.4.

The biorhythm of the events in Paris

Name	No. of days	$\frac{2 \cdot 607}{21}$	$\frac{2543}{12}$	$\frac{3391}{16}$	$\frac{4241}{80}$
Age difference between parents.	1908	33	9	9	36
Ady, conception	10595		50	50	200
Ady, birth	10868	188			205
Léda, conception	12503		59	59	
Léda, birth	12776	221			241

3.7. Summary

In part 3 the assumed role of biorhythm was significantly extended. On the basis of the success of statistical experiments performed for certain heuristic reasons further brave hypotheses “had to be tucked” under the statistical results.

Dealing with dreams we also assumed that subconsciously people perceive each other’s biorhythm and they also know which they of their life they are living. They also “calculate” the age difference and “register” its biorhythm content. In part 3 we came to the conclusion that the date of a child’s conception and birth suits the biorhythm of the parents’ age difference (and consequently to the biorhythm of their parents and close relatives). Biorhythm influences (beside other factors) the choice of partners. Men and women (subconsciously) look for partners with whom they have a similar biorhythm relationship as with their parents or with their relationship to the parents’ age difference.

It may be necessary to emphasise it again that my astonishing hypotheses are not out of the blue sky, they were created as a result of undoubtedly irresponsible liberal thinking and experience, and they resulted in statistical demonstration from my aspect.

The connection between conception and birth was demonstrated with the age difference between the parents, with the help of figures and tables. Just like in the case of dreams individual examples

33 Dr. Czeizel, Endre: Költők, gének, titkok. A magyar költőgéniuszok családfaelemzése. [Poets, genes, secrets. Family tree analysis of Hungarian poet geniuses] Galenus Kiadó, 2000.

34 In the baby’s four items of data 2543 appears once with 6 as a divider, once with 12 as a divider, 3391 appears once as 8 as a divider and once with 16 as a divider, 4241 appears once with 16 as a divider. The largest divider appearing is 84 in the case of 2543. The 607/21 characteristic of Ady’s parents also appears at the baby girl’s birth, multiplied by 2 similarly to the two parents.

can be doubted. For this reason statistical demonstration was used here again. In the course of examining the 89-day cycle the data of one of the large family's was used, and the data of both large families was used in the course of examining the 109-day cycle. The examined population was also increased by including the father's and the mother's conception of birth data in the examination, and so the number of data was multiplied by 4. The question can be asked whether this kind of multiplication was correct. As number 89 is present in the age difference and 109 is present in the pregnancy period, the 4 items of data of the individual children behave depending on each other anyway. However, it only guaranteed that the different items of data of a child were at half a cycle, a quarter of a cycle, etc. distance from each other, but it did not guarantee that they were at a bisecting, quartile, etc. place. But this is what happened here.

The octant of the 89-day cycle and the bisector of the 109-day cycle was made. Continuing the examination of 109 octant concentration could also be performed here. If we take away 1 from 109, we get a number that can be divided by 8: 109-1=8·27, leaving out one frequency (let it be 5 belonging to $x = 0$, as a result of which the total data will be 715 instead of 720) we can make a line of 27 members. The different items of data at a distance of 27 days are added up in the last column of table 3.5.2. Frequencies with serial No. 1, 28, 45, 72 are allocated to $x = 1$, frequencies with serial No. 2, 29, 46, 73 are allocated to $x = 2$, and so on. The "denominator" will always be the serial number of the first added numbers. See table Table 3.7.1..

Table 3.7.1.

The octant concentration of the 109-day cycle taken from the two big families

x	*Amount*	*X*	*Amount*	*x*	*Amount*
1	35	10	30	19	19
2	33	11	30	20	19
3	30	12	28	21	19
4	27	13	25	22	21
5	24	14	23	23	26
6	23	15	22	24	30
7	25	16	23	25	33
8	27	17	23	26	35
9	28	18	21	27	36
				Total	*715*

The results received are shown in Figure 3.7.1. On the two sides of the diagram there is the octant block, in the middle there is the 16th with a little dent in the middle. The picture seen cannot be doubted. What we intended to prove with it is that biorhythm starting from birth contributed to determining the date of the children's conception and birth.

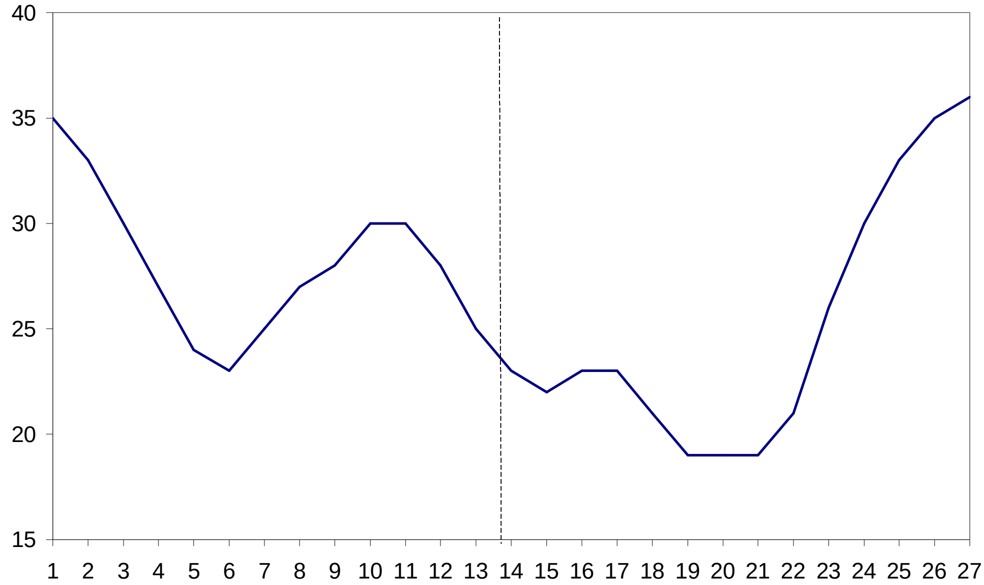


Figure 3.7.1.

Octant concentration in the 109-day cycle of the two big families

We had two aims by examining the connections of several *A* numbers in a few large figures:

1. It was demonstrated in connection with a certain person's choice of several partners that it suited the biorhythm relationship of the person's own parents (triangles).
2. In the course of the examination we tried to find the antecedents on both sides (the biorhythm rendezvous of the Lukács couple).

Here I must call my readers' attention to that the latter aim can be regarded as "evidence No. 1" from the aspect that so many accidents should happen to mislead us. In both cases the *A* numbers "suit" each other from the aspect of biorhythm. However, in the case of the triangles only two *A* numbers, the age difference between the denominator of the triangle and the two alternative persons should be "naturally" similar to each other, the third age difference (the age difference between the two chosen people) are more or less automatically similar to each other. In the case referred to as a rendezvous (figure 3.6.1.), if biorhythm did not play a role, then all three age differences should be "accidentally" similar to each other in the interest of successful self-deception.

In lottery we can calculate the number of coupons needed to get all the numbers right for certain once. If the author regarded his research work as playing lottery, he could say: I did not fill in many coupons, and I still got all the numbers right quite a few times.

4. Annex

4.1. Biorhythm drawings and balance

How to make biorhythm drawings? Let us see it in connection with the example of the age difference of the Petőfi couple. In the figure only the B numbers included in the explanation below are shown.

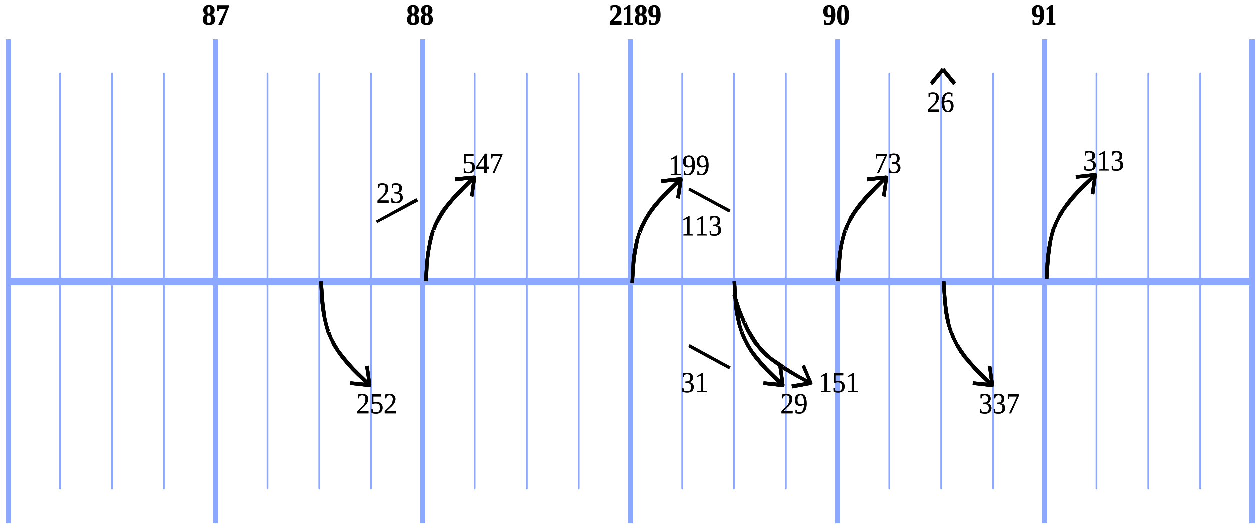


Figure 4.1.1.

The age difference of the Petőfi couple

We can start in two ways:

1. The A number and the numbers of its close environment is divided by the smaller prime numbers.
2. The A number (and only this number) is divided by the known (assumed) B numbers starting from 23, and we continue working with the numbers modified to “whole” octants close to the fraction of the received result.

<u>First method:</u>

It can stated only by looking at it whether a given A number can be divided by 2 or 5. It is also easy to see whether it can be divided by 3. Then prime numbers between 5 and 23 can come. In the case of our example it turns out soon that

$$2188 = 2^2 \cdot 547$$

$$2189 = 11 \cdot 199$$

$$2190 = 2 \cdot 3 \cdot 5 \cdot 73$$

Now we can draw cycle-starting arrows 547, l99 and 73 in the figure. If it is not so easy to make a start, we should use the second method, and if it does not reveal everything, we can go back to the first method again, this time not only aiming at whole numbers, but also half, quarter and eighth numbers, using larger prime numbers as necessary.

<u>Second method:</u>

Looking for the appearance of B numbers 23, 25, etc. near A we can also reveal other B numbers. The following table shows the process of searching and revealing in the case of $A = 2189$, operating with B numbers $23-31$.[35]

Table 4.1.1.

Preparations before making the drawing

$A = 2189$

B	*A/B*	*Rounded*	*Divider*	*Place of sign*	*Multiplier*	*Prime numbers*	*Balance*
1	*2*	*3*	*4*	*5=1x3*	*6=3x4*	*7*	*8*
23	95.174	95.125	8	2187.875	761	761	$8(A-1)=761\cdot 23+1$
25	87.560	87.500	2	2187.500	175	$7\cdot 5\cdot 5$	$2(A-1)=7\cdot 25\cdot 25+1$
26	84.192	84.250	4	2190.500	337	337	$4(A+1)=2(337\cdot 13-1)$
27	81.074	81.125	8	2190.375	649	$11\cdot 59$	$8A=11(59\cdot 27-1)$
28	78.179	78.250	4	2191.000	313	313	$4(A+1)=4(313\cdot 7-1)$
29	75.483	75.500	2	2189.500	151	151	$2A=151\cdot 29-1$
31	70.613	70.625	8	2189.375	565	$5\cdot 113$	$4(2A+1)=5\cdot 113\cdot 31+1$

The sign of B in the 1t column in the biorhythm drawing should be put on the place shown in the 5th column, in the first line for example the appropriate octant of the 23-day cycle. The 3rd column tells us whether we should draw a starting or bisecting arrow, a quartering (upper or lower) cone or an octant. In the case of our example in the first line the first octant ascending diagonal line of the 23-day cycle is drawn in. The data of the 5th column is divided by the B numbers revealed in the 7th column and continue drawing in accordance with it.

In the simplest case the formula of the biorhythm balance is $A = B$. It means that the age data (age difference) to be examined is a prime number, which is generally regarded as a biorhythm number. If the A number is a multiple of a B number, then the formula of the balance is $A = mB$. If half, a quarter or eighth of B (or mB) ($d = 2, d = 4, d = 8$) creates the A number, then the formula of the balance is

$$aA = mB$$

and d divider is allocated to A as a multiplier “for the sake of” equality.

If B does not appear at the exact value of A but in its close environment, then plus or minus 1 appears on one side or both sides of the equation (a, $b = -1, 0, 1$), and so the more complete (but not really general) formula of the balance is

$$dA + a = mB + b\ .$$

[35] Here we only deal with d dividers according to the first three powers of 2. Obviously we can use other dividers analogously. The data in the 5th column of the table are created as the products of the appropriate numbers of column 1 and 2, and the 6th column is created similarly from columns 3 and 4.

As a result of the "co-operation" of 1-s represented by a and b with d and m the place of $\frac{B}{d}$ is "moved" by whole, half, quarter or eighth days in the environment of A. Breaking down the participating numbers into factors and using more brackets the situation can be even more complicated. We can see several examples of this in part 2 and 3.

Now that the readers have become familiar with the (bisecting, etc.) signs replacing and dividing sine curves, let us get rid of them. If in biorhythm drawings the numbers showing the length of the cycle are written in the network divided into quarter days on the places according to the introduced system without these signs, then – making smaller compromises – we can also interpret the message of our B numbers.

We keep the point sign of 16th. The ratios with dividers marked with a vertical arrow so far are also marked with a point from now on leaving out the arrow, and the point is put where the point of the arrow used to be. The new system of signs is used in the 3rd part of the book. The method followed in part 2 is regarded as "learning".

The compromise mentioned above is due to the fact that the d dividers are not always evident. The diagonal octant lines made it possible to distinguish all four possible results. Now only the position above and below the line is suitable for distinction. It must be pointed out that showing the 16th point and "other" d values was also ambiguous before. Now it is also true with respect to the octants. If the ambiguity is disturbing, we can settle the problem by performing a division by B.

First of all sign d should be explained of all the signs stated in the formula of the balance. The value of d (leaving d=1 out) is most often 2, 4 and 8, that is 2 at the power one, two and third. There may be higher exponents too. Prime number bigger than 2 can also appear as d dividers, such as 3, 5, 7, powers and products. In general: lower prime numbers, their powers and products can be used. I cannot determine the top limit of the number of "lower prime numbers" and factors and the extent of the exponents. We may say that "whole" numbers in the general sense can be used. In the decimal system $2 \cdot 5$ is a whole number with a "slightly higher" or high exponent. Whole numbers in the general sense are for example: 2^6, $2^3 \cdot 7$, 7^3, etc.

In the balances the m multiplier can be "any" number. If in the balance only one number is regarded as B (as in general), then in the m multiplier other B numbers can also be found (with their "rank" hidden) as multiplying factors.

Finally in order to make it easier for the readers to make a biorhythm drawing the following table contains prime numbers bigger than 7 and smaller than 1000.

Table 4.1.2.

Two and three-figure prime numbers

11	101	211	307	401	503	601	701	809	907
13	103	223	311	409	509	607	709	811	911
17	107	227	313	419	521	613	719	821	919
19	109	229	317	421	523	617	727	823	929
23	113	233	331	431	541	619	733	827	937
29	127	239	337	433	547	631	739	829	941
31	131	241	347	439	557	641	743	839	947
37	137	251	349	443	563	643	751	853	953
41	139	257	353	449	569	647	757	857	967
43	149	263	359	457	571	653	761	859	971

47	151	269	367	461	577	659	769	863	977
53	157	271	373	463	587	661	773	877	983
59	163	277	379	467	593	673	787	881	991
61	167	281	383	479	599	677	797	883	997
67	173	283	389	487		683		887	
71	179	293	397	491		691			
73	181			499					
79	191								
83	193								
89	197								
97	199								

4.2. Further death data

Depending on the topic actually dealt with in the three parts of the book we used different data of the data sets described in advance in chapter 1.2. The largest data set was the mortality data of KSH. We only used a small proportion of them. Below we give the absolute number material of further cycles, details and summaries put in tables. As a result of the arranged structure the tables may also contain overlapping as compared to what was said above..

Abbreviations used in the contents of the tables:

Years	**Short version**	**Sexes**	**Abbreviation**
1982	82	Men	M
1998	98	Women	W
1999	99	Altogether	A
2000	00		
1998-2000	3 years		
1982, 1998-2000	4 years		

Contents of the tables

Serial No.	**Years**	**Cycle**	**Sex**	**Age**
1.	82	23	M, W, A	6 age groups
2.	82, 98, 99, 00 3 years, 4 years	23	M, W, A	
3.	82, 98, 99, 00 3 years, 4 years	26	M, W, A	
4.	82, 98, 99, 00 3 years, 4 years	28	M, W, A	
5.	82, 98, 99, 00 3 years, 4 years	29	M, W, A	
6.	82, 98, 99, 00 3 years, 4 years	33	M, W, A	
7.	82, 98, 99, 00 3 years, 4 years	38	M, W, A	
8.	98, 99, 00 3 years	25	M, W, A	
9.	98, 99, 00 3 years	27	M, W, A	
10.	98, 99, 00 3 years	31	M, W, A	
11.	98, 99, 00 3 years	37	M, W, A	
12.	3 years	23	M, W, A	6 age groups
13.	3 years	26	M, W, A	6 age groups
14.	3 years	28	M, W, A	6 age groups
15.	3 years	33	M, W, A	6 age groups
16.	3 years	38	M, W, A	6 age groups

17.	3 years	23 and 28	M,	
18.	3 years	23 and 28	W	
19.	3 years	23 and 33	E	
20.	3 years	23 and 38	E	
21.	3 years	Moon/7	F, N, E	
22.	3 years	Year/40	F, N, E	
23.	3 years	Sun/875	F, N, E	

The number of processed and official KSH data

Years, sexes		**Age groups, year**						**Total processed data**	**Official KSH data**
		-20 **1**	**20-40** **2**	**40-60** **3**	**60-70** **4**	**70-80** **5**	**80-** **6**		
1982	M	1199	3687	16478	15363	24104	14167	74998	
	W	729	1550	8065	10405	23125	23342	67216	
	A	1928	5237	24543	25768	47229	37509	142214	
1998	M	678	3103	19146	16826	20393	13763	73909	74300
	W	429	1115	7993	9847	20548	26384	66316	66570
	A	1107	4218	27139	26673	40941	40147	140225	140870
1999	M	623	2898	19270	16383	21449	13674	74297	74641
	W	363	1045	8069	9962	21990	26895	68324	68569
	A	986	3943	27339	26345	43439	40569	142621	143210
2000	M	570	2680	17927	15596	19979	13355	70107	70475
	W	392	984	7666	9323	20829	25666	64860	65126
	A	962	3664	25593	24919	40808	39021	134967	135601
3 years	M	1871	8681	56343	48805	61821	40792	218313	219416
	W	1184	3144	23728	29132	63367	78945	199500	200265
	A	3055	11825	80071	77937	125188	119737	417813	419681
4 years	M	3070	12368	72821	64168	85925	54959	293311	
	W	1913	4694	31793	39537	86492	102287	266716	
	A	4983	17062	104614	103705	172417	157246	560027	

gg