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Finger-reading: Exploring the Information Field

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ABSTRACT

Some people are able to read images by using their fingers rather than their eyes. After nine years of investigation, we confirmed that children between 6 and 13 years old can be trained in finger-reading. An earlier report suggested that finger reading can be developed in a high percent of children (~40%) with training (S. L. Chen et al 1989). More than 21% of the children in our studies developed statistically significant finger-reading capability ($p < 0.05$) after attending finger-reading training classes for two hours daily over four days.

After more than 3000 tests over nine years, we have clarified some of the physiological responses during the finger-reading process. Testing one girl over 800 times, we found that the brightness of the emerging "screen" in her mind depends on her normal vision which provides the backlight. Therefore, wearing a shade or being in a dark room results in a dark background which makes the color recognition difficult. By using color adaptation procedures, we found the subject could keep color constancy in normal visual condition after red-light adaptation, but not with finger-reading

We used trans-cranial Doppler to measure the mean cerebral blood flow velocity (cBFV) bilaterally in the middle cerebral arteries. When the cBFV suddenly dropped 20%, the girl claimed that a screen appeared in her brain. Then, the cBFV rebounded and was followed by a 30 mV electrical pulse on the right palm.

We also measured the EEG brain wave characteristics of the subject during finger-reading experiments. The alpha waves in her EEG confirmed that she can "see" the written characters even though her eyes are closed. We suggest naming the region in the brain associated with this extra-sensory perception (finger-reading) to be "the third eye."

Surprisingly, when certain special words related to religion - such as Buddha, Bodhisattva, or Jesus (in Chinese), "I am that I am" (in Hebrew, meaning God) - were presented for finger-reading, these

youngsters saw extraordinary phenomena, including bright light, a bright and smiling person, a temple, the

Christian cross, or heard the sound of laughter. These responses are completely different from responses to other, ordinary, non-religious words.

It seems that these keywords act as "addresses" connecting to an "information field" (spiritual world) which behaves like an internet world. If you click on the correct address, you connect to a spiritual page. We believe this provides scientific evidence that in addition to our four dimensional space-time material world and known four fundamental energy fields, there exists an additional "information field" (spiritual world).

INTRODUCTION

In 1979, a twelve years old boy named Tang Yu in Szechwan Province of mainland China was found to have "ear reading" capabilities. He could recognize the characters written on a piece of paper, when the paper was rolled into a ball and put into his ear canal (S. S. Chien 1979). Subsequently, hundreds of children in the same province were found by their elementary school teachers to possess this kind of ability. Some used their ears, others used their fingers. In 1979, Professor Chen at Peking University discovered that this finger-reading ability could be developed with intensive training (S. L. Chen et al 1989). He trained 40 children between the ages of 5 and 14 for 8 days. Surprisingly, 15 of them developed finger-reading ability after 3 to 8 days training. In 1980, Professor Tien in Hon-Jo University investigated 1,222 students between 7 and 18 years old in the neighboring elementary, middle and high schools to explore the prevalence of this finger-reading ability among different age groups (W. S. Tien 1996). The highest incidence of finger-reading ability was 20% at nine years old. After the age of 14, this ability was rarely found. Only one of the 306 students between 14 and 18 could read with his fingers.

The mechanisms for signal propagation through paper with perception in the brain were investigated (Lee 1998; L. R. Lo et al 1989; Shao et al 1982; Tien 1994; Wang et al 1989). However, only a few physiological responses of the children during experiments were reported (Tien 1994; Lee 1998) and no satisfactory explanations of the phenomena were given.

In order to investigate the deeper reality of the finger-reading phenomenon, we started our experiments in 1993 on one girl (subject C) who was gifted with natural ability. As of the date of this publication, we have tested her over 800 times. In 1996 we began finger-reading training classes in the summer and accepted children between 6 and 13 to participate. Three children who demonstrated significant abilities were chosen for long-term training and tracking of their abilities. More than 300 tests have been run with each child.

We found that the mechanisms for signal transmission, processing and extraction in this finger reading vision are very similar among these children although, their physiological responses may be different.

There appears to be a region in the brain responsible for this exceptional vision. We suggested this region could be called "the third eye" (Lee 1998). More on this below.

METHODS

One month before the summer training class, a few neighboring elementary school teachers invited the parents of students in their classes to register their children for finger reading training class. Our only selection criterion was that children should be between 6 and 13 years old. The training class ran for two hours on each of four-days, usually starting at 2:30 pm. Children were required to practice qigong breathing exercise for 10 minutes, followed by image making for 5 minutes, then mental concentration on their finger tip for another 5 minutes. The qigong practice was to calm the children and make it easier to concentrate. In retrospect, the qigong might not be needed. During the image-making period, children stared at an object - such as an apple - for a few seconds and then closed their eyes to visualize the apple. This exercise is typical in parapsychology to train a personÕs extra-sensory perception (ESP) ability.

They were then divided into groups of three and started the experiment. Each group was monitored by one assistant who recorded all the experimental procedures and results.

The viewing samples were on 5 x 8 cm rectangular white paper. Printed on the papers were two-digit numbers from 10 to 99 with four different colors (red, green, blue and black) to facilitate data coding and analysis of the large numbers of samples. This also made it easier to judge whether the children's finger-reading ability had reached a readiness threshold. For example, when the children started to visualize one of the digits correctly in consecutive tests, then we knew his finger reading ability was about to emerge.

Over 1,000 samples with computer-printed, two-digit numbers were prepared. As many as 100 Chinese characters were printed, each on a separate paper that was folded twice..

During each finger-reading trial, children placed a hand in a cloth sleeve, as shown in Figure 1. These are standard, light-proof sleeves that are used to handle photographic negatives. The children had the two cuffs tightly tied around their forearms. The samples were randomly chosen by the experimenter, clenched in his fist, and put into the bag through the zipper on the other side. Since all of the two-digit numbers were printed by laser printer, there were no palpable depressions on either side of the paper.

Figure 1. Children sensing images with their fingers

Whatever the children reported they saw on their mental screen was recorded by the assistant. They told the assistant their impressions before taking their hands out of the sleeve, leaving the sample in the bag. The children then also wrote their responses on a piece of paper measuring 5x5 cm. The assistant then unzipped the bag, took out and unfolded the sample, and pasted both sample and answer on the record sheet as shown in Figure 2.

Figure 2. Sample process record sheet

RESULTS

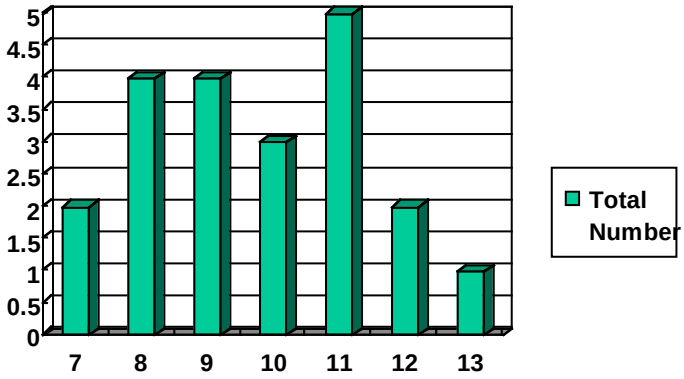
Training

Table 1 lists the results of experiments over a six year period, during which 138 children participated in the class. Of these, 98 completed the four-day training, with 21 demonstrating significant finger-reading ability at $p < 0.05$. Of this group, 17 were at $p < 0.001$. The children ranged from 7 to 13 years old. The age distribution of 21 children is presented in Table 2.

Table 1 Finger Reading Training Results

Year	Total No. of Children	Stayed for 4 days	No. of Children Showing Significant Ability	
			P < 0.05	P < 0.001
1996	15	12	3	3
1997	10	9	1	1
1998	19	9	0	0
1999	30	16	2	2
2000	27	23	5	5
2001	37	29	10	6
Total	138	98	21	17

Table 2 Age Distribution of Supersensitive Children



Age of Children (Years Old)

Statistical analyses

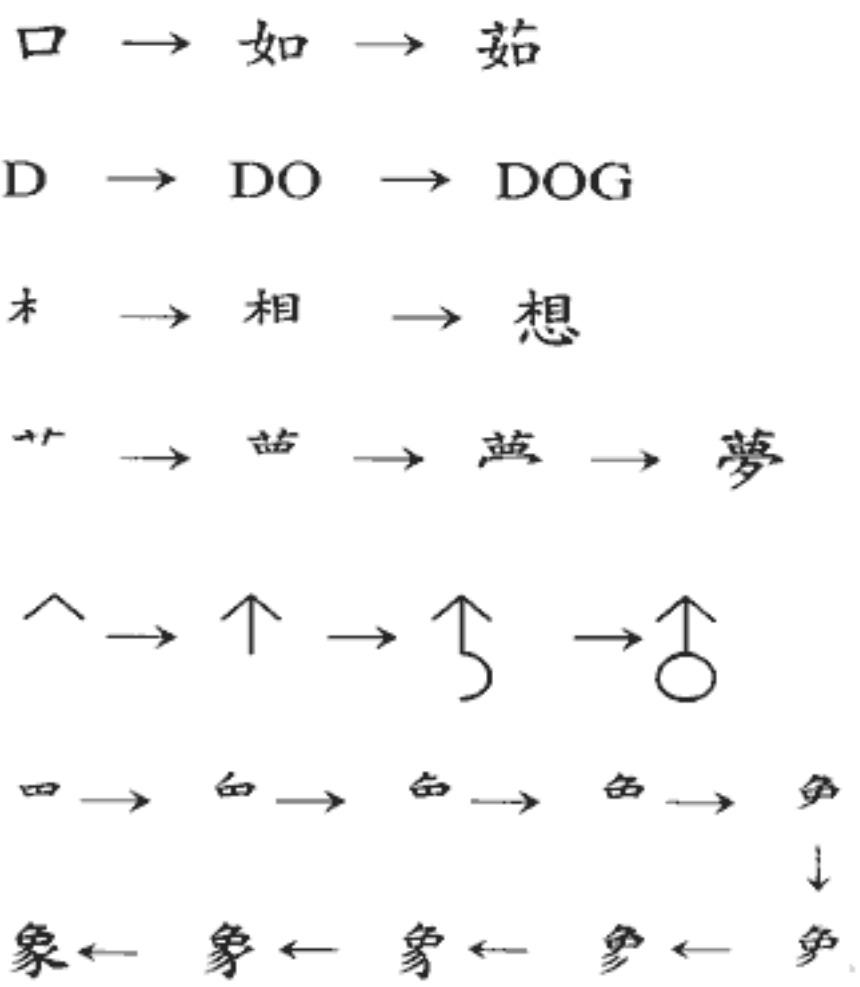
Two-digit numbers with 180 degrees rotational symmetry - such as 99 and 66, 98 and 86, and so on - were considered identical, so the total number of two digit numbers from 10 to 99 was 84, Since each finger-reading test was independent, with an outcome of either success or failure, the chances for success ($p = 1/84$) and failure ($q = 83/84$) were fixed, we could apply the Bernoulli analysis. If the total number of tests was **n**, the standard deviation was equal to the square root of **npq**. Outcomes two standard deviation away from the average value (**np**) were defined significant, i.e., $p < 0.05$.

The process of learning finger reading

After training classes, we usually invited those children who had developed the finger-reading ability to come back to our lab once a month for further research. We found that the finger-reading ability is not maintained without frequent practice.

Based on more than 3000 tests over 9 years, the following are consistent mental processes that appear during finger-reading. Initially, most of the children who possessed natural ability would see the characters suddenly emerge in their normal vision when their eyes were opened. Only part of the colored characters appear, then the characters disappears. This process repeats several times until all or most of the characters appear. Imagery characters and normal vision overlapped. Gradually, as they developed their talents, a television-like "screen" would appear which was stronger than normal vision. The process of developing the "screen" is called "opening the divine eye" by Chinese people. Parts of the characters were displayed on the screen, then the screen disappeared. When it reappeared, more content was shown on the screen. Finally, the entire content was displayed. This process is illustrated in Figure 3.

Figure 3. The process of translating finger impressions to mental imagery



DISCUSSION

The significance level was higher when the training period extended beyond four days.. These results support the finding of professor Chen (1989) and Tien (1996) that finger-reading ability is common among children and can be developed easily with training. This suggests that the exceptional human abilities such as finger reading may be innate. They are powerful in childhood when the brain is more plastic, and can be developed easily. As the child grows older, the knowledge and experience learned over the years tend to reduce the plasticity of the brain and the ability gradually disappears. Another possibility is that the portion of the brain responsible for finger reading degenerates as the child grows older.

Experiments with Talented Subjects
(Lee 1998)

METHODS
Three children who produced significant results were chosen as our subjects for long-term tracking of their abilities. Target samples similar to those described above were prepared by printing, by writing characters, or by drawing pictures on white pieces of paper. The papers were folded to such a degree that not even a trace of color or pattern could be seen from outside. The number of samples was usually greater than 100.

Initially, to examine the authenticity of the finger reading ability, the experimenter asked one or two bystanders to go to another room to prepare the samples and fold them. The samples were stored in a box and brought back to the test room by the experimenter. In each test, the experimenter asked one bystander who had not participated in preparing the samples to select one from the box and gave to the children. Then the experiment started. This was therefore a double-blind test, as neither the experimenter nor the subjects knew the content of any given sample.

The subjects grasped the samples in their hands and immediately inserted their hand in a black bag with cuffs tightly tied around their forearms. Sometimes, the samples were inserted directly into the bag before the children put their hands in.

In an alternative procedure, the folded sample was chosen from the pool, put into a black plastic box and closed by a bystander under the table, then handed it to the children, who held the closed box in one hand during the test. All the processes were recorded with a video camera. For subjects B and D, they were specially trained to hold the plastic box in the hand without inserting the box into the black sleeved bag.

Subject C has the greatest gift for finger-reading ability and most of the physiological measurements were done on her. Two electrodes were glued to the finger pads of both of her forefingers and connected to a strip chart to measure skin potential over time. We also used trans-cranial Doppler to measure her cerebral blood flow velocity (cBFV) and skin electrodes for skin potential during the experiments. Optimal cBFV signal at bilateral middle cerebral arteries in a depth of 50-60 mm using a 2MHz probe was continuously recorded. An active skin electrode was applied and continuously recorded on the right palm and the reference electrode on the left palm.

Color adaptation procedures were devised to test the color constancy of finger reading vision. Brain wave characteristics were measured during the tests in the eyes-closed condition. The sample was given to her after she closed her eyes - which was confirmed by large brain alpha wave amplitude. Alpha waves are not present when the eyes are open. From repeated observations of her EEG, it was confirmed that when subject C saw the words on her screen, her eyes were indeed closed.

RESULTS

Warm-up Time
When the children with finger-reading ability came to the lab monthly to do the experiments, a warm-up time between ten minutes to a few hours was needed to recover their ability. This warm-up time depended on several factors, including how often the subjects practiced at home before the test date and their psychological and physiological conditions. Figures 4(a), 4(b) and 5 illustrate this effect. The vertical axes are the accumulated number of tests (left) and the total number of successful images (right). Subject A started the experiment on August 18, 2001. As shown in Figure 4(a), it took him 32 minutes to recover his finger-reading ability. In the first nine tests only one was correct (a hit), but after 32 minutes every trial was a hit. On August 19, the warm-up time was shortened to 8 min, as shown in Figure 4(b). This indicates that frequent practice is essential to shorten the warm-up time. Figure 5 depicts the result for subject B. The warm-up time was much longer, 100 minutes, due to lack of practice.

Figure 4a. The accumulated number of tests and hits of subject A doing finger reading experiments as a function of time. A warm-up time of (4a) 32 minutes is required in the first day of training.

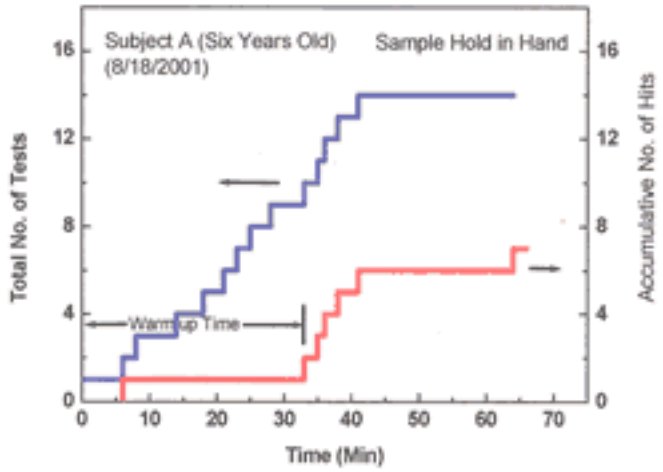


Figure 4b.Warm-up time is shortened to 8 minutes in the second day.

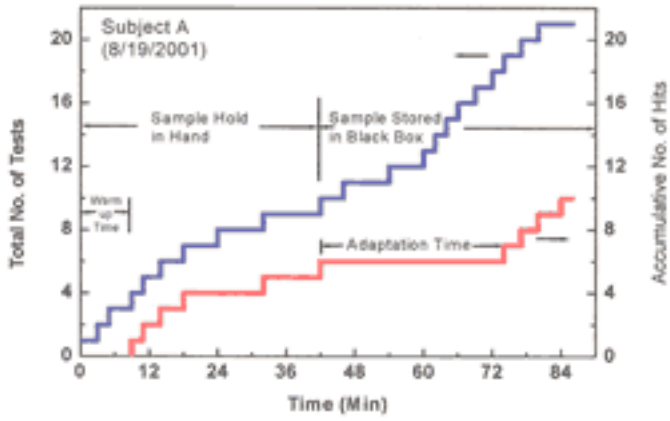
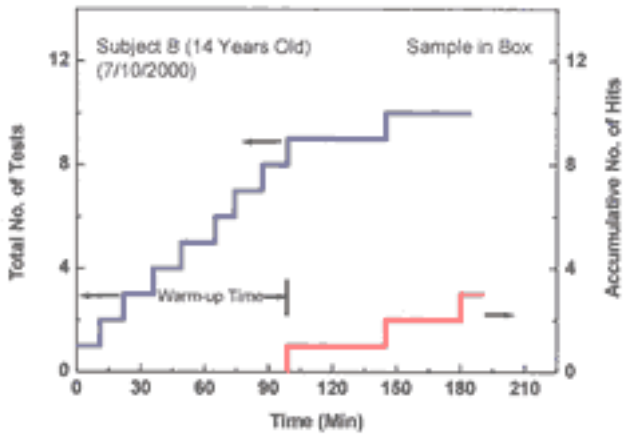


Figure 5. The cumulative numbers of tests and hits of subject B during finger reading experiments as a function of time. With no practice before an experiment, a warm-up time of 100 minutes is observed.



Adaptation Time

Another delay, the adaptation time, was also observed. That is, when the paper folding or testing method was abruptly changed, there was an adaptation time of tens of minutes, sometimes hours or even days. As shown in Figure 4(b), subject A achieved an 80% hit rate after 8 minutes' warm-up time. When the sample holding method was changed at the 43rd minute from holding the sample in his hand to holding a black plastic box in his hand, an adaptation time of 42 minutes followed - during which no hit was recorded - until he again found his finger-reading ability. When samples were glued or sealed with tapes, it took hours or even days of practice to adapt to the new method. It seems that the brain needs time to reprogram its third eye to extract the concealed information. Another possibility is that the children needed to build up their confidence in a challenge that might have appeared to them more difficult.

Physiological Measurements: A Case Study
Cerebral Blood Flow Velocity (cBFV) and Skin Potential
(Lee 1998)

METHODS

As in the previous experiment, two electrodes were glued to the finger pads of both of her forefingers and connected to a strip chart to measure skin potential over time. We also used trans-cranial Doppler to measure her cerebral blood flow velocity (cBFV) and skin electrodes for skin potential during the experiments. Optimal cBFV signal at bilateral middle cerebral arteries in a depth of 50-60 mm using a 2MHz probe was continuously recorded. An active skin electrode was applied and continuously recorded on the right palm and the reference electrode on the left palm.

RESULTS

It was firmly established over ten different trials that cBFV dropped about 20 percent, followed by a large rebound just before subject C visualized the characters, as shown in Figure 6 when the target stimulus was the color red, blue, or various written characters. A skin potential about 30 mV appeared on her right palm at the time when cBFV rebounded. By comparing marker signals sent by subject C with her other hand when she visualized the screen and by the experimenter when the skin potential emerges, the sequence of physiological events can be identified, as shown in Figure 7. At the same time the CO2 exhalation was monitored from her nostril and displayed in the figure. It is clear from the figure that the breath itself would not cause the drop of cBFV. The emergence of the screen in the brain (solid vertical line) is always 0.5 to 4 seconds ahead of the skin potential (dashed vertical line). The screen emerges approximately at the minimum of cBFV and is followed by the appearance of a rise in skin potential. The skin potential can thus be used as an indicator for the appearance of a screen in her brain.

Figure 6. The variation of mean cerebral blood flow velocity (cBFV) and skin potential of subject C as a function of time.

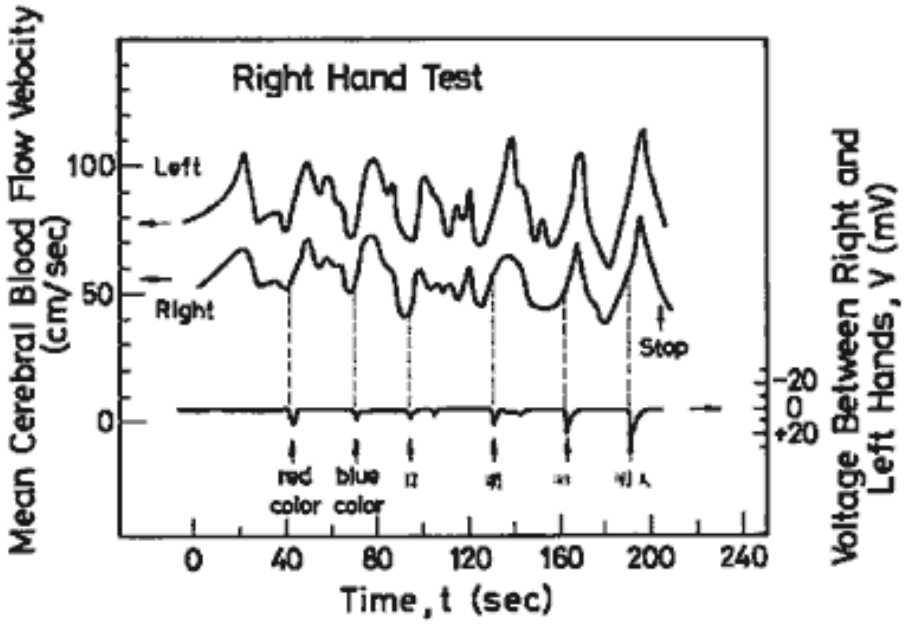
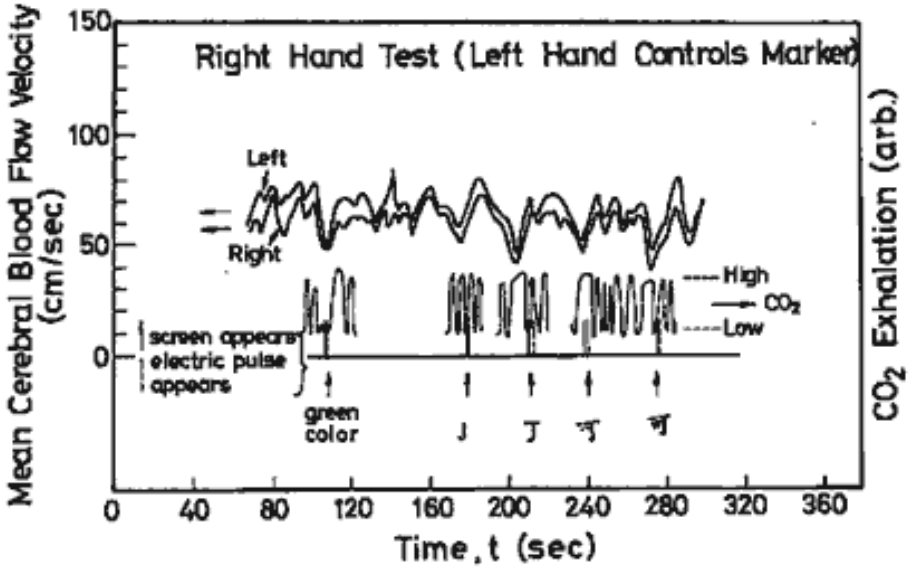


Figure 7. The cBFV and two marking signals as a function of time. A marking signal is sent by subject C (solid line) when she sees the mental screen and the other sent by the experimenter (dashed line) when the skin potential appears.



Color Perception and Constancy in Normal and Exceptional Vision

(Tang, Lee, Hsu 2001)

METHODS

By using a color adaptation procedure, we compared the difference of color perception in normal and exceptional color sensing. Color adaptation occurs when a subject stares at a colored light source for a period of time (15 minutes in our study) to adapt to the color. Since the focus of the experiments was on color perception, other variables were kept as simple as possible.

Thirty-two capital English characters in eight different colors were randomly generated by a computer. There were four different characters for each color. The experimental procedures was divided into four parts:

1. Finger-reading tests under red-light and white-light adaptation; followed by

2. Normal vision tests under red-light and white-light adaptation.

Each part consisted of eight trials. There is a 10 to 15 minutes adaptation time before each part of the experiment. The experiments were performed in a dark room. A 17 inch cathode ray tube monitor was used to provide red-light or white-light. Subject C was required to stare at the screen for 10 to 15 minutes at a distance of 30 cm before the tests. When she visualized the color on her mental screen in the finger-reading tests, a small color plate was displayed on the CRT screen for her to identify the color using

normal vision. The color was described by three coordinates, red, green, and blue. Each color was divided into 256 grayscale.

RESULTS

Figure 8 displays the original data. It is clear from the figure that the color perceptions in normal and exceptional visions under white light adaptation were almost the same. The difference between their color coordinates was less than 30 for red, orange and yellow colors. The shifts in the blue coordinates of the exceptional vision for green, deep blue and purple was about 90 as compared to the normal vision.

Figure 8. Original data showing the observed color after white and red light adaptation procedures. The observed colors can be broken into three basic colors, i.e. red, green and blue each has 256 grayscales.

		Color coordinates after adapting to red light (red, green, blue)	Color coordinates after adapting to white light (red, green, blue)
E Vision	1. Black	(0 · 106 · 0)	(72 · 72 · 72)
	2. Gray	(207 · 207 · 207)	(191 · 191 · 191)
	3. Red	(255 · 255 · 157)	(255 · 87 · 0)
	4. Green	(3 · 7 · 156)	(0 · 183 · 0)
	5. Deep Blue	(0 · 100 · 50)	(87 · 87 · 172)
	6. Purple	(253 · 79 · 4)	(223 · 0 · 223)
	7. Light Blue	(0 · 181 · 0)	(49 · 152 · 255)
	8. Yellow	(255 · 255 · 255)	(240 · 240 · 0)
N Vision	1. Black	(0 · 0 · 83)	(40 · 40 · 40)
	2. Gray	(151 · 151 · 151)	(207 · 207 · 207)
	3. Red	(255 · 0 · 0)	(221 · 72 · 0)
	4. Green	(10 · 176 · 45)	(0 · 185 · 92)
	5. Deep Blue	(24 · 24 · 24)	(96 · 0 · 96)
	6. Purple	(255 · 47 · 151)	(255 · 11 · 133)
	7. Light Blue	(38 · 38 · 255)	(32 · 143 · 255)
	8. Yellow	(255 · 255 · 66)	(255 · 255 · 9)

E Vision: Exceptional Vision

N Vision: Normal Vision

It is also apparent that normal vision exhibits color constancy. The color coordinates shift typically less than 70 grayscale for each color under the white-light and red-light adaptation as shown in Figure 8. However, the finger-vision did not maintain color constancy. The blue coordinates shifted as high as 255 grayscale (full range), as seen in Figure 8 the light blue and yellow color trials. Subject C described that after adaptation to red (or white) light, the inner screen in her brain appeared to be red (or white). This again confirmed our previous finding (Lee 1998) that the light seen by the normal eyes provides the back light (i.e., light source behind the screen) to illuminate the mental screen. The loss of color constancy in the exceptional vision under red light adaptation suggests that normal and exceptional visions function through different pathways in the brain, but they have considerable overlaps.

Brainwave (EEG) characteristics at baseline and during finger reading

(New report)

METHODS

The brainwave characteristics of subject C were analyzed first under eight different conditions - as shown in Figure 9.

1. eyes closed (EC) and relaxed;

2. eyes closed and doing mathematical calculation (EC, cal);

3. eyes closed and imaging scenery (EC, image);

4. eyes open and focusing on words (EO, focus);

5. eyes opened and non-focusing (EO, nonfocus);

6. eyes almost closed and still can see words (EO, small eyes);

7, eyes closed and covered with eye shade (EO, cover);

8. eyes opened but covered with eye shade (EO, cover).

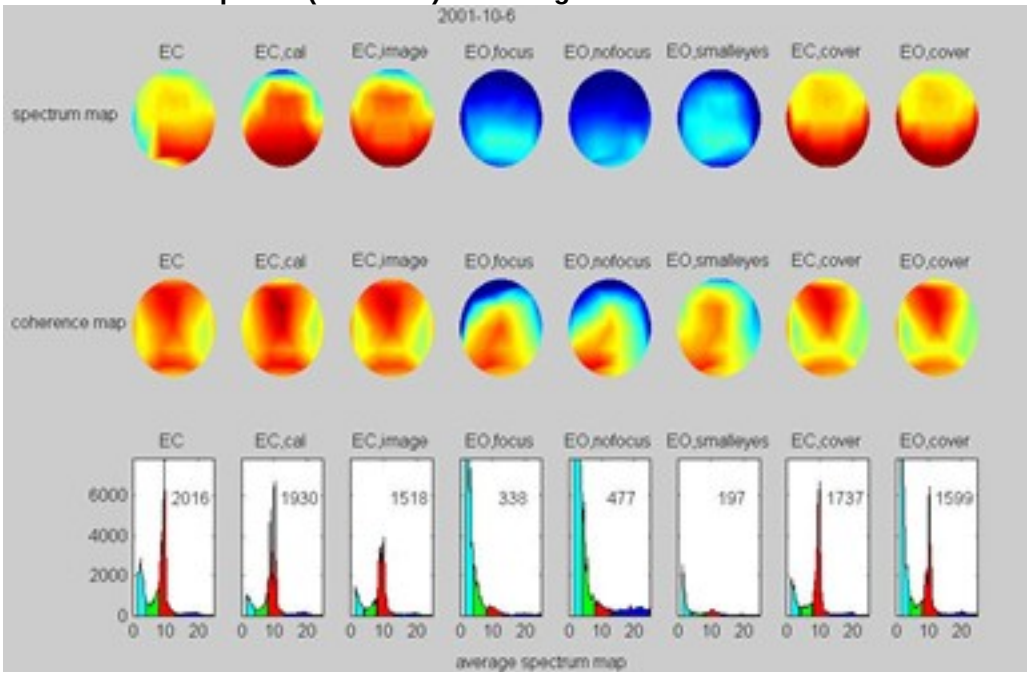
Next, the brain wave characteristics were recorded during finger-reading experiments. At the same time the skin potential in the right palm was recorded as an indicator of the emergence of the mental screen. There were over 100 samples, including Chinese characters and English letters. Subject C was wearing a sleeping eyeshade during these experiments.

RESULTS

Six samples were analyzed. Three were completely correct and three were partly correct (more than 75 percent of the characters were matched). There were over 100 samples, including Chinese characters and English letters. Thus, the chance probability is less than 1/100. Subject C was wearing a sleeping eyeshade during these experiments.

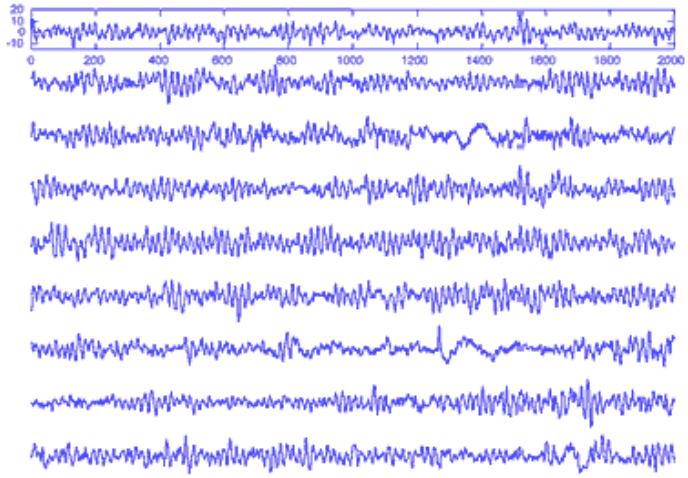
The first row of Figure 9 displays the averaged EEG map over two minutes under the seven different conditions. The second row shows the coherence map between left and right hemispheres. The third row displays the averaged brain wave spectra. The numbers indicated in each spectrum represent the integrated amplitude of brain alpha waves (8 to 13 Hz). The spectra show that the averaged amplitude of brain alpha waves drops by a factor of 5 to 10 when subject C opened her eyes and saw the words as compared to the recordings with closed eyes.

Figure 9. The averaged EEG map (first row), coherence map (second row) and brain wave spectra (third row) under eight different conditions



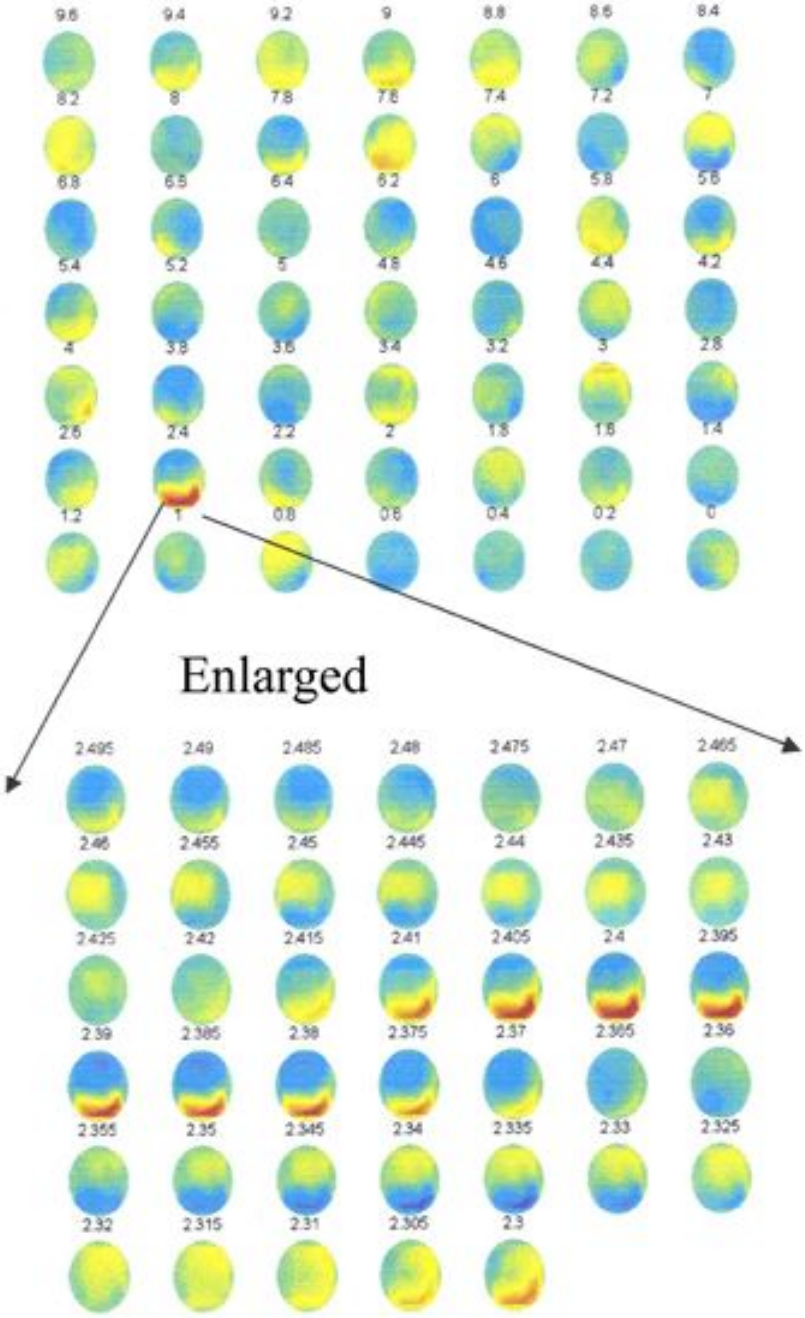
From eighteen recorded skin potentials, fifteen with cleaner data (without low frequency perturbation due to body movement) were chosen for analysis. Figure 10(a) displays the eight individual brain wave characteristics in a period of 10 seconds, measured at electrode O2, the occipital location for primary, normal vision. The second peak of the skin potential was used as the ending time (the reference time, 0 second). This figure shows that the amplitude of the brain alpha wave was large in this 10 second period ahead of the reference point. When compared with Figure 9, it confirms that subject C indeed closed her eyes when she visualized the screen in her brain.

Figure 10a. Raw data showing (a) the brain wave measured at O2 electrode (occipital) in a period of 10 seconds, using the second peak of the skin potential as a reference. Eight out of 15 measurements are displayed.



At the top of the figure is displayed the summation of the 15 measurements at O2 electrode. This summation averages out the random signals and brings out the consistent physiological response of the brain. It is clear that at a time of approximately 2.4 sec ahead of the reference point, a peak amplitude of the brain wave appears. The red asterisks in the eight brain wave spectra indicate the time when the peak appears. Figure 10(b) displays the average EEG map by summing up 15 measurements at each electrode using the second peak of the skin potential as the reference.

Figure 10b. EEG map obtained by summing up the 15 measurements.



DISCUSSION
It is amazing to find out that at approximately 2.38 seconds ahead of the reference time, indicated in Figure 10 (b), the occipital lobe of the cerebral cortex brightened up, suggesting that normal vision is functioning at that moment although the eyes were closed. This is consistent with the visualization of a screen in Subject C's brain ahead of the skin potential (as shown in Figure 7).

It appears that the third eye extracts the signal and sends it to the occipital lobe, where it is perceived as normal vision.

Extraordinary Phenomena Induced by Keywords
(Lee, Chen, Tang 2000; Lee, Chang 2001)

BACKGROUND – Extraordinary phenomena
On August 26, 1999, when we were testing the finger-reading abilities of subjects B, C, and D, a few words related to highly revered persons were included among the many folded slips of paper given to the subjects - with no anticipation that these would produce effects that were different from all the other words presented to them. These included words such as Buddha, Bodhisattva, and a six word mantra (*Xon Ma Ni Bei May Hon*).

Something highly unusual happened. The children responded with spiritual imagery rather than with the letters of words. Subject C visualized bright light and a smiling person, a bright person running in the room, or heard the sound of laughing, as summarized in Figures 11(a), (b) and (c).

Figure 11a. Experimental records showing extraordinary phenomena when special sacred words are presented to subject C for finger-reading. The sacred word in (a) is "Buddha." The numbers in the last column (process records) represent the time (hours, minutes, seconds) when a skin potential appears.

Date	Samples	Test Results	Process Record
26/8/1999	佛光	光	
	佛		16:29 start 16:32 something flies over the screen 16:33 flash 16:34 a bright person appears 16:37 bright person looking at me and smile 16:38 whole thing disappear, end
	Christ	St	16:42 start 16:44 black "st" 16:46 end

Figure 11b. The sacred word is "Buddha"

Date	Samples	Test Results	Process Record
8/27/ 1999			10:30:30 start 10:37:41 end
	佛 (Buddha)		10:40:16 start 10:42:28 very bright screen 10:43:58 very bright 10:44:41 bright, hear sound 10:45:50 bright, hear sound 10:46:44 loud joyful laughter 10:47:18 bright screen, no sound 10:48:00 bright screen, end
	$E=mc^2$	$E=mc^2$	10:49:47 start 10:53:45 = ³ (black) 10:54:12 $E=mc^2$ 10:54:47 end

Figure 11c. The sacred word is "Buddha"

Date	Samples	Test Results	Process Record
8/27/ 1999			16:43:32 start 16:46:08 draw the black fish 16:47:09 end
	佛 (Buddha)		Sample enclosed in black box 16:48:33 start 16:51:28 very bright screen 16:53:13 very bright person stand by prof. Tseng, one hand on his shoulder 16:54:03 bright screen 16:54:55 very bright person appears in between prof. Lee and Chen, looking down at the recorder and smiling 16:55:21 bright screen, bright person disappears
			16:58:30 start 17:02:26 end 17:02:45 \ooooooooo/ 17:03:26)ooooooooo(17:03:43 end

Subject B visualized temples, and an indistinct person telling her to work hard, as noted in Figure 12.

Figure 12 Process record showing extraordinary responses when special sacred words are tested for subject B.

Date	Samples	Test Results	Process Record
26/8/ 1999	佛 (Buddha)		17:03:25 start 17:19:59 a temple appears far away 17:21:50 end
27/8/ 1999	佛 (Buddha)		16:49:04 start 17:16:50 a indistinct person appears who is encouraging me to work hard with Taiwanese dialect, I might have seen him before 17:20:10 blank

Subject C saw a monk holding a string of pearls, wearing a black jacket, with the word, "Buddha" written in Chinese on the inside of his white garment, as shown in Figure 13.

Figure 13. Process record showing extraordinary responses when special sacred words are tested for subject D.

Date	Answer	Test Results	Process Record
8/26/ 1999	東	東	15:01 start 15:08 東 (east)
	步	分	15:09:15 start 15:20:34 分 (minute)
	助	助	15:23:53 start 15:26:12 助 (help)
	U	U	16:29 start 16:49:42 U
	佛 (Buddha)	佛 (Buddha)	17:01:55 start 17:02:51 black color 17:03:42 a sound tells me "seven strokes" 17:04:46 a monk appears hold a string of pearls 17:05:54 " 亻 " 17:15:38 the monk reappear wearing a black jacket, a "佛 is witte on the inside white garments

These responses are completely different from those we had observed previously in over 1500 tests. The previous mental screen impressions were static and faithfully reproduced whatever was printed on the paper.

METHODS

We set up the following experiment to distinguish whether these phenomena are due to hallucination induced by the worship of the holy person by the children or by the connection of the third eye to an external "channel" or transcendent reality. To test subject C, we deliberately introduced the Tibetan words "Mahakala," (the name of an Guardian Angel of one branch of Tibetan Buddhism), "Padma Sambhava" (the name of an Indian who were invited to Tibet in 8th century to subdue the demons and spread the Buddhism to entire Tibet), Hebrew "I am that I am" (God), or the Arabic, “Allah” (God). She knew nothing about these languages and symbols. The results were amazing, as shown in Figures 14(a), (b), and (c). She repeatedly visualized bright light or a "strange screen" whenever the target characters were sacred words.

Figure 14a. "Sam," abbreviation of Samuel (Hebrew for "the name of God"); Jesus; and Hebrew for God, as "I am that I am"

Samples	Test Results	Process Record
SAM		"a little bright", "brighter"
耶穌 (Jesus)	†	"the Cross"
耶穌基督 (Jesus Christ)		"the Cross"
אהיה אשר אהיה		16:39 start 16:43 bright screen (20800Lux) 16:45:55 blank 16:46:41 blank

We then presented only parts of the sacred words or symbols, as shown in Figure 14(b), second item (by deleting the last three characters), and Figure 14(c), third item, and the extraordinary phenomena disappeared. The response was a replication of the symbols. The fact that the extraordinary responses appeared exclusively with the complete revered names but not with parts of the names strongly suggests that the seeing of bright screens or a person was not due to hallucinations. Those words appear to possess sublime meaning. They appear to be either codes, channels or addresses.

Figure 14b. Further records with sacred words are presented to subject C for finger-reading: The top line is "Mahakala" (the name of the Guardian Angel of one branch of the Tibetan Buddhism) and bottom line is "Padma Sambhava" (the name of an Indian who were invited to Tibet in 8th century to subdue the demons and spread the Buddhism to entire Tibet. The middle line is the first portion of the word in the top line, "Mahakala," which in this case was reproduced by the subject letter for letter with no report of unusual perceptions.

Date	Samples	Test Results	Process Record
5/8/ 2000	(Tibetan)		16:34:20 start 16:36:33 bright screen, color is different from usual 16:38:22 blank 16:39:13 blank
6/8/ 2000			11:12:10 start 11:14:01 black color in small region 11:14:18 " 11:14:40 " 11:15:14 " 11:15:44 " 11:16:07 " 11:16:32 blank 11:16:48 blank
	(Tibetan)		11:18:50 start 11:20:38 bright light flash in a small region 11:21:07 bright light 11:21:45 blank 11:22:04 blank

Figure 14c. "Allah" (God) in Arabic. The extraordinary phenomena disappeared when the sacred Arabic word in this example, or the word, "Buddha" (in Chinese) in the next example, is distorted by deleting, adding or changing one or few strokes in the word.

Date	Samples	Test Results	Process Record
23/12/ 1999			15:00:30 start 15:10:00 screen appears don't know what it is? 15:11:00 unusual, very strange 15:11:30 very strange 15:12:00 very strange
25/12/ 2000			10:46:00 start 10:49:20 very strange 10:50:00 very strange 10:51:40 blank 10:52:30 blank 10:53:00 end
1/2/ 2000			22:37:00 start 22:44:00 end

Figure 14(d) displays another test on the Chinese characters for Buddha. The shape of the character was distorted by deleting, adding or changing one stroke or a component of the characters. All extraordinary phenomena disappeared. Subject C wrote whatever was printed on the paper. The English "Buddha" also caused extraordinary phenomenon but the name misspelled as "Buhhda" did not.

Figure 14d. The extraordinary phenomena disappeared when the sacred word "Buddha" (in Chinese) is distorted by deleting, adding or changing one or a few strokes in.

Answer	Results	Time Spent (min'sec)	Process Record
佛	丨弗	6'14"	丨丨丨 → 丨弗
弗	弗	5'00"	弓 → 弗
拂	拂	7'00"	扌→扜→拂
佛	佛	6'50"	弗 → 亻弗
亻弗	亻 弗	6'18"	亻→弗→空白
彿	彿	3'20"	亻 → 彿

The Chinese characters for (Jesus) and English "SAM" (in Hebrew Samuel, "the name of God") also induced extraordinary phenomena. Subject C visualized the Cross and bright screen, respectively.

We found that the English "Jesus" and the names of many prophets in the Old Testament all caused Subject C to visualize the words surrounded by light. It seems that the link between words and the web page in the information field is still there but weakened.

SPECULATIONS

We propose a phenomenological model to explain the possible mechanism of the finger reading and other exceptional human abilities. We believe they are related to the macroscopic quantum phenomenon as Brian Josephson (1973 Nobel Physics Prize Winner) proposed in his mind-matter unification project (Josephson). . The third eye transcends the physical limit of the body and interacts with outer matter to form a unified entity. The indication of this successful unification is the appearance of the metal screen. Then the signals transmitted from outside matter to the inner third eye form the basis of clairvoyance, including finger reading. Consciousness transmits through the third eye to influence matter, forming the basis of psychokenesis. We believe that all exceptional human abilities come from this single mechanism.

We hypothesize three possible explanations for the observed phenomena when English keywords are tested. First, English is a more recent language, while Jesus and the Prophets mentioned in the Old Testament lived in a time when there was no modern English. Second, the pronunciation of Jesus in

English is different from the way it was pronounced two thousand years ago. Third, Subject C may have difficulty in browsing the "Christian web page" in the information field due to cultural differences. From our accumulated evidence, we believe that the first two reasons are more probable.

We propose that in addition to our four dimensional space-time material world and four fundamental force fields, there exists an "information field" in another dimension which may be accessed by the mind. This information field behaves very much like an internet world. Children possessing finger-reading ability can "click" on the address (sacred words) and connect to the corresponding web page in the information field. What content they can see depends on their clairsentient reading ability. Their brains behave like a browser with different versions. Children with low reading ability, such as subject D, saw fewer extraordinary phenomena. This suggests that his browser is not as sensitive, and conversely with the more sensitive subjects.

We believe this experiment has established scientific foundations to traditional religions and opens up a new direction for research on this information field.

The EEG monitoring confirmed that the subject's eyes were not open - due to the presence of brain alpha wave and showed an activation of the visual cortex during finger reading despite the eyes being closed.

We feel the most important finding is the observation of extraordinary phenomena when sacred words related to religion are tested. This suggests that an "information field" exists in addition to the material world. We believe this provides scientific evidence for some of the world views of traditional religion.

In the future, more talented subjects should be tested with sacred words to get a deeper understanding of the relationship between the clairsentient reading ability and its browsing capability of the information field.

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References (In Chinese)

Chen, S. L. et al., The Popularity Problem of the Human Exceptional Perception, *Creating Somatic Science*, Szechwan Education Pub, Tsn-Du 1989, 1, 565

Chien, S. S. Expanding the Fundamental Research of Somatic Science, *Journal of Nature* 1981, 4, 483.

Josephson, B. http://www.tcm.phy.cam.ac.uk/~bdj10/

Lee, S. C. The Mechanism of Finger Reading (Third Eye) and Related Physiological Measurements, *Journal of Chinese Somatic Science* 1998, 8(3), 105.

Lee, S. C. Unification of Mind and Material and Macroscopic Quantum Phenomena, *Journal of Chinese Somatic Science* 1999, 9(3), 124.

Lee, S. C. and Chang, L. S. *Buddhism and Science* 2001, 2(2), 60.

Lee, S. C. Chen, C. T. and Tang, D. The Observation of Extraordinary Phenomena when Special Keywords are Tested in the Experiment on Character Recognition by Fingers, *Buddhism and Science* 2000, 1, 8

Lo, L. R. et al., The Recognition Process for Multi-layer Samples in Human Exceptional Perception, Creating Somatic Science, *Szechwan Education Pub*, Tsn-Du 1989, 1, 574.

Shao, Y. S. et al., The Pattern Emerging Sequence for Recognizing Paper Roll in Human Exceptional Perception, *Journal of Nature* 1982, 5, 274.

Tang, D., Lee, S. C., and Hsu, L. C. Comparison between Normal Color Sense and ESP Color Sense in Color Adaptation Task-A Case Study, *Buddhism and Science* 2001, 2(1), 21.

Tien, W. S. Exceptional Vision and Eyes, *Research on Extraordinary Function of Human* 1994, 4, 4.

Tien , W. S. Studies of the Distribution of Age and Sex for Ear Reading, *Journal of Chinese Somatic Science* 1996, 6(3), 105.

Wang, T. et al., The Pattern Emerging Sequence in Human Exceptional Perception, Creating Somatic Science, *Szechwan Education Pub*, Tsn-Du 1989, 1, 569.

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