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DYNAMIC STUDIES OF MAGNETIC SIGNALS OF THE QIGONG STATE IN A SPACE LABORATORY OF ZERO MAGNETISM

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In a zero magnetic space laboratory, we observed the dynamic changes of magnetic signals during the entire process of QIGONG of 32 exercises with 20 people. Of these, we detected magnetic readings on 21 exercises. The magnetic signals were of three types: 1, direct current signals, amplitude of 2 to 6 X 10^3 nanotesla (nT). 2, alternating current signals with amplitudes of 2 to 2.6 X 10^3 nT. 3, pulsating signals with an amplitude of 3 to 1.3 X 10^5 nT. After completing the QIGONG exercises, there remained a detectable magnetic signal 81 percent of the time, indicating that after completing the QIGONG exercise, there continued to remain a "field" effect. Repetition experiments on 17 occasions with eight people indicated that it was repeatable on 11 occasions with five people (65 percent of the time). Looking at the direct current magnetic field, when releasing external QI, the direct current magnetic field detected was three to six orders of magnitude greater than that of an ordinary person. Just what the mechanism is that causes this drastic increase in human body magnetic signals deserves deep reflection and further research.

There have been a small number of articles in China reporting research into the magnetic signals of QIGONG external QI. Some persons have detected a low frequency magnetic signal of the strength of 1.25 and 1.67 gauss at the location where two QIGONG masters directed their energies. They have also discovered that the amplitude of the magnetic signals and the maximum rate of variation was related to the state of health of the QIGONG master. For the same QIGONG master in a good state of health, the maximum magnetic signal has a strength of 1.67 gauss, and the maximum rate of variation was 6.7 gauss per second. On the other hand, when the state of health was not so good, the maximum strength was only 0.25 gauss, and the maximum rate of variation was one gauss per second. Also, there have been people who have measured at the hands and mouth of a QIGONG master magnetic fields which are from 2 X 10^4 to 1 X 10^5 times the strength of that of ordinary people[1,2]. Another person measured a magnetic field of the strength of four gauss at the palms of a QIGONG

master. However, he pointed out that a marked magnetic field cannot be detected in QIGONG master[1]. In some related reports in the past, not only were there fewer examples of this detection, but the testing was done in ordinary laboratories without magnetism screening rooms to eliminate effects of earth magnetism and outside magnetism interference, and which lacked observation and description of the dynamic process.

Our experiment was conducted in China's only zero gravity space laboratory, and we conducted dynamic observation of the entire QIGONG process.

The zero magnetism space laboratory was composed of 26 pieces of multiple layered alloy (see cover illustration two. Translator's note: unavailable). The space is around eight cubic meters. The zero magnetism space laboratory capability indexes are:

1. Residual magnetic field: The screening effect on the earth's magnetic field is a reduction from 5 X 10^4nT (1nT - 10^{-9}T) to less than 20 nT.

2. Alternating current screening coefficient: 0.01 to 2Hz low frequency signals can be reduced to a level 160 to 1400 times lower.

3. Residual magnetism stability: The residual magnetic field at any point in the space will shift less than 0.3nT within a 24 hour period.

Therefore, we can believe that this has made it possible for us to observe in detail, under laboratory conditions, dynamic changes in the weak magnetic signals under conditions of basically avoiding interference by the earth's magnetic field and various electromagnetic interference.

SUBJECTS AND METHODS OF THE EXPERIMENT

The 26 subjects of the experiment were divided into two groups. One group was the normal group (had never practiced QIGONG) which consisted of six persons with an average age of 46.7 years. The other group was the QIGONG group (practiced QIGONG for from one to 30 years) which consisted of 20 persons with an average age of 45.3 years.

Experiment procedure: Before the subject to be tested entered the zero magnetism space laboratory, he removed all magnetic objects he carried (such as watch, keys, belt buckle, jewelry, and false teeth). After he was checked, he put on slippers and prepared to enter the zero magnetism laboratory.

Before the subject to be tested entered the laboratory, the low level magnetic signals of the closed zero magnetism space laboratory was recorded, and then the subject to be tested entered the laboratory, and hatch (hereafter called door) to the laboratory was closed.

When the experiment sequence began, the subject to be tested first stood inside the zero magnetism space laboratory near the door for three minutes, and then stood at the magnetic intensity probe for three minutes, and then began his QIGONG. During QIGONG, all of the subjects pointed the palm of their hand at the probe until a maximum reading was obtained. At the end of the QIGONG, the subject being tested would stand at the probe for three minutes and then return to the stand at door for three minutes and then open the door. After the subject being tested left the laboratory, the door was closed once more, and the low level reading of the laboratory was recorded. During the process of the experiment, the dynamic changes of the magnetic signals during the entire process of before, during, after and after leaving the lab were all recorded by the recorder.

For recording of the magnetic signals we used the CHO-1 model millioersted meter for the readings. The millioersted meter frequency response is direct current up to ten hertz. It can measure from 1nT to 1mT per centimeter and is adjustable. The zero shift is 1nT per hour. We used a YEW-3065 model three channel signal recorder to record the results. This has a sensitivity of 1V per centimeter, and a paper speed of two or six centimeters per minute.

RESULTS AND DISCUSSION

I. MAGNETIC SIGNAL WHEN NORMAL PERSONS SIMULATED QIGONG

The six ordinary people simulated sending out QIGONG from the palms of their hands, and in all the experimental sequences, there was never a magnetic signal greater than 1nT (nanotesla, unit of magnetic flux density) detected (see illustration two).

ILLUSTRATION TWO: MAGNETIC SIGNAL CHART OF ORDINARY PERSONS SIMULATING QIGONG

1. Standing at the probe. 2. Raising their hands. 3. Simulating QIGONG. 4. End of QIGONG simulation. 5. Inside the door.

II. DYNAMIC CHANGES IN MAGNETIC SIGNALS WHEN QIGONG GROUP RELEASED EXTERNAL QI

In 32 experiments with 20 practitioners of QIGONG, we were able to detect magnetic signals 21 times, which is 65.7 percent of the time. During 11 tests, or 34.3 percent of the time, there was no magnetic

signal.

THREE CATEGORIES OF DETECTED SIGNALS

1. High magnetic signal group. This is where the signal intensity was 11 to 10^5nT. This occurred 13 times, or 40.7 percent of the time.

2. Low magnetic signal group. This is where the signal intensity was two to 10nT. This occurred on eight occasions, or 25 percent of the time.

3. No magnetic signal group. This occurred on 11 occasions, or 34.3 percent of the time.

Based on the category of magnetic signal of the QIGONG released by the subject, we can divide them into the categories of direct current, alternating current and pulses. The direct current signal amplitude was two to 6 X 10^3nT, and continued for 0.5 to 14 minutes (from the time when the subject began releasing QI until he stopped). The alternating current signal amplitude was 2 to 2.6 X 10^3nT, and the frequency was 0.16 to 0.5 cycles per second. The pulse signal amplitude was 3 X 1.3 X 10^5nT, and the frequency was from one to two cycles per second (see table one).

表 1 气功外气磁信号类型和强度

1 发功者	2 直流(nT)	3 交流(nT)	4 脉冲(nT)
5 刘××	4～2.5×10^3	20～2.6×10^3	10^2～10^4
6 张××	4～30	2～5	20～2×10^3
7 崔××	4～36	25	1.2×10^3
8 屈××	4～20	4～13	13～60
9 刘××	3～4	3～4	7～15
10 黄××	5～6	2～3	
11 王××	2		
12 杨××	9		
13 张××			4
14 黄××	6×10^2～6×10^3	18～1.2×10^3	32～1.3×10^5
15 吕××	5		
16 张 ×		2	3.5
17 张××	2～9		

TABLE ONE: CATEGORIES AND STRENGTH OF MAGNETIC SIGNAL OF EXTERNAL QI

1. Person doing QIGONG. 2. Direct current (nT). 3. Alternating current (nT). 4. Pulse (nT). 5. Liu X X. 6. Zhang X X. 7. Cui X X. 8. Ju X X. 9. Liu X X. 10. Huang X X. 11. Wang X X. 12. Yang X X. 13. Zhang X X. 14. Huang X X. 15. Lyu X X. 16. Zhang X. 17. Zhang X X.

ILLUSTRATION THREE SHOWS TYPICAL MAGNETIC SIGNAL CHARTS DURING TESTING

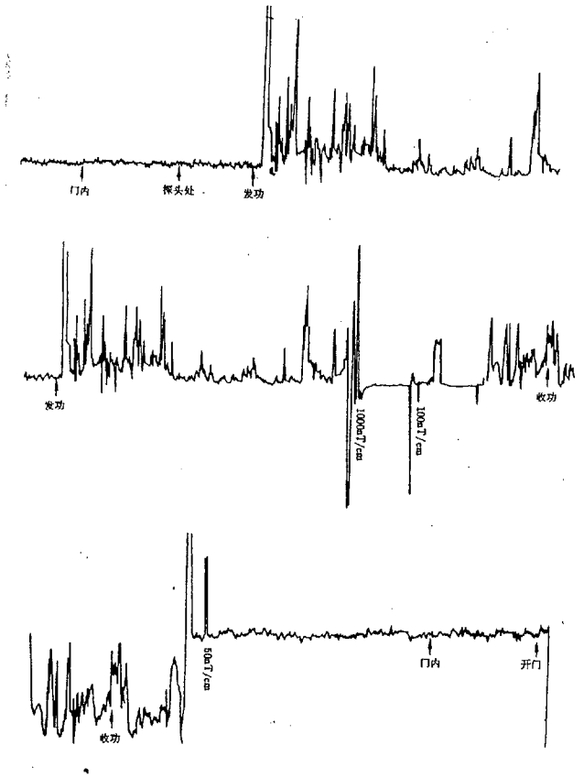


ILLUSTRATION THREE: TYPICAL MAGNETIC SIGNAL CHARTS DURING QIGONG PRACTITIONERS' RELEASE OF QI

1. CHARACTERISTICS OF MAGNETIC SIGNAL DURING RELEASE OF QI:

During the process of the release of QI, magnetic signals were detected 21 times. Of these, on five occasions there were all three types of signals, on six occasions there were two types of signals, and on ten occasions one type of signal occurred. The alternating current signals generally were less than 10nT, and individuals could attain as much as 2.6 X 10^3nT. The direct current signals were between two and 20nT, and some persons could achieve 6 X 10^3nT. The pulse signal had a very wide range of intensity, and the absolute values were also large. A small number of people had signals of less than 100 nT, but the majority were over 10^3nT. Of these, some were of the magnitude of 10^4 to 10^5 nT (see table two and illustrations four a, b and c).

表 2　发功时的磁信号类型和强度

1 发功者	2 直流(nT)	3 交流(nT)	4 脉冲(nT)
5 刘××	2～4	2～20	62～1.5×10^3
5 刘××	2～6	4～2.6×10^3	24～10^4
5 刘××	6		3～10^3
5 刘××			7×10^2～5.4×10^3
6 张××	3～4		2.2×10^2～1.4×10^3
6 张××			40
7 崔××	4	5～25	1.4×10^2～1.2×10^3
7 崔××	20		
8 屈××	2～5		2～13
8 屈××	13～20	2～4	6～17
9 刘××	2～4	2～5	5～8
10 黄××			6×10^2～1.3×10^5
10 黄××			8.8×10^2
10 黄××	6×10^3		9.1×10^3
11 张××	2～9		
12 吕××	4～5		
13 张　×		2	4
14 杨××	9		
10 黄××	3～5	2	
15 王××	2		
11 张××			4

TABLE TWO: CATEGORY AND STRENGTH OF MAGNETIC SIGNAL OF EXTERNAL QI

1. Person doing QIGONG. 2. Direct current (nT). 3. Alternating current (nT). 4. Pulse (nT). 5. Liu X X. 6. Zhang X X. 7. Cui X X. I. Ju X x. 9. Liu X X. 10. Huang X X. 11. Zhang X X. 12. Lyu X X. 13. Zhang X. 14. Yang X X. 15. Wang X X.

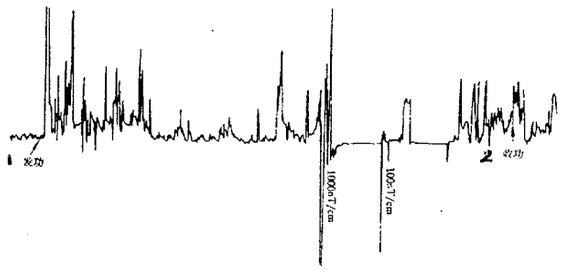


ILLUSTRATION 4(a): MAGNETIC SIGNAL CHART OF QIGONG PRACTITIONER WHILE RELEASING QIGONG

1. Releasing QIGONG. 2. Stop.

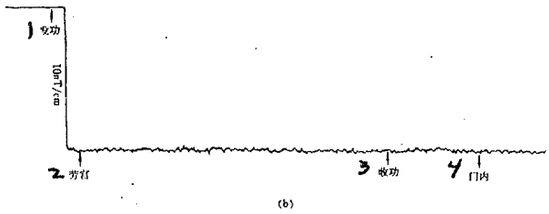


ILLUSTRATION 4(b): MAGNETIC SIGNAL CHART OF QIGONG PRACTITIONER WHILE RELEASING QIGONG

1. Releasing QIGONG. 2. Palm of the hand. 3. Stop. 4. At doorway.

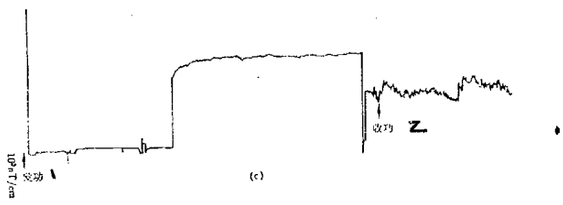


ILLUSTRATION 4(c): MAGNETIC SIGNAL CHART OF QIGONG PRACTITIONER WHILE RELEASING QIGONG

1. Releasing QIGONG. 2. Stop.

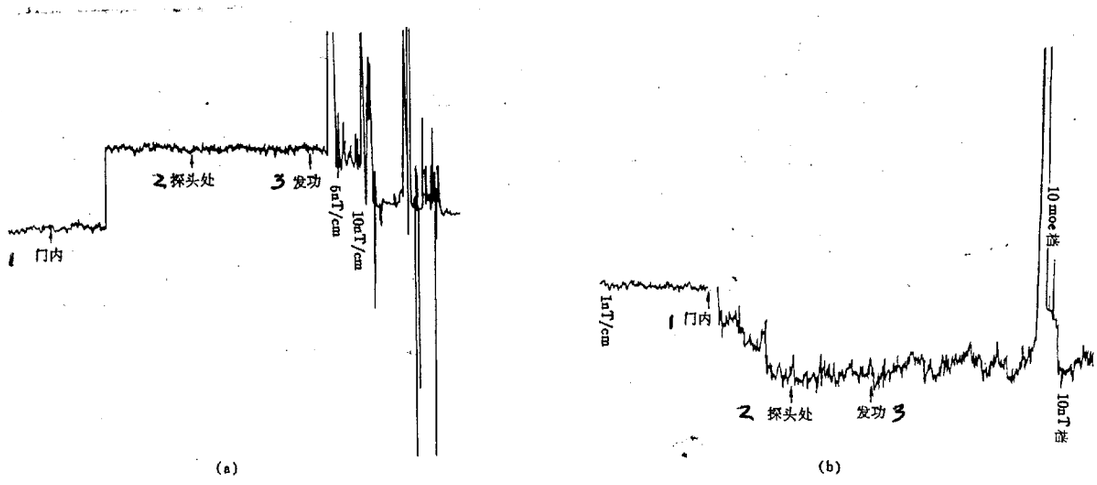
As for the question of the intensity of magnetic fields during the release of external QI, there are reports that under conditions of a magnetism screened room, when a QIGONG master releases QI, low frequency magnetic signals of from 0.25 to four gauss have been detected, approximately equal to 2.5 X 10^4 to 4 X 10^5nT, with fluctuations of only a single order of magnitude[12].

In the zero magnetism space laboratory, magnetic signals of two to 10^5nT were measured, with fluctuations of as much as 10^5 times. Analysis of the difference in the measured signal intensity yields two causes. 1, our laboratory conditions were a zero magnetism space laboratory, and environmental noise was low, relatively small signals could not be covered by magnetic noise. 2, The instruments used had different sensitivity. According to the articles, the instruments they used were a magnetism detection apparatus composed of a magnetically sensitive diodes and a voltage amplifier with a magnetic induction sensitivity of 12mV/gauss, which is 12mV/10^5nT[2]. However, our CHO-1 model millioersted meter had a sensitivity of 10mV/nT, about 10^5 times more sensitive then their instrument.

During the release of QIGONG, we detected a magnetic signal 21 out of 32 times, or two thirds of the time. One-third of the time, no magnetic signal was detected. One reason for this may be that the subject being tested was sending out a signal of a different nature (such as an electromagnetic wave in a different frequency range), infrared rays, or acoustical waves).

2. CHARACTERISTICS OF THE MAGNETIC SIGNALS PRIOR TO RELEASE OF QIGONG

When the subject entered the zero magnetism space laboratory, when the door was closed and he was standing at the doorway or in front of the probe before he began to release QIGONG, most of the times no magnetic signal appeared (standing at the doorway, there was no magnetic signal 86 percent of the time, and standing in front of the probe there was no signal 76 percent of the time) (see table three). However, there were three of these 21 occasions (or 14 percent of the time) when there was a magnetic signal when the subject was standing at the doorway. On one of these occasions, there appeared a direct current magnetic signal of 4nT, on one occasion there was a 2nT signal alternating current magnetic signal, on another occasion there was an alternating current magnetic signal of 3nT and a pulse magnetic signal of 13nT. While standing in front of the probe, on five occasions (or 24 percent of the time) there was a magnetic signal. On three of these occasions there was a four to 20nT direct current magnetic signal, on one occasion there was a 18nT alternating current magnetic signal. On three occasions there was a 30 to 4 X 10^3nT pulse magnetic signal (se illustrations five a and b).



ILLUSTRATIONS 5a,b: MAGNETIC SIGNAL CHART PRIOR TO RELEASING QIGONG

1. Inside the door. 2. At the probe. 3. Release QIGONG.

Before some of the QIGONG practitioners began releasing QIGONG, we detected magnetic signals of several to several thousand nT. This was not the ordinary direct current magnetic field[3] of the human body or a muscle magnetic field[4], because both of these are less than 100pT (one pT = 10^{-12}T), or 0.1nT, and the instrument we used was not sensitive enough to detect these. An explanation for the occurrence of these phenomena is that although the experimenters had not yet notified the subjects to begin QIGONG, they may have actually already entered a QIGONG state. When we asked them about this later, they said that this was the case.

3. CHARACTERISTICS OF MAGNETIC SIGNALS AFTER STOPPING QIGONG

After stopping QIGONG, when the practitioners of QIGONG were standing beside the probe or at the doorway, there were 17 different occasions (or 81 percent of the times) and 15 occasions (or 71 percent of the time) respectively when a magnetic signal was still detected. The intensity of these signals was similar to or slightly lower than that during the release of QIGONG. When the QIGONG practitioner came out of the laboratory and left, the magnetic field returned to the original low level.

The magnetic signals detected at the probe were primarily direct current (12 times) and alternating current (17 percent of the time). The direct current signals were generally below 40nT, but on two occasions they were as high as 10^3nT. The alternating current magnetic signals were below 100nT, but on occasion it reached 10^3nT. On eight occasions there was a pulse signal, and of these, there were two occasions when the signal strength reached 10^3nT.

The magnetic fields at the doorway were primarily alternating current (13 occasions) and the amplitude was generally below 1-nT, however on three occasions it reached 10^3nT. In addition, there were also detectable alternating current magnetic signals (five to 10^3nT) and on three occasions there were pulse magnetic signals (20 to 10^3nT) (See table four and Illustration 6 a, b, and c).

After stopping QIGONG, about 80 percent of the QIGONG practitioners still generated a magnetic signal, indicating that at this time although they had subjectively stopped the QIGONG, but organically, there was still a period of time when they continued to be in QIGONG state. This type of magnetic field only returned to the original low level after the subject being tested left the zero magnetism space laboratory and the door was closed once more. These experimental results seem to illustrate that after QIGONG, a "field" effect continues to exist.

表 4 发功前的磁信号类型和强度

1 发功者	2 探头处(nT)			3 门内(nT)		
	4 直流	5 交流	6 脉冲	7 直流	8 交流	9 脉冲
10 刘××	2×10^3		2.4×10^3	3.5×10^3		3.5×10^3
10 刘××	2.9×10^2	10	2×10^2	3×10^2		
10 刘××			7×10^2	10^3	10^3	
10 刘××			1.2×10^3			10^2
11 张××	30	5	90	25	5	18
11 张××						
12 崔××	36			36		
12 崔××						
13 屈××	13	13		3		
13 屈××	6					
14 刘××	4			4		
15 黄××	6×10^2	80	$>6.5\times10^2$	9.6×10^2	10^2	
15 黄××						
15 黄××	4.3×10^3	1.2×10^3		4.3×10^3	1.1×10^3	
16 张××						
17 吕××	5			5		
18 张 ×	4					
19 杨××	9			9		
20 黄××	5			6		
21 王××	2			2		
22 张××		2	5			

TABLE FOUR: TYPE AND INTENSITY OF MAGNETIC SIGNAL PRIOR TO QIGONG

1. Person doing QIGONG. 2. At the probe. 3. Inside the door. 4. Direct current. 5. Alternating current. 6. Pulse. 7. Direct current. 8. Alternating current. 9. Pulse. 10. Liu X X. 11. Zhang X X. 12. Cui X X. 13. Ju X X. 14. Liu X X. 15. Huang X X. 16. Zhang X X. 17. Lyu X X. 18. Zhang X. 19. Yang X X. 20. Huang X X. 21. Wang X X. 22. Zhang X X.

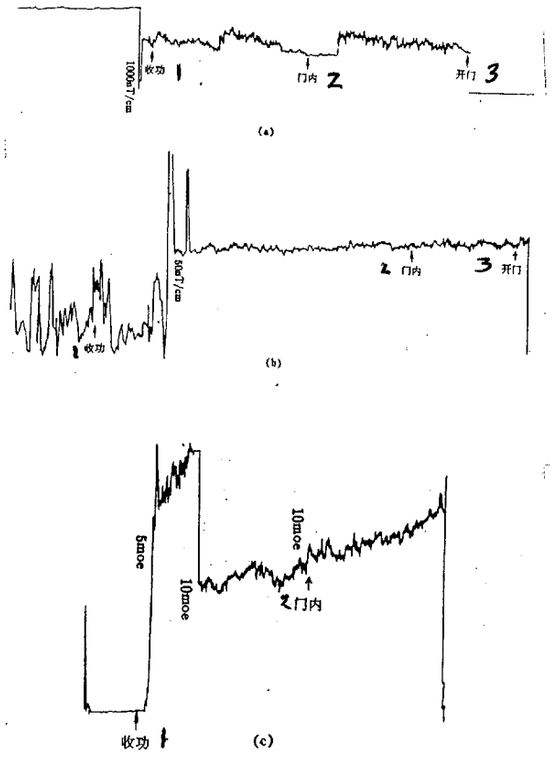


图 6　收功后磁信号曲线

ILLUSTRATION SIX: CHART OF MAGNETIC SIGNALS AFTER STOPPING QIGONG

1. Stop QIGONG. 2. Inside the door. 3. Door open.

III. CONCERNING THE QUESTION OF REPEATABILITY

On the basis of the experiment described above, we observed the repeatability magnetic signal occurrence during the release of external QI for the same practitioner of QIGONG at different times. The time intervals ranged from 50 minutes to 36 days. In the repeatability experiments using eight persons and 17 experiments, with the exception of only three people (six occasions, 35 percent of the time) where there was no repeat, on the other occasions (65 percent of the time) there was repeat results with a time interval of from 50 minutes to 36 days., However, there may have been different degrees of changes in the type and amplitude. However, when the original magnetic signal emitted was relatively small and the two repeat times were relatively close (75

minutes to three hours), there were three persons for whom no magnetic signal could be recorded during the second period of QIGONG. This may be related in some way to the functional state of the subject at that time (see table five and illustrations 7 a and b).

表 5 气功外气磁信号的重复性

1 发功者	2 直 流(nT)	交 流(nT) 3	4 脉 冲(nT)	5 二次记录间隔时间
8 刘××	$4\sim2\times10^3$	20	$2.4\times10^3\sim1.5\times10^4$	90 分 6
	$6\sim10^3$	10^3	$700\sim3.3\times10^3$	
	0	0	$100\sim5.4\times10^3$	36 天 7
9 屈××	4～20	4～13	18～60	90 分 6
	5	2～6	14	
10 刘××	4	3～4	8～13	75 分 6
	0	0	0	
11 张××	4～30	2～5	$17\sim1.4\times10^3$	50 分 6
	0	0	40	
12 杨××	9	0	0	100 分 6
	0	0	0	
13 黄××	$6\times10^2\sim9.6\times10^2$	18～80	$30\sim1.3\times10^5$	8 天 7
	$4.3\times10^3\sim6\times10^3$	1.2×10^3	$4\times10^3\sim9.1\times10^3$	
14 张××	0	0	4	170 分 6
	0	0	0	
15 崔××	4～36	25	1.2×10^3	50 分 6
	20	0	0	

TABLE FIVE: REPEATABILITY OF EXTERNAL QI MAGNETIC SIGNAL

1. Person doing QIGONG. 2. Direct current (nT). 3. Alternating current (nT). 4. Pulse (nT). 5. Time interval between two recordings. 6. Time in minutes. 7. Time in days. 8. Liu X. 9. Ju X X. 10. Liu X X. 11. Zhang X X. 12. Yang X X. 13. Huang X X. 14. Zhang X X. 15. Cui X X.

Through these experiments, we believe it is worth pointing out that when the QIGONG practitioners were releasing external Qi, the measured direct current magnetic field was generally less than 20nT, while certain individuals were as high as 6 X 10^3nT. According to reports, the direct current of the forearm is five to 15pT/cm^3, which means that direct current magnetic field measured during the release of external QI is greater than the original direct current magnetic field by three to six orders of magnitude. During the release of external Qi, the alternating

current and pulse frequencies measured were between 0.16 and two hertz, all within the low frequency magnetic field category. Their amplitudes were from two to 1.3 X 10^5nT, and when the forearm is flexed, the alternating current is 20pT±, which means that the alternating current magnetic field detected during the release of external QI is from two to seven orders of magnitude stronger than that during the flexing of the forearm. During the release of external QI, what is the mechanism that causes human body magnetic signals to increase so drastically? This is a question which deserves deep thought and further research.

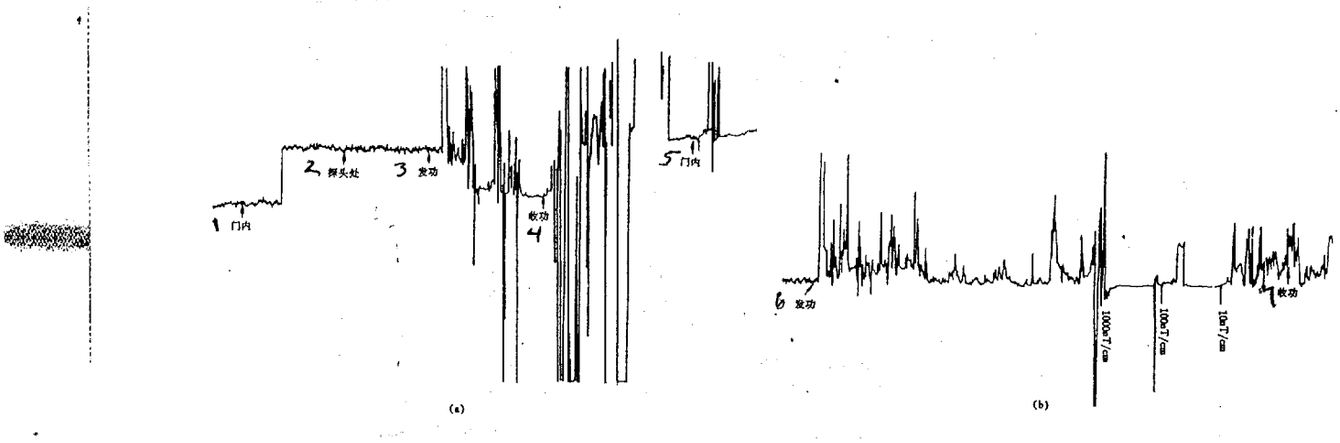


ILLUSTRATION SEVEN a,b: CHART OF MAGNETIC SIGNALS DURING LIU X X QIGONG

1. Inside the door. 2. At the probe. 3. Release of external QI. 4. Stop QIGONG. 5. Inside the door. 6. Release external QI. 7. Stop QIGONG.

SUMMARY

1. In the detection of external Qi magnetic signals on 32 occasions with 20 persons, on 21 occasions (or 65.7 percent of the time), a magnetic signal could be detected. The magnetic signals detected could be divided into three categories: Direct current signals, with amplitudes of two to 6 X 10^3nT, lasting for from 0.5 to 14 minutes (entire process from beginning of release of external QI to stopping QIGONG); alternating current signals, with amplitudes of from two to 2.6 X 10^3nT and frequencies of from 0.16 to 0.5 hertz; and pulse signals with amplitudes of from three to 1.3 to 10^5nT and at frequencies from one to two hertz.

2. Of the 21 occasions where there were detectable magnetic signals during QIGONG, there remained detectable signals of from four to 10^3nT direct current signals, five to 10^3nT alternating current signals and twenty to 10^3nT signals after stopping QIGONG 81 percent of the time while

standing beside the probe and 71 percent of the time while at the doorway. This indicates that the "field" effect continues to exist after stopping QIGONG.

3. Repeat experiments with eight persons on 17 occasions show that there were successful repeats with five people and on 11 occasions. Those practitioners of QIGONG who had the stronger magnetic signals had good repeatability, and most of those with weaker magnetic signals or whose repeat experiments were after too prolonged a time were unable to produce a detectable signal.

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ACUPUNCTURE POINT MAGNETIC EFFECTS IN QIGONG STATE

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ABSTRACT

There has continued to be a heated debate in scientific circles as to whether or not there is a field surrounding the human body, whether or not external QI possesses material properties or produces physical, chemical or biological effects. Some people do not accept the large number of facts which have been piling up, but believe that "external QI" is fabrication, that the human body field does not exist, that treatments by QIGONG masters are nothing more than the "power of suggestion", and that ESP is a magic trick. However, a group of diligent and strict scientific workers support, on the basis of a large number of experiments, the existence of a magnetic field surrounding the human body which has multiple components producing multiple effects and which has a material basis. In a QIGONG state and an ESP state, at certain points on the human body, especially on the channel acupuncture points, external QI can be released, and its intensity is much greater than when not in a QIGONG state. Also, it is control by the consciousness and affected by the environment. It is a major channel for the exchange of information, exchange of energy and exchange of matter between the human body and the outside world. The authors conducted tests of a series of tests on the physical effects of external QI at acupuncture points on the body of psychic S. C. L. while she was in an ESP state, obtaining conclusive evidence demonstrating the material nature of Qi the effects of conscious control. This article concentrates on the introduction of the magnetic effect of the field at the acupuncture points on the human body while in a functional state.

QUANTITATIVE TESTING OF THE MAGNETIC EFFECT OF THE ACUPUNCTURE POINT FIELDS

Everything in the world is bathed in the earth's magnetic field which averages 0.5 gauss. As science and technology have developed and as various electromagnetic equipment has come into widespread use, magnetic noise interference is becoming more and more serious. In this type of magnetic "din", magnetic fields of the magnitude of 10^{-4} to 10^{-8} appear extremely weakly. Therefore, for readings to be accurate and reliable, they should be conducted in a magnetically screened room using highly sensitive magnetometers or using magnetometers with equipment to compensate for environmental magnetic fields. We conducted a number of quantitative magnetic field intensity tests on psychic S. C. L on the magnetic effect produced at the Laogong point (palm of the hand) while in

a QIGONG state. The instruments we used were the CHO-1 millioersted meter produced by the Beijing Geological Instruments Factory and the CHSM-2 high sensitivity magnetic flux gate digital magnetometer. The later has a resolution of one gamma, and during the test the probe was set up vertically and was kept at a constant distance of one centimeter from the palm of the hand. The measured intensity of the magnetic field was 400 gamma, which is equal to four millioersted, smaller than that obtained in previous tests. Through repeated testing, there was no major changes in the average values. We believe that if the environmental magnetic fields are not compensated for or if a screen is not used, of if the probe position, orientation and distance from the source of the magnetism being tested is not fixed, it may result in huge errors.

THE GEOMETRIC CHARACTERISTICS OF THE MAGNETIC EFFECT OF ACUPUNCTURE POINTS

Psychic S. C. L, in a state of QIGONG, can consciously induce the intensification of the magnetic field at several acupuncture points, which can attract nails, cause a compass needle to move and can destroy information on floppy discs and magnetic tapes. In order to determine the geometric characteristics of the spacial distribution of the magnetic fields at the acupuncture points, the authors used a magnetic writing tablet (produced by the Zhejiang Haiqiu Magnetic Writing Pad Company) as a tool in our experiments. We obtained a series of cross sectional images of magnetic fields at acupuncture points (see cover three illustrations A and C. Translator's note: unavailable). From these, we can see that the affected range of the acupuncture effect is comparatively stable, as a circular area having a diameter of between one and 1.8 centimeters, and averaging 1.5 centimeters. Because clear anatomical delineation of channel acupuncture points are lacking, the affected area of this physical effect is of reference value.

What is especially exciting is that the magnetic field cross sectional forms of the magnetic fields of different acupuncture points had unique forms, for example, the Mudan (Tianmu, Yintang), Zhongdantian and Xiadantian all had forms similar to the ancient Chinese symbol of the Yin and Yang (like an S on its side). The Laogong and Baihui points were stable circles, and the Yongquan point had a form of two circles one on top of the other with one small circle on either side, looking like a small "doll".

The scope, form and intensity of the magnetic field can change depending on the psychic's physiological and psychological state, state of health, and method of conscious control as well as environmental factors (such as time, orientation and electromagnetic noise interference).

METHODS AND CONDITIONS FOR PSYCHIC S. C. L. TO STIMULATE AND INDUCE ACUPUNCTURE POINT MAGNETIC FIELDS IN NON-PSYCHIC PERSONS

Psychic S. C. L. is not only able to intensify the acupuncture point

magnetic fields at a series of points on his own body, but he can also, under certain conditions, stimulate acupuncture magnetic fields in persons with no psychic abilities which similarly caused the magnetic writing pad to turn black, displaying a shape corresponding to that of ESP (see cover illustration three B. Translator's note: not available). Dozens of people have already been successfully stimulated, both men and women, old people and young people as well as some foreigners, including Xi Hongzhuo who is the Director of the Hubei Engineering school, Jiang Guihua who is the director of the Wuhan Engineering School, the secretary general of the Hubei Chinese People's Political Consultative Congress, Professors Xie Huanzhang and Shen Jinchuan and associate professors Cai Linfen, Zeng Jincheng, Mo Xuanxue and Wang Jiayang as well as associate researcher Zhang Xiangping all of the Beijing Science and Engineering College, and psychology professor Roberts of the Washington State University and his wife and the well known Taiwan industrialist, Lan Caiwang. The statistics illustrate that he can stimulate this in more than 50 percent of the people. However, he is not able to stimulate this in all people at all times in all environments and at every acupuncture point. This is determined by a series of conditions concerning the person doing the stimulation, the person being stimulated and the environment. First of all, the psychic would observe, sense and detect whether the QI field of the person to be stimulated could be brought into harmony with the QI field of psychic and whether or it would accept control information from S. C. L. The psychic S. C. L. required that the person being stimulated believe in QIGONG, be in good health with no major ailments, and that he maintain a natural emotional state during the inducement process, that he be completely relaxed, both eyes slightly closed and that he concentrate his thoughts on the point of Dantian. At this time, S. C. L would observe whether or not the primary channel points such as the Baihui, Shangdantian, Zhongdantian, Xiadantian and Laogong were open. Some people had "pathological QI" being emitted from several acupuncture points, and it was difficult to stimulate magnetic fields under these conditions. In general, it was induced after five to 15 minutes of quiet relaxation. When S. C. L. determined that there was a relatively strong external QI coming out of the corresponding acupuncture points of the person being stimulated, the magnetic writing pad would be placed up against the acupuncture point, and at this time, S. C. L. would perform deep breathing to raise the QI and increase conscious control of the inducement. After ten to twenty seconds, there were results. We must point out that the persons being stimulated were ordinary people with no ESP abilities whatsoever. Some had practiced QIGONG in the past, but none were able to cause the writing pad to turn black, and after the experiments were over and S. C. L was no longer present, they still were unable to do this.

SOME POINTS OF UNDERSTANDING

1. This experiment repeatedly determined that there is a material basis to external QI and that it possesses a series of detectable physical reactions.

2. There is a human body field with a number of complex reactions which exists surrounding the human body. When someone is in an ESP state, this field is most obvious at acupuncture points along the channels. These are major channels for the exchange of information, exchange of energy and exchange of material between the open, complex giant system of the body and the outside world, much like the input and output ports of a computer. At the same time, because the acupuncture point magnetic fields are controlled by the brain, it is possible that the nature of channels and acupuncture points could be studied from the angle of biological fields.

3. The acupuncture point magnetic fields had relatively stable size and shape characteristics and intensity. However, they would change according to the state of health of the body and the outside world environment. In the future it is possible to develop various new and simple methods of diagnosis and treatments based on this.

4. The successful stimulation of acupuncture magnetic fields in non-psychics by a psychic is of major significance in research into the mechanism of the use of external QI by QIGONG masters and psychics to diagnose and treat ailments and the methods of exchanging information, energy and material between the human body and the outside world. Psychic S. C. L. first of all caused herself to enter a psychic state, and she would give off certain electromagnetic waves like a radio broadcast station. At the same time, she would use her own external QI to induce, stimulate and control the QI fields of the subjects to bring it into harmony with her own QI field and to accept information sent out by the stimulator. As for what the various complex characteristics of this type of external QI radiation are, this will have to wait for more thorough research.

5. The magnetic reaction of the acupuncture point fields should only be one of several reactions of the human body field (external QI). An iron rod with the same intensity as the human body acupuncture point magnetic fields we discovered and detected in our experiments was unable to create the same results. There have already been detected static electricity fields of sizeable intensity and circular electromagnetic radiation which can expose film We have also noted the spacial and time relationships between them.

6. As for the relationship between the polarity (N, S), frequency, shape and intensity of the magnetic fields and the time of the tests, orientation of the body, biorhythm, type of ESP or QIGONG and environmental factors, there has already been some testing and research, but no definite conclusion has been reached.

We would like to take this opportunity to thank Comrades Zhang Xiangping, Mo Xuanxui, Zeng Jincheng and Hua Xianmei for their active cooperation during the experiments.

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STUDY OF THE PHENOMENA OF ENERGY COLLECTION BY THE HUMAN BODY

BY: Wu Qiyao, Tang Xiaoyan and Zhou Ronghua

(Beijing Science and Engineering College)

That ESP can generate a phenomenon of heat has drawn the attention of people in the science fields in China for some time. Psychic Zhang X X has on a number of occasions in public used his hand to burn clothes and hats. Other people with ESP abilities have also done a number of experiments where they have generated paranormal heat energy. Actually, the generation of paranormal heat energy by the human body has unconsciously occurred for several individuals. The phenomenon of "spontaneous combustion" of the human body belongs in this category. Recently there have also been frequent stories concerning this, such as the newspaper report in 1989 about a pair of sweethearts in a certain country in Europe who were embracing in the square, caught fire and burned to death. Also, in "C" city in the Southwest there is a female student (20 years old) who caught fire on two different occasions. Because it was discovered in time, she did not suffer any harm. This illustrates that paranormal heat generation by the human body is a paranormal biological phenomenon which objectively exists. The differences between the two different types of situations described above is that the former is achieved by conscious thought and the latter occurs unconsciously.

Even though a number of people have seen this with their own eyes, as of the present time, it still cannot be proven scientifically, and no quantitative scientific records have been obtained. In order to further explore this biological phenomenon, we used methods of modern physics to conduct a number of experiments and obtained some preliminary results.

EXPERIMENTAL PROGRAMS AND TESTING METHODS

I. EXPERIMENTAL PROGRAMS

1. We invited two psychics who shall remain unnamed to consciously cause a rise in temperature of cold water in a test tube. Then we measured the temperature and calculated the heat as a scientific analysis of the heat focussing effect of the human body in a state of ESP.

2. In order to avoid phenomena caused the effect of ESP on a certain individual sensor, we used a number of different sensors to directly observe the water temperature and its changes to obtain relatively accurate scientific evidence of the rise in temperature.

3. Temperatures greater than 40xC were to be achieved, with two types of probes and three reading methods giving consistent results. This

was done for effective accuracy in the experiment to improve the degree to which the recordings could be believed.

4. We used a millimeter wave radiometer for synchronous observation of changes in electromagnetic radiation during the rise in temperature in order to explore the changes in related properties in the human body during the process of energy focussing and to search for possible inherent relationships.

5. We observed the phenomenon of rising temperature in other ESP ability experiments.

II. TESTING METHODS

1. We used a glass test tube 15 to 20 mm in diameter and 15 mm long. We put four to five millimeters of cold water into this test tube and placed a glass alcohol thermometer and a transistor thermometer probe into the water. We then had the psychic hold the test tube in his hand and try to heat it. We recorded the experiment using the thermometer, the probe, and an X-Y recorder, recording the process and results of any rise in temperature. During this time, we used millimeter wave radiothermometer to monitor the microwave radiation from the body of the psychic during the rise in temperature.

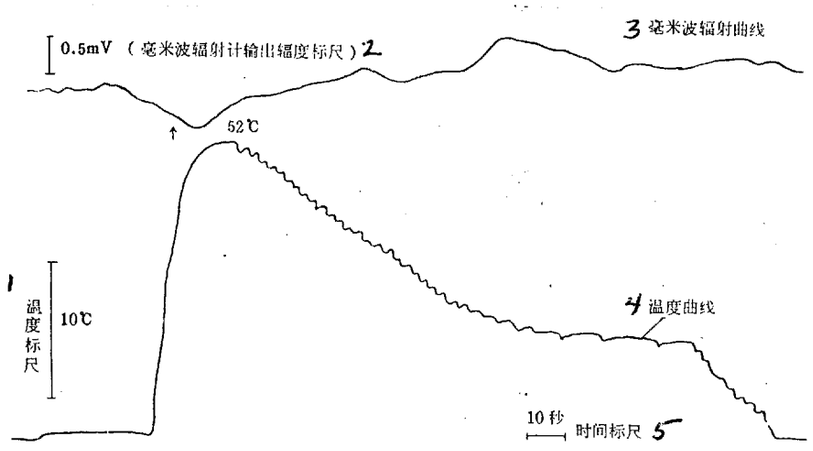
2. We placed a transistor thermometer probe into the medicine bottle used in the experiment, and sealed it with a two layer lid. We then tested the changes in temperature during an experiment of shaking out the medicine using ESP. We also used a millimeter wave radiometer for synchronous monitoring.

3. We used physical rises in temperature (such as using a match or a lighter to raise the temperature) and a normal person causing a rise in temperature as controls to analyze the rise in temperature characteristics of ESP energy focus.

RESULTS OF THE EXPERIMENT

1. Between the two psychics there were seven successful experiments following the standards of the experiment design (the temperatures they achieved were: 72.5, 61.5, 60, 52.5, 52, 51 and 43.5. The highest temperature attained was 72.5C.

2. In the three successful occasions where a millimeter waves synchronous monitoring was conducted, we discovered that during the rise in temperature there was a drop in the body's millimeter wave radiation in all three occasions.



用双笔 X－Y 记录仪同步记录的温升过程及毫米波辐射特性

ILLUSTRATION ONE: USE OF X - Y RECORDER FOR SYNCHRONOUS RECORDINGS OF RISE IN TEMPERATURE AND MILLIMETER WAVE RADIATION PROPERTIES

1. Temperature scale. 2. Millimeter wave radiation meter output radiation scale. 3. Millimeter wave radiation curve. 4. Temperature curve. 5. Time scale (10 seconds).

3. In the process of the experiment of "shaking out medicine", there was no obvious rise in the temperature in the bottle.

4. When ordinary people used their hand to heat up the test tube, they were only able to approach the level of 30C. With physical methods to raise the temperature, it took five times longer for the temperature to return to normal than it did after an ESP induced rise in temperature.

ANALYSIS OF RESULTS

I. The results indicated that ESP can consciously, over a short period of time, concentrate energy to cause an obvious rise in water temperature. The highest temperature achieved in this experiment was 72.5C. According to the classical thermal dynamics formula Q = MC(T2 -T1) (M is the mass of the object, C is the relative temperature, T1 and T2 are the temperatures of the object prior to and after the transmission of heat), the energy was about 0.21 joules.

2. The following experimental phenomena help to eliminate the possibility of false readings in the experiment.

1. The experience of various types of EXP experiments conducted in China in the past indicates that when the psychic is performing, he must concentrate his thoughts on the target and subject of the experiment in order to be successful. We used sensors operating on different principles in the experiment to measure the temperature. This helped to eliminate the possibility of the psychic focussing directly on the sensor in order to create a rise in the temperature reading.

2. The BTS100 series transistor temperature sensor used in this experiment has a reaction time of from 0.2 to two seconds, If it was directly focussed on by the psychic, it would not have been possible to have the rise in temperature time shown in the illustration of 20 seconds and the drop in temperature time of 140 seconds.

3. One of the two psychics taking part in the experiment asked for a towel to wrap the test tube in several times during the rise in temperature experiment. This was because if the temperature rose he might burn his hand. In addition, after the experiments succeeded, we used our hands to feel the test tube, and could feel that the temperature was very high, and the hands of the psychics were a normal temperature, indicating the water temperature did actually rise.

III. The following experimental phenomena and analysis help to explain that the rise in water temperature was due to the biological energy focussing effect generated by the human body, and was achieved through the transmission form of thermal radiation.

Classical thermal dynamics points out that changes in the state of thermal systems are accomplished through the effects of outside systems or transmission of heat toward the system or both. It seems that primarily it is a type of thermal transmission (naturally the effect of such factors as a certain change in an object influencing the changes in "relative heat" or directly causing an acceleration in the movement of molecules must be considered), and heat transmission is limited to the three forms of conductance, convection and radiation. The following two experimental phenomena can eliminate the effects of conductance and convection. 1, The rise in temperature experiment using physical heating (using matches or a lighter to heat the test tube and cause a rise in water temperature) indicates that conductive heat is the direct transfer of heat from a high temperature object to a low temperature object, so it would have to go through the glass tube to transfer the heat to the water. Therefore, to obtain a similar rise in water temperature it required the use of more energy. Furthermore, because the water heat had to go through the glass tube to reduce the temperature, and gradually return to room temperature, the time required was much longer (as much as five times or more). 2, After the psychics had caused the water temperature to rise to 70C, their

hand temperature was still normal at between 30 to 37C. Based on consideration of this, we can preliminarily believe that the primary cause of the rise in temperature was paranormal energy focussed radiation.

IV. In the process of the medicine shaking experiment, there was no accompanying change in temperature, seemingly indicating that the ESP effect possesses a very strong target singularity and focus.

V. Each time there was a successful rise in temperature, the microwave radiation of the human body always appeared as a small valley, indicating that a certain energy relationship exists between the human body's radiation energy carriers and microwaves. Because we only conducted the microwave monitoring experiment during the process of the rise in temperature on three occasions, and because there are many unknown factors, we are unable to discuss this further at the present time.

A SERIES OF INVESTIGATIONS OF LOCALIZED SPONTANEOUS COMBUSTION ON THE HUMAN BODY

BY: Zeng Jingyou, Yang Zhjengang, Xiao Guilin, Miu Hongtao and Lu Yiqian

(Hunan Medical University)

Human spontaneous combustion is an extremely rare paranormal phenomenon. According to calculations in foreign material, since the 17th century, more than 200 cases have been noted, much of which were short news items, and no detailed research data has been found. The causes are still not yet fully known. In Hubei provinces Xiangxiang city, a four year old boy, Tang Jiang, between eight and eleven o'clock in the morning was in the presence of relatives when there were four occurrences of spontaneous combustion on small areas of his body[a] . At 5:30 in the afternoon of that day, he was sent by special car to Hunan Medical College's first hospital emergency room. According to an investigation of how this happened and the state of the burns, the preliminary determination was that this was a case of a human body paranormal phenomenon, and it was immediately reported to the college's deputy director for scientific research, and on the next day a special conference was called of experts who had a foundation in this and who were clinical specialists to set up a scientific research team. Thee goals they set and the steps they took are as follow:

1, To determine the objective existence of this phenomenon. 2, Through cooperation of different disciplines, conduct clinical tests and experimental research to explore the possible causes of spontaneous combustion. 3, Based on available materials, propose effective measures to protect the child from spontaneous combustion. After almost one year of investigations, they have made some progress.

RESEARCH METHODS

Because the phenomenon of spontaneous combustion is a random occurrence and cannot be duplicated and cannot be repeated, it cannot be studied according to the general sequence of scientific research. Second, because man is at the preliminary investigation stage of biological potential and the occurrence of paranormal phenomenon, there are no laws to follow in research methods. Therefore, the project was very difficult. We searched through our college's computerized medical papers and there were no papers on "burns from human spontaneous combustion" in our Chinese or foreign listings (over a period of 20 years). We had only our current knowledge and based on repeated discussions, we set wide ranges of explorations and combinations of multiple disciplines as our guiding direction. We decided on the following plan:

I. THE OBJECTIVE EXISTENCE OF SPONTANEOUS COMBUSTION

Collect eyewitness accounts and polls to list the number of occurrences of spontaneous combustion, the locations on the body, the sequence of events, what was done at the time, the weather conditions on that day at that place. Collect burnt clothing, bedding and batting, the child's own story such as how he felt before and during the incidents.

Experimental investigation: Material analysis of the remnants of clothing and the direction in which it burned to determine whether or not there were any external causes involved.

Diagnostic and treatment materials: Medical record after entering the hospital, results of physical examination, location, degree and spacial characteristics of the burns, were they different from conventional burns, were there any special manifestations during the recovery process.

II. EXPERIMENTAL TESTING OF CAUSES OF SPONTANEOUS COMBUSTION

1. Physical standards: Electromagnetic abnormalities are one cause of spontaneous combustion. Is human spontaneous combustion related to the surface concentration or distribution abnormalities of electric potential. The experiments were to concentrate on observation of static electricity phenomenon and electrical symmetry of the appendages and the body.

(1). Static electricity investigation: We did a quantitative test with a grass ball, using the finger tips and palms of the hands, and using normal persons as controls.

(2). Electrical symmetry investigation: We used a DF-0930A model digital universal meter to check the portions where electrical activity is fairly strong on either side of the finger tips, the palm of the hand (Laogong acupuncture point) and the balls of the feet (Yongquan acupuncture point). We observed the current, voltage, resistance and differences in the readings, using other children of the same age as controls.

(3). Magnetism measurements: The human body magnetic field reflects the changes of the internal biological currents. The experiemnt used a magnetic flux gate magnetometer to measure this, and the sensitivity of the instrument was 10^{-5} gauss, which is less than the magnetism required for the human heart, brain and muscles. If there are any readings, it would be abnormal. The areas checked were the palm of the hand (Laogong acupuncture point). We used children of the same age and adults as controls.

(4). Simulation experiments of magnetic storm magnetic fields. There is already data which demonstrates that 1990 was the final peak year for solar activity in this century. Furthermore, the morning of 15 April

was the most violent radio eruption of this peak year. Its high energy and high conductivity electron particles caused damage to the earth's ionosphere, creating magnetic storms, polar lights and strong ultraviolet radiation, affecting the earth's environment, weather and human bodies to varying degrees[4]. The intensity of the magnetic storm was in general about 200 gamma[4]. This experiment used large area magnetic objects to form a simulated environment, and used a magnetic flux gate magnetometer to adjust the intensity and placed the subject in this environment. We then checked the changes in current in the palms of the hands, and compared the results with those of children the same age and with adults.

(5). Skin temperature testing: If it was an inherent factor that caused the combustion, there may be unsymmetrical energy distribution of surface energy. The energy is directly related to the circulatory system, so the measurement of the symmetry of fingers and palms of both hands may be of significance for reference. For our testing we used imported biofeedback instruments.

(6). Skin electrical testing: The stability of body surface electrical phenomena reflects the state of biological functions. We observed the fluctuation over time of the voltage (in microvolts) to determine its stability (same equipment as above).

2. CONVENTIONAL CLINICAL EXAMINATIONS AND SPECIAL EXAMINATIONS

(1). Blood biological and chemical tests: We looked for abnormalities in such things as the blood potassium, sodium, chlorine, calcium, phosphorous, magnesium and carbon dioxide levels of the blood.

(2). Heart and brain function tests: We checked whether the EEG, EKG and brain stem hearing stimulation potential were normal and for changes in symmetry.

(3). Conventional blood, urine and fecal tests: We checked the basic health status and for abnormalities in internal organs.

(4). Blood ATP enzyme test: An accumulation of energy in parts of the body may be a condition for spontaneous combustion. During spontaneous combustion, there may be a sudden increase of internal energy, and ATP enzyme activity may increase. The method used was to extract three milliliters of heparin antigel from vein blood, and using the method reported by Liu Siqi and others ("Hunan Medical College Bulletin" Volume 4, 1989), we measured the sodium-potassium-calcium-ATP enzyme activity.

(5). Chromosome test: Spontaneous combustion is a randomly occurring event. We have not seen any reports on whether there are any inherited or individual factors, so secondary testing was planned as a type of exploratory testing. The method was to extract three milliliters from the child subject, his paternal grandmother, mother, and sister and place it in 1640 petri dishes for culturing, and after 72 hours, we

performed chromosomal analysis.

(6). Psychological and intelligence testing: In recent years, there has been mention of the special effects of "thoughts" in QIGONG and ESP and explorations into whether or not there is any unique psychological activity and behavior and what possible significance it may have, so we also listed this as one of our tests.

In order to eliminate any possible subjective bias by the researchers and to ensure the objectivity of the tests, all investigations, experiments and tests were conducted by persons not connected with the specialty. There were written and video taped records of on-the-spot investigations. The written materials were written by the persons themselves, and those who could not write provided an oral record. After these were read back and the person agreed to the content, he signed his name and was witnessed by more than one person.

RESULTS

I. EVIDENCE CONCERNING THE OBJECTIVE EXISTENCE OF SPONTANEOUS COMBUSTION

1. WRITTEN MATERIALS PROVIDED BY EYE WITNESSES

(1). Draft written by Long Taoxian, communications specialist of the Hunan Daily and maintenance person for the Xiangxiang General Goods Company (11:00 hours on 15 April, 1990).

(2). Eyewitness account of seeing the first and second occasion of spontaneous combustion of Tang Jiang by Peng Weizhong, cadre of the Xiangxiang Municipal Mining Resources Development Office (written 22 April, 1990).

(3). Oral account by Tang Jiang's paternal grandmother of her grandson's spontaneous combustion, written down by Liu Xiaochun, editor-in-chief of the Hunan Medical College Paper. She signed her own name, and briefly described the four incidents of spontaneous combustion between 08:00 hours and 10;40 hours (recorded 22 April, 1990).

(4). Written recollections of Cheng Lixin, primary treatment physician of the Xiangxiang municipal Central Hospital, of his discovery of burns on the scrotum and on the inside of the left thigh, the redness of the face which was hot to the touch, the high body temperature and the normal unite tests (provided 22 April, 1990).

(5). Long Taoxian's oral description of what he saw after he carried Tang Jiang home from the hospital. Several minutes after he placed him on his bed, spontaneous combustion erupted once more, and he discovered a blue ball of fire roll down from the left thigh burning the sheet and blanket, and flames coming from the chest. Tang Jiang beat the flames and

burned his fingers (Recorded by Ceng Jingyou on 22 April, 1990).

(6). Description of the fourth spontaneous combustion by Wang Weisong, Secretary of the Xiangxiang City Xingxing Village Party Branch of the Communist Party. The child was lying on the bed naked. The blanked and mattress were all cotton. After about three minutes a fire ball (blue) landed on the bottom sheet. He slapped it with his hand, and burned a blister on the palm of his own hand about one centimeter in diameter (provided on 22 April, 1990).

Based on the collateral evidence listed above, there were four incidents of spontaneous combustion.

The first time occurred around 08:10 hours on 15 April when the child screamed that his leg (right leg) hurt. It stopped after two minutes, and there was a hole in his pants where his leg had hurt. He had a small blister on his leg there. Eye witnesses were Long Guiying and Peng Weizhong.

The second time occurred around 08:20 hours, when Tang Jiang screamed, and jumped down from the couch. He was burned between his scrotum and anus and his underpants were scorched and had a hold burned through them (same eye witnesses as above). At that time, Peng looked inside his clothes very carefully and there was nothing but sunflower seeds there, nothing that could burn.

The third time, Tang Jiang had changed into a terry cloth robe and cotton pants and was lying on his bed for about five minutes when his left leg caught fire, burning a hole in his cotton pants. Eye witnesses were Long Guiying and Tang Jiang's mother, Xiao Yulin and a number of neighbors).

The fourth time, after he had been brought home from the hospital, all electrical appliances, metal objects and electric blankets were removed from the room at the orders of the doctor. Tang Jiang lay naked on the bed on an all cotton sheet and with a cotton blanket. After several minutes he caught fire again (about 10:40 hours). A ball of blue fire fell down from his left leg and burned the mattress cover and padding, and flames erupted all over his body like sparks, and there was the odor of electric welding. Those who tried to put out the flames burned their hands. Eye witnesses were Long Guiying, Wang Weisong, Xiao Yulin and more than ten neighbors.

With the exception of the first occasion which was relatively minor the other three occasions all left obvious burns and damaged clothing. According to the descriptions, we can eliminate conventional ignition materials such as matches, smoking materials, fire crackers, or cracker balls, and it was not related to clothing, metal objects or electrical appliances. There was no fire in the room, and the kitchen was a long

ways away. On each occasion there were relatives present, and there is no possibility of playing with fire.

The material above is all recorded on audio and video tape and there are pictures and burnt clothing as evidence.

2. CLINICAL EXAMINATIONS

(1). Tests: His temperature was 37.8 C, his pulse rate was 100 and his respiration rate was 20 times per minute. His growth was normal, he was well nourished, there was no abnormalities in his heart or lungs, his liver and spleen were not felt, there were no abnormalities of the spinal column or of any of the four limbs. Burns: The right forearm, right thigh had second degree burns in three places, the right thigh had third degree burns on one place (see illustration inside cover. Translator's note: not available). Between the scrotum and the anus and on the scrotum there were second to third degree burns. There were also six scattered blisters (see illustration inside cover. Translator's note: not available). The tips of the index and middle fingers of his right hand were burned and had blisters The surface of the burns were all round or oblong, and dry on the surface. They were swelled to different levels, there was no secretion, and the edges were even and clear, with no marked congestion or oedema.

The patient stayed in the hospital for 21 says for observation, tests and treatment. He was completely healed when he left the hospital. Observation during his stay in the hospital indicate that while the degree of burns on his right thigh were determined to be second degree based on external observation, after observing the scabbing over and scarring, it was finally diagnosed as third degree burns and deeper than judged when first entering the hospital. This type of distribution and degree of burning is completely different from burns generally clinically observed. A comparison of the characteristics of this case and those of generally observed burn cases is provided in table one.

	ORDINARY CASES	THIS CASE
SHAPE	Usually irregular	Scattered, round or oval
SURFACE	Flat, usually with secretions and infection	Surface uneven, no secretions or infection
EDGES	Unclear border between burn and unburned area, local congestion and oedema.	clear border, no oedema

2. CLINICAL OBSERVATIONS

(1). The characteristics of this burn case is different from what is normally clinically seen. The degree of burn was much deeper than that judged by observation when patient entered the hospital. There were marked dermal damage, and scabbing was thick and hard. When the scabs came off, the scars had not yet diminished or shrunk after several months. It should not have been possible to have burns to this degree with people present who took immediate measures. This indicates that it is possible that there was spontaneous combustion on and below the skin surface.

(2). Upon investigation there were no common combustibles at the site (such as matches or fire crackers) and the subject was covered with were three layers of clothing and blankets, under which there occurred localized ignition and burning. This is indeed very rare.

3. EXAMINATION BY FORENSIC EXPERT

Examination report was published by the Hunan Public Security Department.

The results of this examination were.

(1). Tang Jiang's trousers were made of cotton fiber, his thermal underwear was made of Qinglun (phonetic) fiber. His two pairs of underpants were cotton fiber. There were no traces of any type of oil or $-NO_3$ or $-ClO_3$ found in the area of the burn on his pants.

2. The thermal underpants and outside pants were sent off to be examined with the same results. The examination of the underpants can eliminate such things as open flame, smoldering and potassium hydroxide, sodium hydroxide, sulfuric acid, nitric acid, or hydrochloric acid. Based on the characteristics of the various localized scarring, the burns were more severe under the surface than on the surface (see photographs supplied. Translator's note: not available), and it would seem that the ignition began under the surface.

The results indicate that the clothing sent off for inspection did not contain any explosives such as nitrates, any oily combustibles or any other hazardous chemical. The fire started from the inside and worked its way out. No possibility of external cause of the burning exists.

According to burning process observed by the eye witnesses on the various occasions, the clinical observations of the differences between these burns and those ordinarily clinically seen and the result of the determination of the forensic experts, we can be fairly certain that it was spontaneous combustion.

II. RESULTS OF EXPERIMENTAL VERIFICATION OF SPONTANEOUS COMBUSTION

1. PHYSICAL STANDARDS

(1). STATIC ELECTRICITY TESTS

We used a grass ball to test for any static electricity reaction at Tang Jiang's fingers, palms of his hands, toes, ball of his foot and areas burned by spontaneous combustion, and compared the results with those of a normal person.

The results: Tang Jiang had random occurring attraction on three occasions (for about one second each time). The other children and adults were all negative. The tests were done on the morning of 21 April.

(2). ELECTRICAL PARAMETER SYMMETRY TEST

A. On 18 April, 1990, we tested Tang Jiang and a control group of children including Liu Yuan all at the same time for electrical parameters (see table two).

表 2 不同部位电参数测量值

测试部位 1	电流(μA)2		电阻(μΩ)3		电位差(mV)4	
	5唐江	6对照	5唐江	6对照	5唐江	6对照
7 右手－左手	37	0.29	1.4	0.28	55	17
8 双劳宫	0.24	0.05	3.6	3.9	197	46
9 双涌泉	0.4	0.14	2.8	3.7	157	82
10同侧涌泉对劳宫	0.47	0.20	2.8	3.3	64	96
11对侧涌泉对劳宫	0.42	0.49	3.4	4.1	126	63

TABLE TWO: MEASURED VALUES OF ELECTRIC PARAMETERS AT DIFFERENT POINTS

1. Point tested. 2. Current (in microamps). 3. Resistance (in microohms). 4. Potential difference (in microvolts). 5. Tang Jiang. 6. Control group. 7. Right hand - left hand. 8. Both palms. 9. Both balls of feet. 10. Balls of feet to palms of same side. 11. Balls of feet to palms of opposite sides.

From table two we can see that the current at the right - left hand of Tang Jiang peaked out at 37 microamps, 80 times higher than that of the control group children and adults. The potential difference of both sides was also much higher than that of the control group. Later we tested Tang Jiang on a number of occasions and never duplicated such a high degree of asymmetry. On these occasions, his test values were not markedly different from normal children. This result seems to have a fairly clear connection to spontaneous combustion. It is possible that at the time of spontaneous combustion there was an even more marked increase in Tang

Jiang's current and potential difference.

Because of the uniqueness of the current value between Tang Jiang's two hands, we further tested electrical parameters of other normal children and adults.

B. On 25 July, 1990, Tang Jiang's family and those around him were tested for current with the following results:

表 3 唐江家附近人群电流测定值

1 姓 名	2 性 别	年3 龄	4 最大瞬时电流(μA)
5 刘念华	6 女	11	1.8
7 杨龙龙	8 男	$1\frac{3}{12}$	1.0
9 唐 健	10 男	16	1.0
11 肖雨林	12 女	24	0.2
13 龙桂英	14 女	50	0.1
15 王兴辉	16 男	8	1.1

TABLE THREE: CURRENT VALUES OF PEOPLE NEAR TANG JIANG'S HOME

1. Name. 2. Sex. 3. Age. 4. Maximum instantaneous current (microamps). 5. Liu Nianhua. 6. Female. 7. Yang Longlong. 8. Male. 9. Tang Jian. 10. Male. 11. Xiao Yulin. 12. Female. 13. Long Guiying. 14. Female. 15. Wang Xinghui. 16. Male.

C. On 21 September we tested healthy children in a kindergarten with the following results (see table four):

表 4 健康小儿电流测定值

1 姓 名	性 2 别	年 3 龄	4 最大瞬时电流(μA)
5 周 书	6 男	$4\frac{1}{2}$ 岁	0.42
7 李 硕	6 男	5 岁	0.33
8 秦 星	6 男	$5\frac{1}{2}$ 岁	0.25
9 李 宁	6 男	5 岁	0.42
10 黄 杰	11 女	$5\frac{1}{2}$ 岁	0.73
12 李 晓	6 男	5 岁	0.50
13 王中工	6 男	5 岁	0.24
14 张 宏	6 男	$4\frac{1}{2}$ 岁	0.15
15 黄 宇	6 男	$4\frac{1}{2}$ 岁	0.44
16 王天刚	6 男	5 岁	0.10
17 向兴云	11 女	5 岁	0.42
18 朱 李	6 男	$5\frac{1}{2}$ 岁	0.42
$n=12$		5±0.35	0.35±0.16

TABLE FOUR: CURRENTS MEASURED IN HEALTHY KINDERGARTEN CHILDREN

1. Name. 2. Sex. 3. Age (in years). 4. Maximum instantaneous current (in microamps). 5. Zhou Shu. 6. Male. 7. Li Suo. 8. Qin Xing. 9. Li Ning. 10. Huang Jie. 11. Female. 12. Li Xiao. 13. Wang Zhonggong. 14. Zhang Hong. 15. Huang Yu. 16. Wang Tiangang. 17. Xiang Xingyun. 18. Zhu Li.

Tang Jiang's family and the healthy children in the kindergarten all had relatively good symmetry between the left and right sides. The current value was generally below one microamp. There were individual readings over one microamp (less than two microamps), but none comparable to Tang Jiang's readings. The mean value of the children was 0.3±0.16, and none exceeded two microamps.

(2). BIOLOGICAL MAGNETIC FIELD TESTING

Results: Tang Jiang's hands had magnetic fields of 0.00 to 0.1 milligauss (mGS). None of the people in the control group had a reading (because all normal people have a biological magnetic field of less than 10^{-6} gauss). This indicates that Tang Jiang's hands generated an increased current, the intensity of the magnetic field was also markedly enhanced.

In numerous repeat testing following the tests conducted on 21 April, 1990, Tang Jiang's hands were like those of an ordinary person and did not show any abnormality.

(3). MAGNETIC STORM MAGNETIC FIELD SIMULATION TEST

Results are shown in table five.

1 姓名	2 年龄	3 入磁场前电流(μA)	4 在磁场中电流(μA)	5 出磁场后电流(μA)
6 唐 江	5岁	1.04	0.58	0.64
7 李 宁	5岁	1.30	0.85	1.72
8 阮 进	5岁	2.00	1.45	1.80
9 肖桂林	33岁	0.60	0.30	1.16
10 唐炳良	28岁	0.19	0.14	0.36
11 曾敬友	53岁	0.08	0.05	0.06
12 郭华珍	26岁	0.66	0.86	0.71
13 阳振刚	59岁	0.43	0.55	

TABLE FIVE: INTENSITY OF DIFFERENT PERSONS PALMS IN AN APPLIED MAGNETIC FIELD OF 200 GAMMA

1. Name. 2. Age (in years). 3. Current (in microamps) prior to entering the magnetic field. 4. Current (in microamps) while in the magnetic field. 5. Current (in microamps) after leaving the magnetic field. 6. Tang Jiang. 7. Li Ning. 8. Ruan Jin. 9. Xiao Guilin. 10. Tang Bingliang. 11. Ceng Jingyou. 12. Guo Huazhen. 13. Yang Zhengang.

From the above table we can see that four months following his spontaneous combustion, an artificially applied magnetic field did not have any marked effect on the current intensity in Tang Jiang's hands. This also held true for the control group. This indicates that a magnetic field applied by a magnetic storm (very slight amplitude magnetic field) might not have been the primary cause for the change in Tang Jiang's electrical parameters. The biological effects of high energy particle flow due to sun spot explosions are not only the effects on the earth's magnetic field, but the effect on the weather and strong ultraviolet ray radiation effect are also important aspects. This type of model is actually very difficult to accomplish.

(4). RESULTS OF SKIN TEMPERATURE TESTING

1 手 指(℃)		2 手心		3 腿烧伤处	4 腹股沟
5 左	右 6	5 左	右 6		
30.5	28	33.0	30.0	28.6	29.6

TABLE SIX: SKIN TEMPERATURE TESTS

1. Fingers (xC). 2. Palms. 3. Burn on thigh. 4. Sublingual.

The skin temperature test results were of no pathological significance, but we can see there was a certain asymmetry between the two sides. This may be related to the asymmetry between the electrical parameters we mentioned earlier.

(5). SKIN ELECTRICAL TESTS

表 7 皮电、肌电检查

1 测 定 时 间	0	5'	10'	15'	20'
2 左手皮电(单位 wno)	5.8	6.5	7.0	8.5	12
3 测 定 时 间	0	1.5'	5'		
4 额部肌电(单位 μV)	7	3	3.5		

TABLE SEVEN: SKIN ELECTRICAL TESTS

1. Time of tests (in minutes). 2. Skin of left hand (in units of wno). 3. Time of tests. 4. Skin of forehead (in microvolts).

Table seven indicates that skin electricity tends to increase over time, and the potential of the forehead skin fluctuates more, but there is no clear connection with the purpose of this study.

2. CONVENTIONAL AND UNCONVENTIONAL CLINICAL EXAMINATIONS

Conventional clinical examinations are as follow:

(1). Results of blood chemistry: Blood sodium was 136.0 mMol/L, blood potassium was 4.35 mMol/L, blood chlorine was 112.0 mMol/L, carbon dioxide formation rate was 26.6 mMol/L, blood calcium was 10.3 mg/d:, blood phosphorous was 4.8 mg/dL and blood magnesium was 1.78 Eq/L.

Results: Blood sodium, potassium, chlorine, magnesium, phosphorous and calcium content were all in the normal range.

(2). Electrocardiogram was normal: The EKG was normal. The electromyogram and the brain induction potential were both in the normal range.

(3). Conventional blood, urine and fecal tests were all normal.

Conventional testing was primarily performed to evaluate the state of Tang Jiang's bodily functions and his state of health. These results indicate that the measured indexes all fell within the normal range.

3. RESULTS OF UNCONVENTIONAL TESTS

(1). Results of blood ATP enzyme tests (read by biochemistry lab). Results are shown in table eight.

表 8 血中 ATP 酶测试结果

	1 唐 江	2 对 照 儿
Mg^{++}-ATP 酶 3	0.310	0.224
Na^{+}-K^{+}-ATP 酶 3	0.290	0.442
Ca^{++}-ATP 酶 3	0.002	0.050

TABLE EIGHT: RESULTS OF BLOOD ATP ENZYME TESTS

1. Tang Jiang. 2. Control child. 3. Enzyme.
NOTE: The unit for enzymes is microMol/mg membrane protien/hour.

This data indicates that the Na^{+}-K^{+}-ATP enzyme and the Ca^{++}-ATP enzyme were below normal, indicating in increased consumption of energy by the victim of spontaneous combustion.

(2). Chromosome tests (performed by our schools genetics lab). Test results for Tang Jiang and three controls showed no abnormalities.

(3). Psychological, intelligence and behavioral tests (performed by our schools abnormal psychology graduate department). All tests results were normal.

(4). Photoelectricity pulse wave chart testing: The wave forms of Tang Jiang and his father, Tang Bingliang, were compared, and Tang Jiang's waves had a higher amplitude and showed no dichotic waves. His father had normal wave forms.

(5). Red blood cell membrane skeletal protien chart. Tang Jiang's chart spectrum was similar to that of the control children.

Of the five special tests above, the ATP enzyme seemed to show relatively clear differences, and may passably related to the energy consumption of the spontaneous combustion. The other items all fell within the normal range.

III. WEATHER DATA

1. Supplied by the Xiangxiang Municipal Weather Bureau: On the morning 15 April, it was cloudy and rainy with no lightning.

2. According to an NCNA draft (number 67): NCNA of 27 April reports that at 11:32 in the morning of 15 April, Nanjing's Zijinshan Observatory was subjected to a radio storm which was 40 times the magnitude of normal. There appeared a large solar flare which lasted for 167 minutes. It could be the final strongest peak in solar activity in this century. It can cause damage to the earth's ionosphere, and can cause polar lights, magnetic storms and strong ultraviolet radiation, having a major effect on the ecological balance of the earth. The Changsha area and Nanjing are a certain distance apart, it is worth nothing whether or not it was basically the same time as Tang Jiang's spontaneous combustion.

IV. COMBUSTIBLE MATERIALS INVESTIGATION

?Between July and August of 1990, Tang Jiang's father sent letters saying he had discovered flashes of light on the floor of the house. Rubbing them with the finger can cause the tip of the finger to become singed, and in which one could form lines of light and words. The project team was then sent to the house to collect samples from the room in the house that gave off light and from another room that did not (these were first wiped dry with a cotton swab and then wiped with a wet cotton ball, and placed into a sealed bottle). The team also took samples of the well water and city water, and inquired as to what the land had been used for before the house was built. After the samples were brought back, they were sent to the Hunan Workers' Health Research Lab to test for yellow phosphorous. The results of this test were as follows:

1. The well water was 0.13 mg/L, the city water was 003mg/L. The cotton balls which had wiped the fluorescing floor areas was 86.8 micrograms and the swabs from the areas which had not fluoresced were 8.4 micrograms.

The results demonstrate that there was yellow phosphorous on the floor of the Tang Jiang's house which was greater than the threshold for fluorescence. The source of the yellow phosphorous could have something to do with using well water to scrub the floors. The site of the house was formerly a paddy field, and was then used to grow vegetables. It was later used to build the house on. It is not on a slope (people in that area are superstitious about building anything on a slope). The floor of the house is a poured concrete slab, painted with red 801 and then painted with 177 paint. It should have little connection with any phosphorous content of the dirt underneath.

CONCLUSION

I. DETERMINING THE FACTS

Spontaneous combustion of the human body is a strange phenomenon which is clinically rarely seen. In foreign countries since 1673 there have been more than 200 cases related in formal reports. In China there have been similar individual records[2]. However, we have seen no research papers on this phenomenon. This research into a four and half year old boy in Hunan's Xiangxiang city, Xingxing Village spontaneously catching fire on four occasions in a single afternoon is a somatic science research topic into the discovery into the human potential and the mysteries of a random occupance. It is also a topic into protecting children and man. Through on site investigations and inquiries, clinical observation, experimental research and forensic analysis, we demonstrated that spontaneous combustion is an objective fact.

II. CONCERNING THE CAUSES OF SPONTANEOUS COMBUSTION

Based on materials presently on hand, it may related to three possible factors.

1. Within two to three days after Tang Jiang entered the hospital, he was tested and found to have body surface static electricity abnormalities, magnetic fields at his hands (0. mGS), current on his body surface (37 microamps) and voltage (55 microvolts), all of which were clearly higher than ordinary children and results. However, in later tests, Tang Jiang's electrical parameters no longer showed any abnormalities, but were the same as normal people. Therefore, it is hypothesized that during Tang Jiang's spontaneous combustion his electrical parameters may have been even higher, and therefore, it is possible that Tang Jiang's spontaneous combustion was related to his abnormal static electricity parameters.

Static electricity abnormalities are believed to be one of the major causes of forest fires. Body surface static electricity abnormalities indicate a high degree of asymmetry in the distribution of electrical potential on Tang Jiang's body. The intensity of his biological magnetism was much higher than that of normal people. This indicated through the formation of a relatively high current in his hands. Through a skin temperature test, we also discovered similar phenomena. The skin test difference reflects asymmetry in the blood supply and heat supply. The drop in the blood Na-K-ATP enzymes and the Na-CA-ATP enzymes also indicates that there had been a relatively high energy consumption process. At the scene his entire body was seen to be covered with sparkling light, and the odor of electrical sparks was present. This indicates the nature of electrical discharge ignition. This all indicates that static electricity abnormalities in Tang Jiang's body was the primary cause of the fire.

2. Astrological data proves that the spontaneous combustion on Tang Jiang's body and magnetic solar storms occurred on the same morning. According to Chinese Academy of Sciences Nanjing Zijinshan Astrological Observatory reports, on the morning of 15 April, the solar magnetic storm radio current was 40 times greater than the normal intensity. This sort of solar storm directly and indirectly affects the physical environment on the earth and man's activities. Why did Tang Jiang's spontaneous combustion not occur before or after, but just on the day of the solar magnetic storms.
This makes us think that Tang Jiang's spontaneous combustion may be related to these magnetic storms. Articles on the connection between solar magnetic storms and spontaneous combustion[2,3,4] and Chinese experts we visited all believed that sun spot explosion caused radio particle flows. It has already been demonstrated that they can interfere with the ionosphere and atmosphere around the earth and affect the earth's magnetic field (magnetic storms), having a major affect on life. The effect of

solar winds on the earth is uneven. It is possible that it was stronger in the area of Tang Jiang's home. The solar winds could have ionized the atmosphere at Tang Jiang's home, or the atmosphere at Tang Jiang's home may have become mixed with easily ionized gasses from under the surface (in November of 1989, combustible gasses coming out from underground causing repeated fires was discovered in Hunan's Shaodong. This is an example of gasses coming up our of the earth). In addition, Tang Jiang's own body had abnormal static electricity. This type of static electricity and magnetic fields indicates that such abnormalities as a radio flow could be the result of having undergone solar wind radiation or after having been subjected to envelopment by strongly ionized gasses, because of certain abnormalities on Tang Jiang's body, it caused abnormal electrical abnormalities. We have duplicated an applied magnetic field similar to the intensity during a magnetic storm, in an attempt to simulate this phenomenon. However, we could not duplicate the other effects of the solar particle flow, and the results of the experiment were negative. Tang Jiang's electrical parameters did not undergo any abnormal changes in an artificial magnetic field, which is consistent with the view above. Was it the solar particle flow and earth's magnetic storm that caused Tang Jiang's spontaneous combustion? Because of they occurred at the same time, it cannot be eliminated as a possible major factor.

3. Concerning inspection of combustible materials, because there was the coincidental appearance of sparkling light in the Tang home, samples were collected for laboratory testing and it was discovered that on the floor of Tang Jiang's room lived, in the water or a nearby well and in the city water to which the house was connected there contained yellow phosphorous. The yellow phosphorous content was highest on the floor in a certain area of Tang Jiang's room. The source of this yellow phosphorous is still not clear. Was it due to scrubbing the floor over a long period of time using the well water of the city water so that the yellow phosphorous built up on the floor? This could possibly lead to yellow phosphorous or its compounds to be on Tang Jiang's body. Whether or not this was the material basis for localized spontaneous combustion on Tang Jiang's body will have to await continued observation.,

In summing up all the above, we can believe that Tang Jiang did experience spontaneous combustion and it was not caused by any conventional source such as fire crackers, matches or oil. Therefore, we may conclude that spontaneous combustion does objectively exist. The fact that we were only able to detect abnormal electrical and magnetic parameters shortly after Tang Jiang's spontaneous combustion indicates that the child's abnormalities were temporary biological phenomena. Furthermore, the explosion of the sun spots could have been the cause for the inducement of Tang Jiang's reaction. The high yellow sulphur content of Tang Jiang's bedroom, as well as abnormal yellow sulphur content of the nearby well, indicates the existence of combustible materials and the possibility that they had gotten on Tang Jiang's body. From the material presently available, we can hypothesize that the possible model of this spontaneous combustion is: The astrophysical phenomenon of fusion induced

an abnormal electromagnetic reaction in Tang Jiang's body (no similar change occurred in his relatives or neighbors). Electromagnetic abnormalities are often factors in starting fires (such as lightning causing forest fires). Furthermore, there was yellow sulphur in Tang Jiang's room which contaminated his body and got into his skin, thus causing a strong oxidation process to occur and leading to the deep burns and sparks. This explains the primary reason why the electromagnetic abnormality occurred on Tang Jiang's body and not on others in the family.

Of the connections between the earth's environment and the human body, the phenomenon of electromagnetism is one of the most basic. Comrade Qian Xuesen pointed out when he was talking of establishing a theory of unique phenomena for somatic sciences: "the manifestation of human paranormal abilities may actually be an electromagnetic field between man and object, where man can be subjected to the effects of electromagnetic waves and electromagnetic fields in the environment"[1]. Wang Xiubi and others demonstrated that in external QI, there exists weak electromagnetic waves between ten and 360 megahertz which can cause an increased charge density on the surface of red blood cells and an acceleration in the electrophoresis rate. Dubuluofu (phonetic) believes that the earth's magnetic field has obvious effects on the human body[7]. J. B. Beal has proposed that during earthquakes, low amplitude super low frequency (0 to 100 hertz) earth magnetic interference is generated that may affect the brain function. During wind storms, a vertical electrical field signal is generated that may cause a change in the ionization balance of the atmosphere, leading to different ailments in those persons sensitive to the weather[4]. C. Polk has proposed that the earth's magnetic field is a gradually changing field, and it has undergone many reversals. Sunspot activity is one of the major factors in short term changes in the earth's magnetic field. During magnetic storms, the degree of changes may be as much as several hundred gamma (one gamma equals 10^{-5} gauss) and may last for more than 20 hours (first rising and then falling). Furthermore, this is accompanied by changes in other earth physics phenomena such as atmospheric temperature and pressure, passage of universal rays, earth electrical field (in a vertical direction) and atmospheric resistance, causing complex biological effects[6]. In his book "The Earth and Static Electricity", Xu Haomin described the increase in static electricity during earthquakes and examples of people and animals giving off light and becoming burned[2]. In his book "Looking for the Causes of Ground Lights", he also describes the phenomenon of "ball lightning"[3]. The materials above illustrate that astrophysical changes are a primary cause of abnormal electromagnetic phenomena in people and objects on the earth such as static electricity, ball lightning, electric fields on the surface of biological entities and changes in magnetic fields as well as changes in the bodies internal functions. When there are combustible materials present, there is a definite possibility of leading to spontaneous combustion. The views above are consistent with our investigation of the scene and the hypothesis we reached after a series of experiments and examinations that Tang Jiang's spontaneous combustion was due to a magnetic storm causing electromagnetic anomalies in his body causing the

fire.

III. THE IMPORTANCE OF THIS RESEARCH INTO THE SPONTANEOUS COMBUSTION OF THE CHILD

First is for safety. Second is to illustrate that the causes of questionable fires may be due to human abnormal electromagnetic phenomena. According to what we presently know, we have come up with the following suggestions for the protection of Tang Jiang.

1. Purchase a precision universal electric meter, and frequently check the electrical parameters between his two upper extremities. If any abnormalities are found, immediately use warm water to wipe down his entire body to balance out the electrical charge distribution and passably reduce the accumulation of combustible materials. Furthermore, he should check himself daily for a few days after this, until the readings are normal. He should not wear synthetic underwear to prevent any static electricity. When there are marked changes in the weather, he should be closely watched.

2. Prevent the child from coming in contact with combustible gasses or entering areas where combustibles are piled up. After he has matured, he should not work where he has to do this.

3. Be on the watch for the appearance of special phenomena around him, such as ground fluorescence.

4. We suggest that health and disease prevention departments make a phosphorous inspection of the Tang family's home and the neighborhood, to improve the environment and the condition of the drinking water.

SUMMARY

This article describes the results at this stage of multiple discipline research into China's first example of human spontaneous combustion. We have confirmed the objective existence of spontaneous combustion, and based on currently available materials, we have proposed a possible model for spontaneous combustion and have proposed suggestions for protecting the child who had undergone spontaneous combustion.

We would like to take this opportunity to thank Xu Haomin, Wang Xiubi, Li Xiangdong, Zhao Dingli, Tan Shusen and the many scientific experts at our college for their guidance and assistance.

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ON COMBINING TRADITIONAL CHINESE MEDICINE AND SOMATIC SCIENCE

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The rise of somatic science in China marks the highest of all things born in the universe - man - and the prominent place he should have in the universe and in the fields of modern science. It marks the important foundation laid for somatic science by medical science and its branching out and being propelled to the forefront of modern science. It also marks the intimate union of traditional Chinese medicine and somatic science and the outlook for major developments, which in the 21st century will become a revolution for modern science and medicine.

I. TRADITIONAL CHINESE MEDICINE, MEDICINE AND SOMATIC SCIENCE

The rise of somatic science within the body of modern science, has formed theories of modern somatic science concerning the subjects of research, contents and methods. According to these theories:

1. Somatic science is a major portion of the body of modern science, combining natural sciences, mathematical sciences, system sciences, thought sciences, and social sciences. Somatic science is the study of man in his universal environment. Its subject of study, the human body, is a conscious, open, complex giant system included in the super giant system of the universe. Traditional Chinese medicine, Western medicine, QIGONG, ESP as well as all other phenomena and processes of the functional states of the open, complex system of the human body fall within the scope of its research. As a system, somatic science includes three major categories - basic science, technical science and applied engineering. The basic theoretical sciences of medicine and the basic science and technical science of somatic science are very closely related, just as the theories of traditional Chinese medicine such as Yin and Yang, the theory of five elements (wood, fire, earth, metal and water), the theory of hidden phenomena and spirit, the theory of evidence and disease are all closely related to the functional theories of somatic science concerning the complex giant system of the human body. The same is true for scientific and technological disciplines of Western medicine such as pathology, pharmacology, immunology and parasitology. Medical clinical sciences such as internal medicine, surgery, gynecology and obstetrics, pediatrics and orthopedics can be considered as applied technologies of somatic sciences.

We can see that the objects of research in medicine and somatic sciences, broadly viewed, are both the human body. Narrowly viewed, the object of medical research is the health of the human body and the

prevention and cure of disease. It is the commonality of the subjects of research of medicine and somatic science that determines the intimate relationship between the basic theories of medicine as well as clinical science and the three major departments of somatic science. Furthermore, the characteristics of medical study of the human body indicate that medicine obviously is a portion of somatic science research, and is a major branch of the body of somatic science.

2. Traditional Chinese medicine, Western medicine, as well as combined traditional Chinese and Western medicine are all important pillars and practical foundations of somatic science. They are important contents of somatic science research. By using the theories and methods of the open, complex giant system in somatic science to study traditional Chinese and Western medicines, we can clearly see that they are two different bodies of medicine formed under different historical and cultural conditions, based on different philosophical thought and scientific concepts, use different theories and methods and have developed along different lines. There should be an overall scientific evaluation of the advantages, disadvantages, special characteristics and superiorities of these two types of medicine, stressing thorough research through somatic science into the functional states of the open, complex giant system of the human body and laws governing their adjustment and transitions, to include the properties of the various levels of the human body from the microscopic to the macroscopic, the interaction between human consciousness and the various environmental levels of man's universe, from quantitative to qualitative, comprehensively studying the changes in the complex giant system of the human body to form a channel between traditional Chinese medicine and Western medicine and raise both of them to the front lines of modern science and impel them to the pinnacle of modern science.

3. There is a very profound inherent relationship between traditional Chinese medicine and somatic science. From the very beginnings of somatic science, Comrade Qian Xuelin has laid special stress on "traditional Chinese medicine, QIGONG, and ESP are all one, they are a single field of research"[1]. A large number of scientific workers have discovered through their strict experimental research on QIGONG and ESP that there a great number of similarities between them. Many of the subjects of experiments in the two are also closely tied in with the theory of channels in traditional Chinese medicine and even with overall theories of traditional Chinese medicine. They began to become conscious of the fact that there may exist a profound inherent connection between ESP and QIGONG and traditional Chinese medicine. If we full utilize all possible modern scientific and technology knowledge and methods to conduct experimental and theoretical research, and at the same time, on the basis of modern science and technology fully absorb and digest the vast inheritance of traditional Chinese medicine accumulated over several thousand years in China, we will be further able to unite the research of the three. We can also disclose the secrets of the human body, this highest and most evolved product of the natural world, most complex and

highest self-organized complex giant system[2].

The results of this research will make more clear as time goes on that traditional Chinese medicine is a major pillar of somatic science and is a key to unlocking the mysteries of the complex giant system of the human body. The uniting of traditional Chinese medicine, QIGONG and ESP is the path to a modern scientific revolution. Traditional Chinese medicine is more closely related to somatic science than to any of the other modern sciences, and the subjects of research, content and methods are most similar, the views and terminology are the nearest to each other. The founding and development of somatic science will require assistance from traditional Chinese medicine. The modernization of China's traditional medicine will also require assistance from somatic science. The intimate joining and mutual permeation of traditional Chinese medicine and somatic science is a major avenue, point of breakthrough and developmental direction for the modernization of traditional Chinese medicine.

THE SYSTEM THEORY OF TRADITIONAL CHINESE MEDICINE IS THE BASIS AND THE KNOT THAT TIES TRADITIONAL CHINESE MEDICINE AND SOMATIC SCIENCE TOGETHER

Traditional Chinese medicine and somatic science come together at a wide range of points.

The subject of study of somatic science is the human body. It is an open, conscious, complex giant system. This concept is of profound scientific significance. It especially stresses that the human body is not only a complex giant system, but it also exists in the super giant system of the universe. The human body is an open, complex giant system, and it also is an especially complex giant system - a subsystem of the social system. The human brain is also an open, complex giant system. All the activities of the human body are carried out under the unified control of the human brain. Therefore, we must merge these two giant systems into one and completely study the characteristics of the activities of the overall giant system of the human body[3]. Because of the limitations of history, traditional Chinese Medicine cannot generalize its subject of research to the degree above for somatic science, but it has a profound description of this type of topic, and there are a large number of similarities in trains of thought. Although traditional Chinese medicine does not have this precise concept of the human body as an open, conscious, complex giant system, it has compiled a great deal of profound thoughts on this major topic, and requires that on the basis of modern science and technology and through extensive research of this juncture of medicine and somatic science, we absorb and digest its thoughts, and then we may even more thoroughly reveal this open, complex giant system which is the human body.

Close ties not only exist between traditional Chinese medicine and somatic science in the subject of research, but also in a series of

aspects such as the contents of the research, the practical foundation and methodology. In these wide ranging ties, the most important and most basic tie is the tie between the theories of Chinese traditional medicine and the somatic sciences theories concerning the functional states of the complex giant system of the human body. Because of the close ties between the theories of traditional Chinese medicine and the theories of somatic science concerning the functional states of the complex giant system of the human body, there has been thorough research and development of the system theories of Chinese traditional medicine, which is the theoretical basis of the common development of traditional Chinese medicine and somatic science.

What we have called traditional Chinese medicine system theories are not in general referring to traditional meanings of the theories of traditional Chinese medicine, but are the use of the theories and methods of system science, the use of the theories of the functional states of the complex giant system of the human body as well as qualitative to quantitative, comprehensive integration methodology, to thoroughly study the theoretical system of China's traditional medicine to gradually forge it into a system concept of traditional Chinese medicine under modern scientific conditions. As for the description of macroscopic characteristics of the giant system of the human body, use the study of the laws and corresponding principles and methods governing health and disease prevention and cure through the macroscopic view of overall reactions to analyze microscopic changes. In this manner, on the basis of continuing to carry forward all reasonable and outstanding successes of traditional Chinese medicine, we will fully absorb and digest the most advanced and sharp edged scientific achievements of modern science, and thus give rise to new ideas, new principles and new methods in traditional Chinese medicines system theory.

The body of traditional Chinese medicine in overall view includes three levels. The system of Chinese philosophical thought, the system of the basic theories of traditional Chinese medicine, and the body of traditional Chinese clinical medicine. Using the theories and methods of system science and using somatic science theories and methods concerning the functional states of the complex, giant system of the human body to thoroughly research the body of traditional Chinese medicine will allow these to be tied together at the three levels to form and develop a system theory for traditional Chinese medicine.

1. In the historical process of forming and developing its theoretical system, Chinese traditional medicine continuously widely adopted the excellent achievements of ancient Chinese philosophy, natural science and technology, and the humanities, and focussed them into the crystallization of China's ancient dialectical materialism and theory and practice of traditional Chinese medicine. It gradually formed the special character of traditional Chinese medicine and the philosophical form of a unique dialectical materialism, traditional Chinese medicine dialectics. In the past 2,000 plus years, it has accompanied the generation and

development of the system of traditional Chinese medicine, with its theoretical system based on the basic theories and clinical system of traditional Chinese medicine. It also deeply penetrated inside this system, and within the system of traditional Chinese medicine, it was a vital connection and at the same time an independent level, serving as a guiding ideology and a philosophical and theoretical basis. The core and outline of the ideological system of traditional Chinese medicine is the traditional Chinese medicine theory concerning the relationship between man and the universe[4]. To use system sciences and the theories of somatic science to develop the system theories of traditional Chinese medicine, it is necessary first of all to use the modern anthropic theories, conduct thorough research, to develop the theory of the relationship between man and the universe in the system of China's traditional medicine. The anthropic principle is the philosophical basis of the system of somatic science, just as the traditional Chinese medicine idea of theory of the relationship between man and the universe is the philosophical basis at the center of the system of traditional Chinese medicine.

The guiding ideology of somatic science is system theory which is one step above the unification of the integral theory and the reduction theory. On one hand it makes full use of Western modern scientific theories and technologies, and on the other hand also conscientiously extracts oriental and Chinese traditional philosophical ideas and medical theories and techniques, to organically and creatively develop somatic science research. The forging of modern anthropic principles from the ancient Chinese view of the relationship between man and the universe came out of just this sort of union. Somatic science is guided by the anthropic principles in its discussion of the mutual connections between the complex giant system of the human body and the various levels of the universe. Traditional Chinese medicine was guided by the concept of the relationship between man and the universe, to primarily discuss at the macroscopic level the connections between man and nature. Although there are large differences between the theories and methods of the two, they are mutually intelligible. The former does not deny or refute the latter. To the contrary, in order for somatic science to know the human body at all five levels of the universe in an overall, systematic and thorough way, it must conscientiously absorb the philosophy, medical theory and technical accomplishments of traditional Chinese medicine over the last 2,000 plus years. It must make full use of the system of traditional Chinese medicine, always maintaining the use of the basic instruments, which are the use of the human system of senses as measurement instruments. "Real actual tools are the organs of sense that man uses to understand the objective world", "Only the results of the brain's processing of the senses are measurements of man's understanding, only this is mans understanding of the objective world. Therefore, a thorough understanding of quantum mechanics measurement problems requires the use of man's system of senses as measurement instruments and it is not the use of the imagination as the instrument[5]. The health and disease problems medicine wants to solve, whether it is Western science using the microscopic changes in the cellular tissue of organs to analyze the

overall reactions to treat the disease, or if it is Chinese traditional medicine using overall macroscopic reactions to analyze the microscopic changes to treat the disease, or if is somatic science from the universal view to the expanded view, from the microscopic view to the submicroscopic view to analyze the human body at the macroscopic level, none of these can divorce itself from the human body which exists as an integral unit at the macroscopic level. Therefore, the theories and practice of Chinese traditional medicine is of important significance for the creation and development of somatic science. In yet another aspect, traditional Chinese medicine is continuing to develop its view of the relationship between man and the universe, its views of medicine and its technological basis to further fully utilize modern science, especially the theories, technologies and methods of somatic science and system science, completely absorbing the scientific achievements of the anthropic principles. Thus, the system of philosophy and ideology of traditional Chinese medicine must be gradually enriched, developed and enhanced, completely shedding its "simplistic" forms to become the guiding ideology for developing a modern system theory for traditional Chinese medicine and to become the philosophical basis for a modern scientific system of traditional Chinese medicine.

2. Use of the somatic science theories on the functional states of the complex giant system of the human body to thoroughly study the basic theoretical system of traditional Chinese systems will also, at the points of union on the three system levels, form new principles and new ideas in the system theory of traditional Chinese medicine such as the QI, Yin and Yang and five element systems of the functional states, the hidden symptoms spirit system functional state theory and the evidence-disease system functional state theory. The three systems of functional state theories mentioned above are three basic forms of Chinese medicine system theory summarizing the understanding and study of the human body at the macroscopic level, from giant systems to subsystems and from the main outline to subbranches.

The central task of somatic science research is to study the functional states of the complex giant system of the human body, which are the macroscopic and microscopic functional states of the objective environment of the super giant system of the universe in which man exists and the laws governing the control and switching of the functional states of the human body. It must study the mechanisms of the various functional states of the human body. It must study the similarities and differences of the various functional states to more thoroughly understand the characteristics of the various functional states and their medical significance. It must study the process of transition from one functional state to another, doing exploratory research into the control parameters of altering the functional states of the human body. It must study the corresponding physical, chemical, biological and somatic effects generated by the various functional states. Using these theories of functional states, it should probe the QI, Yin and Yang, five element systems, hidden symptoms and spirit systems of the basic theories of traditional Chinese

medicine, and then probe further to the evidence and disease system. This is the intimate union of traditional Chinese medicine and somatic science. With this sort of union, if we are able to raise to a new level traditional Chinese medicine which already has a solid foundation of 2,000 years of practice, and also has scientific theories which reflect the highest levels of modern science, this will undoubtedly be of very important significance for breakthroughs in somatic science and the theories of traditional Chinese medicine.

The theories of traditional Chinese medicine are not summed up in theories of functional states. They are not all inclusive, just as the theories of the functional states of the complex giant system of the human body do not include all research in somatic science. However, the study of the macroscopic forms of the operations, transitions and regulation of the various functional states of the human body on the basis of the theories of QI, Yin and Yang and the five elements is the heart of the theoretical system of traditional Chinese medicine. The theories of QI, Yin and Yang and five elements in Chinese medicine are actually the use of QI as the basis of the giant system of the human body, the constant evolving of Yin and Yang is the core, and the five elements, which are five types of QI, are the basis for the changes, transition and regulation of the various functional states at the various levels in the human body.

The primary unique characteristic of the theories of traditional Chinese medicine is that it emphasizes QI and deemphasizes the bodily organs. It is precise concerning Qi and imprecise concerning the bodily organs. It is precise on the functional states and imprecise on the state of the organs. This naturally has been restricted by historical conditions. It does not have the conditions and methods for modern scientific experiments. It does not delve down into the microscopic levels to dissect and analyze the tissue and cells of the organs of the human body. However, the basic reason for this lies in the fact that the basic philosophy of the theories and methods of traditional Chinese medicine does not think this way. It holds that the universe, all things, and the human body are all made up of QI. To further break down the universe, all things, and the human body into its smallest parts is nothing more than the minute state of QI. The most microscopic form of QI and QI which has been coalesced into a certain form of QI (organ) are all forms in which QI exist. Only certain types of QI form "the changes of the universe" and form the organs of the human body, to make the human body an entity with various functional states and their corresponding activities and changes. It is only necessary to have a thorough understanding of the laws governing the changes of the functional states of the different kinds of QI through which the universe, all things and man are mutually limiting, to have a firm grasp of nature and man, which are the laws of the QI of the heavens, earth and man. One can then further have a firm grasp of the laws of the growth and aging process of man, his health, and the prevention and cure of disease. Therefore, the theories of traditional Chinese medicine place a great deal of emphasis on

the changes of QI in the universe, all things and the human body. It looks at the changes in the activities of the entity of the human body from the viewpoint of changing and regulating the activities of the functional states.

In the system theories of traditional Chinese medicine, the QI, Yin and Yang and five element system functional state theories are the outline. They run throughout the entire philosophy and ideology of traditional Chinese medicine, the basic theories of traditional Chinese medicine and the clinical practice of traditional Chinese medicine. Furthermore, the theory that the QI of essence is form and the QI of spirit is change, or which is also called the functional state theory that the QI of essence is form and the QI of spirit is change, is the basic theory of traditional Chinese medicine concerning physiology.

Based to the theory of the QI of essence is form and the QI of spirit is change, traditional Chinese medicine generalizes the state of the organs of the human body into the system of hidden symptoms and spirits. The hidden symptoms system is an whole concept. The hidden symptoms concept thoroughly and briefly summarizes the special nature of the theories of traditional Chinese medicine. It takes the material structure of the human body to be a model such as this: the five viscera - hearts, lungs, liver, kidneys and stomach and the six bowels, the channels, networks and points, and the essence, QI, spirits, blood, saliva and liquids. All of these are hidden inside the human body, but their symptoms can bee seen from the outside. It is very obvious that the theories of traditional Chinese medicine do not think in the manner of constantly analyzing and dissecting this material structure of the body to find out just what they are made of. They emphasize the aspect of functional state, analyzing and studying the external characteristics of the various functional states between the hidden symptom systems, between the various viscera and bowels, between the essence, QI, spirit, blood, saliva and liquids, between the viscera and bowel essence, QI, spirit, blood, saliva and liquids, and the transportation routes of the channels and networks in order to analyze and become familiar with the characteristics of the biological structures of the organs hidden inside the body and their operational mechanisms. An intelligent doctor would be familiar with the operation and transition mechanisms of these bodily functional states, and would recognize the characteristics of these functional states and their physiological and pathological significance, and would know the control parameters for regulating these functional states, and would be able to determine if someone were to live or die.

The theories of traditional Chinese medicine hold that the human body is not only a living organism, and not only possesses a material hidden symptom structure, but man also possessed highly complex spiritual and emotional activities. There are not only pathological factors of the material form, but there were also unique psychological factors of special forms of consciousness.

What is most prominent is that from the time of the "Neijing", the theories of traditional Chinese medicine accurately viewed the entity of the human body as existing in a subjective and objective environment where he interacted with the universe, and the hidden symptoms and the spirit of man were united. It also united the state of the organs and functional states based on the material form of the hidden symptoms with the emotional state of the spirit form. Therefore, the hidden symptoms and spirits systems of the human body were united. This united the state of the organs, the functional state and the spiritual state of the body. The "Neijing" outlined the uniting of these three states very clearly. "The blood, pulse, nutrition, QI, essence and spirits are hidden by the five hidden organs", and "The kidneys conceal the blood and the blood houses the soul, the spleen conceals the nutrition and the nutrition houses the thoughts", the heart conceals the pulse and the pulse houses the spirit, the lungs conceal the QI and the QI houses the animal spirits, the kidneys conceal the essence and the essence houses will". The liver, spleen, heart, lungs and kidneys are the five viscera and blood, pulse, nutrition, QI and essence are the five forces arising out of the five viscera, and they are also the material forms of the human body. They arise out of the five viscera of the human body and also move back and forth among the viscera and connect the five viscera, thus forming activities and transition of the various functional states of the human body. The soul, animal spirits, thoughts, spirits, and the will are the five states of consciousness. The emotional states of these five states of consciousness do not exist independently, but are always closely tied in with the state of the five viscera and the functional states of the five forces arising from the five viscera, moving back and forth, and changing. "Liver-blood - soul, spleen - nutrition - thoughts, heart - pulse - spirit, lungs - QI - animal spirits, kidneys - essence - will", this is the concealed symptoms and spirits system of the human body of traditional Chinese medicine. It is an exceptionally simple and precise model for the human organ states, functional states and emotional states[4]. The basic special characteristics and superiority of the body of theories of traditional Chinese medicine lie in the thorough and detailed analysis and understanding of the macroscopic entity reactions to the various complex functional states and the analysis and regulation of changes in the states of the bodily organs and emotional states to maintain health and prevent and cure diseases, to a level where one is able to determine if someone is to live or die.

Because evidence and disease are used by the theories of traditional Chinese medicine to describe the range of abnormalities and imbalances in the giant system of the human body as well as the appearance of various pathological states, and because it is the evidence which guides the clinical diagnosis and treatment of traditional Chinese medicine, this theory crosses over from the body of basic theories of traditional Chinese medicine to its clinical practice. It is also part of the clinical system of traditional Chinese medicine. It is the core of diagnostic and treatment theory and methods. We will discuss the theory of evidence and disease system functional states in the next section.

3. The central theory, basic principle and method of the body of traditional Chinese medicine clinical practice is dialectic treatment. The basic and central theory of dialectic treatment is the theory of evidence and disease system functional state.

Evidence generally refers to the comprehensive range of the pathological states of the giant system of the human body. It is the macroscopic parameters of this type of functional state. It signifies the overall reaction of the body being in this sort of functional state. Chinese medicine is not only dialectic, it also diagnoses diseases. Zhang Zhongjing systematically established the principle of "Examination, Pulse, Diagnosis and Cure" based on the three Yins and the three Yangs. This basically established the theory of dialectic treatment and the body of clinical practice, which has been continually enriched and further developed by those who followed him. It is very obvious that whether it is based on the dialectics of the six channels or viscera and bowels channels, both are theories of the functional state of the evidence-disease system centered around dialectics to deeply analyze various pathological functional states of the human body, to thoroughly understand the operational mechanisms of these functional states and to understand their differences and similarities, their special characteristics and their pathological significance, their transition and evolutionary process and how to be able to regulate and improve the control parameters of these functional states, thus achieving the requirement for treatment of "careful examination of the Yin and Yang states and regulate it in order to put it in balance".

The theory of the functional states of the evidence - disease system is another important connection between the theories of traditional Chinese medicine and the theories of the functional states of the complex giant system of the human body in somatic science. On this connection is based the special character and superiority of traditional Chinese medicine which is built on the foundation of traditional Chines medicine theories and clinical practice, as well as system science and somatic science which are built on the foundation of the theories of the functional states of the complex giant system of the human body. With these foundations, we must fully absorb modern scientific theory and achievements, thoroughly study this open, conscious, complex giant system of the human body, and the various complex pathological functional states manifest at the macroscopic entity reaction level, and thoroughly study the laws governing the activities, transition and regulation of these functional states. We must make full use of and categorize the abundant scientific contents of Chinese traditional medicine clinical dialectic treatment theories and methods, and gradually elevate it to the leading edge at the forefront of modern science.

III. THE DIRECTION OF GROWTH FOR TRADITIONAL CHINESE MEDICINE SYSTEM THEORY

The direction of strategic development for China's traditional medicine is the modernization of its theories and its clinical system. Its primary avenues of development are through the development of traditional Chinese medicine system theories or through the intimate combination of traditional Chinese medicine and somatic science, especially the intimate combination of the theories of traditional Chinese medicine and the theory of the functional states of the complex giant system of the human body to spur on the modernization of traditional Chinese medicine to achieve major advances in its body of theories, and thus launch major breakthroughs in the clinical system of traditional Chinese medicine, gradually making the transition from traditional Chinese medicine to modern Chinese medicine.

Since the founding of the Peoples' Republic of China, traditional Chinese medicine and herbs have, on one hand, seen more vigorous growth than at any other time in history, yet on the other hand, it seems to be more and more in danger of fading out. In the modern era, traditional Chinese medicine has been subjected to more critical examination than at any other time in history. In modern times, traditional Chinese medicine is facing three major challenges, which are the four medicines, international Chinese medicine and the new scientific and technological revolution?.

In modern times, there have also been pregnant possibilities for major developments in traditional Chinese medicine. It is worth noting that some of the problems in the forefront which modern physical science, life sciences and system sciences are attempting to solve are exactly those areas where somatic science research is concentrated, forming a new area for growth with extremely good hopes for breakthroughs. Somatic science research has initially disclosed the very deep inherent connection which exists between traditional Chinese medicine, QIGONG, and ESP. It has united these three into one as a complete field of research, making traditional Chinese medicine the key to gradually more deeply disclose the mysteries of the complex giant system of the human body. In this manner, the combining of traditional Chinese medicine and somatic science research has been propelled to the forefront of modern science, and it may very possibly become a new science which will achieve major developmental breakthroughs in new areas of growth. This is necessary for the modern development of traditional Chinese medicine, and it is also an opportunity. If traditional Chines medicine can grasp the opportunities of this period, it will make progress that could be of history changing significance.

The linking of traditional Chinese medicine and somatic science and their common development can allow the theories of traditional Chinese medicine and the theories of the functional states of the complex giant

system of the human body to be combined to form a strategic juncture, becoming the theoretical basis for extremely hopeful breakthroughs by somatic science research on the leading edge of modern science. Traditional Chinese medicine system theory and traditional Chinese medicine system functional state theories are not only new names to explain the theories of traditional Chinese medicine. Research and development of system theories of traditional Chinese medicine is based on the foundation of the traditional body of theories of Chinese medicine, uses the system concept and methods of system science, and it uses the theories and methods of the functional states of the complex giant system of the human body of somatic science to thoroughly study the three levels of the body of traditional Chinese medicine and thoroughly study the functional states of the three systems of the body of basic theory of traditional Chinese medicine. Using these new theories to do more research to clarify the open, conscious, complex giant system of the human body will enrich the contents of the theories of traditional Chinese medicine. It will greatly enhance its level and field of vision as it stands on the pinnacle at the leading edge of modern science to explore and resolve the most complex problems of modern science. A much wider range of methods will be used, as we can also use many advanced methods of modern science and modern medicine. Research will grow out from the macroscopic level to the other two extremes. Once the system theories of traditional Chinese medicine are at the level of research into the functional states of the complex giant system of the human body and extended to fields of research at the microscopic and universe levels, expanded to even more of the scientific fields of modern science and be assisted by the theory of the method of comprehensive integration from the qualitative to the quantitative of somatic science to develop the methodology of traditional Chinese medicine, it will become compatible at many more levels and in an even wider range of scientific fields, and it will grow. When this happens, system theories of traditional Chinese medicine will both use its traditional theories and absorb new theories to study and explain the QIGONG theories which are most similar to those of traditional Chinese medicine and to reveal the secrets of the mechanism of the activities and transitions of the various functional states of QIGONG. It will coordinate with other theories and methods of somatic science, and after the laws of ordinary functional states are discovered, it should make contributions toward the disclosure of the secrets and laws of paranormal functional states.

The combining of theory of functional states of the complex giant system of the human body and the theories of traditional Chinese medicine will gradually forge a Chinese medicine system theory which will span across China's traditional medicine and the field of somatic science. On the basis of Chinese medicine system theory, we will gradually forge a modern Chinese medicine somatic science, which will become one major theoretical pillar of modern ordinary somatic science. At the same time, the thorough use of the theories and methods of the functional states of the complex giant system of the human body will be a major change in somatic science. By using this type of viewpoint and method to study the

ordinary functional states and paranormal states of the human body new somatic science information will be obtained. The use of the comprehensive integration method of qualitative to quantitative to highly comprehensively integrate large amounts of theoretical and clinical data from traditional Chinese medicine and Western medicine as well as biological and pathological data and control parameters will forge a modern ordinary somatic science. While other fields of somatic science have achieved major progress, with the theoretical results mentioned above, somatic science may hopefully, in the 21st century, gradually disclose the secrets and laws of the normal functional states and paranormal functional states. It may uncover the secrets of laws of the open, conscious, complex giant system of the human body and man and the super giant system of the universe, and develop man's tremendous potential, opening up a better world for mankind.

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