

Pilot Study on Steiner's Medical History Questions in Relation to Clinical Syndromes

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In this article we intend to report on the methodology of recording key symptoms in accordance with Rudolf Steiner's medical history questions and their relationship to one another.

1 Methodology

1.1 Nomenclature

The totality of recorded patients is called the *total group*. Principal subdivisions (e.g. sex, age) are called subgroups, subdivisions according to constitutional and functional perspectives (e.g. autonomic functions) *classes* and significant symptoms *characteristics*, insofar as they do not refer to the medical history questions. Rudolf Steiner's medical history questions are called *key questions*, the answers *key symptoms*. Excessively strong/weak affinity between 'I' and astral body on one hand and etheric and physical body on the other is described as *Excessively strong/weak intervention*. A group of key symptoms which leads to similar conclusions about the action of the human constituent elements is described as *concordant*, one which leads to contradictory conclusions *discordant*.

Apart from the occurrence of key symptoms that go in the same direction, account is also taken, on occasion, of the exclusion of a key symptom that is the opposite. Characteristics referring to opposite key symptoms of equal weight are called *ambivalent*.

Words in single quotes are used in analogy or as key words, e.g. 'salty' for salt requirement. This is a concession to the brief nature of the text. Words in double quotes are quotations, although they may not always be grammatically true to the original.

1.2 Patients

Characteristics and key symptoms of 166 patients from the Department of Internal Medicine of the Carl Unger Clinic in the years 1966-1967 were analyzed. Case notes with serious gaps were excluded.

1.3 Data recording

A *medical history questionnaire* was completed by the patient, if necessary with assistance from the physician. The answers were not to refer to the current state of illness but to the time before the illness. The questions were thought to be unambiguous and were answered freely. The physician filled in a *diagnostic questionnaire*. *Rhythmological* data were recorded by an assistant.

1.3.1 Medical history questionnaire

According to Steiner 'dreaming,' 'disturbed sleep,' 'lethargy,' 'short sightedness' and the need for sweet things indicate excessively weak intervention, the opposite symptoms and vertigo during external mechanical processes excessively strong intervention.(7,8)

In order to get unambiguous answers to Steiner's key questions,(7,8) the following questions were asked: - To assess dreaming: Do you dream a lot during the night? What is the nature of your dreams?

- To assess sleep: Do you often take hypnotics? Which? Do you have difficulty falling asleep? Do you wake frequently? Approximately how often?

- The question concerning mobility, activeness or lethargy had to be adapted to the patients: Is it an effort to do anything? Yes? No? Since when?

- In the question concerning sight, confusion with presbyopia had to be excluded: Are you nearsighted? Farsighted? Since when? Do you have to wear glasses all the time? While reading?

- A question was asked about the "longing" for salty or sweet foods: Do you generally like strongly salted foods? Sweet foods? Sour foods? Bitter foods? We specifically asked about *highly* salted food since medium salting tends to be the rule. It was stated that the question applied only to the desire, not to the way the patient acted on rational grounds.

- The question about vertigo caused by external mechanical processes, e.g. by rapid rotation of the body, was specifically differentiated: Do you easily become dizzy? When dancing? When turning suddenly? When bending over? When straightening up? When getting up in the morning? When looking down? (It was not asked whether the sensation of vertigo was revolving, or swaying etc.).

(The question about slow or fast growth had been wrongly put and could not be included in the analysis. This does not matter in so far as it refers more to the etheric body.)

The question about problems with eliminations was dealt with separately as Steiner only says in general terms that they allow conclusions to be drawn about disorders in the cohesion of 'I' and astral body on one hand and the etheric and physical body on the other. But he does not specify how. The questions asked were:

- Do you have a daily bowel movement? How often? Do you regularly use laxatives? Yes? No? Occasionally? Which? What, in general, is the consistency of your stools? Firm? Soft? Thin? Traces of blood? Traces of mucus?

- Do you perspire easily? Where on the body?

We did not find a satisfactory formulation for assessing the passing of urine. The question about menstruation was deliberately excluded since it is to be examined in a special group.

1.3.2 Diagnostic questionnaire

Sex, age and body mass were determined for the formation of subgroups.

Autonomic functions were assessed on the basis of pulse rate, respiration rate and the pulse-respiratory quotient.(2) The following questions were also asked: Do you feel cold

easily? Do you often have cold hands? Cold feet? (These questions also cover the symptom of cold, clammy extremities). And: Do you feel best in the morning, at midday or at night?

The following was asked for the classification relating to *development during childhood and youth* < 21: Were you a strong or not very strong child? What was your energy state from age 6 to 13? From age 13 to 20? Did you have a nice childhood? Did you enjoy your youth? Did you suffer any shocks? At what age? Did you have periods of sustained worry or distress?

The following was asked for the classification relating to *basic mood*: Do you tend to get depressed? The physician also made an assessment whether the patient was in principle depressed and despairing - agitated, restless, fidgety - calm, indifferent.

For the classification relating to complexion the physician noted: skin color - hair color - color of eyes. Mixed complexions were decided specifically according to skin and hair color.

Constitutions were classified as leptosome, athletic and pyknic Kretschmer types, as well as a mixed types.(3)

1.4 Methods of examination

Body mass was calculated according to Broca:

Body weight (kg) x 100 / (height (cm) -100).

Overweight people thus have a body mass index >100%, underweight people <100%.

Pulse rate, respiration rate and pulse-respiration quotient were determined on all patients during the working week after 9 a.m. while resting in bed, always by the same assistant. Individual measurements were repeated at approximately the same time. Pulse and respiration rates were counted for 3x1 minutes each, with the pulse-respiration quotient based on the arithmetic mean. The pulse rate was taken at the radial artery by palpation. Patients with weak heart contractions were excluded. The respiratory rate was determined visually and unnoticed by the patient.(6) For further methodology see reference.(9)

Table 1a. Summary of raw data, with ranges and frequencies.

Characteristic	Range	No.		Within a subgroup	
		n	%	n	%
Whole group		166	100		
Subgroups				Female	111 66.9
				Male	55 33.1
Age	<, > 45 years	166	100	<45 years	64 38.6
				>45 years	102 61.4
Body mass	<, > 100% Broca index	166	100	≤100%	99 59.6
				>100%	67 49.4
Key symptoms					
Need to taste	'sweet' – 'salty'	165	99.4	'sweet'	76 46.1
				'salty'	34 20.6
'Dreaming'	yes – very seldom – no	159	95.8	yes	90 56.6
				very seldom, no	69 43.4
'Sleeping badly'	yes – occasion- ally – no	163	98.2	yes	97 69.5
				occasionally, no	65 39.9
'effort to do things	yes – no	160	96.4	yes	87 54.4
				no	73 45.6
'Sighted'	near-, normal-, far-	164	98.8	near-	24 14.6
				normal-	130 79.3
				far-	10 6.1
Vertigo	yes – no	163	98.2		
'turning'	yes – no			'turning'	59 36.2
'bending'	yes – no			'bending'	50 30.7
'straighten up'	yes – no			'straighten up'	76 46.6
'looking down'				'looking down'	66 40.5
'Bowel movements'	yes – no	166	100	normal	75 45.2
				constipation	91 54.8
'Congestive sweat'	yes – no	165	99.4	yes	56 33.9
				no	109 66.1

Table 1b. Summary of raw data, with ranges and frequencies (continuation)

Characteristic	Range	No.		Within a subgroup	
		n	%	n	%
Vegetative functions					
Pulse rate (min ⁻¹)	numerical	166	100		
Respiration rate (min ⁻¹)	numerical	166	100		
Pulse/respiration quotient	numerical (log)	166	100		
Cold extremities, feeling cold	yes - no	166	100	yes	109 65.7
				no	57 34.3
Well-being during the day	morning - midday - evening	154	92.8	morning	61 39.6
				midday	24 15.6
				evening	69 44.8
Childhood and youth development					
< age 21 'Not feeling very strong' age 0-7	yes - middling - no	158	95.2	yes	54 34.2
				middling - no	104 65.8
age 8-14	yes - middling - no	155	93.4	yes	39 25.2
				middling - no	116 74.8
age 15-21	yes - middling - no	151	91	yes	20 13.3
				middling - no	131 86.8
'Not nice childhood', 'Not nice youth'	yes - middling - no	164	99	yes	49 29.9
				middling - no	115 70.1
'Shock, worry'	yes - no	136	81.9	yes	100 63.3
				no	58 36.7
Basic mood	yes - no	162	97.6	'depressed'	62 38.3
				'excited'	11 6.8
				'calm'	86 53.1
Complexion	light - medium - dark	142	85.5	light	61 43
				medium	43 30.3
				dark	38 26.8

Constitutions according to Kretschmer types(3) were established visually by a trained physician.

1.5 Analysis of raw data

Table 1a shows the characteristics and their rating, derived from the raw data, e.g. Yes - No or numerical. Characteristics were encoded, e.g. Yes: 0, No: 2, neither nor, undecided and equalizing values: 1. Individual means for pulse rate, respiration rate and the pulse respiration quotient during the patient's inpatient period had been previously determined by Trageser.(9) Further calculation of the pulse-respiration quotient was done logarithmically, distribution being abnormal.(2)

1.6 Statistics

Normal distribution was characterized by mean value and standard deviation, differences between the latter were estimated by t-test and, for non-normal distributions, by Wilcoxon. Frequency distributions were evaluated using the chi-squared test, partly against one another, partly against expectation.(1,4) Comparisons between two scores were done by Pearson correlation coefficient after controls with the chi-squared test brought identical results, $p < 0.001$ is judged to be highly significant (h.sig.), $p < 0.01$ as very significant (v. sig.), $p < 0.05$ as significant (sig.) and $p < 0.1$ as statistically conspicuous (st. con.).

No alpha adjustments were made. Always demanded by statisticians, they hardly ever appear in medical publications. The method is meaningless for our purposes because there is no random sample survey in a statistical sense, and the statement of probability is only intended to assist relative assessment to form a personal judgment (personal information from Burckhardt).

1.7 Presentation

The relationship between characteristics was intentionally not presented in the usual form of contingency tables because in the 3 methods of calculating short and long sightedness (see 3.2) there is no general reversibility which can be expressed by + or - alone. Furthermore, the aim was to keep the grouping of characteristics in the 2 classes of strong and weak intervention optically apart. Finally, the data was intended to be presented in a more space-saving way than with contingency tables. We therefore decided in favor of bar charts.

All results were printed at an angle so that they can also be read diagonally.

1.8 Equipment

Equipment: Victor V 286, Statgraphics software ISBN 0-926683-06-3 (USA) and Microsoft WORD 5.0.

2 Results

The characteristics are presented within overall and subgroups and in their relationship to one another. For further data see tables la,b respectively.

2.1 The characteristics of the subgroups

In accordance with the usual distribution of admissions to a department of internal medicine, approximately twice as many women as men were represented (Table la). Age was $x = 51.1 + 15.7$ years (20-81 years). This was subdivided into <45 and >45 because there were twin peaks in age distribution (Table 1), because the menopause was to be included in the higher age group and because earlier investigations had shown that Scleron was recommended by Steiner as a geriatric medicine from age 40,(10) i.e. the aging process becomes more pronounced after this. Approximately two thirds of patients were

>45 (Table Ia). Distribution according to sex was the same in both age groups. Patients <45 are described as 'younger' and patients >45 as 'older.'

Average weight was $x = 65.6 + 15.2$ (35.0-140.3) kg with an average height of $x = 166.7 + 8.2$ (147 -189) cm. 59.6% of patients had a body mass index <100%, 40.4% >100% (Table Ia). Body mass also established the link to Kretschmer types,³ with a Broca index of $84.4 + 11.6\%$ for the leptosome type,

$99.0 + 16.3\%$ for the athletic type, and $120.6 + 18.1\%$ for the pyknic type. Constitutions also correlated positively with the Broca index ($r = + 0.74$ $p < 0.0001$) but not with height and weight. Patients with Broca index <100% are described as 'slim' and the others as 'corpulent'.

Fig. 1. Histogram of age distribution in the total group ($n = 166$ patients).

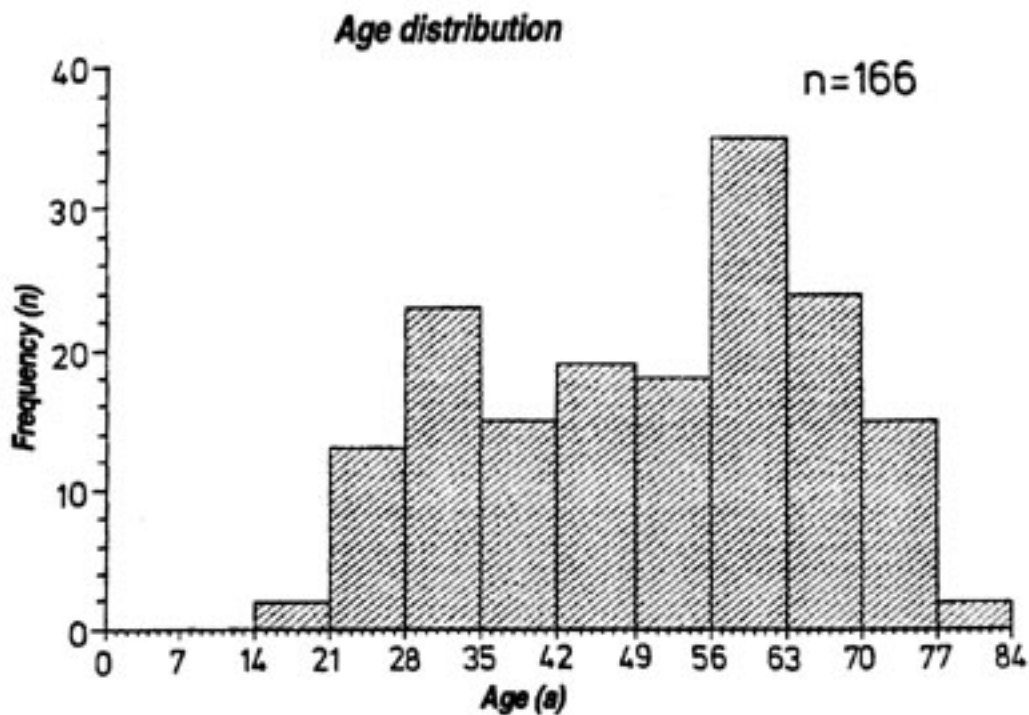
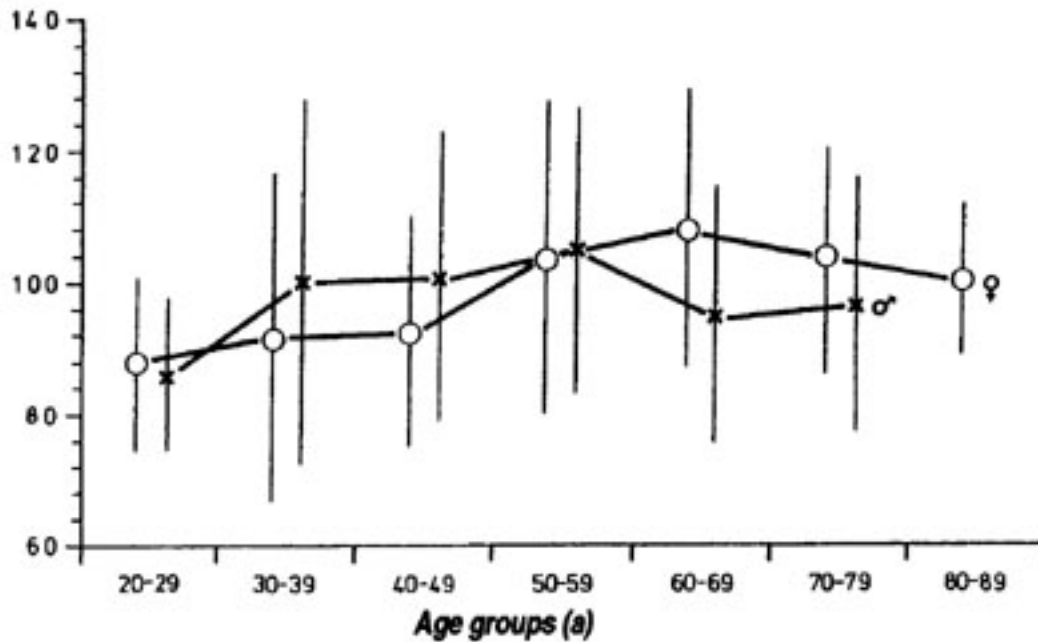


Fig. 2. Changes in body mass at different ages. Ill women and 55 men. Brackets indicate standard deviation.



Correlations between the 3 subgroups showed a link between age and corpulence only ($r = +0.22$, $p < 0.01$). The 'younger' group was slimmer, independent of gender, than the 'older' group (Broca index 92.4% vs. 102.9, $p < 0.01$). But that relationship was not constant (Fig. 2). At an advanced age corpulence went down again, from approximately age 65 in women and 55 in men (which corresponds roughly to the different ages of mortality).

2.2 Key symptoms

2.2.1 Key symptoms in the total group (Table 1a, b)

- 'sweet,' 'salty': One third of patients had ambivalent taste requirements. Of the rest, approximately twice as many preferred 'sweet' to 'salty'. Only positive statements were included, so that 'not sweet' is equivalent to 'salty' and vice versa.
- 'night-time 'dreaming': Approximately half of all the patients dreamt frequently. They were evaluated against the rest.
- 'sleeping badly': Approximately 70% of patients complained about disturbed sleep ranging from slightly to seriously disturbed. 30% slept well.

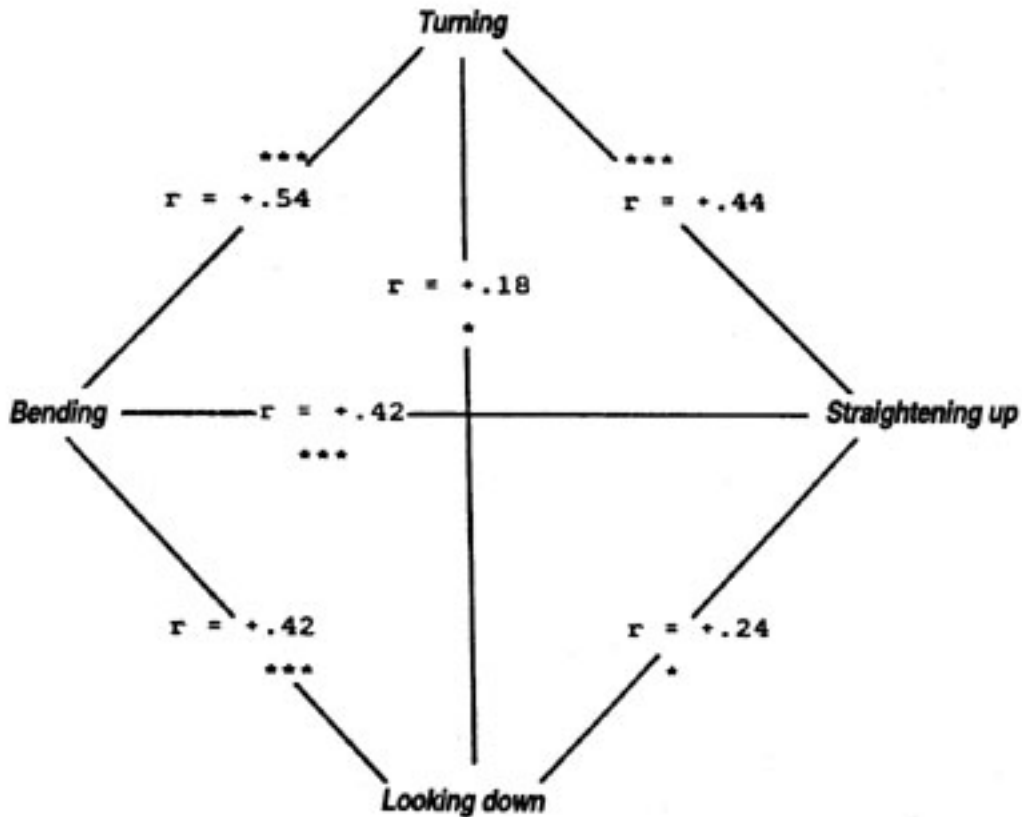


Fig. 3. The correlative relations between the 4 types of vertigo in the total group ($n = 166$). For symbols see legend Table 2.

- 'effort': Approximately half the patients complained about 'it being an effort to do something'. They were evaluated against the rest. - 'nearsighted', 'farsighted': Only 20.7% of patients were near or farsighted. Of these, approximately two thirds were nearsighted and one third was farsighted.

There was no age differential, which argues against the confusion of presbyopia and hyperopia. The small number of cases of impaired sight induced us to use 3 types of analysis:

1. nearsighted vs. normal sighted and farsighted as well as farsighted vs. normal sighted and nearsighted;
2. nearsighted vs. normal sighted as well as farsighted vs. normal sighted;
3. nearsighted vs. farsighted.

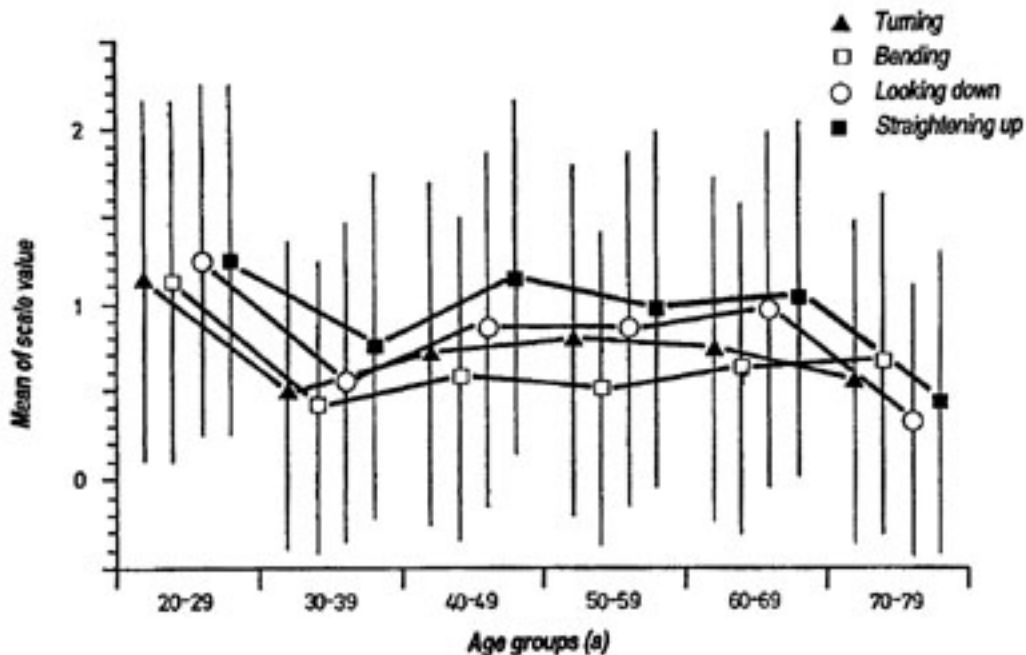


Fig. 4. The 4 types of vertigo by age in the total group.

- 'vertigo': 71.8% of patients complained about vertigo, mostly while getting up (Table 1a). Since Steiner emphasizes vertigo caused by external "mechanical processes," e.g. "by rapidly turning around,"(7) it was not clear whether this also included bending down and straightening up again. Neither the - roughly equal - correlation between the different types of vertigo (Fig. 3) nor their relationship to age (Fig. 4) provided any help in reaching a decision. As is shown by tables 2 and 3, 'turning' only correlated in 35.7% of cases with key symptoms which indicate strong intervention. In the remaining cases vertigo in the total/subgroups was always concordant (31x) with characteristics of weak intervention. Since 'turning' could be typical - neurogenic vertigo connected with old age - its occurrence in >70-year-olds was examined. Although there was no frequency difference in comparison to the <70-year-olds (Fig. 4), there was a slightly higher correlation with far-sightedness ($r = + 0.35$) in >70-year-olds than in <70-year-olds ($r = + 0.18$ $p < 0.1$). Thus vertigo from 'turning' in 70-year-olds could be connected with excessive intervention. Therefore the four types of vertigo were hypothetically linked with inadequate intervention in the first instance, and only 'turning aged >70' was linked with excessive intervention.

2.2.2 Key symptoms in the subgroups sex, age and body mass The greatest differences were found between the sexes. There was a tendency for women to 'dream' more frequently than men (61.9 vs. 46.3% $p < 0.1$), to 'sleep more badly more frequently' (61.1 vs. 48.2% $p < 0.01$), to have to 'make a greater effort to start work' more frequently (61.5 vs. 39.2% $p < 0.05$), to complain more about vertigo when 'turning around' (44.4% vs. 20.0% $p < 0.01$), 'straightening up' (55.6% vs. 29.1% $p < 0.01$), 'bending down' (38.9% vs. 30.7% $p < 0.01$) and 'looking down' (43.5% vs. 34.5% n.s.).

The age differential was low. 58.6% of 'older people' slept badly, but 'younger' ones still did so in 45.4 % of cases ($p < 0.1$). With body mass the surprising thing was that corpulent people rarely had to make 'more of an effort to do anything' than slim people (62.1% vs. 51.1% $p < 0.1$) and slept hardly any worse (60.6% vs. 49.5% $p < 0.1$).

Thus women had a stronger tendency towards weak, men towards strong intervention. Age and body mass did not demonstrate any certain relation.

2.2.3 Relations between key symptoms (Table 3) Pairs of relations were treated as reversible, e.g. 'dreaming' - 'sleeping badly' vs. 'no dreams' - 'sleeping well.' In the tables, only one of the 2 pairs is linked with a bar for reasons of clarity, e.g. 'dreaming' - 'sleeping badly' but not 'no dreams' - 'sleeping well'. Only positive correlations are mentioned, e.g. positive correlation between 'dreaming' and 'sleeping badly,' and not the negative correlations between 'dreaming' and 'sleeping well'. Such reversibility applies only in a limited way to sightedness according to methods 1 and 2 (see 3.2.1)

In the total/subgroups there were altogether 39 sig.- h.sig. and 17 st.con. concordances and only 2 sig. and 3 st.con. discordances with $|r| = 0.14 - 0.4$. The correlations referred in descending order of frequency to: 'sleeping badly' (28), 'straightening up' (18), 'dreaming' (16x), 'turning around' (14), 'effort to do anything' (12), 'bending down' (9), 'long and near-sighted' (3 each), 'looking down' (4), 'sweet' (2), 'turning aged > 70' (1).

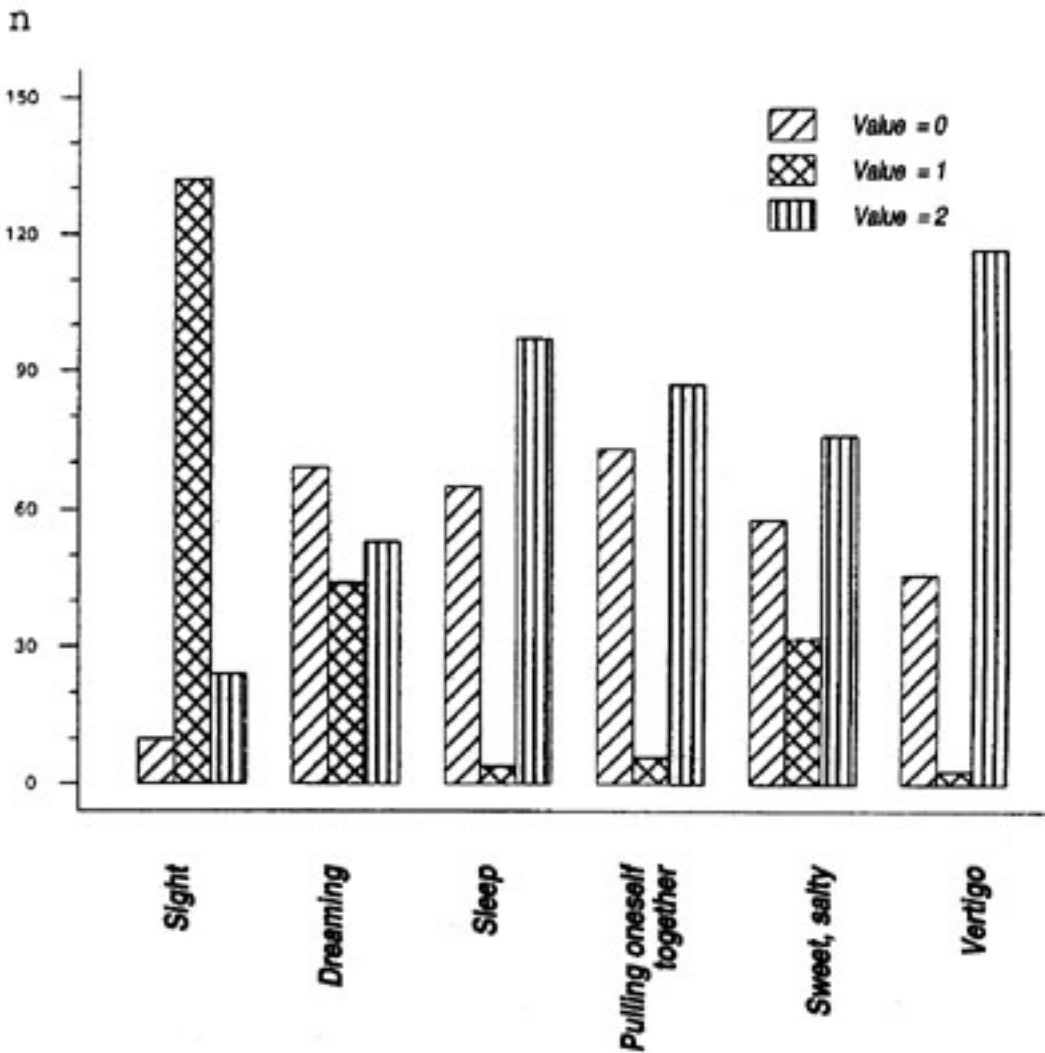
While all types of vertigo except 'turning' correlated without exception with the characteristics of a lack of intervention (see above) and 'turning' also related 9 times to a lack of intervention, it also related 5 times to strong intervention, although only in relation to sight.

This result came as such a surprise, that we wanted to test it by means of a second method.

Every key answer was given a value such that 2 stood for an answer indicating weak intervention, 0 for strong intervention and 1 for a mean, indifferent value. Vertigo was no longer differentiated.

Fig. 5 shows the frequency distribution of the evaluation of the individual key symptoms. Only sight clearly shows frequent indifference.

Fig. 5. Frequency distribution of the values 0,1 and 2 for every key symptom in the total group.



0 stands for strong intervention, 2 for weak intervention and 1/or indifference.

Every patient was then given a personal value by adding his or her values together. A total of 0 clearly indicates strong intervention, a total of 12 weak intervention.

Fig. 6 shows the histogram of all individual evaluations. Distribution is not normal ($p < 0.0001$).

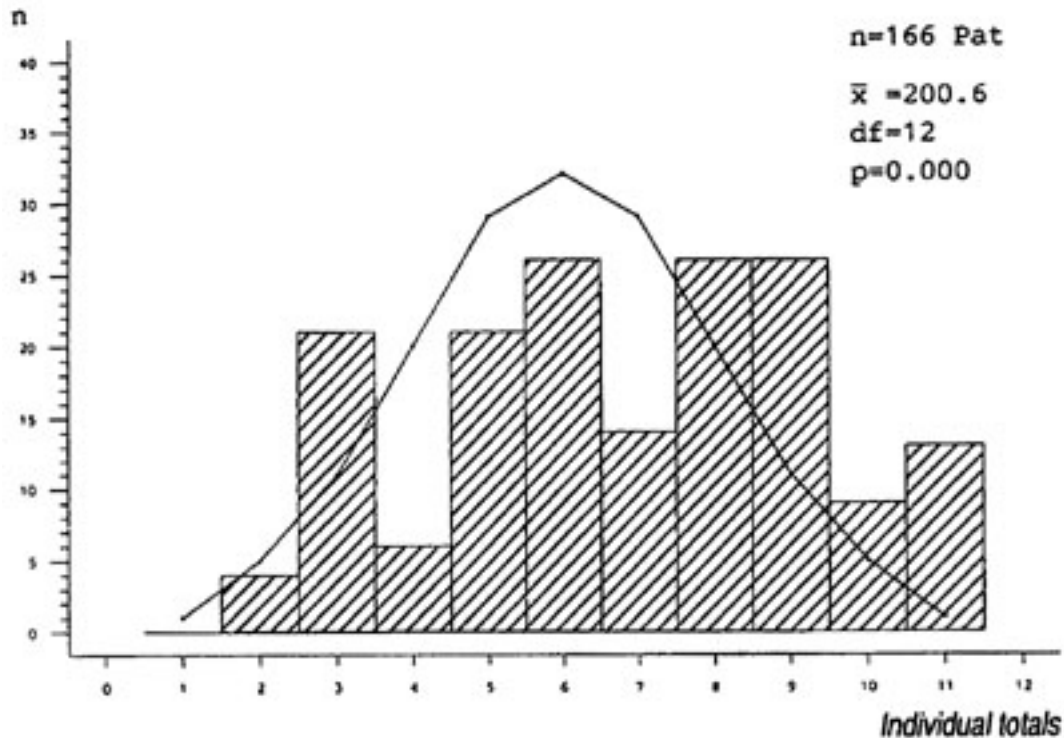


Fig. 6. Frequency distribution of the individual totals of assessments 0,1 and 2 (see Fig. 5) of the 6 key questions compared to anticipated distribution in the total group.

To test this unexpected distribution, the theoretically possible combinations of all three answers to the 6 questions had to be calculated: $(a + b + c)n$, where a, b and c represent the three values 0, 1 and 2 and n the number of questions, here 6. In order to calculate the frequency of the individual totals, the binomial formulation $(a + b)1n$ was extended by $(a + x)n$, with $x = b + c$, and the anticipated distribution calculated on that basis. (Here we would like to express our thanks to B. Moellenbruck, who assisted us in finding the solution to the mathematical problem.) Since the total of this anticipated distribution did not correspond to the number of our patients ($n = 166$), we reduced the anticipated values as a percentage so that their sum also came to 166. Only then could comparison of class membership be made, using the chi-squared method.

Fig. 6 shows that the flanks of the anticipated distribution have a higher level of occupation than the center, particularly with reference to the high individual totals. The difference is significant, with $\chi^2 = 200.6$ $df = 12$ $p = 0.000$.

This result confirms that of the first method: the answers to the key questions are not mixed arbitrarily but show an above average chance arrangement in line with either strong or weak intervention. 36.8% of the patients are, however, in the middle group with values 5-7.

This was followed by the question whether the gender difference observed above could also be confirmed by this method. Fig. 7 shows the tendency among women for higher sum totals and among men for lower ones ($\chi^2/n = 23.5$ $df = 9$ $p < 0.005$).

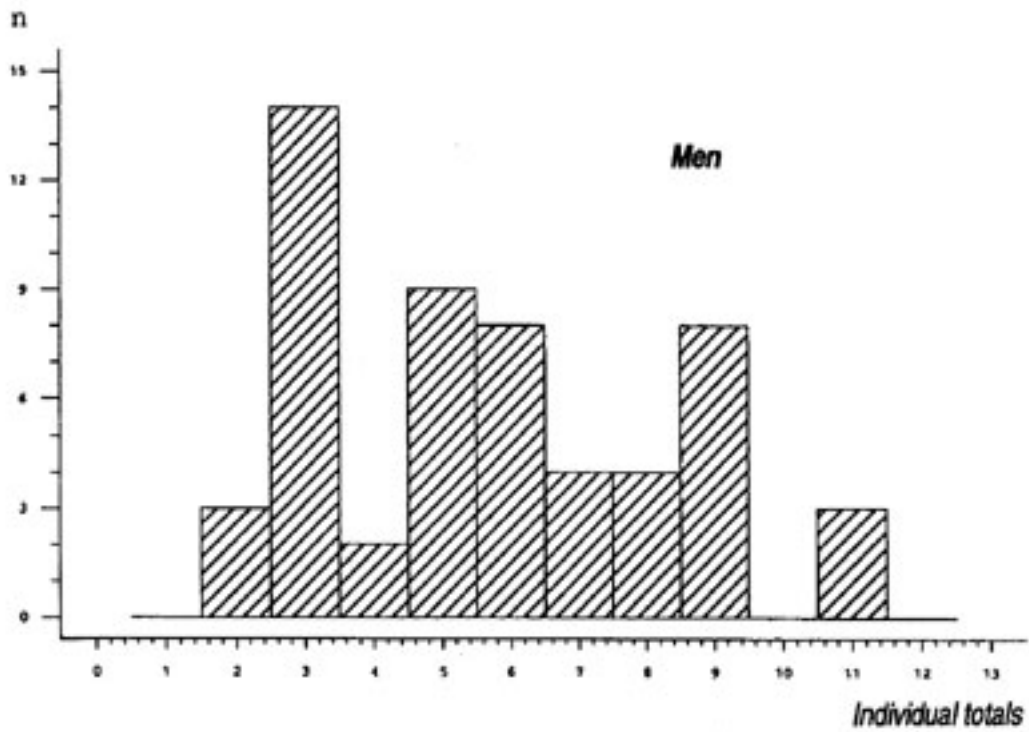
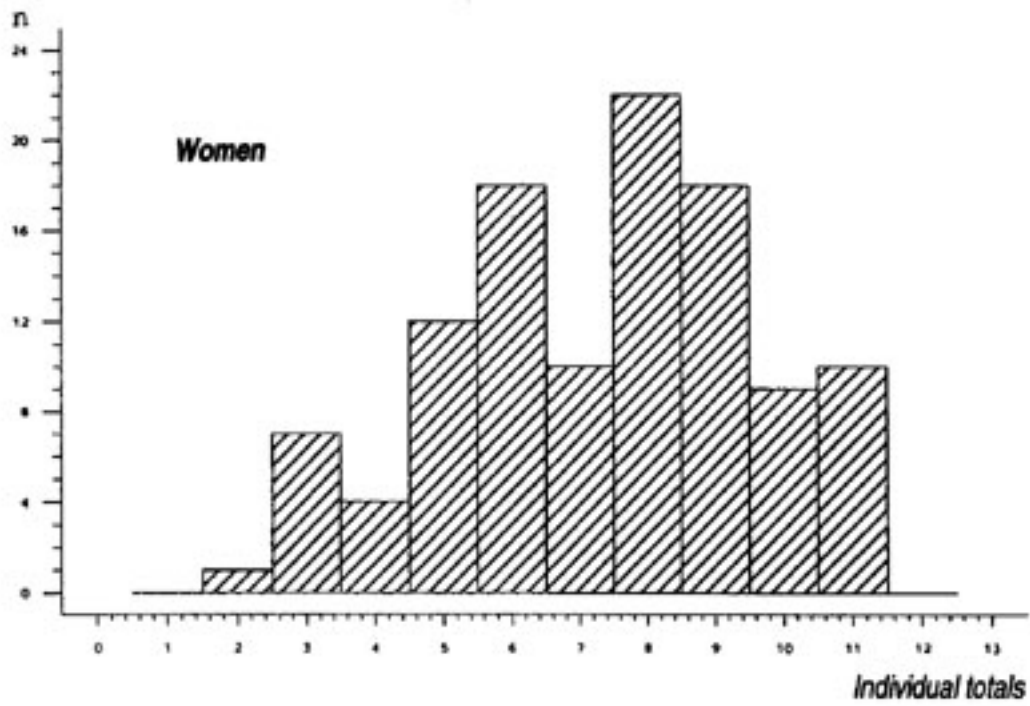


Fig. 7. Frequency distribution of individual totals (see Fig. 6) classified *ace. h* (female above, male below). The two distributions vary ($p < 0.005$).

No differences were noted in the age and mass subgroups, which is in line with the results of the initial method.

Thus we can see an above average chance arrangement of the key symptoms in relations to either strong or weak intervention. This convincingly validates Steiner's statement. Women overwhelmingly show a pattern of answers which indicates weak intervention whereas men show one which indicates strong intervention. The result is independent of age and body mass.

2.2.4 Discussion

The way in which the questions were formulated could probably be improved, but even at this stage polarization was good with uncertain answers relatively rare (Fig. 5). A greater number of the latter inevitably occurred with sight, but there were nevertheless 41 usable correlations for near- and farsightedness. In 31.7% of cases they were confirmed by various calculating methods (see 3.2.1) or at least did not contradict one another. The study should, however, be repeated with a larger number of near and farsighted people.

Contradiction between the spiritual scientific and the empirical statement about vertigo permits the following conclusions:

- If Steiner's statement is *true*, then 'bending down' and 'straightening up' are certainly not vertigo caused by "mechanical processes." But in that case the latter types of vertigo, including 'looking down', could represent a new symptom, found by accident, of lack of intervention because of the frequency of their relationship with other key symptoms. That is why they were retained below.
- Differences between individuals might then disappear insofar as the physician has not asked differentiated questions about the various types of vertigo. But in two thirds of all patients with 'turning', discordance would still have arisen between individuals according to Steiner, because in their case 'turning' is overwhelmingly associated with symptoms of weak intervention.
- If Steiner's statement is not valid, two thirds of discordances between individuals caused by 'turning' would dissolve; they would remain with one third.

The problem cannot be solved statistically, but that only became apparent following empirical investigation.

Neither can the problem be solved by assuming a mistake in the notes of the shorthand writer; this is unlikely in light of the text. The question remains whether 'turning' is really an ambivalent symptom and Steiner, by chance, only saw patients in whom it was associated with strong intervention and generalized on that basis.

	Total group	Sex		Age		Broca index	
		Female	Male	≤45 a	>45 a	<100x	≥100x
Turning	+	+	-	+	+	+	+
Nearsighted	2		2		3		
Sweet							
Dreaming							
Sleeping badly							
Effort to do things							
Farsighted				2	2		2
Salty							
$ r $	\bar{x}			0.25			
	max			0.03			
	min	0.14	0.19	0.21	0.18	0.26	0.25
	Max	0.21	0.25	0.29	0.39	0.28	

Statistical assessment of the weight of individual key questions was omitted because factor analysis is only of use if the answers to each single question are distributed normally. This not being the case, as Fig. 5 shows, only an estimate can be made in line with the frequency of the correlations (see Table 3) and the low number of indeterminate answers (see Fig. 5). In this light, questions about sleep, 'dreaming,' 'need for effort,' 'vertigo' are very reliable. The questions about sight are meaningful but their value is limited in practice because of the large number of normal-sighted patients. The question about 'sweet' and 'salty' correlates less frequently than accords with my practical experience. This may be explained by the fact that we asked about the need to add a lot of salt to food (see 2.3.1). (See below about constipation and sweating.)

The spectrum of correlatively significant key symptoms is very similar in total and subgroups. Everywhere there is a strong relationship between 'dreaming,' 'sleeping badly,' 'need to make an effort,' 'turning' and 'straightening up.' Altogether this result accords well with experience from case studies.

The degree of correlation is disappointingly low in the first instance ($|r| = 0.14-0.44$) (see Table 3). This is due to the many detailed characteristics, as is known from other studies, and would change immediately with the creation of subgroups, which was deliberately omitted in order not to overlook previously unknown subgroups, as will be confirmed later (see parts in and IV). The low correlation coefficients, indeed even the individual discordances do not therefore need to indicate unusability of the method but may provide statistical room for maneuver to accommodate individual and subgroup particularities which we still have to learn to read.

	Total group	Sex		Age		Stoic Index	
		Female	Male	+45 *	+45 *	+100*	+100*
Dream							
Dreaming	***	**	**	**	**	**	**
Sleeping badly	***	**	**	**	**	**	**
Effort to do things	***	**	**	**	**	**	**
Nearsighted							
Farsighted							
Tuning							
Struggling up							
Bending							
Looking down							
Salty							
Seldom dreaming							
Sleeping well							
Not effort to do things							
Farsighted							
Tuning > age 70							
[*]	0.32	0.28	0.3	0.32	0.28	0.28	0.28
**	0.07	0.05	0.07	0.03	0.07	0.08	0.06
***	0.14-0.21	0.18-0.3	0.24-0.44	0.23-0.37	0.18-0.33	0.19-0.33	0.21-0.33

Table 3. Relations between key symptoms. Only positive correlations, e.g. 'dreaming' - 'sleeping badly', are shown if negative ones act as mirror image, e.g. 'dreaming' - 'sleeping well'. Similarly only one pair of relations is named, e.g. 'dreaming' - 'sleeping badly', when the other one, 'seldom dreaming' - 'sleeping well', is the inevitable consequence. Both pairs are entered when this is not the case, e.g. with short and far-sightedness (see 3.2.1).

In the meantime our results have been tested by Kroez(5) using a sample of 108 women (56 with histories of or manifest breast cancer, 52 non-malignant controls >40 years of age). The question was whether the relationship of the human constituent elements was different in women who later developed breast cancer than in women who have, as yet, no cancer. The women were asked to say from memory how they would have answered Rudolf Steiner's medical history questions between the ages of 21 to 30 and from approximately 40 to 45. To establish the relationship between the key symptoms the results of both groups are presented here in summary.

The questions were:

1. Do you remember having dreams? Almost never, seldom, occasionally, frequently, almost daily.
2. Did you have difficulty falling asleep or suffer from disturbed sleep? Almost never, seldom, occasionally, several times per week, almost daily.
3. Do you tend towards far or nearsightedness (not presbyopia)? Farsighted, nearsighted. The answer applies to both age groups.
4. Did you have a desire for sweet, salty, bitter or sour food? Yes, no.
5. Did you suffer from vertigo? Almost never, seldom, occasionally, frequently.
6. How often did you have bowel movement? Approximately 1-2 times, 3-4 times per week, approximately once, 3-4 times, > 4 times per day.

7. Did you take laxatives? Frequently, occasionally, never.

Question 2 was formulated differently than in our case (see 2.3.1) in the hope of achieving greater differentiation in the responses. This hope was not realized.

In question 4 the expression 'highly salted' (see 2.3.1) was not included in order to produce larger groups.

Question 5 was not differentiated (see 2.3.1), since differentiation offered no advantage (see 2.3.1).

A score was produced from questions 6 and 7. Scoring took place according to our results which will be published in part V: constipation is an indication of lack of intervention.

This left 6 key answers. A score was calculated for every answer and from this a total score for every woman. Correlation between the single scores and the total score was then examined. Below, the results for age 21-30 always come first, followed by those for age 40-45.

- 'sleeping': ($r=+0.26$ $p= 0.0074$; $r=+0.0076$ $p= 0.938$)
- 'dreaming' ($r=+0.45$ $p= 0.0000$; $r=+0.41$ $p= 0.0000$)
- 'sight' ($r=+0.21$ $p= 0.0029$; $r=+0.29$ $p= 0.0033$)
- 'taste' ($r=+0.54$ $p= 0.0000$; $r=+0.44$ $p= 0.0000$)
- 'vertigo' $r=+0.25$ $p=0.01$; $r=+0.18$ $p=0.06$
- 'constipation' ($r=+0.58$ $p= 0.0000$; $r=+0.34$ $p= 0.0005$)

This confirms our results in principle. That the correlations are partly higher than in our case (see 3.2.3) is due methodologically to the way the groups are formed. The reassessment of vertigo (see 3.2.1) is confirmed. The new formulation of 'salty-sweet' resulted in more exact relations than in our case (Table 3). The result for 'sight' is again remarkably good despite the small groups.

The question about 'falling asleep and disturbed sleep' is less suitable in this form. Our formulation (see 3.2.1) proved to be more accurate.

Thus it emerges that Rudolf Steiner's key questions, with reference to the anthroposophical assessment of key symptoms, are very consistent within themselves, provided that the 'vertigo' symptom is reassessed. This is all the more remarkable as the content of the questions is very heterogeneous.

Given that the key symptoms allow conclusions to be drawn about the highest constituent elements of the human being today, the 'harmlessness' of the questions comes as something of a surprise. No psychoanalytical, psycho- social or biographical questions! And yet they are the key to anthroposophical treatment. In my opinion this can be explained in that the 'I' of the patient does not need to be discernible to the physician but only the intensity of its *intervention*.

Another factor, too, appears to be of significance: the more physicians remain phenomenological, truly "shallow," in their observation, the more they school themselves to

investigate the depths by esoteric means and not by speculative deduction and spiritist methods (see 1.3).

The questions about key symptoms have proved so useful in making anthroposophical diagnoses that I would not want to do without them during consultations. Moreover they train the faculty of perceptual judgment.

Nevertheless, questions remain open, e.g.: what does it mean that some questions focus on very constant characteristics ('sight') and others on changeable ones ('sleep'), that some are more directed at the body ('taste') and others more at the psyche ('dreaming')? This should be the starting point for more in-depth studies.

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References

1 Haseloff OW, Hoffmann HJ. Kleines Lehrbuch der Statistik. Berlin: W. D. Gruyter und Co. 1965.

2 Hildebrandt G. Die rhythmische Funktionsordnung von Puls und Atmung. Z angew Baeder- und Klimaheilk 1969; 7:533.

3 Kretschmer E. Koerperbau und Charakter. Berlin: Springer 1977.

4 Pfanzagl J. Allgemeine Methodenlehre der Statistik II. Berlin: W. D. Gruyter 1974.

5 Kroez M. Ueber Angst, Vegetativum und konstitutionelle Aspekte bei Mammakarzinom-Patientinnen. Inaug. diss. publ. prepared 1995.

6 Reichel H, Weidlich F. Ist durch Zaehlen von Puls- und Atemfrequenz ohne apparativen Aufwand die Wirkung von Badekuren erkenntlich? Arch Phys Ther (Leipzig) 1959; 5:338.

7 Steiner R. Spiritual Science and Medicine (GA 312), lecture of 25 March 1920. Translator not known. London: Rudolf Steiner Press 1975.

8 Steiner R, Wegmann I. Fundamentals of Therapy (GA 17), chapter 19, 4th case. Translated by E.

Frommer and J. Josephson. London: Rudolf Steiner Press 1983.

9 Trageser K. Untersuchungen zum periodischen Verlauf des Puls-Afem-Quotienten und der Koerpertemperatur bei internistischen Klinikpatienten. Marburg/Lahn: Inaug. diss. 1986.

10 Weckenmann M. Das Arzneimitelbild von Plumbum im Spiegel von Argentum II. Merkurstab 1990; 43:108