

Physiological analysis for consciousness power **

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Resumo

Em experiências de clarividência foram encontrados indicadores fisiológicos que sugerem que o sistema simpático do indivíduo interveio activamente e que o seu sistema nervoso parassimpático se reforçou instantaneamente e, simultaneamente, a sua pressão sanguínea aumentou e o nível do oxigénio no sangue diminuiu. Na verdade o EEG revelou que, entre outras zonas, o lóbulo frontal se tornou mais activo quando aqueles fenómenos ocorreram, tendo-se verificado que os dados fisiológicos se alteraram quando a actividade do lado direito do cérebro aumentou, particularmente no lóbulo frontal. Numa outra experiência, foi movido um objecto sem qualquer contacto físico, tendo sido registadas ondas cerebrais, do tipo EMG, além das do tipo δ observadas com nitidez. A acção potencial destas ondas δ atingia o seu máximo no momento da deslocação do objecto.

Introduction

People desire their wishes to come to true when they pray to God. We think that sometimes, if the desire strong enough, it goes well. However, a human can achieve a desire by making an effort while having a desire to want it to become so. When an exercise, willpower, luck were prepared entirely in the world of sports, sportsmen and taking a gold medal in the

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Olympics and other things are thought about. What was tested here was put on measurement table of an electronic balance; we opened the paper carton of the medicine, taking out a bottle of the medicine. The psychic did an experiment to take out medicine without touching this medicine bottle. The experiment where held the medicine bottle and vibrated the bottle bring out some medicine, is done well, but she did not touch it in this experiment. We think generally that a normal man cannot understand such thing by common sense.

However, we are doing research work on why Chinese qigong is good for keeping healthy. We understood that qigong had good effects from the physiology measurements of Western medicine. We experienced Chinese somatic power (super ability in Japan) in these research works. Thereafter we had lot of experiments on a non-visual recognition, thought-graph, matter movement, telepathy and measured those mainly by physiological measurement many times. We were not able to understand the meaning why special ability power was included in the classification of qigong in China. For us, the subject controls his/her respiration and the respiration affects his/her brain, and we think that this causes effects. In other words we think that the power of mind or what was on his/her mind acted on this physically when he/she made an object more.

This study was understood that this study was a good method to study both the brain and the spirit. We began this kind of study in 1995, and do experiments more than ten times and report has reported on some of these already, but there are many things still unknown. We report here on non-visual recognition and object movement.

I. Non-Visual Recognition

I.1 Introduction:

The existence of a phenomenon of non-visual recognition between general populations is arguable. However, persons with such ability are widely reported in books or on television. We hear that there are such people in Japan. But usually, it is so difficult to meet such people. We conducted new experiments on a problem of the non-visual recognition. We report here about the results from a new analysis.

1.2. Experimental method

We cooperated with Ms. WANG Bin, a Chinese lady; it was confirmed that she already had such ability in her primary school days in China. We conducted experiments on non-visual recognition using various kinds of materials, as previously. Thirteen students of our university wrote something on small paper, which had been obtained by cutting A4 sheets into quarters. The students did not show other people what they had written. Then, each sheet was folded and put into one of 13 envelopes and sealed shut. We randomly collected the envelopes from students. The subject could not move from the test chair, except when applying or removing sensors for measurements.

We adopted the international 10-20 method for the EEG electrode for non-visual recognition and used 19 channels with a maximum frequency 200 Hz. These data were used in the form of EEG topography.

We set 3 minutes to relax with the eyes closed before a non-visual recognition experiment for the subject. Measurements were made continuously, including the relaxed period. We took measurements at all times including the relax period with closed eyes. We showed the envelopes to the subject after 3 minutes. The subject selected one envelope from among them and began non-visual recognition. When the subject understood all of the contents, she wrote her answers on paper that we had prepared. After the writing was completed, we continued taking data, which she relaxed with the eyes closed for about 3 more minutes.

1.3. Experimental Results

1RUN: (Successful case)

After opening the letter envelope, we compared her answer with the student's word; we did not think there was complete agreement. However, "TUE" as read correctly. The subject was not able to read the number that expressed time. But we counted this run as a successful case.

2RUN: (failed case)

The subject took a break for about 30 minutes due to a headache and tried another run. We treated these data as failed case.

All measurements:

We perform all simultaneous measurements shown in Fig. A1, except for the EEG data from RUN1, successful case: GSR, SpO₂, temperature at the center between both eyebrows, blood flow, EMG of the Laogong, continuation blood pressure, an BPM and R point voltage of the ECG, respiration, carbon dioxide level in nose exhalation, heart rate are shown in the figure.

First, the distinguishing features are discussed for the successful case. From Fig. A2, we can understand that BPM increases to around 90/M at the end point of the experiment in comparison with being around 80/M in the relax state with eyes closed. The change in the R point voltage of the ECG is more definite. Compared to the first relaxed period, the R point voltage decreases when the non-visual recognition is started, and recovers to the average R point voltage when the experiment is finished. This shows that the sympathetic nerve system becomes dominant during the non-visual recognition period. However, the R point voltage is seen to rise quickly during the non-visual recognition period when we look at this graph carefully. This shows that the parasympathetic nerve system becomes dominant.

Activity of Autonomic Nerve System (LF/HF)

Fig. A4 shows the result of a Fourier analysis of the fluctuations of the intervals of the R point and R point of her ECG data. We used data for 100s for this analysis. Acquisition data in each physiological measurement is 200 points in one second.

Therefore, as for the result of an analysis for 100 seconds, the time position of LF/HF may be off in terms of the time because we adopted the center time between the analysis times. Also the LF / HF value is one or more than 1.5 in the normal relaxed condition and increases up 5 just before the end of non-visual recognition. Many small peaks are found at the middle times.

Blood Flow:

Fig. A5 is the measured blood flow at the subject's neck; the blood flow increases during the time when the R point voltage rises. In addition, we understand that the blood flow increases to the maximum value just before 1400 seconds. The blood flow at a center between the eyebrows also shows a maximum here (Fig.A1).

SpO₂:

In addition, the oxygen level in blood is 97% for the relaxed condition, but falls to around 95% just before 1400s. We think that much oxygen is used in non-visual recognition. In addition, in non-visual recognition, the temperature of the neck rises in Fig.A1. Therefore, we can explain this from the increase in the heart rate and the rise in the blood pressure.

EEG and Topography:

Two relaxed periods with eyes closed were set at the beginning and end of the experiments. The EEG topography in the experiment of non-visual recognition even for eyes opened condition showed the level of β wave a comparatively low value.

Because we thought that the analysis time had to be short, we used 0.32 seconds. From an analysis of the physiology data in particular, we decided on the highest probable time for doing non-visual recognition was after 1000 seconds. It is necessary for the sight field to work in a β wave region of EEG, and we must pay attention to the place of lively brain function. The electrical potential of the sight field of the frontal lobe rises separately, and both channels grow like the sense of touch from the region where the electrical potential was high. When the channels growing from both places make contact, the channel potential increases to a higher level. Such a phenomenon occurs in both the left-brain and the right brain. But the potential of β waves got up in the right brain at the most interesting place that reacted. Example data are shown in Fig. A7 including EEG wave patterns before and after the experiment.

1.4. Discussion

We needed to think about how the non-visual recognition could be evaluated. We decided to compare both successful and failed examples.

Fig. A10 shows the calculated results of the LF/HF ratio. We can surely understand that the autonomous nerve system of the subject acts powerfully from the result in the successful case; in the successful example, LF/HF increases by many times. The value of LF / HF becomes low due to an analysis interval of 100 s. It is thought that, actually, because the changes of the BPM or R point voltage were so sudden, LF/HF would show higher changes when using a short analysis time, if it were available.

In EEG topography, vibration equivalent to a beta wave observed at the instant non-visual recognition reached her whole body; this vibration that was observed in GSR appeared in an acupuncture point of the hand.

Fig. A12 shows the blood flow of the brain when a non-visual recognition phenomenon occurred. Blood flow in her neck increases just before the end of non-visual recognition, but blood flow in her Yintang increases in unison with the blood flow in her neck. It is not found that blood flow in her Yintang and neck agrees in the failed experiment. In other words, the frontal lobe acts powerfully in an instant during non-visual recognition, and is reflected in an increase of her blood flow.

She controls the autonomous nerve system by controlling the respiration consciously. Probably it is a key point that she makes the sympathetic nerve system slightly excited, and she makes her parasympathetic nerves system excited instantly.

The frontal lobe and electrical potential of the sight field was found to rise separately in the right brain when we examined the electrical potential of the waves. Higher potential and thin channels from both places grow with time, and they connect. The electrical potential shows that this phenomenon becomes high afterwards. As for the reason why the electrical potential of her frontal lobe becomes high, it is known that electrical potential becomes high in the state that concentrates on something. Such activity is found from the EEG topography at the moment of non-visual recognition. However, such a state does not continue. The period agrees with the increasing phenomenon of blood flow in the frontal lobe. In addition, it is well known that the activity of her brain needs much oxygen, but the oxygen level in the blood decreases within a short time. This is not the normal state where a person looks at something all of the time in the non-visual recognition condition. In other words, much energy is needed in her brain, and we think that it is not easy to continue this condition. Therefore, she can see something instantly and she tries several times to complete the whole image. Even in our experiment, the same phenomenon as happening occurred; a thing appears many times in a short time.

1.5. Conclusion

We studied the phenomenon of non-visual recognition from the viewpoint of physiology. We found the following:

1. During non-visual recognition, the subject controlled the autonomous nerve system by a change in the period and amplitude of her respiration. The recognition greatly resembled qigong.
2. Her sympathetic nerve system acted strongly during non-visual recognition, and she suddenly strengthened the work of parasympathetic nerve system. Furthermore, an image of the thing, which she could not originally see, appeared instantly when the frontal lobe and a visual area of the right brain connected slightly on EEG topography.
3. Blood flow in the frontal lobe of her brain increased, and the oxygen level in the blood decreased for the task. Related to these observations, the skin temperature of her Yintang (meridian) and neck rose.
4. From the results of EEG topography, it could be seen that the frontal lobe and the visual area cooperated with each other on the right-brain side. However, we thought that the instant state of the EEG was repeated many times using the recognition phenomenon. It would be consistent with the description of a screen phenomenon reported by clairvoyant persons.
5. The activity of the β wave region becomes active on the right brain side during the non-visual recognition state. Furthermore, the action potential rose in the sight field and part of the frontal lobe instantly. We thus understood that non-visual recognition became possible when both places could cooperate.

The activity of two cooperating places of her brain occurred instantaneously.

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2. Can mind let an object move?

(A different subject moved pills through a sealed glass to outside without any touch to the medicine bottle)

2.1. Introduction

This is a report concerning an unrealistic experiment in which a different subject takes out pills from a medicine bottle, and she moves them to somewhere without any touch the sealed glass bottle.

We used the same experimental equipments as used in the non-visual recognition experiment discussed in the foregoing paragraph. The electronic balance was used to measure a weight of a medicine bottle, which could measure the maximum 120 g with sensitivity of 0.1 mg (second different point).

2.2. Experimental contents

A subject of this experiment was Ms. Wang Chang (Chinese). She put her left hand on a table top set just in front of the subject. The left hand put it with a soft measurement level to fix it. We put a finger cuff for a blood pressure measurement, a sensor for SpO₂, GSR electrodes, and EMG electrodes to the hand. The right hand of the subject became free at that time.

Three tables were set in front of the subject at an interval of about 20 cm. An electronic balance having measurement sensitivity of 0.1 mg was set on a wooden table in the middle. A medicine bottle for use in our experiment was put on a measurement table of an electronic balance. The electronic balance was left a glass wall, and three directions, and two glass doors and a glass ceiling, and a ceiling are glass doors, and nothing can enter because the doors are closed during experiments. Two small CCD video camera head to record the medicine bottle and to record any change in the weight of the medicine bottle on this table was set.

We put on the center table with a flux gate magnetic sensor measuring instrument and light detecting sensor with light shout out cover. On the most far-off table, another CCD video camera head.

Furthermore, a window takes out the flux gate sensor coil measuring a very weak magnetic field to a window of an electronic balance. This output is taken also into the BIOPAC system, where it is measured real time.

Furthermore, there is another video camera measuring the experiment scenery whole more. A picture of the video camera, Thermo image and an image of a mass measurement are recorded in 1 screen from these 3 screens.

Before the experiment we mounted the subject with all kinds of sensors. The subject selected one-medicine box from four kinds of vitamin compounds, which we purchased at a pharmacy just before the experiment.

We purchased these medicines not to ask to the subject. We open a box of a package with our side after having selected it and set it on a measurement table of an electronic balance. Accordingly all glass doors are shut out and she could not directly touch by hand the medicine. Thus, the hand of the subject did not reach the electronic balance.

If the preparations of the experimental protocols were enacted, she rested with closed eyes for about 3 minutes first, and began the pills taking out experiment afterwards. After we heard her say "I did", she started to rest again for about 2 minutes.

2.3. Experimental results and Discussion:

a) Electrocardiograms:

Heart rate: (Fig. B1)

There were comparatively few changes in the heart rate during the rest period with closed eyes, and it was found during medicine taking out experiments without touching the bottle that the heartbeat rate suddenly increased. Although some periodical nature was found, it cannot be clearly described using only this Fig.B1.

R point voltage of ECG: (Fig. B2)

The R point voltage is comparatively simple compared with the change in the heart rate in during the rest period. In other words, there were a few big changes in the first half of an experiment, but four places of points of an upward slant to the right are found in the latter half of the R point voltage.

b) SpO₂, Blood Flow, EMG of left hand, GSR, temperature of a point (acupuncture point; Yongquan) of left foot (Fig. B3)

Although the O₂ concentration of blood at her fingertip kept roughly 98% of the constant values during the first rest, it was understood after starting the experiment that the concentration began to change. However, it can be found that the oxygen density fell to 95% at the end of the experiment just before the second rest. However, there was a time delay in order to calculate the oxygen density from SpO₂. We think that it was equivalent to the maximum places of blood flow at the second line from the top of Fig.B3. In the blood flow data at the second line at the neck, we understood that the blood flow increased at several points when the experiment was started.

The third line from the top shows the blood flow at Yintang. It can be understood that the blood flow increased after starting the experiment. We can understand that the blood flows shows the maximum at 1070 seconds, in particular. Regarding this matter, the blood flow increased whenever the subject challenge it many times. However, we think that she made a blunder when the flow was not sufficient. Also, it is thought that it was realized for the last 1070 seconds.

The electrodes of the EMG were attached to her left arm, and we understood that power entered her arm when the experiment began.

We measured the temperature change of the palm of their left hand at the center (Laogong; acupuncture point). From the data, the temperature at Laogong decreased rapidly. When persons with special ability showed it, we already know that the temperature of their hands became cold. At big temperature deterioration in the third time, an attention is necessary for the blood flow at third line from the top of Fig.B3 agreeing with the place at the lowest temperature.

In the GSR data, except for during the rest period time, pulse like waves were found during the experiments many times; this is an indication that she was going to enter a strain state many times.

As for below the second line, it is for the case that a temperature sensor was added to a Yongquan (acupuncture point) of a foot by the lower part. It shows that for a while after the experiment started, the temperature decreased. As the time was found that temperature rose once on the way, but it looks that as she made a mistake to control her body, she continued the experiment once again.

c) Analysis by topography of brain waves (Fig. B6)

We examined the brain waves from ① to ④ in the region of the above-mentioned GSR and another region. The brain waves of the region of ② are shown in Fig B6 as one example. A noisy electrical voltage appeared at several points, as in the figure. As a result of having examined the topography of these regions, the topography of the region of ② in Fig. B5 at the highest voltage of the EEG data are shown in Fig. B6, and the action potential at other places in the topography did not increased so much.

In other words, in a region of α waves, the electrical voltage of left frontal lobe rises at first, and an activity domain spreads out on the left occipital lobe; it spreads to the left visual area, but the action potential falls within a short time. It was a short time of about 0.5 second in this region ②. In a region of β waves, a weak action potential of α waves rose simultaneously. β waves appeared after low alpha waves of electrical potential before showing this β wave, and the electrical potential rose; after that the β wave became strong. A frequency fall of the brain waves was done from α to β waves through θ waves.

We understood that she took a cycle that brain waves of the subject changed into a reverse course such as from α waves to β waves and at last θ ; and after it came back to α , electrical potential fell afterwards. The subject tried this cycle many times. We finished the experiment upon her saying "I did", but we gave more time for her to relax with closed eyes afterwards. However, the subject promptly identified that a medicine appeared from the bottle.

Fig. B6(c) shows her brain waves topography at the time. We understood the result that her sight field linked the frontal lobe of the right brain in a short time in the case of a non-visible recognition experiment, which is described in former part of this paper, and that the EEG potential decreased instantly after the high potential region at the frontal lobe, and her sight field connected.

We looked for the medicine, which disappeared from the bottle, and confirmed that a pill existed in a video camera bag, which had been placed before the subject at a distance of about 3m where she could not reach it. Although these were originally 60 pills in the bottle, but it was confirmed that there were only 59 pills when we counted the remaining pills. Furthermore, we confirmed that the medicine, which we watched by eyes, and the

pill in the bag, had the same colour and same shape as that of the remaining medicines.

However, the pill in the camera bag was not shiny compared to the remaining medicine. Furthermore, we examined the pills using a micro X ray fluorescence analysis, and it was confirmed that the result was the same as original medicine.

2.4. Conclusions

- 1) We confirmed the fact of object movement. This was not the usual type experiment. The subjects usually shook a bottle. In this experiment, we obtained the data, which we could trust as physiology data, because there was not manual vibration provided.
- 2) The oxygen density in the blood fell in 95% passed at 1070s shown in Fig.B2. This is the position at which she performed her special ability. It was thought that this performance made big load for her in the point of physiology and the oxygen of blood was consumed so much in her brain. Also this was the reason for a time delay in the time of the minimum O_2 concentration of SpO_2 and the time of maximum blood flow, occurred in order to calculate the oxygen density not to agree.
- 3) We understood that a big load affected to her brain because a quantity of blood, measured with her neck, increased most near by for 1070 seconds. When the experiment started the blood flow in her Yintang increased to more than that at the rest time.
- 4) It was understood that the temperature at her Laogong and her Yongquan of a foot deteriorated compared to that of the rest period. Regarding this matter, it is thought that blood flow to the feet and the hands decreased for some reason.
- 5) However, we could understand that from the data of the R point voltage of an ECG, she was in a comparatively relaxed condition. At places of around 640s, 700s and 1080s, R point suddenly deteriorated. This means that she suddenly turn into a strain state from relaxation.

In other words, she made her parasympathetic nerve series in the active state at first, and then suddenly changed the sympathetic nerve series in an active state.

6) In the measurement of EEG waves, an EEG wave like an EMG was able to appear many times.

The EEG voltage of the head rose in front of the left when we performed a frequency analysis of the brain waves.

The active region grew more to the left occipital region of the head. It was the voltage to be big even if we compared the EEG in rest condition and even if we compared it with general brain waves.

□ wave appears, too. □I wave appeared before showing this □ wave and it moved to □ wave and moved to □ wave more and also understood that EEG waves would decrease with the reverse such as from □ to theta and then from theta to □I.

7) After the experiment was over, she saw immediately it through in order to identify that medicine appeared. As a result, an action potential of the right frontal lobe and a right sight field rose first in front of the right, as described in the first half. The places where action potential of both becomes high and they connect in to channel, afterwards. We think that she confirm it by her self.

Be indistinct

- 1) When medicine came out from the bottle, we were not able to measure any weight change of the medicine bottle well.
- 2) The mechanism by which medicine leaves from the medicine bottle, what kind mechanism act, and how to move the medicine appears and now is more indistinct.

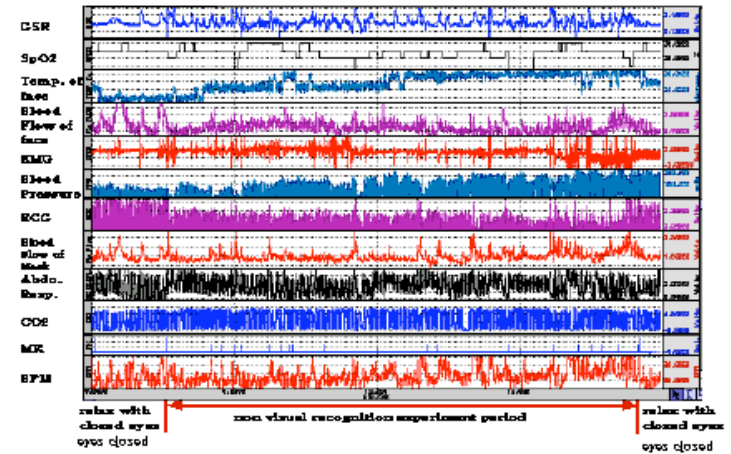


Fig. A1 Various Physiological Data. (Successful Case)

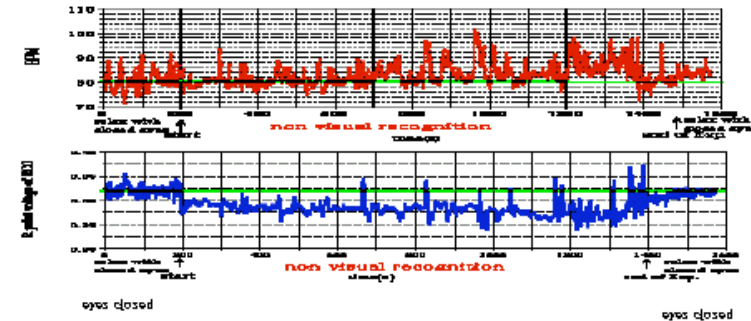


Fig. A2 BPM and R point voltage of ECG(Successful Case)

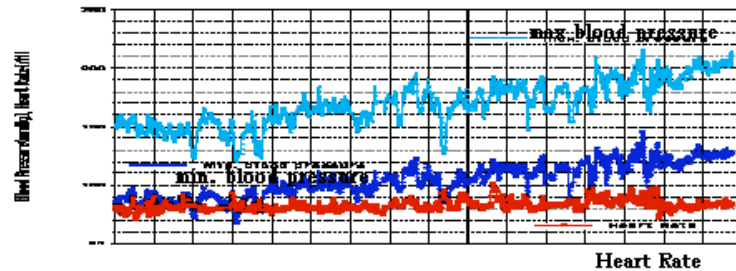


Fig. A3 Blood Pressure and Heart Rate (Successful Case)

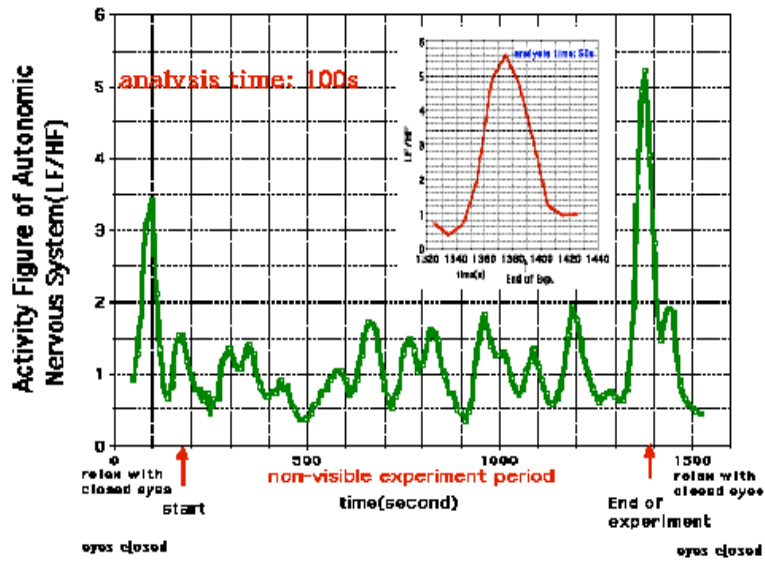


Fig.A4 Activity Figure of Autonomic Nervous System (LF/HF);Success Case

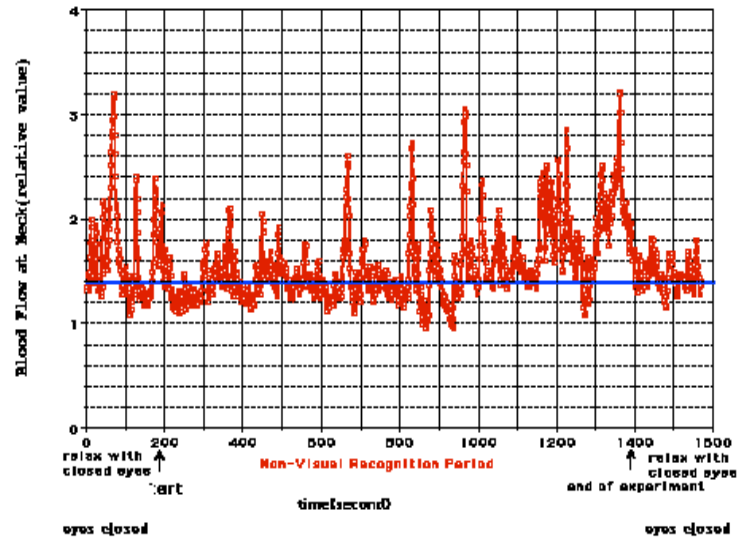


Fig. A5 Blood Flow at Neck (Successful Case)

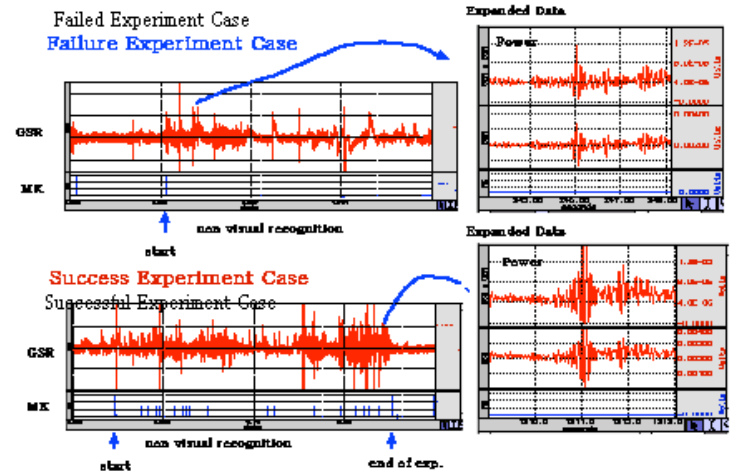


Fig.A6 Oscillation in GSR Data ; Failed and Successful Cases

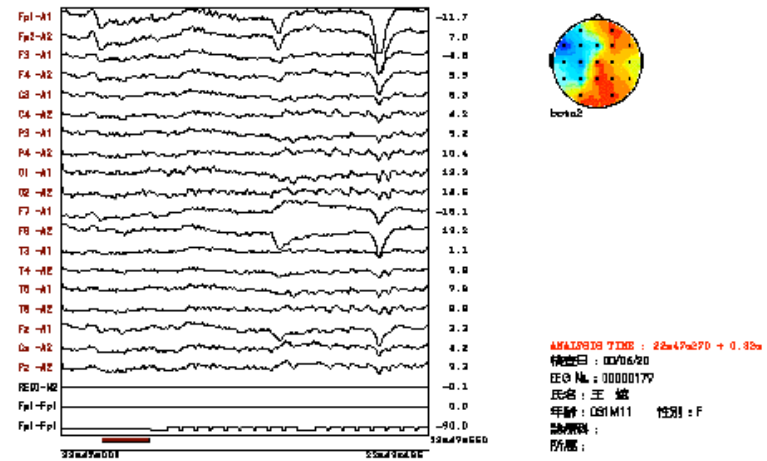
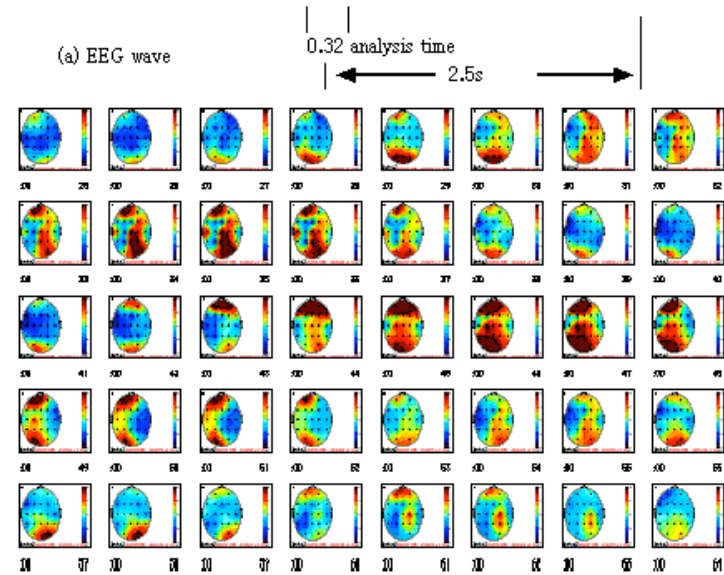
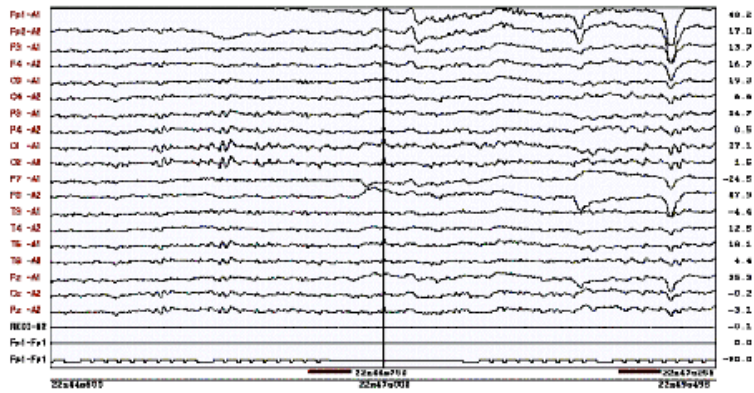


Fig. A7 EEG Raw data and Topograph(β wave) at 1367.27s+0.32s



(b) Topograph of upper EEG region

Fig. A7-2 EEG Raw Data and Topograph ($\beta 2$ wave)

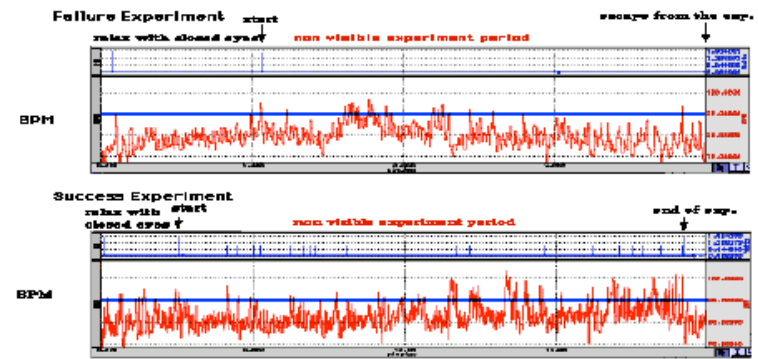


Fig. A8 BPM Data ; Failed and Successful Cases

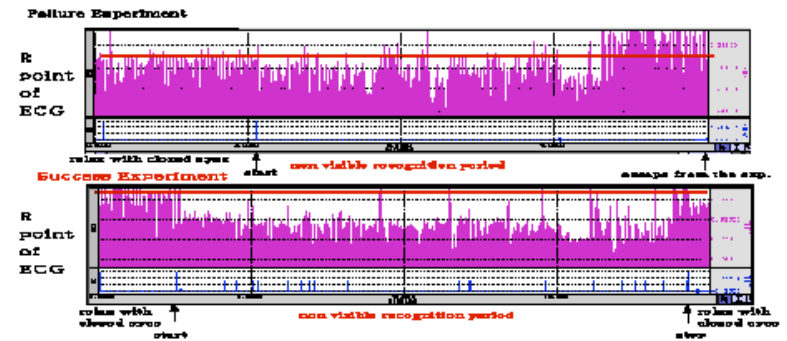


Fig. A9 R Point Voltage of ECG ; Failed and Successful Cases

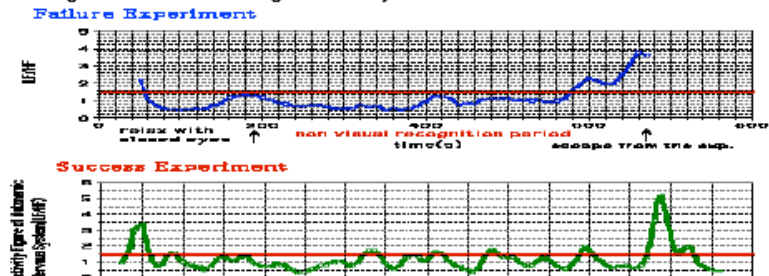


Fig. A10 LF/HF ; Failed and Successful Cases

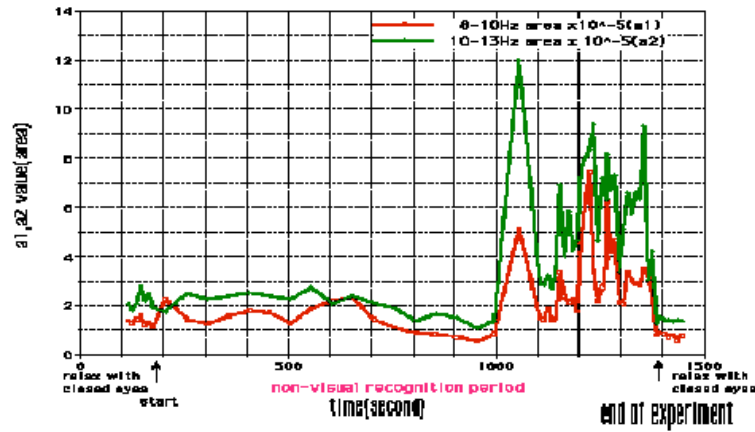


Fig. A11 a1, a2 spectorum area (successful Case)

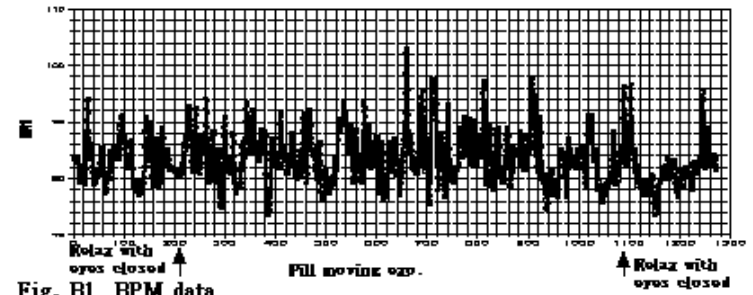


Fig. B1 BPM data

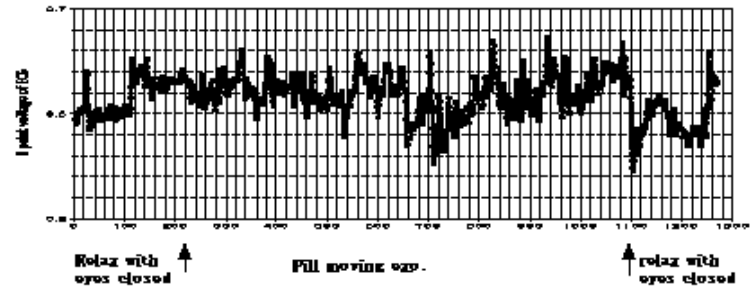


Fig. B2 R point voltage of ECG

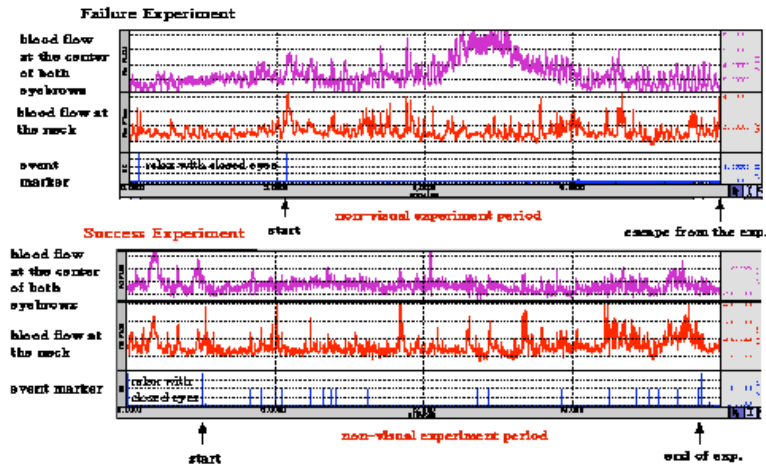


Fig. A12 Blood Flow at the Neck and the center of both Eyebrows; Failed and Successful Cases

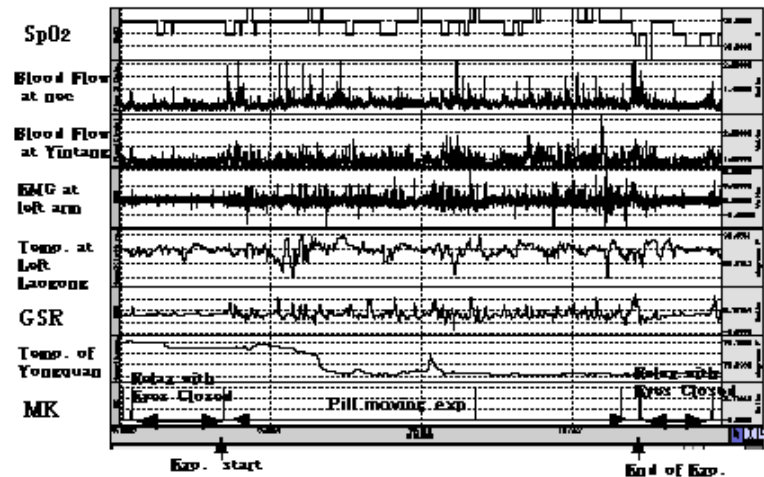


Fig. B3 SpO2, Blood Flow ,EMG, Temperature, GSR and Marking

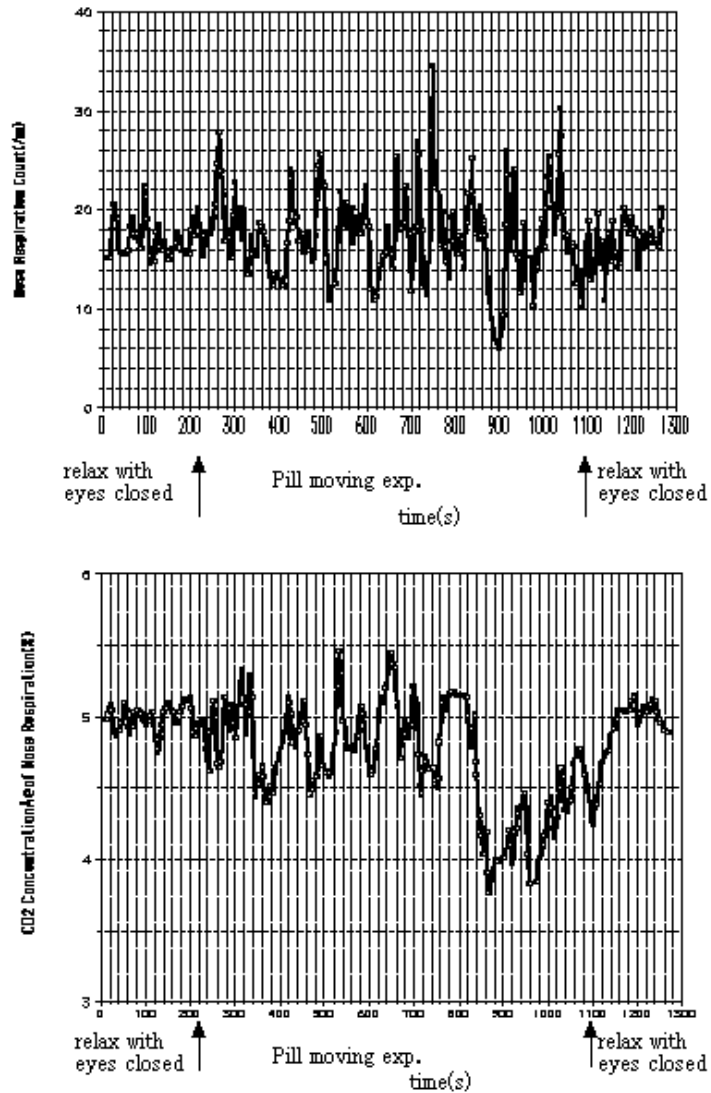


Fig. B4 Nose Respiration Counts(upper)
CO2 concentration of Nose
Respiration(below)

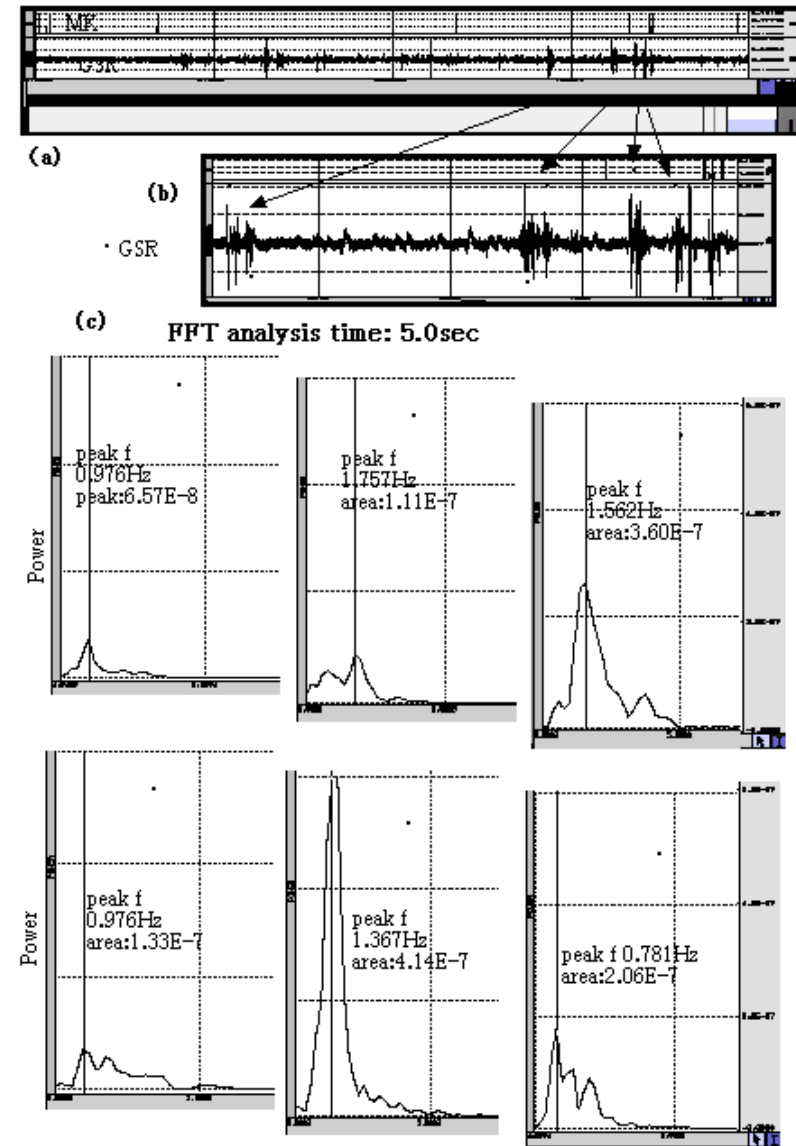
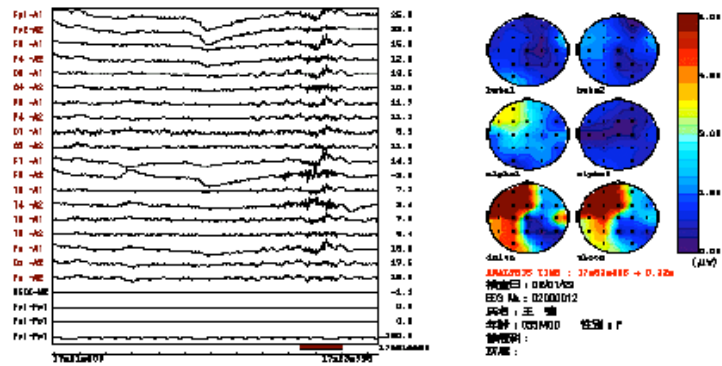
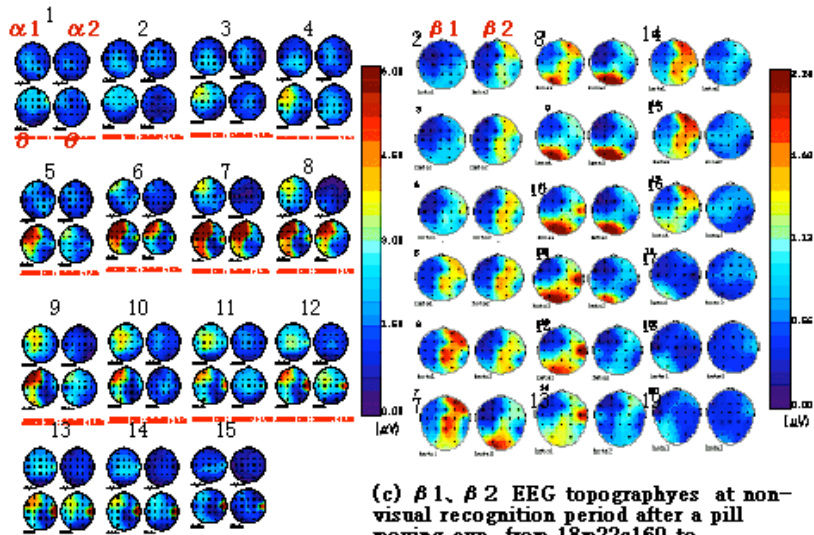


Fig. B5 Oscillation voltage in GSR a) whole area
b) expanded area
c) Power spectrum from No. * to No. *



(a) EEG data and topographies at a time of 17m52s.205 (analysis time 0.32s)



(b) EEG topographies from 17m51s930 to 17m52s465

(c) $\beta 1$, $\beta 2$ EEG topographies at non-visual recognition period after a pill moving exp. from 18m22s160 to 18m22s785

Fig. B6 EEG data and topographies at a pill moving and non-visible recognition experiments