

# Chaos, Rigidity, and Complexity and their Changes Caused by Environmental Influences

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*Abstract:* - Since several years we are performing a frequency distribution analysis of biological data. The events distribution is approximated by a lognormal curve (in biology: order) and by a normal = Gaussian curve (coincidence, chaos). For the analysis of the data we use the Chi-square and the Kolmogorov-Smirnov tests. In the last years we recognized a change of the average results. The complexity increased and more extreme patterns resulted. Instead of one peak the usual result frames show 2-5 peaks now. In 435 patients with different diagnoses we compared the tendencies of these groups in 2002/2003 and in 2004/2005. The results display the importance of the influence of electromagnetic waves in the environment on human system regulations.

*Key-Words:* - Frequency distribution, normal distribution, lognormal distribution, chaos, rigidity, complexity, electro-smog

## Introduction

If more than 500 biological dates which were collected by means of a randomized procedure exist, a frequency distribution analysis is worthwhile. The dates can be derived from systems of the organism or can be produced by groups from sociological or psychological investigations. Groups' behavior forms an analogue to a human organism and the core beliefs and ideologies of groups resemble the subconscious autonomous systems of the organism.

We measure routinely the skin resistance values of the 12 classical meridians [9] (left and right = 24 dates/person) and we use the reactions to about 80 varying medicines as coincidence influence so that over 2.000 digital dates/person

result. After that a frequency distribution analysis with an approximation of the distribution by a Chi square- and a Kolmogorov-Smirnov analysis is performed, both comparing with a lognormal = order (in figure 1, red) and a standard = Gaussian = chaos (green) curve [1, 5, 7, 10, 11].

We distinguish five typical results of the analysis [2]:

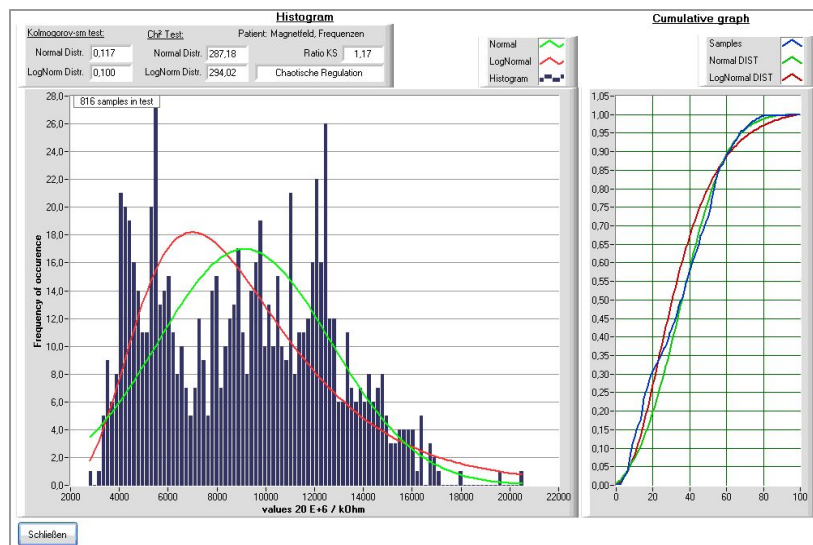
- 1) chaos (coincidence)
- 2) chaotic tendency (lability)
- 3) Golden Cut (health)
- 4) rigid tendency (order)
- 5) rigidity (fixation)

The five groups correspond to typical abnormalities and to illnesses:

- 1) Selfaggression, chronic fatigue-syndrome, and cancer (entodermal)
- 2) Allergy and neurosis
- 3) Health and regulation-unimportant illnesses like infections
- 4) Strong stress, high tension, multiple

- 5) Arterial sclerosis, M. Parkinson, endogenous depression, and anankasm

Figure 1.  
Example of a multi-peak frequency distribution: multimorbidity



### A retrospective evaluation

In our energy-diagnostic department we noticed in the last years cases with irrational stimulus-reaction-patterns and with a chaotic or rigid regulation state of the autonomous systems more frequently. We found a possible explanation in the Switching-phenomenon. In addition to former results a new cause came into the discussion, it is the electro-smog-exposure. We used three criteria in order to clarify the discoveries: A) a negative reaction to a pulsating magnetic field, B) a positive reaction to a brain synchronization procedure, and C) frequency distribution analysis models of skin resistance values. A retrospective

evaluation about 4 years (435 patients) divided into 2 groups (2002/2003 vs. 2004/2005) was carried out, it found themselves 1) a discrepancy between results before and after the synchronization procedure B), and 2) a positive relationship between the criterion A) and a chaotic inclination in C). So the suspicion arises conc. an electro-smog-induced polarization of systems [3] inside the organisms in our population (table 1).

Concerning the term 'synchronization procedure': a massage of the own eye brows performed with crossed arms for about 40 seconds. It is able to

resynchronize a 'switched' central nervous system. Switching means that conscious and subconscious parts are no more associated but are working separately. The result is a 'cool' person with apparently normal intellect, however, no entry to the emotional parts of the brain. If such a person receives

questions (by methods of the energetic and information medicine) the answers will be paradoxical. A similar and known situation is a dependency to an agent which harms the person. The agent may be an exposure to electromagnetic waves, too.

Table 1.  
Results of a retrospective evaluation of skin resistances over 4 years (% change)

		years 2002 + 2003		years 2004 + 2005	
<b>puls. magnetic field exposure</b>		<b>- 13.5</b>		<b>-22.3</b>	
	SD		18.1		15.7
<b>synchronization procedure</b>		<b>+8.3</b>		<b>+14.6</b>	
	SD		6.9		9.4
<b>distribution histogram left ↔ max. : max. ↔ right</b>		<b>.68</b>		<b>1.07</b>	
	SD		.30		.53

*The differences between the groups are significant.*

### Examples

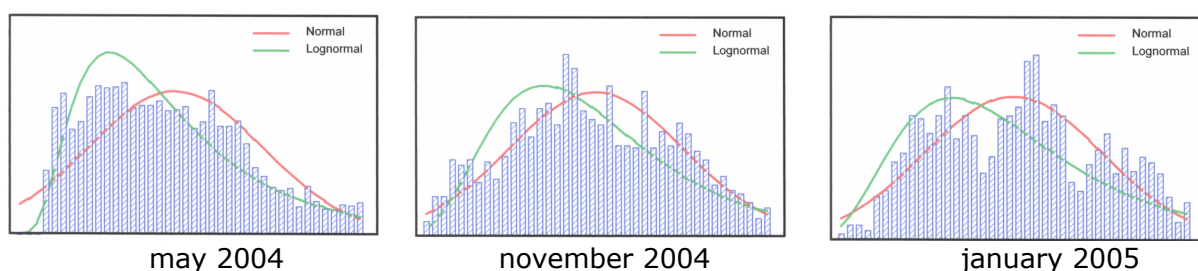
Which are further tendencies during the course of the last years? In the first years of these investigations (1998 to 2002) most persons showed a single distribution peak (figure 4), since then many persons have, however, 2 to 5 tops which refer to a fragmentation of

the regulatory status.

In addition extremes are frequent now, more and more results are chaotic and/or rigid, the central peak of the Golden Cut becomes a rare result. An example is demonstrated in figure 2.

Figure 2.

Distribution histograms of a female over 9 months - fragmentation tendency together with a neurotic development

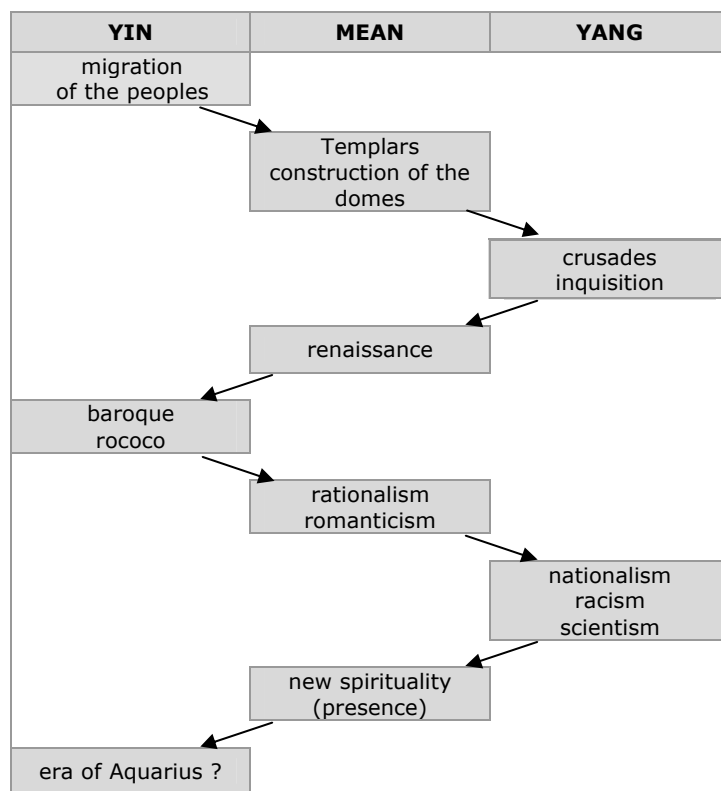


### Theoretical considerations

A person that is in harmony and with a normal health state shows a Golden Cut-Distribution. It is a dynamic equilibrium which means that it moves itself between a chaotic and a rigid tendency, according to the life situation. If there is a requirement for a high performance, the adrenaline (N. sympathicus) climbs and a log-normal distribution will turn out. If a rest is necessary and possible, the adrenaline declines and a Gaussian distribution tendency will result. A person with a distribution pattern like this is able to react on every demand in a moderate and adequate way.

Concerning regulations and psychologically this person will not be either an anarchist or a fundamentalist. The disadvantage of this harmony is, however, that hardly a mental evolution occurs firstly concerning the individual and secondly concerning the society. In the history of mankind and all nations harmonious times are exceptions, in reality often a pendulum oscillation can be described between the two extremes of chaos and of rigidity. Figure 3 shows the pendulum in the cultural history of Europe since (in about) the year 500.

Figure 3.  
The cultural history of Europe considered as pendulum variations



It seems that presently we are entering a phase of changes again. It corresponds

to the physicists' knowledge that life occurs at a laser threshold between

entropy and negentropy which never means a stability or even a safety [4, 6]. The non-linearity of a deterministic

### **Discussion**

The developments in the last years were: an increasing negative effect of electromagnetic waves, an increasing positive effect of a brain synchronization procedure, and a chaos tendency in the distribution histograms combined with fragmentation and desynchronization of the regulation systems. The three changes are correlated to each other. These effects seem to be produced by the no more continuously, but exponentially ascending technical electro-smog exposure. The environment of this world becomes cleaner concerning chemical agents, however, more polluted by waves and rays. All over the world the behaviour to use mobile phones regularly at the ears – close to the brain - has become the same. Wireless communications instead of the old telephones have become part of the normal way of life. This aspect may not be responsible for diseases like cancer, but produces an obvious change in the regulation abilities of the individuals.

Chaos and rigidity are not good or bad per se. In fact both have advantages. A chaos is creative, it allows modifications, it ends states of a pseudo-harmony. Rigidity admits to arrangement, it allows to concentrate onto special issues and tasks and to stabilize the society. The advantage of a further elongation of the

chaos as a characteristic of life in nature [8] seems to be predominant in our societies, too.

pendulum is a higher rate in the evolution of the mankind, and is an acceleration of the mental evolution of the people. The complexity grows.

On the first view both, chaos and rigidity, are enemies of a complexity, as it is combining tendencies and not extremes should be contained. After an era of slow and broken developments after the 2<sup>nd</sup> world war an acceleration, however, which is granted by fast and wide movements of the pendulum may be necessary. Also the globalization and the IT-revolution are important influences concerning that. The world has become a township and we are entering the steep phase of an evolutionary e-function. Stable states are substituted by permanent and increasingly faster variations and developments.

If we accept this, the meaning of the results is important for the sociology, too. Maybe we must use a wider concept of complexity which implies the extremes, that for example the anarchist as also the fundamentalist implies.

## Conclusion

Our analysis results of patients from Central Europe represent individual conditions. In the statistical evaluation and over some years, however, they allow the discovery of certain developments in the European society. One reason for that seems to be the ascent of the exposure of our population on electromagnetic waves resulting in a chaos tendency in the central nervous

system. This means an increased necessity towards a wider understanding of complexity including chaos, rigidity, and fragmentation. This kind of synthesis should be widely accepted in order to avoid conflicts and wars in the evolutionary (or revolutionary) time to come. The integration of extreme positions instead of fighting them will become a decisive task.

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