Are the stabilizing and destabilizing influences of the planetary gravitational field on the structural formation of biological patterns real?

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Summary:
There is a series of indications which seem to offer evidence for the fact that the relatively weak fluctuations in the planetary gravitational field have a non-linear influence on structure-building processes.
Frequencies of the fluctuations, which remain relatively stable over long periods, show a correlation with biological structures. In order to describe these processes, we can use a correlation function displaying the stabilizing and destabilizing states with a certain probability. Correlations in the forming of structure of the human intelligence, the stability of psychological processes as well as the triggering of earthquakes, have already been investigated by using this correlation function.
The results of these investigations seem to indicate that the correlation function might also be suitable for describing factors which have an influence on other evolutionary processes of human nature.

Zusammenfassung:
Sind stabilisierende und destabilisierende Einflüsse des planetaren Gravitationsfeldes bei der Strukturbildung biologischer Muster real?
Es gibt eine Reihe von Anzeichen dafür, dass die relativ schwachen Fluktuationen des planetaren Gravitationsfeldes Strukturbildungsprozesse nichtlinear beeinflussen. Frequenzen der Fluktuation, die über größere Zeiträume relativ stabil bleiben, zeigen eine Korrelation mit biologischen Strukturen.
Zur Beschreibung dieser Prozesse eignet sich eine Korrelationsfunktion, die stabilisierende und destabilisierende Zustände mit einer bestimmten Wahrscheinlichkeit anzeigt. Mit dieser Korrelationsfunktion wurden Korrelationen bei der Strukturbildung der menschlichen Intelligenz, der Stabilität psychischer Prozesse aber auch bei der Triggerung von Erdbeben untersucht. Die Ergebnisse lassen vermuten, dass die Korrelationsfunktion möglicherweise geeignet ist, Einflüsse auf weitere Prozesse der menschlichen Evolution zu beschreiben.

CONTENTS

1. Introduction

Most researches, which refer to complex systems, do not take into account the interactions of the gravitation. This is indeed correct. Compared to other interactive processes, the strength of the gravitation is really very weak. Usually complex systems, like they occur on this planet, are exposed to much stronger influences. Apart from the tides, the gravitation only seems to be effective on the scale of the planet system.
Earthquakes are events which take place in relatively extensive areas. But even in this case, the variable gravitation of the planet system is not taken into consideration.
One reason might be the fact that people have only started to do research in the field of complex systems.
The following explanations deal with the weak gravitational interactions on various complex systems. I will introduce a method which is a model for the influence of the fluctuating gravitation on the evolution.
This method enables us to simulate the gravitation and its influence on complex systems. These systems can also exist on small scales.
What is new about this method, is the fact that the interactions are non-linear. When interacting with complex systems, the primary periodic influences of the gravitation secondarily generate higher frequencies (harmonics).
The model might be somewhat uncommon. However, it could lead to the solution of problems which have existed for a long time. The revolutionary character of the majority of revolutions in the history of science is not due to their introducing entirely new ideas into the debate but rather to their offering surprising solutions to problems that have been the object of discussion over a long period.

2. The model of the gravitational interaction

This model takes into account the fluctuations of the gravitational field of all big planets including also the sun and the moon.
Of course, these fluctuations of the gravitational field are very weak, and some people would argue that holding a cup of coffee in your hand has a bigger influence than Jupiter. But this is not correct. The gravitational effect of Jupiter is equivalent with a globe made out of lead with a weight of approximately 300000 kg and a diameter of 3,75 meters in a distance of 10 meters. Such a globe corresponding to the moon would even have a diameter of 20 meters in 10 meters' distance.
Who would be able to hold this in his hand?

Since the gravitational field is very weak in its effect, there are only the following areas which are relevant for correlations:

a) spatial structuring processes, which are hardly determined by other effects or which are not determined at all.
b) The formation of not completely determined patterns.
c) critical conditions in highly dimensional dissipative systems.
d) highly complex systems, which are far from the thermal balance and which are on the edge of the chaos.

Compared with other interactive forces, the weak fluctuations of the gravitation can only have an effect, if they are considered and observed as a stimulation-field over a long period of time. This means that they have to operate over a long period of time with relatively constant frequencies.

Are these conditions given through the planetary system?

The answer is yes; the system of the big planets is very stable. The orbits of the big planets are very stable during millions of years. In addition to this, there is another important circumstance: the orbits of the planets lie almost on the same level. They represent natural oscillators on a big scale. Such a rhythm or such duration of vibration is determined by the time period from conjunction to conjunction of two planets. These are relatively stable frequencies of the cosmic fluctuations. It is quite likely that only these frequencies are capable of having an influence on the evolution.
Unfortunately, it is not possible to simulate these circumstances in the laboratory. The time periods are simply too large. I can imagine however, that such simulations will become possible with the help of a fast computer.
The aim of my researches is as follows: I wanted to prove the existence of the planetary fluctuations of the gravitational field in natural complex systems. In order to achieve this, it was necessary to create a non-linear correlation function.

Such a correlation function must fulfil several special criteria:

1. It must describe the interactions of the planetary fluctuations of the gravitation with different complex systems. In a certain sense, it must have universal validity.
2. It must express general qualities or qualities of an evolutionary process.
3. It helps the mathematical formalism, if the correlation-function describes polar qualities of the evolution.

The fundamental Newton's movement-equation of N mass-points has the form:

$$\ddot{r}_i = G\sum_{\substack{j=1 \\ j\neq i}}^{N} M_j \frac{r_j - r_i}{\left|r_j - r_i\right|^3} \qquad (1)$$

r_i, r_j = vectors of the planets i, j with the masses m_i and M_j; G = gravitational-constant.

It is however not in a favourable form for the present problem.
From the helio-centric view, circle-frequencies $\omega_{i,j}$ can be declared. These circle-frequencies are relatively stable in the time.

$$\omega_{i,\,j} = \frac{2\pi}{T_{i,\,j}} \qquad (2)$$

$T_{i,j}$ = Time from conjunction to conjunction of the planets i and j.

Only directional-invariant processes are examined. One can write for the alterations of the planets - power (in a first approximation):

$$F_{i,\,j} \propto f_{i,\,j}(t) + k_{i,\,j}(t)\cdot\cos(\omega_{i,\,j}\cdot t) \qquad \text{t = time} \qquad (3)^*$$

** The relationship (3) follows from the vectorial addition of the powers F_i and F_j.*

$$\mathbf{F}_{i,j} = \mathbf{F}_i + \mathbf{F}_j$$
$$\mathbf{F}_{i,j}^{\ 2} = \mathbf{F}_i^{\ 2} + \mathbf{F}_j^{\ 2} + 2 \cdot |\mathbf{F}_i||\mathbf{F}_j| \cos(\alpha)$$

From a geo-centric view, the cosmic cycles are not quite so stable, therefore it is simpler, instead of $\omega_{i,j}$ to put the angle $\alpha_{i,j}$ (under which the planets i, j from the earth appears), in (3).

$$F_{i,j} \propto f_{i,j}(t) + k_{i,j}(t) \cdot \cos(\alpha_{i,j}) \qquad (4)$$

The weak gravitational-field-fluctuations, especially its cosine-share, can be considered as a type of stimulation-field-strength on matter.
The terms $f_{i,j}(t)$ and $k_{i,j}(t)$ are relatively stable.

$$F_{i,j} = f_0 + k_0 \cdot \cos(\alpha_{i,j}) \qquad (5)$$

The interactions of these "waves" (5) with matter and their different structures, will be not-linearly. In analogy to other not-linear interactions with matter (for example not-linear optics) one can put (with 7) a general correlation-function $H_{i,j}$ for the influence of two planets i, j.

$$H_{i,j}(\alpha) = \gamma_1 F_{i,j} + \gamma_2 F_{i,j}^{\ 2} + \gamma_3 F_{i,j}^{\ 3} + \ldots \qquad (6)$$

with
$$\gamma_1 = \frac{k_1}{k_0}; \gamma_2 = \left(\frac{k_2}{k_0}\right)^2; \ldots\ldots \qquad (7)$$

The conversion of (8) into a Fourier-serial is better suitable.

$$H_{i,j}(\alpha_{i,j}) = a_0 + a_1\cos(\alpha_{i,j}) + a_2\cos(2\alpha_{i,j}) + a_3\cos(3\alpha_{i,j}) + \ldots \qquad (8)$$

The form (8) of the correlation-function shows the formation of "higher harmonics" by the interaction with matter.
The problems of the correlation-function are the coefficients a_k and the meaning of H.

In my researches I restricted myself to the qualities which are associated with the concepts of “STABILITY” and “INSTABILITY”. The change from stable to unstable conditions and vice versa , can be observed in the evolution of many complex systems. Stability and instability are also qualities of a structure. Mechanical constructions for example, which are based on triangles, are very stable. Constructions, which are based on quadrangles, are very dynamical and very unstable. A table with four legs is more likely to wobble than a table with three legs.

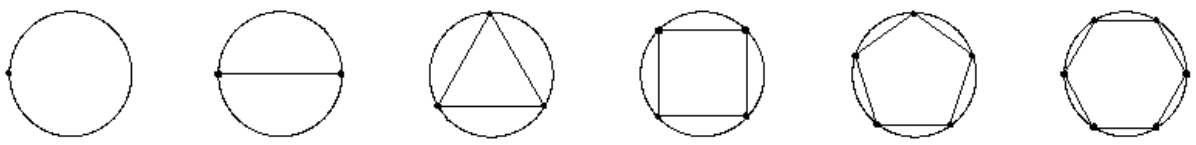


Figure 1, mechanical criteria for stability and instability into a planetary cycle

If one translates such mechanical criteria for stability and instability into a planetary cycle, the angles of the triangle (120 and 60 degrees) show stability and the angles of the quadrangle (90 and 180 degrees) show instability. If one also takes into consideration the characteristics of the pentagon and the hexagon, one gets a sequence development, which - after a Fourier-transformation - shows some special qualities.

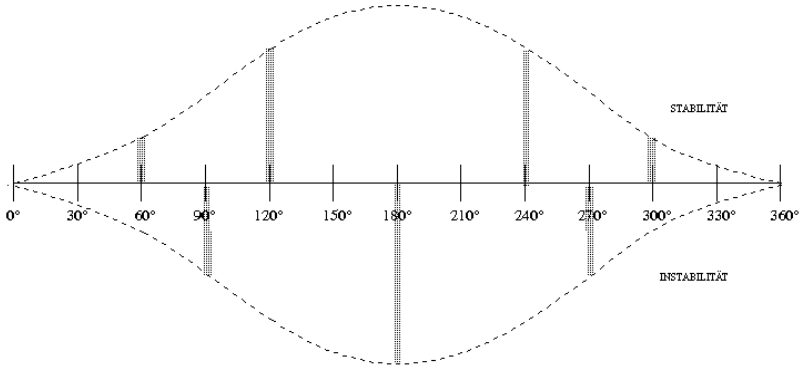


Figure 2, translation of mechanical criteria for stability and instability into a planetary cycle

$$H_{i,j} = \sum_{s=1}^{N\cdot 12-1} a_k \cos(s\cdot\alpha); mit(k = s \bmod 12) \qquad (9)$$

$$\text{with } a_k = \{0,1,-2,3,-5,0,3,0,-5,3,-2,1\}$$

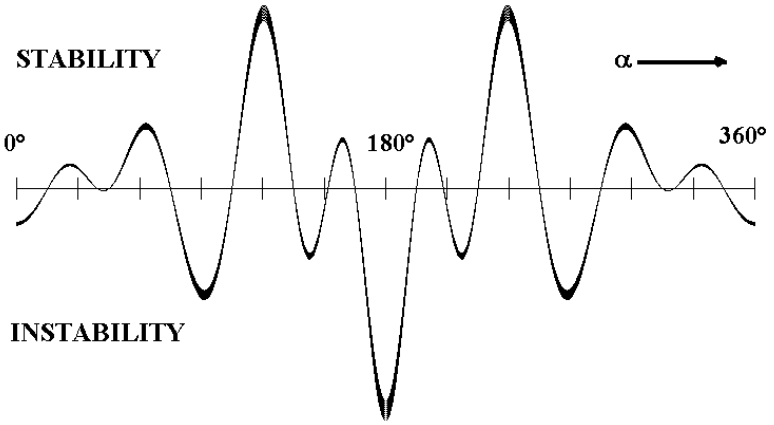


Figure 3, Correlation function 1. Order after equation with N=1. This was obtained through a Fourier-transformation from structural points of view.

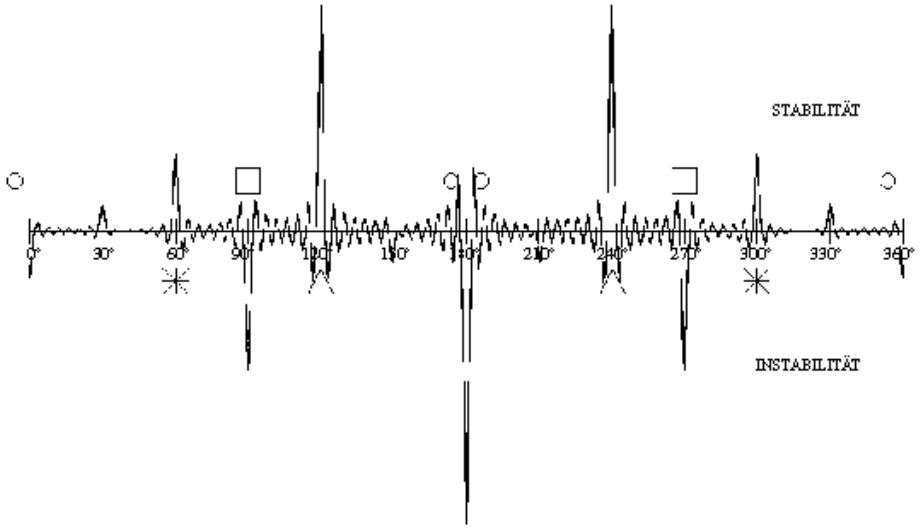


Figure 4, Correlation function 1. Order after equation with N=7

The coefficients are elements taken from the numerical series of Fibonacci; they are alternating and reflected. This makes the curve somehow aesthetically attractive.
This correlation function can also be interpreted as a non-linear interaction of the planetary fluctuations of the gravitational field with material structures. The vibrations of the planetary gravitational field lead to higher vibrations, to higher harmonics, in material structures. This is especially interesting, because it enables various researches. The planetary fluctuations of the gravitational field are indeed effective everywhere. The pictures 3 and 4 show the emerging of higher harmonic vibrations of these interactions.

I will show a number of possible interactions. Each of these interactions will meet with big scepticism.
Who would want to claim that the development of the individual complex intelligence of a human being is influenced by the planetary gravitational field. Such a statement can be dangerous for the scientific reputation. Only the totality of the manifold interactions can give a glimpse of the correlation which have been examined.
I have to mention beforehand that the interactions of the gravitation with complex systems which have been examined are far from having a determined effect. We can only observe a higher probability for certain events or for certain forming of structures.

2. The model of the gravitational interaction

The planets represent natural oscillators on a big scale. Such a rhythm is determined by the time period from conjunction to conjunction of two planets. These are relatively stable frequencies over a long period of time.
In my researches I restricted myself to the polar qualities which are associated with the concepts of "stability" and "instability". The change from stable to unstable conditions and vice versa, can be observed in the evolution of many complex systems.
If one translates such criteria for stability and instability into a planetary cycle, one gets a sequence development (after a Fourier-transformation).

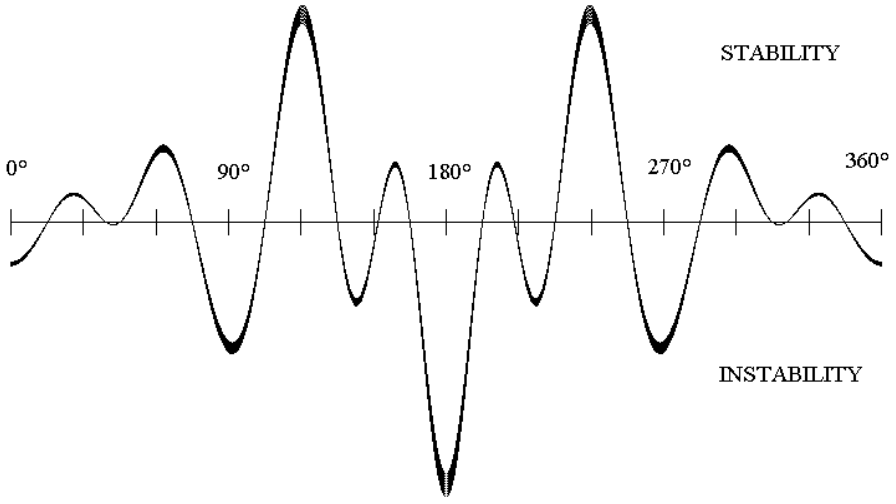


Figure 5. Correlation function 1st order after equation (9) with N=1.

The correlation function H (9) is not developed for earthquakes.
Nevertheless, can this function describe the triggering of earthquakes?
Tensions in the earth's crust are mostly the cause of earthquakes. If these tensions have reached a critical state, there can be vibrations of different strengths.
The first hypothesis that was explored is as follows: If these tensions are in a critical condition, then also the fluctuations of the planetary gravitational field can cause these vibrations. The probability for an earthquake becomes higher if the fluctuations show unstable conditions.

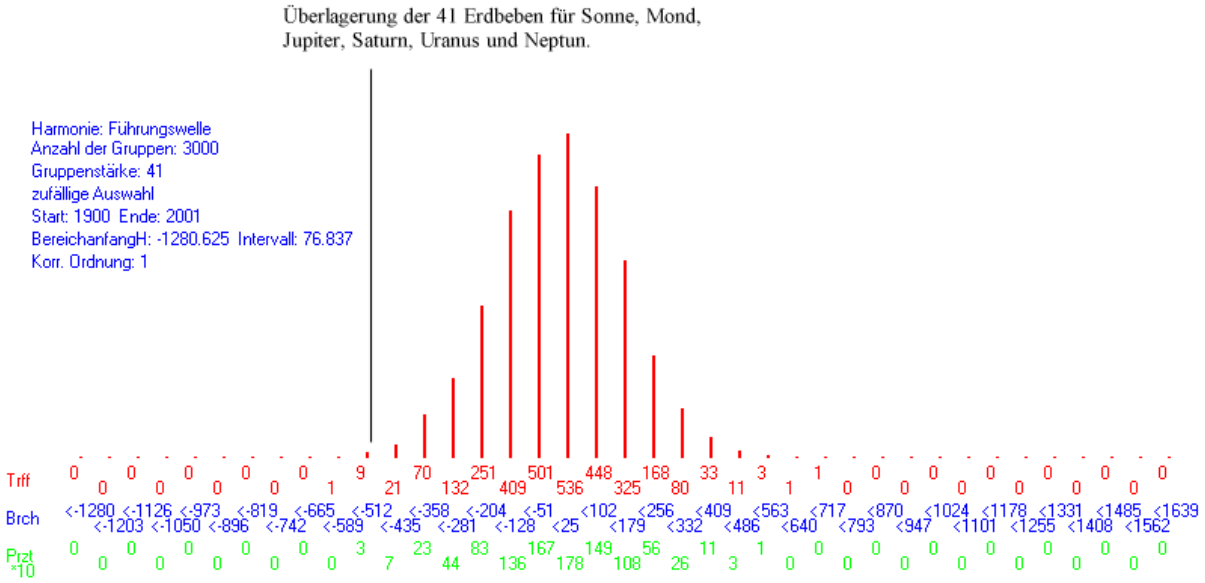
3. The triggering of earthquakes

For the understanding of the effects of the gravitation, one can say that the triggering of earthquakes appears to be absolutely plausible. Therefore, it should here be mentioned briefly. The influence of the sun and the moon on earthquakes has often been suspected and has also been proved. The effects of the tides are considered to be the cause for this. But this is only a rough explanation. The correlation function which I developed is more precise because it takes into account higher harmonics.

Tensions in the earth's crust are mostly the cause of earthquakes. If these tensions have reached a critical state, there can be vibrations of different strengths[2].
The hypothesis that was explored is as follows: If these tensions are in a critical condition, then also the fluctuations of the planetary gravitational field can cause these vibrations. The probability for an earthquake becomes higher if the fluctuations show unstable conditions.
First the 41 strongest earthquakes of the last century were explored.
Later on, the researches were extended on a total of 1400 earthquakes. This parallel study was done by the Canadian Brian Johnson[3].
The researches show some interesting results, which throw light on the correlations.
I obtained the following statistically relevant results:

1. Only the big planets show an effect. Pluto doesn't play a role.

2. The planets, which out of the perspective of the earth are always close to the sun (Mercury and Venus), don't shows any important effect either. They are dominated by the sun. Their planetary fluctuations are more or less disorders of the correlation frequencies with the sun.



Density function. 1st order with N=1. There is a correlation of sun, moon, Jupiter, Saturn, Uranus and Neptune. The blue figures represent the range, the red figures show the score in this range and the green figures show the relative score in per mille. The probability of being wrong is 0.6%.

3. During the earthquake, the correlation function shows a certain instability. The first derivation is positive. This means that the correlation function before the actual earthquake shows an even stronger instability - in the average value. This coincides with the fact that there are also pre-earthquakes and other signs of the coming event, before the earthquake actually begins.

As a result of these researches, we can state the following: earthquakes can also be stimulated by the planetary fluctuations of the gravitational field. This has been proved with a probability of error of 0.6%.

4. Forming of structures of biological patterns

4.1 Structuring of the intelligence

In the evolution the highly complex system of the human brain has developed itself during a long period of time. The communication between the nervous cells through the help of the synapses isn't determined completely - neither genetically nor in any other way.
The relatively long period of the evolution of the brain and the stable planetary fluctuations could have led to a rather informal kind of interaction. This means that the actual causes for the interactions are not the absolute forces of the planetary gravitational field, but the extremely weak, but at the same time very stable fluctuations.
This is certainly a new quality of interaction.

A metaphor for this is the formation of waves through movements of the air over the ocean. The powerful masses of water on top of the deep ocean can be compared with the constant gravitational field of the earth. The small waves can be compared to the fluctuations of the

planetary gravitational field. These are higher harmonics of the oscillation of the surface animated through the wind.

I put up the following hypotheses for my researches:

1. Planetary fluctuations have a lifelong effect on structuring processes and on stability processes of the brain.

2. Especially during a period of strong synaptic plasticity, this influence will be very strong. The forming of structure in the brain will be very much influenced during the short period of time when the individual becomes autonomous, this means when a child is being born.

3. A correlation function which is harmonic and stable while a child is being born, will have a positive and therefore stabilizing effect on the development of the intelligence of the individual.

4. A positive first derivation of the correlation function will also have a positive effect on the development of the intelligence.

5. Psychical instabilities and crises are being triggered by the planetary fluctuations.

6. In smaller spaces (if we compare the human individual to earthquakes) mainly the higher frequencies will have an influence.

The development of the intelligence of a human individual is dependent on many different factors. The genetic constellation given by the parents is of course very important. Moreover, many environmental factors have an effect on this development. And also the psychical personality concept contributes to further development of the intelligence.
Therefore, we can expect that the fluctuations of the planetary gravitational field won't have a too dominant influence. Nevertheless, its influence can be shown.
I am of course aware of the problem of measuring intelligence, but I won't discuss this problem here.

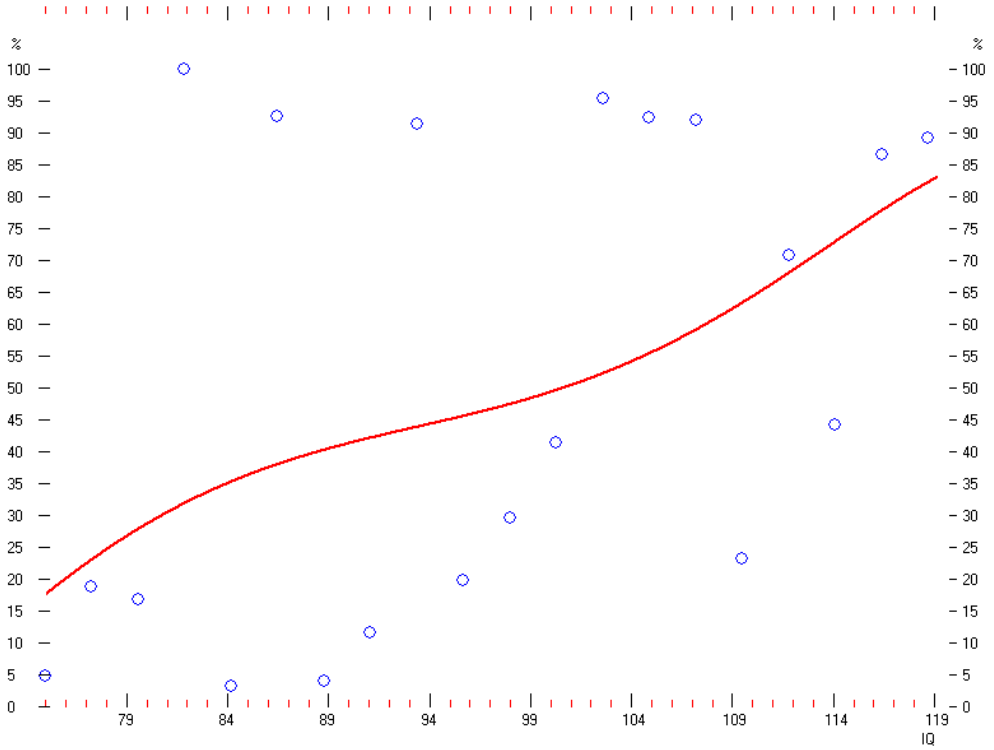
We used 3 groups of people for the researches.

1st group: 160 children, at the age of nine years or older, whose IQ had been measured. (Among these children there was no one with learning difficulties, and we can say that very few of them will have an academic career in future). Therefore the groups 2 and 3 are complementary fringe groups.

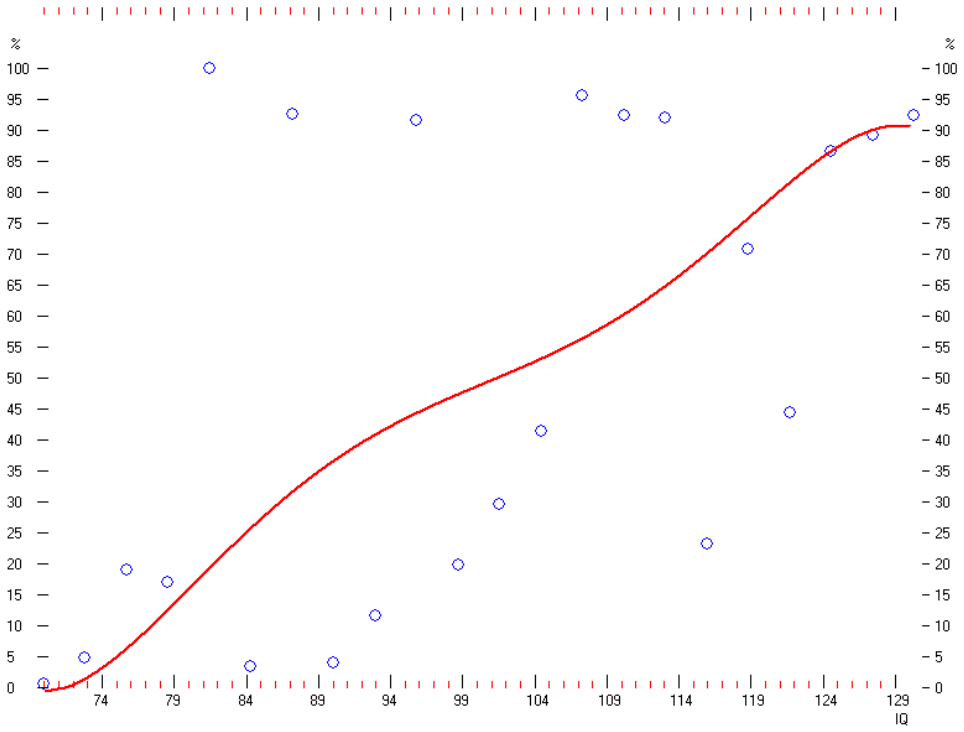
2nd group: 14 persons who went to a school for educationally subnormal children.

3rd group: 12 persons with an academic education.

The group of the 160 children was dealt with first. We formed subgroups of 8 children per group, and classified them according to their IQ. Each of these subgroups was tested with 3000 control groups for its probability.
Figure no. 6 shows the results of the 1st group.



Balance curve for the relation between IQ - measured after Horn and the frequency of the sum of the correlation matrix H of 3rd order for the group of 160 children. This curve was calculated by using the method of the smallest squares.



Balance curve for the relation between IQ - measured after Horn and the frequency of the sum of the correlation matrix H of 3rd order for the group of 160 children and the fringe groups 2 and 3. This curve was calculated by using the method of the smallest squares.

Despite the enormous fluctuations, the balance curve shows a slight tendency: Children with a higher intelligence were born during a period of time with a harmonic and stabilizing correlation function.

If one also considers the fringe groups, then figure no. 7 shows a more obvious tendency.

3. Ordnung	Anzahl	H	H[%]			H'	H'[%]		
niederer IQ	30	-246,7	0,8			179,8	53,1		
hoher IQ	28	411,8	99,4			602	93,5		

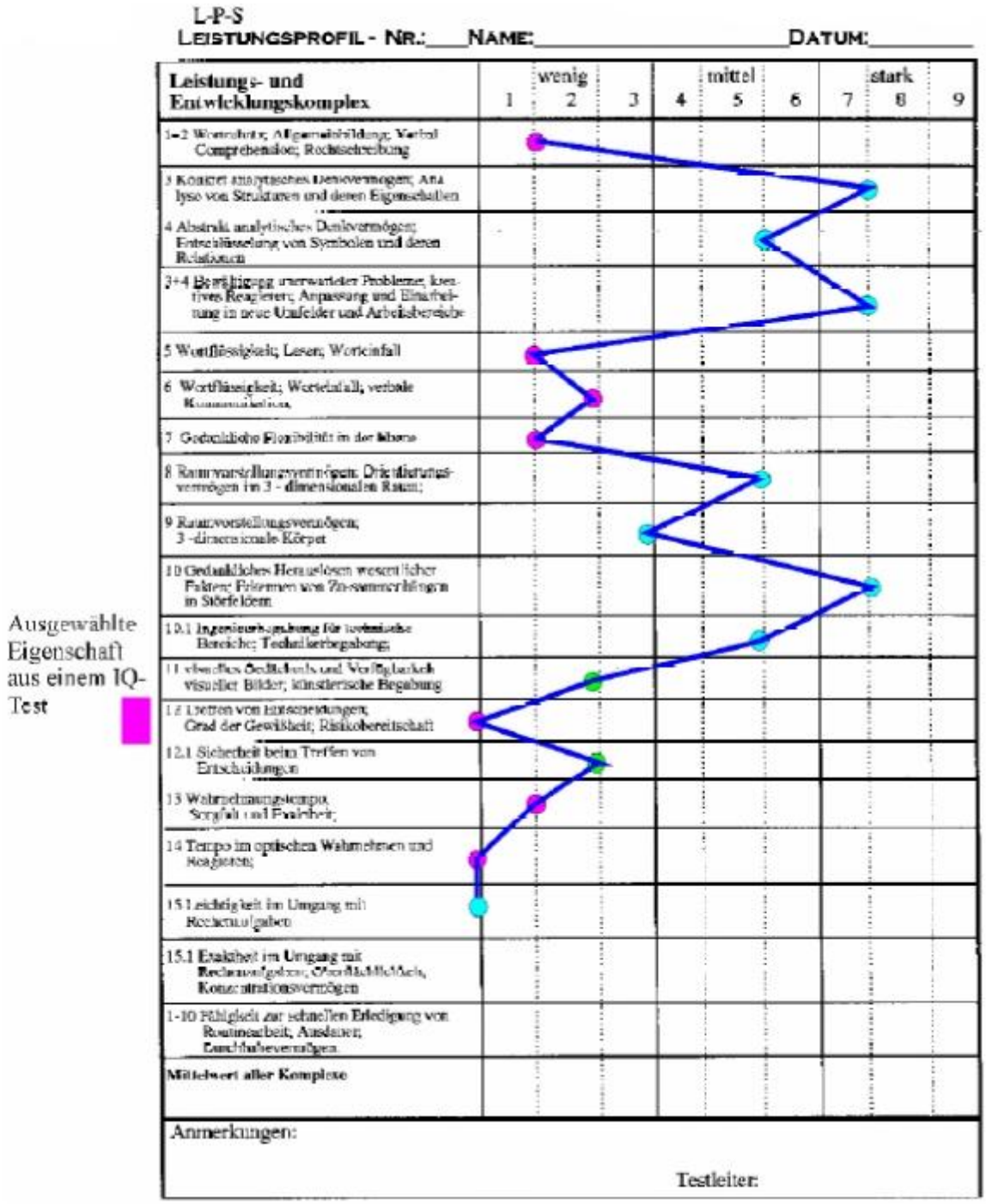
Results of the relation between IQ and correlation matrix for 30 persons with low and 28 persons with high IQ. The probability of being wrong for H confirms a relation which is highly significant. All calculations were made for 3rd order of the correlation function. Interpreting the numerical values: For the group of 30 persons with low IQ, H is = -246.7 and H[%]=0.8. This means that only 0.8% of the control groups have a value lower than -246.7.

The influence of the planetary fluctuations on the development of the individual intelligence of a human being is weak and can practically only be noticed in the fringe groups.

If one forms new fringe groups out of the lowest and the highest IQ's of the children (16 children each) plus the fringe groups 2 and 3, then table no.1 shows the results.
The probability of error is 0.8% for the group with low IQ and 0.6% for the group with high IQ. This shows that it makes sense to do further and more detailed research in this field.

4.2. The influence on personality factors.

If it is likely that there is an influence of the fluctuation of gravitation on the development of the very complex human intelligence, we can expect that there are also influences on individual personality factors.
By observing children of the test groups, I noticed that those children whose IQ-factor for "guessing of fragmentary words" was especially weak, weren't very willing to take risks. Fragmentary words are not harmonic, they create insecurity. Such children might possess a stronger need for harmony and stability.



Therefore we can assume that these children might have an affinity to stable, harmonic environments. Any risk which is taken, can cause instability.
We took 25 out of the 160 children. These 25 children were the ones who had the lowest factor in “guessing of fragmentary words”.

The results in table no. 2 clearly show the influence of the planetary fluctuations beyond all orders of the correlation function.

Ordung\ Funktion	H	H[%]			H'	H' [%]		
1	730,7	98,8			251,3	42,2		
2	601,56	99,8			447,44	76,3		
3	351,78	96,6			589,42	80,6		
4	262,81	90,6			886,06	96,8		
5	207,92	86,3			1212,51	99,5		
6	254,92	97,9			642,73	80,3		

Results of the examinations about the influence of the planetary fluctuations on the factor "Guessing of fragmentary words" - measured according to Horn's method. 25 out of 160 children showed a rather low performance for this factor. The table shows the sums of the correlation matrices H, H', as well as the frequency H[%], H'[%], compared to control groups of the same period which were chosen at random.
Interpreting the numerical values: For order no. 1 H is = 730.7 and H[%] = 98.8. This means that 98.8% of the control groups have a lower value than 730.7.

Since table no. 2 considers all 10 celestial bodies with relevant gravitational influence, we can of course raise the following question: Do all these celestial bodies have an influence? The correlation matrix does not show the same influence for all 10 celestial bodies, and we had expected this indeed. The moon, Venus, Mars, Jupiter and Saturn are of particular influence. If only these planets are admitted to the correlation, then table no. 3 shows the following results.

Ordung\ Funktion	H	H[%]			H'	H' [%]		
2	275,24	99,98			108,81	71,6		
3	143,29	99,6			60,74	67,3		

Results of the examinations about the influence of the planetary fluctuations on the factor "Guessing of fragmentary words" - measured according to Horn's method. 25 out of 160

children showed a rather low performance for this factor. The following planets had been considered: moon, Venus, Mars, Jupiter and Saturn. The table shows the sums of the correlation matrices H, H', as well as the frequency H[%], H'[%], compared to control groups of the same period which were chosen at random.
Interpreting the numerical values: For order no. 2 H is = 275.24 and H[%] = 99.98. This means that 99.98% of the control groups have a lower value than 275.24.

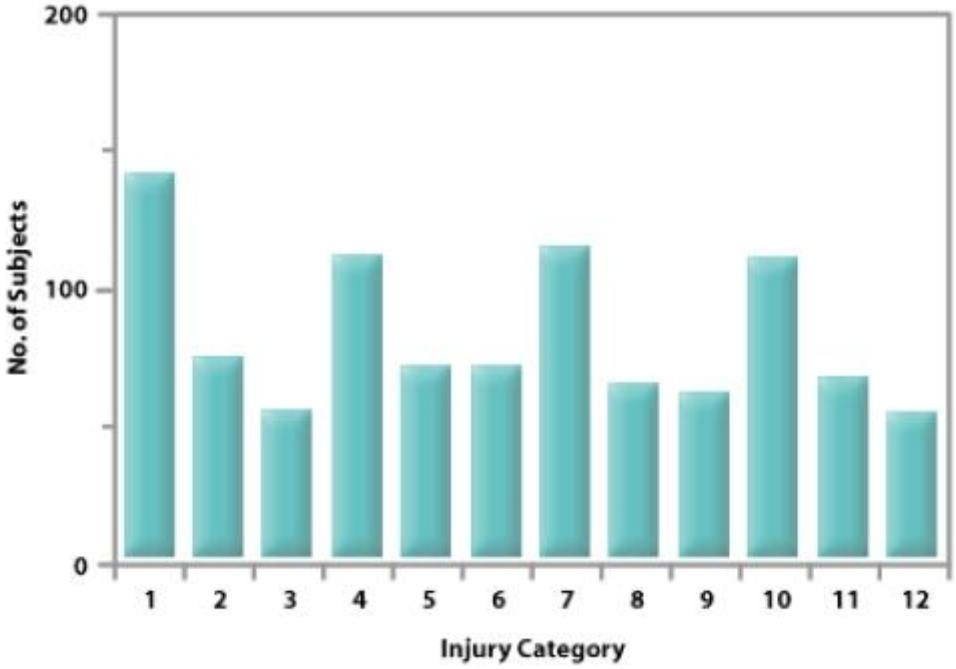
According to table no. 3 the probability of error is only 0.02% for the following statement: "Children with a relatively low performance of the IQ value "guessing of fragmentary words (risk-factor)" have had especially harmonic correlations of the moon, Venus, Mars, Jupiter and Saturn at their birth" !

In this particular case 5000 control groups were dealt with and calculated . Only one of these groups had a higher value for H than 275.24. All other calculations are based on 3000 control-groups.
We can of course carry out further optimisations of the correlation of the 10 celestial bodies. But this would go too far. I only wanted to show that optimisations, which don't change the correlation function, lead to much better correlations which then can be applied in practise.

The above example shows into which direction further researches could go. The correlations contain a multitude of different frequencies which can all be examined further according to their meaning and effect. The rough selection of the frequencies can be made according to the correlating celestial bodies and according to the order of the correlation function. At the same time with the multitude of the correlation frequencies, we can see the enormous complexity of the planetary fluctuations.

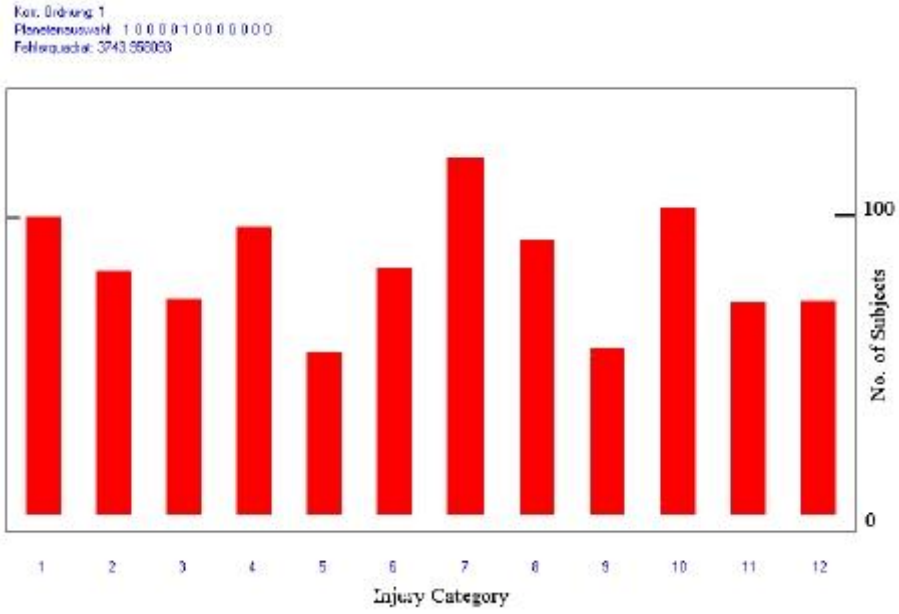
4.3. Stability and instability of psychical processes

The full moon has often been suspected of being the cause for psychical instabilities. There are contradictory studies to this theory.
Although the correlation function shows instability for the full moon - who stands in opposition to the sun - the following study does not deal with this problem.
Nevertheless, it is possible that there are such stimulations of psychical processes and that these work in addition to many other factors.
We won't explore such stimulating processes here, but we will deal with triggering manifestations of resonance.
These manifestations of resonance presuppose that the planetary fluctuations of the gravitational field have created certain structures at a certain point of time and that these structures stay stable in course of time. These structures which have come into existence at an earlier stage, correlate with the current planetary fluctuations. We now have a different image of the interactions. Apart from the cross-correlations of the planet-oscillators there are also correlations of the planets with themselves (auto-correlations).
The dissertation of Sara Klein Ridgley (<http://safire.net/sara />) examines the relation between injuries which happen at work and the time when they happen - in relation to the birthdays of the persons who have these injuries. It was significant that there were more such injuries on people's birthdays and 3, 6 and 9 months after their birthdays.



Frequency of injuries corresponding to people's birthdays taken out of a study of Sara Klein Ridgley. Number 1 marks the period of time (1/12 of the year) round the birthday. Number 7 stands for the period of time (1/12 of the year) which is 6 months after the birthday. The fact that the results differ from what had been expected, is highly significant (according to Sara Klein Ridgley).

Bearing in mind the correlation function, one can assume that the sun reflects this result. The moon's correlations with itself could not be explored in this context since the data about the injuries was sorted out in groups to 1/12 of the year. The moon however has a cycle of approximately 1/13 of the year. Apart from the sun, Jupiter also plays a marginal role.



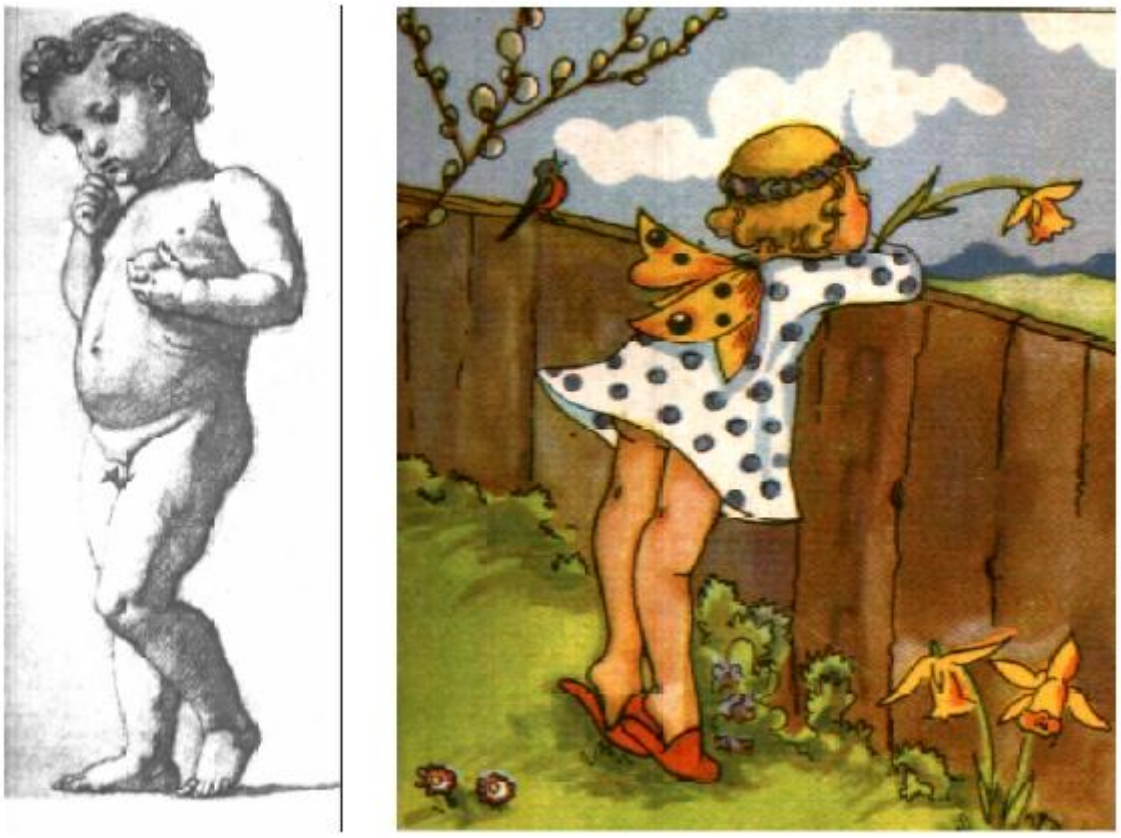
Frequency of injuries corresponding to people's birthdays. This table was calculated with the correlation function H in comparison with figure no. 9. The auto-correlations of the sun and

Jupiter are relevant here. Number 1 marks the period of time (1/12 of the year) round the birthday. Number 7 stands for the period of time (1/12 of the year) which is 6 months after the birthday.

The quality of correlation between these two pictures is +0.533. It could be even higher, if one took into account the so-called "birthday-circumstances" which leads to an increase of injuries. The reasons for this are birthday-parties where people drink alcohol and this leads to psychical instability. The increase of the number of injuries might also be due to the fact that people tend to be depressive when they realize that they have become 1 year older.

4.4. Development psychology and biographical rhythms

The researches to this topic are to a great extent interdisciplinary. The origins of these researches can be found in a textbook for painters with the title: "The naked human being - an anatomy for artists." There I found the following sentence: "The small child is most attractive between the age of 3 and the age of 5. Later, this attraction will never be reached again..."



The attraction of the four-year old child will never be reached again later. (Pictures by Anselm Feuerbach and Liesl Lauterborn)

This indicates a stable condition of the child's development at this age. At the age of 6 or 7, the child changes its appearance; this change goes together with instability.
This rhythm of stability and instability in the development of a child is also visible in the physical appearance of a child. In former times, artists therefore preferred to portray angels in

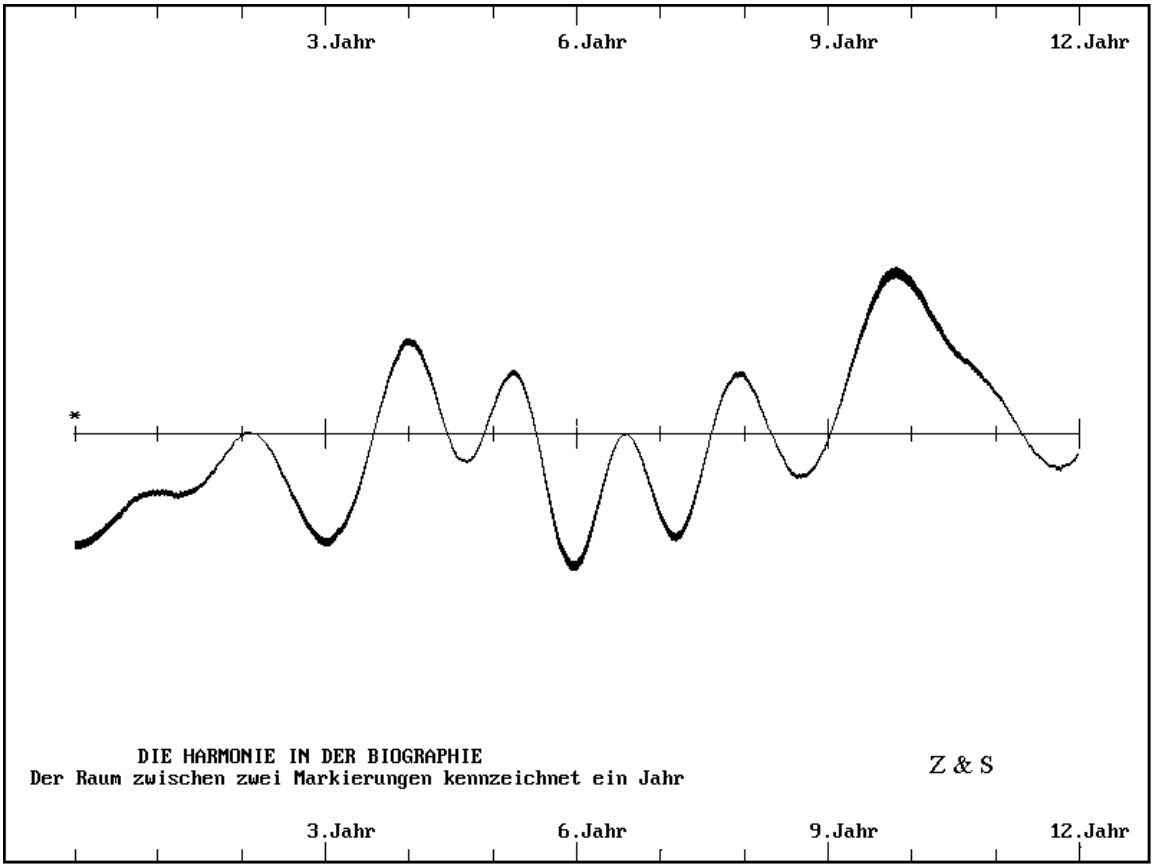
a childlike and youthful manner which corresponds to the phases of the relative stability, harmony and balance.

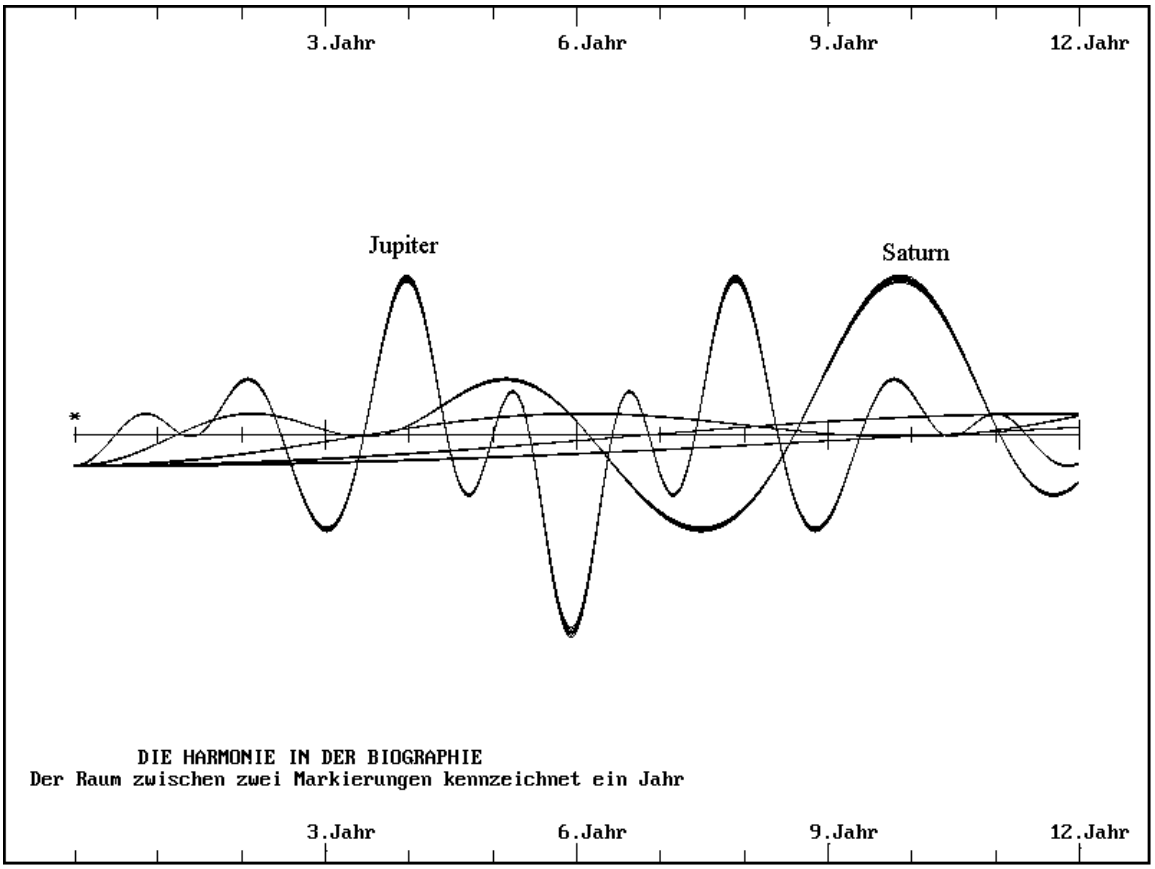
Due to these researches, a certain model of development becomes predominant; this model consists of a psycho-dynamic process between crisis and handling this crisis. Erik H. Erikson has also developed such a model, the so-called ‘scheme of 8 stages’.

At this point I want to make some remarks to the following pictures: In order to calculate the curves, we use the medium orbital period of the planets. This means that we only get statistical average values. In some cases the curves might differ up to two years.

Figure no. 12 shows stable and unstable phases of the development of the human body starting with the date of birth up to the age of 12. The above figure shows the superposition of the slow and biographical planets from Jupiter until Pluto. Only Jupiter and Saturn are dominant during this period of time.

The physical harmony of the 11-year old child - the climax of childhood.
(Picture “Amor” by Michelangelo da Caravaggio)





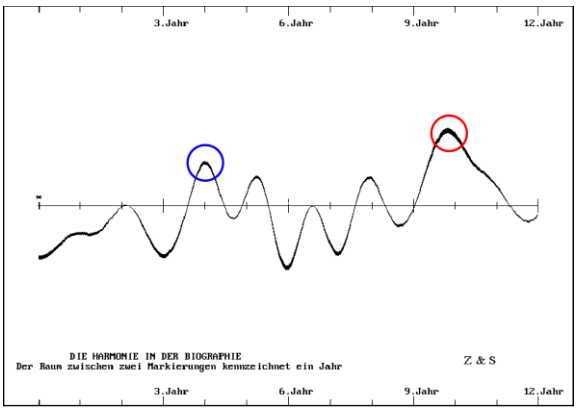
Stable and unstable phases in the development from birth up to the age of 12. The above figure shows the superposition of the planets Jupiter to Pluto (slow, biographical). Only Jupiter and Saturn are dominant during this period.

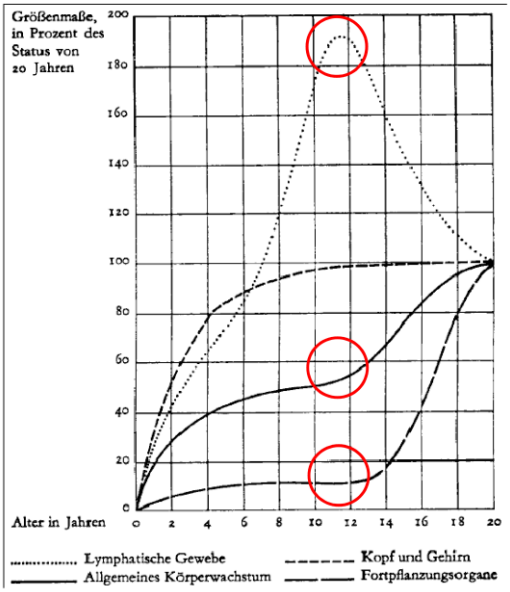
One can detect three major instabilities or crises in the development of an individual. These are a person's birth, which undoubtedly represents a crisis for the individual.
The second crisis begins approximately at the age of 3, when the child starts to become defiant and stubborn. And there is a third phase of instability which begins at the age of 6, when also the physical appearance of the child changes a lot. The period round the age of 6 or 7 means a major change in the life of all children, since most of them start school at this age.
But apart from the phases of instability and disharmony, there are also two phases of particular stability and harmony.
The first phase is the "special attraction" of the child at the age of 4. This is the time when they grow more slowly. The growth will only increase again remarkably when they reach puberty.
By the age of 4 the child's sensory motorial alertness has also calmed down.
The second phase is the so-called "climax of the childhood" round the age of 10 or 11. At this stage the proportions of the body are quite harmonic. The lymphatic tissue has reached its maximum state. This phase could be called the silence before the storm of puberty.
Of course, there are differences in the development of boys and girls and there are also differences from one individual to the other. We obtained these curves from the auto-correlations. If we also take into account the cross-correlations, then this leads us to a first individualization.
A second individualization is achieved through the triggering of the higher frequencies of Mars and Venus. It is possible that these frequencies influence for exam le the individual beginnings of puberty. There are of course many other circumstances which have an influence on the beginning of puberty. But the planetary fluctuations are capable of triggering puberty in certain intervals. At which time puberty then is actually being triggered, depends on the environment, the nutrition and on genetic predispositions.
Researches on this field, however, have only just been started.
The climax of the crisis of puberty is approximately at the age of 15. At this stage the child's face loses its childlike shape. The grace of the adolescent, which is a stable phase, starts roughly at the age of 16 or 17.

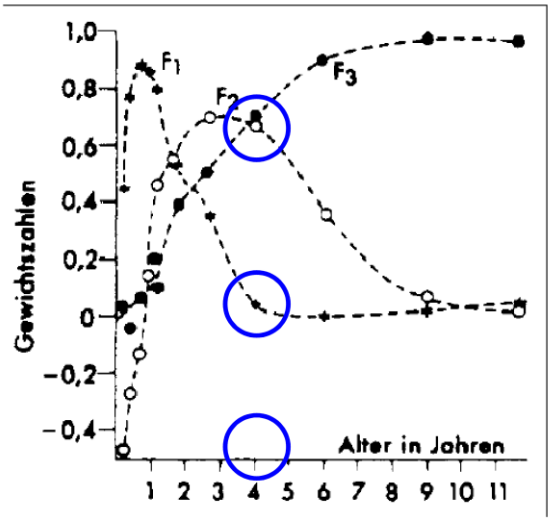
The grace of the 16-year old teenager - the climax of the adolescence. (Picture by Hans Thoma)

While the stable and unstable phases of childhood can still be connected with physical growth-processes, the influence during adolescence is being shifted to psychical processes.

Now we could ask the following question: Can we also recognize the controversial - but nevertheless very popular - topic of midlife crisis in the planetary fluctuations?
The midlife crisis actually seems to be the longest and major phase of instability in a person's life.
During childhood, only the planets Jupiter and Saturn are capable of having an influence on the individual development. Later in life, the influence of the planets Uranus and Neptune is more and more growing. The superimposition of all of these planets influences the character of this unstable phase. (figure no. 16)
What comes after the midlife crisis? You know it, these are the very popular so-called "best years in life". This phase is represented in the planetary fluctuations as a harmonic and stable phase of long duration.

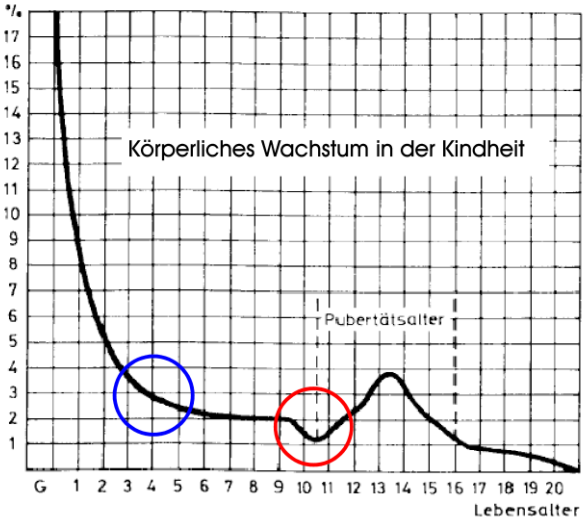


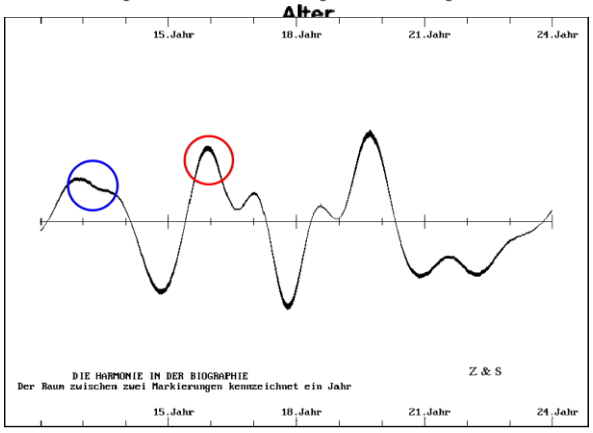


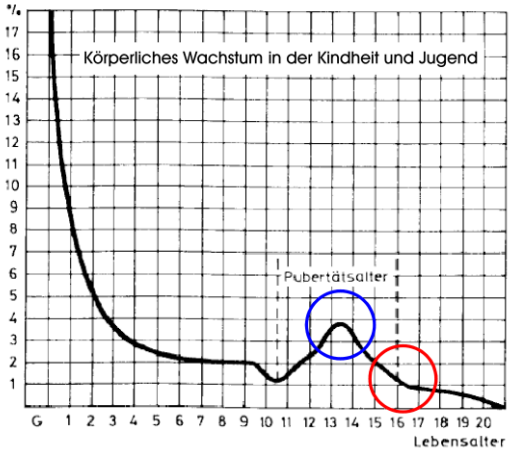


F1: sensomotorische Wachheit
F2: Persistenz
F3: Symbolverständnis und sprachliches Denken

Abbildung 1-9: Veränderung der Intelligenz mit dem Alter

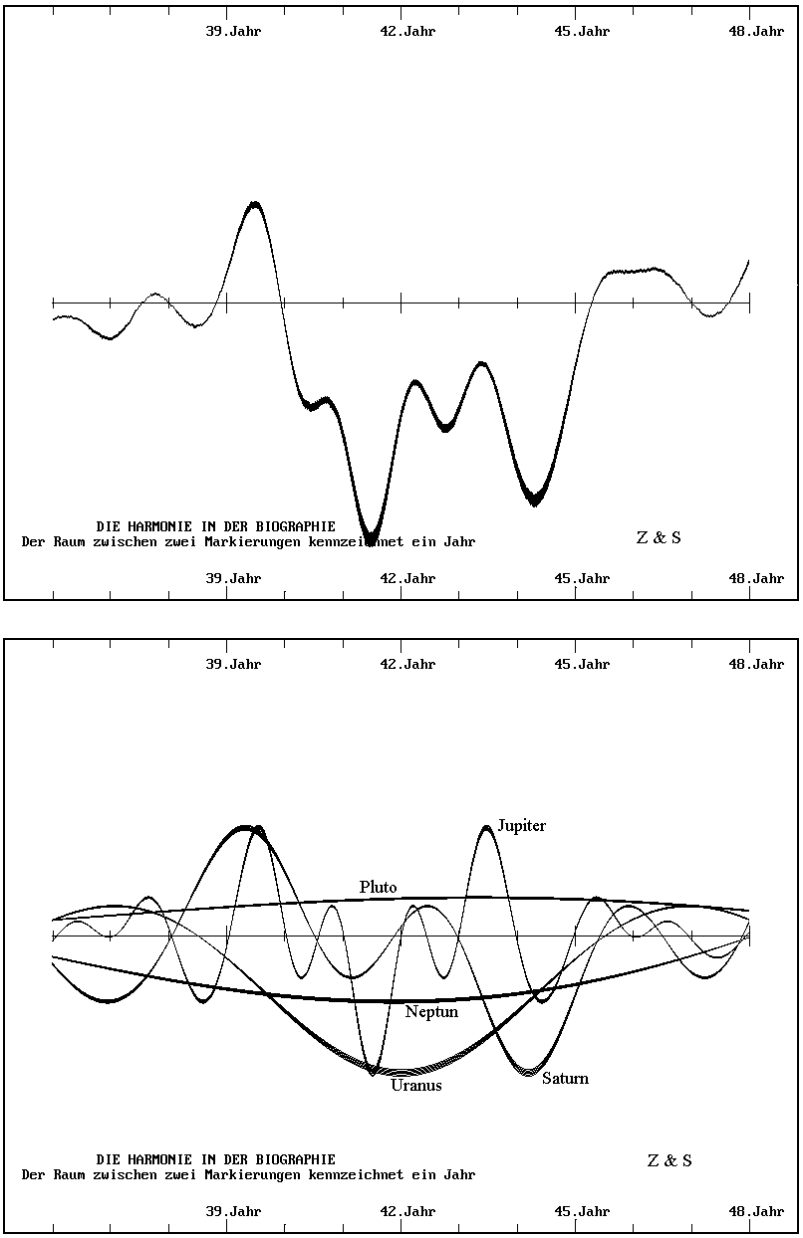






Auto-correlations of the big planets with different types of development curves. The development curves are taken out of M. Tücke, "Development psychology of childhood and adolescence…"

There can of course always be individual exceptions! I hope you have enjoyed or you will still be able to enjoy this phase in your biography, maybe with a glass of red wine.



The "midlife crisis" and how it is represented in the auto-correlations of the big planets. Apart from Jupiter and Saturn, the oscillators Uranus and Neptune are now of importance. The so-called "best years" in the biography of a human being. Exceptions are of course always possible!

5. Conclusion and outlook

Here are a couple of final remarks about further researches: The researches about the earthquakes have already shown that not all correlations are of equal importance. So Pluto, for example, had no influence on the triggering of earthquakes. But the other examples also suggest, to introduce a certain factor called g, which helps to find an adaptation to the problem we explored. This factor has the function of a frequency-filter. It will possibly be dependent on the gravitational strength, on the frequency and on the resonance frequencies. Such an optimisation is necessary, if this correlation theory is being used to make prognoses which have a higher probability.

The aim of these researches was, to produce the prove that the planetary fluctuations have an influence, which cannot always be neglected.
If one defines coincidence in the evolution as a lack of complete piece of information, this lack can be reduced to a certain extent, if one takes into consideration the fluctuations of the planetary gravitational field.
I hope that with this overview I was able to arouse your interest for the fascinating fluctuations of the planetary gravitational field. Our planetary system is a huge complex system and it sounds unbelievable that the constellations of the big celestial bodies shall even have an influence on the individual development of human beings and even on human art. Can we get used to such an idea at all? I think we should do!