

Foreword

In a scientific text the words used have a definite meaning. Every word can be found in a dictionary and every new word or concept is explained or defined. The content of a text is scientific if mention is made of the way in which a statement can be verified by other investigators. If a statement, even though correct, cannot be investigated, then it is no scientific statement. Even though the author of a scientific text sticks to the rules that does not mean that the text will be understandable to a large public. To be able to derive the correct information from a scientific announcement the reader must first study it. For the studying of it it is necessary to read the text, to look up the less known concepts in a dictionary and go repeatedly through the whole of it, aloud is best.

Copying of the text increases the familiarity with the content considerably. Only when the reader is able to completely reproduce the content on paper by heart, can he be considered to have studied the text. For the verification of the correctness of scientific statements in general the investigator is considered exchangeable in the experiment. With research into the experimental changes of the own consciousness however the investigator cannot be replaced by another one. One can never gain knowledge of consciousness expansion without first expanding one's own consciousness. If the consciousness-investigator himself is adult - i.e. if the pulsation in his brain has stopped - it can be a religious experience to return out of the psychic dark to the light, but this is only possible for one who has first come to be in darkness. Anyone who himself has never changed essentially can not imagine the significance of other people's fall and so he fails to see the reason for correcting the disadvantage of the last step in human evolution: walking upright.

As long as the existence of brainpulsations cannot be established or excluded the investigator must himself decide to which category he belongs and how he can verify that.

The Mainwork

On the scroll entitled: "Homo Sapiens Correctus" are ten handcolored pictures, illustrating the mechanism of brainbloodvolume. In studying it the corresponding text - that contains not one word too many - must be copied and repeatedly read aloud. The reader cannot realize the significance of the small differences between the succeeding pictures when he knows the text. The pictures represent:

1.

Becoming adult: the pulsation inside the cranial cavity is suppressed with the sealing of the cranial sutures and the volume of brainwater (cerebrospinal fluid, colored yellow here) increases.

2.

How can the brainwater be removed again from the cranial cavity?

3 -10. Ways of increasing the brainbloodvolume.

Besides understanding the mechanism itself one can get an impression of the importance of the practical application of this knowledge. For this purpose the remaining writings have been gathered in this booklet.

The Discovery

In the last year of my medical studies I investigated ways in which the brain function could be improved. Having succeeded in reaching a state of expanded consciousness by means of Yoga headstands, and finding this state comparable to the effect of consciousness-expanding drugs, I wanted to find out which common factor in the two methods had produced the improvement. By using the simple method of a hand-grip, closing the veins at the neck to keep my blood from leaving my brain, I found that the additional volume of blood in the brain produced the state of expanded consciousness. Since increased brainbloodvolume always accompanies this state, I concluded that the

additional blood allows for exchange of oxygen and carbon dioxide between the blood and the brain, thus accelerating the brain metabolism and improving its functions, including consciousness. At the increased level of metabolism, the brain cells take far more glucose from the blood, eventually producing hypoglycemic symptoms, which I have experienced myself and which have also been reported to occur in LSD experiments.

In my own experiments with LSD I noticed that the brainbloodvolume is increased by a temporary constriction of the veins in the neck, which, as in the hand-grip process, allows the heart to build up enough pressure in the cranial cavity to press approximately a mouthful of cerebrospinal fluid out of the central nervous system. When the venous constriction is relaxed, the pressure in the cranial cavity drops, gravity claims the additional brain blood, new c.s.f is produced, and brain metabolism decreases.

In the process of anthropogenesis, if we consider the total time elapsed since life appeared on earth as one year, then homo sapiens erectus only appeared during the last few seconds of it. The disadvantage of man's upright position appears when the bones of the cranium grow together. During the growth process the still-open cranial sutures enable the membranes surrounding the brain to expand when the brain capillaries are pumped up with blood by the heart. But inside the rigid cranium the column of blood the heart pushes through the brain drops down through the veins without creating the pressure to force out any of the superfluous mouthful of c.s.f.

Animals keep their brain functions optimal by holding their necks in a horizontal position. But since his origin man has been searching for the means to replace the lost blood in his brain.

During the experiments on myself every temporary relief from this burden of gravity increased my determination to make the state of expanded consciousness a permanent one. In order to regain the high level of brainmetabolism of my childhood, I restored the expansion possibilities of the brain membranes by making an opening in my skull. The permanent effect on my psyche induced by this operation is similar to the effect temporarily induced by standing on the head for a quarter of an hour(or smoking indian hemp of the best quality). Non-toxic substances that temporarily increase the brainbloodvolume are "psychovitamins". Their common action is to constrict the neck veins. The increase of brain metabolism is due to the intake of more oxygen and glucose from the blood and the output of more carbon dioxide to the blood. By eating a mouthful of sugar at the onset of agitation or fatigue, one prevents the progressively worse symptoms of hypoglycemia, such as cold hands, chills, trembling, and paranoia, which occur when adrenalin is secreted as an emergency reaction to supply the brain with new glucose from the liver. If no sugar is taken, the action of adrenalin may strain the heart, and when the adrenalin is exhausted, the ego may get lost. By taking sufficient sugar, the experience is made more positive. The presence of LSD in sugar (1 mg/kilo) will solve the problems of the abuse of each, since increased metabolism prevents obesity and sugar prevents hypoglycemia. Tobacco and alcohol should not be used in combination with psychovitamins, since they hinder the expansion of consciousness. Drinking a lot of alcohol during an LSD experience can result in extreme physical, psychical and social discomfort.

INTERVIEW I

Bart Hugues questioned by Joe Mellen

M: You were born in Amsterdam on the 21st April, 1934. Your father was a doctor, as his before him. Your mother died when you were two and a half years old. When Holland was occupied by the Nazis you were six. What are your memories of the war?

H: Well, individually, I had a good time as children do. I remember the hunger and the disappearance of Jewish friends, and once Germans came to arrest my father because he had refused to become a member of their "Kulturzimmer." He hid under a sofa in his waiting-room. The Germans waited for a long time, sitting on him. I remember seeing my grandfather at the end of the war. He had oedema of the legs caused by lack of protein - they were puffed-up with water. He was completely starved. At the age of 85 he had been eating grass and leaves from the wood behind his house. That was all there was to eat.

Liberation meant food - different uniforms in the streets, handing out chocolate to the children.

M: At school what were your main interests?

H: I had many interests: girls - I had twenty-five girlfriends when I was eleven; marbles - in the last year of the war I won a lot of money at marbles, selling back those I'd won and buying ice creams for my girlfriends. I also had many animals, mainly reptiles and amphibians. At eleven I had fifty snakes, lizards, toads, frogs, newts etc. At eighteen the number was three hundred and eighty-five - that's the most I've had at the same time. I was fond of drawing and painting in watercolors, and after fourteen I spent more time on my homework, had one girlfriend, played table tennis and chess.

The last three years at school (from seventeen to twenty) were boring. I slept through the classes waiting for them to end. At that time I read a lot, mainly philosophy - Plato, Nietzsche, Freud, Pavlov, Hesse, etc. My interest in reading was awakened by Henk, who gave me a course of books to read. He was the only adult with whom I had contact, and my confidence in them was badly shaken when he committed suicide.

M: On leaving school you started your medical studies. Why did you decide to do that?

H: My original idea (as a child) to study biology developed into a study of the hairless, talking ape. I wanted to specialize in psychiatry and psychoanalysis and then teach the subject.

M: When did you first take LSD?

H: In 1958, as a subject in a series of psychiatric experiments at the Psychiatric Department of the University Hospital in Amsterdam.

M: Did you take sugar?

H: No, because I hadn't discovered the mechanism then. I thought all sugar-lack symptoms were essential parts of the experience. [1]

M: Did you enjoy it?

H: Yes, though at the end I was very scared by the visual distortions (caused by sugar-lack). I saw three of the doctors as a devil with horns, a pig and a chimpanzee. Six others on the experiment saw the devil and three saw the pig.

M: In 1960 you were married on the 15th March and then continued your studies. Did you have any more LSD experiences?

H: Yes, both Barbara and I had one more experience. We both enjoyed it.

M: Did you finish your medical studies?

H: Yes, in 1962 I took the main part of the doctorate exam (the semi-arts), including psychiatry, neurology and pharmacology, and passed it. The second part (obstetrics and surgery) I took in April 1964, and failed in a theoretical part of the obstetrics exam. I took it again in front of the same doctor (it was the final part I failed - a ten minute oral exam in private with one doctor) and failed again. After that the government withdrew my grant, so I decided to forget it.

M: After ten years of study?

H: All my friends smoked and had tried unsuccessfully to turn me on, but in the summer of 1962, after I'd passed the semi-arts exam, I went on holiday to Ibiza to find out for myself if pot has similar effect to LSD and to see if it had any addictive qualities. In all the books I had read it appeared as a non-toxic substance. I smoked as much as I could for a while then suddenly stopped. Noticing no withdrawal symptoms, I then started smoking again.

M: In January 1963 you had a daughter, whom you named Maria Juana. What were the reactions to that?

H: All sorts of hysterical nonsense. There were photographs of her, scandal articles, associations with orgies, declarations that my wife and I were not married etc.

M: In November 1962 you discovered the mechanism of brainbloodvolume. What led to the discovery?

H: Having got high from smoking pot in Ibiza, I met Titi there. He used to stand on his head at parties for considerable periods of time. When I asked him why he did it, he said it got him high. My father stood on his head every morning - "to keep fit" he said - I had always felt fit anyhow, so had seen no reason to adopt the practice myself. But now I stood on my head for a quarter of an hour and got high.

In November, in Amsterdam, Germ (who has the third eye from a car accident, and who named his Daughter Mescalina) gave me some mescaline, and it was then that I got my first clear picture of the mechanism, realizing that it was the increase in the volume of brainblood that gave the expanded consciousness. An improvement of function must have been caused by more blood in the brain which meant there must have been less of something else. Then I realized that it must be the volume of cerebrospinal fluid that was decreased. [2]

M: How did you discover the action?

H: Although I was aware of the effect of the action - to increase the brainbloodvolume - at that time I hadn't perceived the action itself, the constriction of the veins. I perceived that later, on LSD. [3]

M: So once you had discovered that expanded consciousness was caused by an increase in the brainbloodvolume it was a logical step to the need for sugar with LSD etc.?

H: Yes. That brain cells take more glucose from the blood than bodily cells do is common knowledge in the medical profession.

M: Sugar-lack is inevitable if you increase your brainbloodvolume?

H: Yes. The brain lives on glucose and oxygen, whatever anyone says about the holy ghost and spiritual bread.

M: When did you decide to have the "third eye"?

H: In prison, having checked the mechanism by perceiving the cerebrospinal fluid in the back outside the central nervous system (after using the pressed-up method described in the scroll,) I thought about making a hole at the base of the spine to let the fluid out, and while thinking about holes I realized that pressure was necessary to squeeze the cerebrospinal fluid out of the system. Then, having concluded upon the nil pressure inside the adult skull (in most people the skull seals between the ages of eighteen and twenty-two,) I saw that any hole in the bony surrounding of the system would give the pressure back. But after a time I realized a hole in the spine would heal over so it had to be in the skull, where holes stay open.

M: Once you had decided to have the "third eye," what did you do?

H: One of the main reasons I wrote the scroll was to give the knowledge to the doctors. I visited about twenty professors, of psychiatry, anthropology, neuro-anatomy etc. and their reactions were without exception negative.

M: What do you mean negative?

H: They were polite but uncooperative. Two surgeons said they understood the mechanism, but dared not even ask their superiors for permission to perform the operation.

M: For how long did you try to find a doctor to do it before deciding to do it by yourself?

H: For two years

M: Then on January 6th, 1965, despairing of assistance from the medical profession, you operated on yourself?

H: I had planned originally to do it six months earlier, but my friends took away my tools and prevented me from operating.

M: So you had to conceal your intention the second time.

H: Yes. My wife knew I was going to do it, but no one knew when.

M: What tools did you use?

H: An electric drill, a surgical knife, and a hypodermic syringe for the local anesthetic.

M: How long did the operation take?

H: Three quarters of an hour

M: Was there any pain?

H: No.

M: Not even afterwards?

H: No.

M: How long was it before the wound healed?

H: Three days.

M: What was the effect you noticed?

H: The appearance of pressure inside the skull. It took about four hours for the cerebrospinal fluid to be pressed out.

M: And now you are permanently high. How would you describe your state to someone who had never taken conscious-expanding drugs or stood on their head for a quarter of an hour?

H: I feel as I felt before the age of fourteen.

M: If you are permanently high now, aren't you on a permanent sugar-lack?

H: The sugar-level in my blood is lower that it was, but the liver and adrenal glands have adapted to the greater need for glucose.

M: What happened after the operation?

H: I made it public ten days later, by having the bandage removed at a "happening." A week later I gave a press conference, before which I went to the University hospital to have an X-ray photograph taken. I was detained for an hour by two psychiatrists and released only when I promised to return the following day. I told the journalists this, but they didn't mention it in the papers. The next day I went back with two witnesses. Then ten male nurses formed a circle around me and forced me into the clinic, where I was kept involuntarily for three weeks, for "observation." The day after my release the news was announced in the press. A month later I made a television appearance, soon after which the government issued a statement - read out in the television news - to the effect that Bart Hughes's scroll "Homo Sapiens Correctus" was not 99% but 100% nonsense!

M: Do you advocate the "third eye" for everyone?

H: I advocate the availability of trepanation for every adult who wants it.

M: Who will want it?

H: Everyone who understands the mechanism. There is no reason why a single adult should be left behind if he wants to be liberated from gravity's drag.

M: What you're saying is give the adult back his lost brainblood and he will look after himself, is that right?

H: Yes. With enough blood the central nervous system is a better doctor than your doctor.

M: What about diet?

H: Eat a salad every day.

M: Do you think the adult state can have any advantages over the trepanned state?

H: No. The older one is, the more will trepanation increase the benefits of experience.

M: You have said that social reform must start with the individual. Can you expand on that?

H: Gravity is the enemy. The adult is its victim - society is its disease. My problem is how to explain to the adult that he has too little blood in his brain to understand, if he has too little blood in his brain to understand that.

M: Do you think that trepanned he can create a better social system?

H: I think that no construction of adults can work optimally unless each adult in the construction is trepanned.

M: Do you foresee many changes in a trepanned society?

H: Increased efficiency in social operations, the restriction of activity to the essential, and with the restoration of originality and creativity to the adult rapid progress in technology.

M: Do you see a future for art?

H: With a rejuvenated adult, art is likely to become a common activity - no longer an "in" commercial enterprise.

M: You have been accused of evangelism, of coming as a Messiah. What do you think of that?

H: I do really prefer my trepanned state to my previous adult state, but I am an atheist and certainly not sent by anyone.

M: Do you think LSD should be available to the general public?

H: Only with sugar (1 pound per trip) and extra vitamin C, and in supervised centers. Supervision by those who understand the mechanism is necessary to prevent people from falling the victims of their own ignorance.

M: Your view is optimistic, but can you be sure that in a trepanned society the particular interests of the individuals will complement each other? Might it not be merely an acceleration of conflict and chaos?

H: I am sure that the increase in common sense will result in an increase of cooperation. There will be less conflict and chaos because communication will depend less on the number of words and more on their meaning.

M: There is a lot of talk among our wilder "visionaries" about a change in the modes of communication, the substitution of colors for words for example. How about that?

H: I think it's a good idea to exchange the unnecessary words for colors and keep the few left for communication of information.

M: Do you think man can live without religion?

H: Trepanned man will not find it necessary to give meanings to abstract words, or to invent new superstitions. "Faith in the immortality of the soul" is a chain of associated meaningless words.

M: Is there any hope of something replacing fear as the motive impulse behind behavior?

H: Gravity is the enemy. A large part of adult behavior is motivated by the fear of losing the grip on what blood is left in the brain. Trepanation, by restoring the blood lost in the course of growth removes the main cause of fear.

M: In a trepanned society there will be more individuality and independence than in the present one. What part do you see the state playing?

H: I think the state should serve the individuals, not vice versa. It should provide all essential needs.

M: How do you explain the turning to Eastern doctrines and religions which the use of LSD has brought in America?

H: It is a reaction to the apparent chaos of Western civilization - but they don't know the mechanism, so they don't take sugar. I can understand them looking elsewhere than in America, seeking "the secret" in the esoteric doctrines of ancient religions - but of course there is no secret.

M: Do you think the mechanism has been known before?

H: There are no signs that the mechanism itself has been known, though facts connected with it, around it, have been known - for instance yoga headstands and trepanation have always been practiced.

M: Has trepanation been used as the cure for insanity before?

H: Yes. It is described as such in the painting and writing of Hieronymous Bosch.

M: Why do you think the practice has died out?

H: It must have got an undesirable reputation because it was known as a cure for insanity. It was probably regarded as a stigma showing that the bearer had been insane.

M: But it has never, to your knowledge, been used for other reasons?

H: Not on a large scale. Certain ancient civilizations used it, and it has been and still is a religious practice in some parts of the world. In central Africa it is used commonly for the treatment of a variety of diseases.

M: The established Western view of the operation is that it constitutes mutilation, that it has no indication?

H: Yes. The mechanism is unknown to the medical profession. In fact there are two indications: the general one is adulthood, the particular one insanity.

M: Adulthood is hardly a disease, is it?

H: It is the end of youth, an unnecessary handicap. Whether you call the loss of brainbloodvolume to gravity a disease or not is irrelevant - it is certainly a loss, which can be recovered.

M: Is there any contradiction?

H: No. I suppose in cases of severe adulthood there might be a depression immediately after the operation in a period of retrospection.

M: How did you come to the realization that the Ego is a conditioned reflex?

H: From the observation that other people's egos were deconditioned by prolonged sugar-lack, I concluded that the

Ego is a conditioned reflex.

M: What was it thought to be before?

H: Freud gives it a place among parts of the personality, but does not define it. Descartes said cogito ergo sum, and Satre had some thoughts about it - I forget what they were.

M: You have been quoted in the newspapers as saying that anyone can easily trepan himself. Is this your opinion?

H: In the scroll I have written "With today's knowledge of operating techniques one can easily do this by oneself." I have not written "Without today's knowledge..." because I did not mean that.

M: One last question. What is your definition of genius?

H: Someone born with knowledge of the difference between no and yes.

8 THE EGO

The Large Mechanism

I. Man's position is upright. II. Blood is heavier than cerebrospinal fluid. III. The cranium seals at the end of growth. These three factors cause the loss of intra-cranial pressure, decreasing the brainbloodvolume: a mouthful of blood is lost to the brain and is replaced by a corresponding volume of cerebrospinal fluid.

The Small Mechanism

A reflex, by constricting the arteries leading to the rest of the brain, concentrates the brainbloodvolume in the parts of the brain which are in action. (Decreased brainbloodvolume limits the number of brain centres that can function simultaneously and reduces the volume of blood directed into those centres). A closed circuit is formed by one's perception of the word one speaks as one speaks it: perception of the word is simultaneous with the reflex action that concentrates the brainbloodvolume in the speaking center; word recognition in turn triggers the reflex. A chain of word associations establishes and maintains a priority in the direction of brainbloodvolume to the centres for speaking, listening, writing and reading.

Ego Loss

The control of the speaking center (and the other word-communication centres) over the coordination of the brain functions is a conditioned reflex which is deconditioned not only when the meaning of the word is lost, but also by prolonged "sugarlack", since the reflex action fails to supply the centres with more energy as long as the blood contains too little glucose.

The Third Eye

Trepanation restores the intra-cranial pressure which is necessary to replace the blood lost to gravity as the cranium sealed, and all brain centres are again able to function independently of the conditioned reflex, still using it for more effective concentration.

The definition of the ego as a conditioned reflex which is deconditioned when the meaning of the word or its significance as the stimulus for the reflex (on sugar-lack) is lost, expresses permanent dependency on word-recognition to maintain ego identity. Talking and the ego are developed by the meaning the parents give to the word. The child is made to change his behaviour at the same time that a formula is repeated in his ears, until the recognition of it in his listening center causes the change in behaviour. Once conditioned by the formulas the child recognises then among the sounds he produces himself by the occurrence of the changes in his own behaviour. The ineffectiveness of the child's repetition of the formulas to cause the same behaviour-change in an outside projected image of himself makes his own reaction dependent on whether he identifies with the ego or with the image.

Identification with the image is effected by a constriction of the arteries to the parts of the brain that are threatening the ego resulting in repression from consciousness and exclusion from function.

Trepanation experimentally confirmed

From the Textbook of physiology - edited by K.M.Bykov, published by the Foreign Languages Publishing House Moscow 1960 p. 180.

"Cerebral circulation"

When insufficiently supplied with oxygen the nervous tissue and especially the cells of the higher divisions of the central nervous system cease functioning sooner than the cells of other organs. Compression of the vessels running to the human brain causes almost immediate loss of consciousness. A drop in the general blood pressure in the large arteries below 70 to 80 mm Hg leads to an insufficient cerebral blood supply and to disorder of the cerebral function. In slight anaemia of the medulla oblongata the vasoconstrictor centre is stimulated, and this leads to a rise in blood pressure and to an increase in the blood flow to the brain.

Due to the constancy in the volume of the cranium the cerebral vessels show no pulsatory changes in the volume of the blood they contain. The blood flows along the cerebral vessels in a continuous stream, and the pulse waves in the cerebral arteries are suppressed.

Former investigators repeatedly described cerebral "pulsations" whose rhythm corresponded to the rhythm of the heart-beats. The studies conducted by Klosovsky have shown that these pulsations arise only after trepanation of the skull, i.e., creation of an opening in its osseous integuments.

Owing to the constancy in the volume of the cranium changes in the amount of blood contained in the cerebral vessels are possible only during corresponding changes either in the mass of the cerebral tissue (including the glia, etc.), or in the amount of cerebrospinal fluid. If the blood flow to and from the brain increases to the same extent the rate of blood flow to the brain may increase regardless of the total amount of blood which fills its vessels. Changes in the volume of the cerebrospinal fluid can hardly occur rapidly, and the increase in the amount of blood, which fills the cerebral vessels, is probably connected with a decrease in the volume of the cerebral tissue (including the glia and the intercellular substance) produced by a change in the state of its colloids. It is, therefore, probable that the nervous influences on the cerebral vessels are closely connected with the nervous influences on the cerebral metabolism".

Comment on the Bykov Textbook

In the Bykov textbook of physiology in the chapter on cerebral circulation, I read that the brain arteries cannot pulsate because the cranium is rigid. On this I comment that the state of ossification of the cranial sutures only appears at the end of growth.

B.Klosovsky found that previously described cerebral "pulsations" only arise after trepanation of the skull. I found at my self-trepanation in 1965 that the pressure came back in the cranial contents, which feels like a headstand. The increase in the brain blood volume equals that produced by standing on the head for fifteen minutes.

The textbook explains how due to the rigidity of the cranium changes in the amount of blood contained in the cerebral vessels are possible only during corresponding changes in the amount of cerebrospinal fluid. Using a method that fills the brain capillaries maximally within two minutes, I perceived under the skin of the back the presence of warm cerebrospinal fluid that had been pressed out along the nerve channels on both sides of the vertebral column. The effect of this increase in the brain blood volume on the psyche lasted for five hours. In this period about ninety millilitres of cerebrospinal fluid is reproduced.

The textbook describes the reflex mechanism that regulates the function division in the brain:

"The blood is continuously redistributed in the brain because of the dilatation of the arteries and capillaries in the portions of the cerebral cortex which are in a state of vigorous activity at the given moment and because of the simultaneous decrease in the lumina of the vessels in the portions of the cortex, which are at this time in a state of comparative rest (and, probably, in the portions of the cortex which are in a state of certain inhibition). B.Klosovsky observed that stimulation of the vestibular apparatus led to a dilatation of the vessels of the pia mater only in the parietal region of the cortex which receives the impulses from the stimulated receptors, whereas the vessels of the membrane of the occipital zone were at this time somewhat constricted. Contrariwise illumination of the eyes leads

to dilatation of the vessels in the occipital portion of the cerebral cortex".

I discovered that the reflex mechanism regulating the function division in the brain provides a priority to the functions for word-communication. The mechanism that maintains this priority also appeared to have all the properties of the conditioned reflex. On deconditioning it a psychotic reaction occurs. After trepanation it appeared impossible to provoke this reaction. Thus trepanation cures psychosis.

There are two indications for the application of trepanation:

1. The cure for psychosis.
2. For the adult who wants to increase his brainbloodvolume.

To avoid the error (in arte) of trepanning a skull inside which expansion is already present as a result of a trauma in youth (a wrongly operated person who states that he has not noticed a single effect would find general belief, as opposed to those who witness an improvement) the operation must always be preceded by an examination to see whether arterial pulsations already exist (i.e. the person is Klovovsky positive).

Considerations on reading "The Psychedelic Experience Based on the Tibetan Book of the Dead"

I try to avoid confusion in my scientific work by restricting myself as much as possible to the use of words that have an undisputed meaning.

Besides that however I do see the truthcontent of esoteric writings. But in this book too I come across the great objection I have always had against esoteric lecture, i.e. that the key, telling which word actually stands in the place of another word, is not given with it. True, in the foreword it is pointed out that what is described as taking place after the death of the individual in reality takes place within the extent of his consciousness during life. So the word DOWN has been replaced by the word DEAD, the word HIGH by the word LIFE. But if you, as the reader, think that now you will be able to understand it, you are wrong for still it appears not to make sense. I read in poetic words the stages into which the LSD-experience can be divided. From the time when I was still taking LSD without sugar and vitamin C every now and then I remember what a task it is, essentially for a beginner, to adapt his behaviour to the totally new situation. Whether at the time my personality did improve, I cannot trace anymore; but I do believe that many personalities can come out of their isolation more easily if they too take a sugarlack-trip ONE TIME. For that, Leary's directions in the book can be valuable.

As the knowledge of the difference in specific gravity between blood and cerebrospinal fluid is required for complete understanding of the mechanism of brainbloodvolume, I must assume that before our time nobody has ever known the mechanism. On the other hand, thousands of trepanned skulls, that have been found everywhere on earth, indicate that the advantage of having the third eye (in the sense of the expansionhole in the skull) has been well known in former days, even though it must then have been ascribed an esoteric meaning.

He who asks himself whether such a radical change of the given anatomy is justified may consider that here it concerns an (at present rational) correction to the disadvantageous result of the last step in evolution (the erection on the hindlimbs).

Looking with the new knowledge at the theme of reincarnation and that of mythology we see that reincarnation means that every now and then the adult reaches full consciousness and then becomes conscious of the development of his personality in up- or downgoing line, whereas third eyers are proud of the "high level they have reached". In mythology we find again the mutual relations of the rare personalities, as they constantly reappear, in all cultures, in all places. The nature of the relations between the rare personalities and of what they bring about has been made out for our time in our language by Freud and Jung. The selection that takes place inside the "ingroups" rests apparently on mutual attraction and repulsion of the personalities, but in reality it is based on mutual recognition of the third eye. The mythology describes in detail how this elite behaves.

The classical devil-figure or the snake (the only animal with a non-ossifying skull) indicates the part that many third eyers come to play, if they want to help the fellowman in expanding his consciousness. Such a trip-veteran, who does not know himself what an advantage he has over most grown-ups, truthfully testifies to the staying out of harm with his frequent use of non-toxic consciousnessexpanding drugs. If this prophet now takes the view that what counts for him also counts for others then his example forms a threat to his surroundings, for while he gets results he will leave a trail of mentally disturbed persons behind him.

In the present-day circumstances, I consider what is indicated is in the first place study and teaching of the mechanism of brainbloodvolume and in the second place utilization of the knowledge by the application of trepanation. Only after that can allowing the use of non-toxic drugs under certain circumstances for certain persons be considered.

The action of these drugs is constriction of veins. As a result of this, the filling of the bloodcapillaries increases. With the filling of the braincapillaries about ninety milliliter of cerebrospinal fluid is pressed out of the central nervous system along the nerve-channels, to be discharged via the lymph. As a result of the increase of the surface over which the brain is now in contact with the blood the brainmetabolism increases considerably. Herewith so much more glucose is withdrawn from the blood, that the bloodsugarlevel soon reaches the lower border of the admissible, and then by reflex adrenalin is secreted which sees to it that new glucose is injected into the blood from the liver. After a few hours the whole supply of adrenalin is exhausted. Now the glucoselevel falls to a still lower level, the condition of "sugarlack" has set in. To avoid the risks of suspending the adrenal reflex one must take every few hours the rawmaterials for the adrenalinsynthesis -vitamin C in tabletform plus the additional factors in the form of fruits. After a few hours the veins relax, the pressure in the cranial cavity falls and in the course of five hours about ninety milliliter of the brainbloodvolume drops out of the skull to be replaced by the lighter cerebrospinal fluid. On the use of mescaline an equal increase in the brainbloodvolume appears as on LSD-use. Moreover mescaline acts in such a way that continuous glucose is released from the liver. By smoking a good quality of Indian hemp one can reach up to halfway the LSD-level.

The Tibetan Book of the Dead, clearly written for an elite that is educated in the "humor of the false bottom", till now offered little risk of laymen going to do irresponsible experiments on the ground of the reading of it, but in our time it brings a new danger along with it, namely that it can give the impression that the dangers of LSD are situated in the events during the "trip" itself. But as it rightly says, the trip counts for safe, provided that it be taken under the prescribed circumstances. The danger threatens when the layman has once lifted a tip of the consciousnessveil, namely if he would continue the experience on his own, for then ego-transcendence could pass into ego-loss of longer duration. That this in "inexperienced" and "weaker" personalities can lead to adaptation disorders is known to the authors of this book; less well known is that a part (I estimate 10%) of the people gets allotted in youth with a permanent expansionwindow in the skull by accident operation, whereas in the majority, that does become adult, the expansion and therewith the pressure inside the cranial cavity ceases to exist when the cranial sutures seal at the end of growth (between 18 and 22 years old) after which the brainbloodvolume decreases and consciousness is limited. Those in whom expansion continues cannot lose their ego more than temporarily; as the adult state does not appear in them, they cannot judge the consciousnesslevel of the adult. But the individual who becomes adult notices that an irresistible force exerts its influence on him, that his involvement with reality decreases and his grip on the course of events becomes weaker. Thanks to the ego, consciousness is maintained in in the talking- and in the listeningcentre at the cost of consciousness in the rest of the brain. The force of the ego is dependent on the energysupply. By prolonging the duration of grave glucoselack in the blood the power of concentration of the ego weakens and the adult cannot even maintain clear consciousness in the - pea-size - talkingcentre anymore.

With good care the patient can in practice recover quite considerably, but he can only be really cured by restoring expansion to his cranial cavity. Now medical science has alas not yet come so far as to perform trepanation in order to revitalize the adult (I estimate the increase in the brainbloodvolume brought about by trepanation to be one third of that by LSD) and to cure the psychiatric patient (organic abnormalities excluded). As long as this arrears in the official knowledge lasts therefore I can recommend everyone to be careful with his ego and in all circumstances of expanded consciousness keep the sugarcontent of his blood normal by keeping eating sugar and vitamin C during the whole trip and drinking some freshly pressed oranges every now and then to stay in good condition.

H.B.Huges.

Letter to the reader

I will try to make clear how very important for health my discoveries are.

I started studying medicine with the intention of finding a cure for mental disease. I found this in the form of skulltrepanation. As a result of this the brainpulsation, that got lost with the ossification of the cranial sutures around the age of twenty one years, returns, and the greater strength of mind of youth is restored. According to my estimation, in 10% of grown-ups the strength of mind is retained, as a result of contracting a hole in the head in youth. They cannot know about which loss I am speaking because they have never become adult. The adult can

experience what force can be gained by standing on his head for ten minutes or by application of another yoga-exercise.

I hope that within a short time help can be offered to a good friend, who has already been taken into a psychiatric clinic several times now. He knows himself that he can only be cured by trepanation, but his doctors do not want to help him for they do not see the reason. For that it is first necessary to take note of my findings and for this repeated studying of my complete work is required. The mainwork - the scroll - is sold in order to be able to found a clinic where the third eye is granted to every adult who wants it. Once a large number of doctors understands the use of the application of trepanation everybody will be benefited.

We live in a time with greater possibilities for good than ever before and everyone of us can contribute to realizing them.

With cordial greetings,
H.B. Huges.

Copied from Moksha, psychedelic bulletin, nr.7, 1968.

THE SECRETS OF THE GOOD TRIPPER

Safety measures with the use of hashish and of LSD

Richard Hÿbner

This article concerns the physiological action of hashish and of LSD. The theory, which is published here, dates from 1962, but encountered at the time the disbelief of the medical profession. The American textbook of pharmacology of the year 1966, however, contains indications that go a long way in the same direction. Worth mentioning are the adrenalin-like effects, which can appear after the use of LSD, such as pupildilatation, raise in temperature, the erection of the hairs, raised bloodsugar, heartacceleration, an increasing attention of mind and facilitation of involuntary reflexes (1). The significance of adrenalin during the trip will be gone into in detail presently.

Measures with a session

It will strike the newcomer on the "scene" that the experienced tripper always has glucose and other candies at hand. Maybe once he also has asked himself whether there is a relation between the sweet delicacies, that are consumed in the East, and the use of hashish. Everybody can establish that "smoking" stimulates the fondness for sweets. This could indicate the glucoselevel of the blood falls. But why the experienced traveller considers not only sugar, but also fruits indispensable and why he swallows a little tablet of vitamin C every few hours during the trip (with hashish a few tablets a day), those are questions that the novice does not know now to answer at once. Let us try to explain it to him.

Vitamin C (ascorbic acid) is the main raw material of the hormone adrenalin. Additional factors are found in fruits, but not in the synthetic preparation. By the use of vitamin C, that is available in tabletform, and of fruits (underlined because it is forgotten rather often) the tripper insures himself against running out of adrenalin. Now what has this to do with his spiritual well-being? This, that adrenalin is the hormone which is responsible for glucose being released into the blood by the liver. Roughly said: without adrenalin no glucose (unless it comes from continuous outside feeding with glucose or sugar, which is split into glucose after ten minutes, or fish, from which the glucose is liberated only after twenty minutes. Fish is mentioned here separately because it is converted into glucose the fastest after sugar and because it is something else again than all that candy). Without glucose however the blood does not contain the require food for the brain, which, as we will see, can have particularly sad results.

Principle hypotheses

Not only the glucoselevel of the blood, but also the quantity of blood in the brain (the brainbloodvolume) must be

studied if one wants to understand the peculiarities of a trip. The principle hypotheses are the following. They were for the first time formulated by BART HUGES (2).

1) Brainbloodvolume

With the use of hashish and of LSD, according to this theory, the volume of blood in the brain increases (the streamvelocity and the minutevolume do not change, only the brainbloodvolume does). This takes place because hashish and LSD constrict the (neck-)veins(not the arteries, but the veins). This constriction of the veins is visible on the back of the hand about half to one hour after the swallowing of LSD. Moreover it can be felt internally in the neckveins (you feel that "the reins are tightened"). It is noticeable too that adrenalin, which is released later, constricts the veins (but by fits and starts, each time about 2 minutes), so that the process that is started by the psychedelic drug, continues itself.

The arteries continue pumping ordinarily, but the veins, the drains of the blood are narrower. The result is that the blood in the braincapillaries is dammed up. Those small vessels, the number of which amounts in the millions, swell up. The blood, that contains the nutrition of the brain, reaches places where otherwise only a low level brainmetabolism takes place. If one assumes that consciousness is equal to brainmetabolism over a certain level, then one can now realize why under hashish or LSD unconscious notions can be made conscious. Every smoker or swallower knows that he can wake up forgotten memories again in this way.

It must be pointed out that the psychedelic effect is not only dependent on chemical means. Standing on the head too has the effect of increasing the brainbloodvolume so that one gets "high". Another method is to constrict the neckveins with the fingers. There is no single reason why those methods would be better than the chemical, only they are less comfortable.

2) Glucoseconcentration

Because the brainbloodvolume in the brain rises, the metabolism of the sugar (glucose-combustion) increases. The user feels fine. He is "high". After about 3 hours however (on a LSD-trip) this accelerated combustion results in "sugarlack" ("sugarlack" is the state of extreme glucoseshortage in the blood, which appears after the adrenalin supply is exhausted). The user gets confused ("freaking"). He is in a state of diminished critical faculty, in which he can do crazy things. In the meantime however the brainbloodvolume decreases and through that retards the glucosecombustion. The shortage is past again after about 5 hours. Eight hours after the beginning of the trip the glucosecontent of the blood is normal again.

It is remarked that this is a description of a trip w i t h o u t s a f e t y m e a s u r e s. If after that trip is over another dose was to be taken, then a state of prolonged sugarlack would rise. The danger of this is that a part of the personality (namely the "I") is damaged ("flipping"). The ego is not proof against prolonged sugarlack. A precise theory exists why this is so, as to what are the causes for one's becoming a "zombie". The hypotheses concerned, which come from BART HUGES as well, cannot be gone into here. Repeated is that "freaking" relates to the state of sugarlack; "flipping" however to the state of prolonged sugarlack.

If safety measures are taken (vitamin C plus fruits), then the tripper does not get through his adrenalin and consequently the brain is sufficiently fed with glucose continuously. The traveller stays "high". He does not get half dazed ("stoned"). As no sugarlack appears, "freaking" stays out. The danger of "flipping" is fully excluded.

"Skull high on sugar" is an expression that indicates that the brainbloodvolume is maximal (no more blood can be added) and that there is no glucoseshortage. It is the state of bliss. The face of the smiling Buddha. "Skull high", but then without sugar, causes, as now must be clear, a "bum trip".

Testingmethods

If the hypotheses made are correct, it is not difficult anymore now to realize why hashish and LSD on the one hand have such fierce opponents, but on the other also such enthusiast advocates. Both sides are looking, without knowing it themselves, at the glucosecontent of the blood, but the opponents do this from the negative (zombie-) and the advocates from the positive (Buddha-) point of view. The struggle can continue going on forever as neither of the two groups desires to understand the true facts. An indication, that for the verification of the theory maybe of importance, is the behaviour of proofpersons under m e s c a l i n, the molecular structure of which resembles that of adrenalin and noradrenalin. It is not impossible that this drug, on

which ALDOUS HUXLEY made his trips and of which no accidents are mentioned in the literature, directly withdraws the glucose from the liver, without adrenalin being used for it. If this is so, the named safety measures (vitamin C plus fruits) are necessary with the use of hashish and of LSD, but not with the use of mescaline. Another point concerns the reaction of diabetics. The reason to pay attention to this here is a question in the medical column of Hitweek. The asker, who stated that he was a diabetes patient, informed that after the smoking of hashish he got symptoms that made him think of the results of an overdose of insulin.

Here we come to familiar ground for the medical man. On behalf of the non-medical man it must be mentioned that insulin is a substance that represses the glucose from the blood into the liver (so has the adverse effect of adrenalin). An excess of insulin causes sugarlack, which can go along with psychotic symptoms. Investigation should be made into whether this state subjectively corresponds with the state of glucose shortage under the influence of hashish, which according to the letterwriter is indeed the case.

The experiences of the tripper form the guide in the research. In relation to this it is a pity that so few doctors know the consciousness changes, it deals with here, in their own experience. A great number of phenomena, that here are not raised for discussion, could medically be explained rather simply. E.g. the onset of the deep breathing after the use of LSD. Or the getting dry of the mouth, by which the user hallucinates maybe that his mouth is full of dust. The tripper usually does not have physiological knowledge at his disposal. He does not recognise the shivering and trembling, that can follow on the use of LSD, as the action of adrenalin. Without help he does not come further than the Greeks, who spoke of the "mysterium tremendum", the "horrible secret". May this article attribute to his being saved from the hands of false priests.

Summary

The psychedelic drugs are praised by the one, vilified by the other. In this article the supposition is expressed that one and the same factor: the glucose content of the blood (in connexion with the brain blood volume) is at the base of this diverging judgment.

Maximum brain blood volume without glucose shortage ("skull high on sugar") goes along with a state of ecstatic delight. Sugarlack produces confusion ("freaking"); prolonged sugarlack insanity ("flipping"). It has been described how the psychedelic experience can be made safe by the use of vitamin C and of fruits and what this is based on (adrenalin).

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THE TABOO ON THE SOUL

by Richard August Hübner

About the author: Richard A. Hübner was born in The Hague, Holland, in 1924. His father was a German writer and an expert on Hieronymus Bosch. His mother studied chemistry at the University Libre in Bruxelles before World War I. One of his ancestors was the Flemish doctor Andreas van Wesele (Vesalius), who in the 16th century broke the taboo on dissecting the human body and who has become the founder of modern anatomy. Hübner studied philosophy with psychology as major subject at the University of Groningen. He graduated cum laude (1949). He is member of the board of the Foundation for Independent Thinking (F.I.T.) and lives in Amsterdam where he teaches courses in the knowledge of the mechanism of brain blood volume.

Introduction

I came to my present study through the use of psychedelic substances. I experimented on myself with marihuana, hashish, mescaline and LSD. These substances are non-addictive, as contrary to, for instance, tobacco or opium. I read everything I could find on the subject, but I never found a satisfactory explanation of the mechanism of consciousness expansion. In the summer of 1968 I met Bart Huges. It was from then on that my insight started to develop. One of the difficulties was that I had to unlearn a lot of pseudo-scientific information on the subject. I will

now try to explain Huges' news to the reader. I must warn you that you are in for a piece of tabooed literature. You can break the taboo only if you read the article carefully and apply your critical wit to it. If you succeed, I can guarantee that you will find your effort abundantly rewarded.

The article is divided in two parts. The first part concerns the functions of the brain. The second part deals with the improvement of these functions. The totality of the brain functions will be called the soul. I must point out that I see no reason to attribute the idea of immortality to the soul (the totality of the brain functions). My viewpoint is a physiological one and has nothing to do with "metaphysics".

Scientific model

What I'm going to explain is based not on a normative, but on a scientific model of man. The basic idea is that we are not "men", but monkeys, who, in the last second of evolution, have climbed down from the trees and who, unlike other apes, have learned to walk on their hindlegs instead of on all four. Another difference with our cousins is that we have lost our hair (at least most of it) and have acquired the ability to "speak", that is (in our culture) to conjugate a 27-fold variation (the alphabet). A hairless, babbling monkey is what "man" is. In this article it will be demonstrated that our erect posture has an unsuspected disadvantage (the advantage of walking erect is clear enough. For instance, it frees the "hands" for action). The disadvantage will gradually dawn upon the reader. It is that the monkey has lost part of the volume of blood in his brain to the law of gravity. In the second part of the article I will explain how this disadvantage can be corrected by a simple operation.

To understand the following you need a certain knowledge of the human body, in particular of the vascular system. The new discovery is this. The action of hashish, LSD and the other consciousness expanding substances must not be sought in the braincell, but in the ratio between the volume of blood and the volume of fluid (liquor cerebrospinalis) in the brain. I do mean "volume" and not "flow".

"Volume" is the cubic content of the lake; "flow" is the stream that enters it (the arterial flow). The vascular system consists of 3 types of blood vessels: arteries, capillaries and veins. The walls of arteries and veins are elastic. You don't have plastic tubes in your head, but resilient, living vessels, that can contain a larger or a lesser volume of blood. When the capillaries swell on the heartbeat, they drive out a certain amount of the cerebrospinal fluid. This fluid does not feed the brain cells, but fills the space that otherwise would remain open. The fluid is produced and absorbed in the brain according to need. Don't be led astray by doctors who speak about the blood vessels in general. Don't be misled by that habit when discussing this article with a physician. Make sure what he means: arteries or capillaries or veins. Without this basic distinction you cannot understand the process of consciousness expansion.

One more piece of information is necessary. The central nervous system (the brain and the spinal marrow) is fully enveloped by a membrane. This membrane is elastic. It swells up with the capillaries (systolic action) and springs back after the heartbeat (diastole). The membrane fits closely to the inner side of the bone (the skull and the dorsal vertebrae). The question then is: how can the capillaries swell, because in order to expand they obviously need room. Huges gives this answer. Up till the age of 21, when growth is completed, the skull opens and closes in the sutures. This can be seen under a microscope. With a baby, you can see the brain swell and shrink in the fontanel. The tragedy of the monkey (erect, hairless) starts after the sutures have grown together. In the adult animal, the membrane cannot expand anymore. As a consequence, pulsation stops. The capillaries, unable to swell, retain their smallest diameter. This means a decrease in the volume of blood and, therefore, an increase in the volume of cerebrospinal fluid. The result is: less blood and more fluid. We shall go into this in more detail later.

In the skull of an adult person, the sutures are no more than a line of union in an immovable articulation the person has "died". To resurrect him, an opening in the skull must be made to give room to the membrane so that it can function again as a resilient skin around the brain. The operation is called trepanation. Pulsation is restored and the ratio between blood and liquor is again as it was before. Unfortunately, medical profession has refused to study this discovery and so trepanation cannot be obtained unless for urgent reasons (e.g. brainsurgery).

The Large Mechanism

The "Large Mechanism of Brain Blood Volume" is a concept that refers to the fact that the total amount of blood in the brain can be increased. It is obvious that an increase in blood volume improves the functioning of the brain, for

blood contains the energy (in the form of glucose) on which the cells feed (plus the oxygen for the combustion). Less fluid and more blood means an increase in brain metabolism.

How can the total volume of blood in the brain be increased? Several methods are available. One - not the most comfortable - is to use the law of gravity to your advantage by standing on your head. As the capillaries expand (driving out some of the liquor) and their surfaces increase (improving brain metabolism) you get "high".

Awareness, spontaneity and intimacy increase. Another method is to constrict the veins of the neck (the vessels through which the blood is discharged from the head). You can learn to do this with your fingers, but again the method is not particularly pleasant. How come that the blood volume in the head increases when the neck veins are constricted? The following illustration may be helpful.

Suppose you turn on the tap in the kitchen. The water comes out of it in a constant flow. You cannot, of course, narrow the diameter of the drain pipe with your fingers as it is not made of living tissue, but suppose you could, what would happen in the sink? Right, the volume of water in the sink would mount until a new equilibrium is reached. Let's go back to the subject. The bloodflow remains constant (the arteries pumping the blood to the brain can be compared with the tap), but the veins are constricted. The blood, like the water coming from the tap is "pushed back" by the narrowed "drain pipes". Since the blood has to remain some place it swells the capillaries. The volume of blood in the brain increases until a new equilibrium is reached with the cerebrospinal fluid.

The veins can be constricted by chemical means. Most powerful in this respect is a hormone that is called adrenalin. But psychedelic substances, too, constrict the veins. About one half to one hour after taking a sufficient quantity of LSD the veins on the back of the hand are visibly constricted. In some cases, they almost disappear from sight. Anybody can observe this. If you take LSD yourself, you can feel the effect in the veins of the neck. It feels as if "the veins are tightened". It must be pointed out that there are no nerves that lead to the muscle tissue of the veins. They cannot be constricted by neural impulses like the walls of the arteries. It is the substance in the blood (adrenalin; acid) that narrows the diameter of the vein.

Let's reconsider what has been said about the skull. After 21 it is rigid. The sutures are closed. The blood is in the blood vessels, the liquor in chambers in the brain ("ventriculae"). Between the solid structures (the cells) there is no air. The blood contains the nutrition (glucose) for the cells. The liquor has no other function than to fill the empty spaces. Its volume goes up when the blood volume goes down, and vice versa. At this point you need some new information. Some of the liquor can be pushed out of the system through the sheaths in which the nerves leave the central system in the back. But to push the liquor out, you need pressure. It won't leave the system if there is no pressure. We have already seen that in the skull of the adult the capillaries cannot expand for lack of room to do so and that, therefore, there is no pressure in the adult skull (this has been confirmed by experiment). LSD does not restore expansion of membrane around the brain. It does not restore pulsation (pressure). What does it do then?

The arteries that convey blood to the brain (about 1 1/2 liter of fresh blood per minute) do not change. But the neckveins do. They constrict under the influence of acid. The capillaries swell and remain inflated as long as the "drain pipes" are constricted. The liquor cannot be compressed, but it can be driven out and this is exactly what happens. Molecule after molecule of cerebrospinal fluid is driven out of the central nervous system. You may feel this as a warm feeling in your back when you are tripping on an adequate dose (it feels a bit as though you were laying on your back in warm urine). It has been roughly estimated that under the influence of LSD about 90cc of liquor is temporarily replaced by blood. The result is an increase in brain metabolism (combustion of glucose). Subjectively, this is felt as "getting high".

A possible experiment would look as follows. Take two monkeys, make them sit upright and mark the liquor cerebrospinal is by making it radioactive. Then give mescaline or LSD to one of them. Measure the radioactivity under the left collar bone (this is the place where the cerebrospinal fluid, pushed out and carried on by the lymph, enters into the bloodstream). Radioactivity will increase in the one monkey as compared to the other one. Because of the radioactive marking the experiment cannot be done with humans. However, the monkeys would not need to be sacrificed if one medical doctor ventured to stand on his head and draw his own conclusions.

The estimate (90 cc) is based upon the following. It takes about 5 hours to come down from the top of an LSD high (the whole trip lasts about 8 hours). Now the average rate of formation of liquor cerebrospinalis has been estimated at 0.3 cc per minute (see FULTON, J.F. A Textbook of Physiology. Philadelphia: Saunders, 1955, p.960). So it can be assumed that $5 \times 60 \times 0.3 \text{ cc} = 90 \text{ cc}$ is the difference between "top-high" and the "normal" state of mind of the adult person (90 cc fluid instead of 90 cc blood). Acid does not push out all the cerebrospinal fluid (sometimes estimated at 180 cc), but rather a part that obviously

is superfluous and whose presence in the brain goes back to our erect, vertical posture.

Brain metabolism

The neck veins constrict. The capillaries - millions of them, but you can see them only with a microscope - swell up. Fluid is pressed out. Its volume is replaced by blood. In other words, the volume of blood in the brain ("brainbloodvolume") increases. What happens when the brainbloodvolume increases is this.

As the surface of the capillaries increases, the release of glucose from the blood into the braincells - through that surface - increases, too. With the inflated capillaries comes an increase in brain metabolism. More glucose is burned up by the brain cells than before. Another effect of capillary expansion is a better washout of the waste products of brain metabolism. These are the physiological secrets of "getting high". Remember that it centers around glucose combustion and not around oxygen supply. Also, do not confuse blood volume with blood flow. Everything that has been explained here has to do with changes in the volume of blood in the brain (venous constriction and capillary expansion). Nothing was said about changes in the blood flow (the volume of fresh blood pumped in per minute in the brain by the arteries).

You are "high" only as long as there is sufficient glucose "sugar" in the blood. It is obvious that when more glucose is burned up the percentage decreases. On "sugarlack" the person gets "stoned". It may happen that he forgets what he was going to say or that he does not remember what he has just said. When the glucose level falls down below a certain mark, a hormone is released from the adrenal glands (the hormone is named adrenalin). It is released by a reflex and automatically enters into the blood. Adrenalin fetches sugar from the storage in the liver and puts it into the blood. Up goes the glucose percentage. The person recovers. He is "high" again. Should the percentage hit the ceiling, then another hormone - insulin - puts the excess glucose back into the liver.

As any textbook of biology will tell you, adrenalin is a toxic substance which the human body produces but in minute quantities. A production of 1 gram a year is normal. Like LSD (which is not toxic), adrenalin is measured in gamma's. It is made from tyrosine. To metabolize tyrosine into adrenalin in the body ascorbic acid (vitamin C) is indispensable. Unlike rats and other animals, humans are unable (unless, perhaps, on a macrobiotic diet) to synthesize ascorbic acid in their own bodies. They must take it in from without (lemons, oranges and other sources of vitamin C). If you do not have it and if your supply of adrenalin is exhausted (on a trip, the supply is exhausted after about 3 hours), you cannot supply your blood with glucose from within. From then on (unless you supply yourself with sufficient sugar from without) you are in a state which is called Sugar Lack (with capital letters). In slang, it's called "freaking". The higher brain centers (the centre of speech, for instance, which, to function properly, needs a vast amount of glucose) do not work well anymore. You lose control. However strange and interesting, this is not a state of mind to be desired. Moreover, if Sugar Lack is prolonged over more than just one trip, e.g. when, without taking vitamin C, you drop another dose, the Ego is threatened. Ego loss and insanity are the same thing. In slang, it's called "flipping".

The other centers, that can do with far less glucose, continue functioning. The "tripper" sees reality through the eyes of his evolutionary ancestors. The Old Consciousness. Reality in terms of capture and prey. The vision of the archetypes. The American psychologist Leary has called attention to those states. However, the physiology behind it and the risk involved (ego loss) have escaped his attention.

Safety Measures

I have said that, with an LSD-trip, the supply of adrenalin is exhausted after about 3 hours. To make the experience safe, you must swallow 2 tablets of vitamin C (50 mg each tablet) about every 2 hours. Also do not forget the C when smoking pot. But remember that the only absolute safeguard against "flipping" is trepanation.

An acid-trip starts with venous constriction. Once the process is started, the adrenalin, that is released, takes over (adrenalin constricts the veins as well, but by fits and starts, each time about 2 minutes). After 3 hours (see before) the veins get wider again: the brainbloodvolume slowly decreases and the glucose-combustion slows down to the ordinary rate. The tripper is coming "down" ("re-entry"). Finally the glucose-content is normal again.

Against prolonged sugarlack the ego of an "adult" is not proof (presently it will be said what the "ego" is) Chain tripping (LSD) or chain smoking (hashish) must be strongly warned against without safety measures (vitamin C).

The people who do this are relatively rare, but the risk is serious enough. It is the risk to become insane.

So far about the Large Mechanism. It concerns the increase of the total volume of blood in the brain, with as result accelerated brainmetabolism and expansion of consciousness (getting "high").

The Small Mechanism

The Small Mechanism concerns the division of a given volume of blood in the brain. The difference with the Large Mechanism is that, with the Large Mechanism, it is the total volume that counts. How can the total volume be distributed in the brain? The muscle tissue of the walls of the arteries receives impulses of the nervous system (motoric innervation). Nervefibres run towards it (not so with the veins. The veins can only be constricted along the humoral way, i.e. by the presence in the blood of hormones and chemical substances or with the help of other techniques from outside). The arteries then constrict under the influence of impulses from the autonomic nervous system. Through this the arterial bloodsupply to certain braincenters can be restricted so that more blood is available for other centers. The blood is continuously redistributed in the brain by the Small Mechanism.

The knowledge of the Small Mechanism will explain how a person whose skull sutures have closed (an "adult") can still function on his diminished brainbloodvolume.

Sealing of skullsutures

From the biological point of view man is an upright going ape. If he uses enough vitamin C (3 x 2 tablets of 50 mg a day) and feeds himself properly, he does not have to fear for "freak-out" (loss of social conditioning), nor for "flip-out" (psychosis). The actual cause of "flipping" is that, through his vertical position, the relation between the volume of blood and the volume of brainfluid has changed unfavourably for the blood (blood has a higher specific gravity than cerebrospinal fluid).

Now when growth ends (about in the 21st year) the cranial sutures seal. This has the following consequences. When the cranial sutures are still open, there is room for the resilient brainmembrane to expand with the pulsation of the arteries. In this situation one could visualize the brain as an elastic pulsating balloon. A baby, where the fontanel is open and the pulsations are visible by the unarmed eye, is in the fortunate possession of much blood-containing braintissue and little cerebrospinal fluid. The adult on the contrary, in whom the last possibility for expansion in the skull (namely in the sutures) is lost, does not have this fortune anymore. Since the investigations of the Russian doctor Klosovsky (see Prof. Dr. K.M. Bykov, Textbook of Physiology, Moscow, p.178) we know that the adult has no pulsepressure in the brain. This is the result of the closing of the skull sutures. Thereafter the previously mentioned pulsations of the brainmembranes are not anymore possible. The pressure falls away. (With pressure is meant the difference between the systolic and the diastolic pressure). Through that the relation brainfluid/brainblood increases in favour of the brainfluid. No more fluid is pressed out of the system. The volume of blood decreases. The child becomes, the more he approaches the adult age, slowly but surely "hypnoid": he does not anymore have the bright mind of former days. ("hypnos" means sleep) Awareness, spontaneity and intimacy have vanished.

Once more back to the ape. The erect monkey, who does not know that his "fall" (loss of brainbloodvolume) has a purely mechanical cause, hangs after the end of growth as it were on his nails over the abyss (of insanity). That he does not tumble into it right away rests exclusively on the existence of the Ego (a new "being" in evolution, see next paragraph). If the ego is lost after the 21st year - e.g. as a result of prolonged tripping without vitamin C - the patient can only be cured by trepanation, i.e. expert skull-trepanation. Trepanation restores pulsation. Pulsation restores volume.

Origin of the ego

The reader will perhaps be overburdened by all this new information. He should try to read this article a number of times. We have described the Large Mechanism (the increase of the brainbloodvolume). The Small Mechanism has been discussed (the distribution of the available brainbloodvolume). I will now outline the origin of the ego,

according to the studies of Huges.

Let us see what happens after birth. The newborn baby gives expression to all his impulses. He is in the complete possession of all his brainfunctions (the soul). The fontanel is open and one sees the brain pulsate. Pulsepressure in the brain. "Klosovsky-positive". Favourable relation between bloodvolume and brainfluidvolume. Now the small child learns that, when it hears the voice of the mother, that says e.g.: "eat", a certain lustsatisfaction appears. It relates this satisfaction to the sound of the word. Finally it opens its mouth automatically when it hears "eat". When the child starts to jabber, it forms the formula ("eat") and notices his conduct to be changed (it opens its mouth). It repeats the magical formula a second time and in the end it discovers that with the formula it controls its own behavior. What a glorious moment, the discovery of the magical formula to choose your own conduct. But the child cannot yet say "no" to its own message, yet this is already another question. The origin of the Ego indicates that a closed circuit has arisen between the listening centre in the brain (the centre discovered by Wernicke) and the centre of speech (discovered by Broca). This must be seen as follows. The recognition of the word ("eat") was attended with concentration of brainblood in the listening centre. It was, by the simultaneous appearance of blood in the centre of speech (when the word was spoken by the child itself), conditioned to this last concentration. Every word that is recognized, henceforth concentrates blood in the centre of speech.

By this blood concentration and ensuing metabolism consciousness appears in the speaking centre until it can form a next word, which again is recognized by the listening centre, etc. The meaning of the word do not matter for the ego, if only it is recognizable. If consciousness is not maintained it is because the blood contains too little energy (glucose) for the centre of speech. The grip on the Small Mechanism (constriction of arteries), through which blood is concentrated in the centre of speech is then released to the extent that the grip (the ego) is no longer there. This is called Loss of Ego. If that happens, the words a person says do not have to do with his conduct anymore. He has lost the control over himself.

Because in the adults there is no pressure in the skull (not enough blood), they can, if they lose the Ego, not be reconditioned to their old level. For the ego originated when the relation between the volume of blood and the volume of brainfluid was optimal (in the early years of childhood). The only cure is to restore pulsation in the skull.

Summarizing the following can be said. The ego is a "being" that after the first year of life takes command progressively. It's development is completed after the child has learned to read and write. After that nothing new can be added to the knowledge of the ego. It is a closed circuit between the centre of speech (as big as a pea) and the listening centre (as big as a grain of rice). The ego "feeds on" word recognition.

THE TABOO ON THE SOUL (end)

Man, according to the model that is used in this article, is an upright walking ape. He has a "soul" (the totality of his brainfunctions) and an "ego" (a closed circuit between the centre of listening and the centre of speech. The rest of the brain is called the "it". Its function is the "self"). In the first part it was said that the volume of blood in the brain can be increased (the Large Mechanism of of Brainbloodvolume) Further it was explained how the available volume of brainblood is distributed (the Small Mechanism). Lastly the origin of the "I" was sketched. It was pointed out that man, after the end of growth (21st year), is in the position of someone who, because the pulsepressure in his brain is absent, hangs above an abyss. The "loss of the ego" implies that he tumbles down into psychosis. The three basic forms are schizophrenia, maniac-depressive psychosis and classical epilepsy.

Loss of the ego

The closed circuit between the speaking centre and the other centers for word-communication means that the erect monkey can keep his behaviour in his own hand. This holds after he has become adult and the "beat" has fallen out of his brain. The adult does all he can to keep blood in these very centers, but this must happen by "squeezing it out" of other parts of the brain. For the total volume of the brainblood is after the 21st year insufficient to supply all centers equally. There is a surplus of cerebrospinal fluid and a shortage of blood. The adult - the "hypnoid" - "squeezes" by means of the Small Mechanism blood from the back part of the brain, where the eye-sight is located, to the centers for verbal communication. Also other centers, e.g. the sexcentre, are "pinched off" for the sake of the bloodsupply of the centers for speaking, listening, reading and writing.

Under influence of a consciousness-expanding drug, e.g. LSD, an adult sees the world light up. The one interprets the radiant colours as paradise. The other is frightened and panic-stricken. What happens is that the original sensibility is restored. Through the constricting of the neckveins - the Large Mechanism - the brain receives again sufficient blood to function at top level.

Much more yet happens. The personality, in the meantime through glucose-shortage incapable of making itself heard with the help of the speaking centre, reveals itself around the ego. Unconscious contents appear to light. The person concerned can give the impression of hallucinating. He is in the twilight state between "down" and "high". He is "stoned". It is important to note the next definition. Consciousness is brain metabolism over a certain degree. The reader may realize that if the brain metabolism (glucose combustion) increases, consciousness expansion must be the inevitable result.

Glucose-shortage ("sugarlack") threatens the continuation of the ego. The recognition of the word - the coin in the automat - concentrates blood into the speaking centre, but when the blood contains insufficient nutrition (glucose) the reflex is deconditioned. To understand this we must think of the experiments of Pavlov. A dog to whom one, when the dinner-bell rings, gives no food, finally does not react anymore to the impulse (the bell). The conditioned reflex - salivating when the bell rings - is deconditioned. The circuit is broken. The same happens when the recognition of the word (comparable to the ringing of the dinner-bell) does not go coupled with the offering of glucose (comparable to the food) to the speaking centre (comparable to the stomach of the dog). The concentration of blood in the speaking centre simultaneous with the recognition of the word in the listening centre is at an end. The ego is not there anymore because the reflex, that maintained it is deconditioned.

With the present treatment of such cases one is already glad when the patient (on tranquilizers) succeeds in performing simple manual labour. What must be seriously investigated is the following.

Trepanation

With the peoples in Antiquity and also with the priest-caste in Peru and in Tibet it was customary that the initiated were trepanned, i.e. that an opening in their skull was made whereby their brain could pulsate freely again. Trepanation - making an opening in the bone - was not performed to allow for an operation in the brain, but to restore the intracranial pressure. The priests however did not possess the knowledge we have nowadays. They had to make it

do with phrases such as "the liberation of the soul". This kind of phrases we find again everywhere in esoteric literature. There was a second reason yet why the trepanation-ritual was kept secret. The priests knew the nature of the ape. They knew how afraid he is of everything that has to do with the skull and with blood and brain. It is practically impossible to convince him that he needs a small opening in the skull to stay "all there" after his growth is completed. The monkey likes to aggrandize and makes himself an excessive picture of the operation. The one thinks that he will become enormously high from such an opening. The other thinks that it is an enormous hole. The next again explains it so that a hole is drilled in his brain. Nobody realizes that the principle is as simple as that of the bicycle pump. Most people are frightened and want to preferably not think about it. Let me try to explain the main points again.

Blood is heavier than brain fluid. The ape goes upright. The blood is "pulled down". Through that the lighter fluid always has the tendency to increase in volume. It does when the pressure, through which fluid is squeezed out, disappears (21 year).

But why does the pressure fall out? Because after the sealing of the skull sutures at the end of growth the pulsation stops. The resilient brain membrane can, because it is confined to the rigid skull, not swell up.

The elasticity of the membrane does not express itself anymore, because there is no expansion-possibility anymore. No longer does the membrane "spring back". If there is no expansion, then there is no pressure, which was confirmed by the measurements of Klossovsky. In the Russian textbook (K.M. Bykov, Textbook of Physiology, Peace Publishers: Moscow, p.178) it says: "Former investigators repeatedly described cerebral "pulsations" whose rhythm corresponded to the rhythm of the heart-beats. The studies conducted by Klossovsky have shown that those pulsations arise only after trepanation of the skull, i.e. creation of an opening in its osseous integuments". An American textbook of physiology (J.F. Fulton, Saunders: Philadelphia, p.956) gets rather close when it states: "With the subject sitting up, the cerebrospinal fluid pressure at the cisterna magna is approximately zero". We can infer from Klossovsky that the pressure is not "approximately" zero. It simply is not there. In other words it is zero.

The "Third Eye"

The initiated in former days could deal with "psychovitamins" without experiencing damage of it. So they could still exceed the level of the "third eye" (the opening in the skull) which they had obtained (by hashish about about 50%, by LSD even 100% of the volume, that is otherwise taken up by unnecessarily much fluid, is filled with blood). The consciousness-expanding drugs were sacred. For the non-initiated the use of them was taboo. Experience has taught that a person who, without belonging to the priestcaste (read: without being trepanned), all the same used such drugs went often insane. We know now why. Loss of ego (conditioned reflex) caused by prolonged sugarlack. The trespassers of the taboo did not know that by the use of berries (vitamin C in tabletform did not exist yet) they could have maintained their ego. Without ascorbic acid (vitamin C) tyrosine cannot be synthesized into adrenalin by the body. Without adrenalin the liver cannot give glucose to the blood. The breaker of the taboo "flips", (unless he has the third eye by hazard - contracted a hole in his skull). About the "third eyer" I am going to speak now.

Teenagers and third eyers (adults with a by hasard contracted opening in the skull) use consciousness-expanding drugs without experiencing disadvantageous results from it. Explicitly meant are the psychedelic drugs and not e.g. addictionpoisons and narcotics. The users can "freak", but a bed, a bath and healthy food set them on their feet again in a short time. "Flip-out" (psychosis) is excluded. It becomes different when the teenager becomes adult (21 year). Would he now keep chain smoking or chain tripping without taking the necessary safety measures (vitamin C), then the danger is not imaginary that he loses his ego.

The third eyer however trips on. Nothing happens to him, but he himself does not understand why. He refuses to believe that the opening in his skull could have anything to do with it. He leaves, if he uses "drugs" and also persuades others to do so, a trail of dislocated persons behind. This is not evil will, but ignorance.

The problem of Lucifer, the lightbearer, is this. How can someone show the full reality - the reality of the soul - to someone else without the latter losing his mind? The answer has been found. But how many people are clever enough to understand it? How long will it take yet to restore a truly high civilization?

Contribution to psychology

If what is written here is correct, there is reason to take a close look at psychology. Distinction should be made between the following 4 categories people of 21 years or older ("twens" and older age groups):

- a. Hypnoids (Adults)
- b. Third Eyers
- c. Trepanned Adults
- d. Trepanned Third Eyers.

The hypnoids form the big majority. They have no notion of other consciousnessstates than theirs and form as it were the lowest and least informed caste. They follow leaders and are busy as consumers and employees in the "well fare state". Most of them are under the hypnosis of anonymous powerholders.

After that come the third eyers. They are the ones that in their youth have contracted one or more holes in the skull (holes in the skull do not seal). They are aware in the sense that sufficient blood is in their brain - in as far as the vertical position allows for this - to let all braincentres function. They are less susceptible to suggestion than the adults. While they talk with others, the non-verbal signals do not escape them. The third eyers are most frequent among the independents and creatives. They stand bolder in life than the hypnoids. Experience has taught them that they are the superiors. They are not tending to reject the trepanation-teaching on the basis of prejudice (like the hypnoids, who think that trepanation is a kind of mutilation of he head), but on the basis of the fact that they feel good and would not know what more should be improved in them. With them, chance has corrected the disadvantage of the last step in evolution (the erect position of the monkey that that climbed out of the tree). The knowledge of the human soul is preserved by the priests. These are third eyers and trepanned adults, who realize the value of knowledge, a value to which the others, who think solely in money or in muscle power cannot attain.

Disbelief in the beneficial effect of trepanation - the restoration of a youthful level of brainmetabolism - may have arisen in the past from the mispractice of trepanning third-eyers. Today, this fault can be avoided. Only those who, upon measurement of brainpulsation, show that they are Klosovsky-negative (have no pulsation and, therefore, no intracranial pressure) should be accepted for the operation. Third-eyers would forever deny that the operation was of any benefit to them, and rightly so, because one opening in the skull is enough.

Trepanation is dealt with by the great medieval painter Jeroen Bosch in two of his pictures. In one, the patient, whom today we would call "flipped-out", is seated, whereas the operator, dressed in long garments, is standing behind his chair. He carries the instrument to bore the hole, symbolized by a cylindrical funnel, on his head. In the other painting, Bosch shows a fellow who has been operated upon (his head is bandaged), a group of prospects, and a doctor showing the small disc of bone (technically, it is called a rondel) cut out from the skull by the instrument.

The taboo and the law

Respectable people will have laid themselves out to type marihuana and hashish as "addicting" drugs. Their aim was to withhold the youth from the use of those drugs. The effect however is opposite. The teenagers discover that they are not addictive drugs at all and leave their tobacco smoking and alcohol drinking parents quietly to their own delusion. The real risk is that they, when they become adult fall victim to the abyss against which I have warned (loss of the ego). Some people want, probably with the best intentions, to legalize the use of marihuana and hashish. This should however be done on one condition. The user must be able to prove that he has pressure in his skull. If not, the danger exists that sooner or later he becomes a social charge. Every clinic should be able to perform the required examination with the help of the method of Klosovsky. A person who has no pulsepressure in the brain (Klosovsky negative) should be trepanned on his own request.

Again a few misunderstandings must be cleared out of the way. In the first place concerning the measurement of the pressure. Former researchers have had the opinion that there is always pressure in the brain, but their method consisted in pricking into the brain with the help of a hollow needle. Through this the pressure is automatically restored. The effect is the same as with trepanation. Expansion is created. It is important to avoid this error in arte in the future. The other misunderstanding is that drilling through the bone is a difficult and hazardous operation. In fact however it is a modest operation, where the patient if necessary stands on the street within a quarter of an hour. There is no reason therefore why trepanation should not be accepted as widely as, for instance, vaccination. The attentive reader will have questioned himself how it be possible that the observations, which were described in this article, have escaped the attention of the medical world seven years long. The one explication is that trepanation is taboo. The monkey just doesn't want a hole in his head.

The taboo, reader, simply wipes out the information

THAT
IS STANDING
BEFORE YOUR
EYES.

Something to Teach

I am thirty years old and it is three years since I got the third eye. Seven years ago I smoked my first joint. Before that my skull had sealed and my growth was officially at an end. I had been training to be a chartered accountant before going into the stock exchange, but just before taking the final exams early in 1963 I left my job and renounced the life that had been planned for me. After my first joint I knew I had made the right decision I was well educated. As a result of that by the end of it I knew how to learn. The core of my education was languages, ancient greek, latin, french and german, so the emphasis was always on the meaning of the word. Once my time was all my own I devoted the best part of it to the pursuit of knowledge. I was aware that I knew very little about myself. Gradually reading gave way to writing. After turning on my writing changed form, becoming much looser; streams of free association poured out of my brain along arm, hand, fingers and pen onto the paper. Though it was often hard to make sense of what I had written, intuitively I knew that it was not unimportant to me. It was the beginning of a self-analysis. I had to look at what I was saying. For other people it was just streams of words without special significance, but to me it was the story of my life like a jigsaw puzzle to be pieced together. I had intended to make my living by writing, but what had I to say that made any difference to anyone else?

In 1964 I was given some mescaline in Torremolinos. When the trip was over I knew that all my problems could be solved by regaining the state of mind I had experienced then. I remember feeling the miraculous ease with which one

performs a task as complicated as the articulation of a word. The only problem was how to get some more mescaline.

Soon after that, early in 1965, I heard tell of someone who had drilled a hole in his head to get permanently high. I put it down as another crankish idea and didn't think much about it. Later that year I went to Ibiza, looking for mescaline or LSD. I knew a few people who had taken acid and said it was even greater than mescaline. In Ibiza I met an American girl called Fran, in whose house stayed Bart Hughes, the Dutchman who had drilled the hole in his skull. Bart was away at the time but due back soon with some acid. I asked Fran what was behind the operation and she said it was done to increase the volume of blood in the brain. I said you couldn't increase the volume of blood without decreasing the volume of something else, but Fran knew no more than she had told me. It was not until later that I found out from Bart that there is a corresponding decrease in the volume of cerebrospinal fluid. That is the water in which the whole brain and central nervous system floats, and the decrease in its volume has no detrimental effects.

When Bart arrived with the LSD, he said, "take sugar with it, and extra Vitamin C". The three of us took trips together. For Fran and me it was our first trip. Bart brought a huge two-kilo bag of sugarlumps and some lemons and we squeezed the juice from the lemons into saucers and dipped the lumps of sugar in it before eating them. The trip lasted all night long, an ecstatic parabola, with gravity bringing the brainblood down again as the *ásun* was coming up.

The next day I read the open letter explaining the mechanism and wrote down a few questions to ask Bart on certain points that I could not fully understand. His answers cleared up my misunderstandings and thus was the foundation of my discipleship laid. It was three months' concentrated work on the words of the scroll and open letter, arranging them into the shortest possible complete account of all the relevant facts and experiments in English, that enabled me to ask every question I could think of on every detail from the most central to the most peripheral. Fortunately Bart had been looking for someone to help him with the English version when I met him. By the time we had finished it I really understood it.

Understanding the mechanism of brainbloodvolume enables one to take LSD or other hallucinatory drugs without harm and gives one control over the expansion of one's own consciousness. Once you know the mechanism you can increase the brainbloodvolume in innumerable ways and any number of laws cannot prevent you putting your own blood in your own brain when you wish. Having fully understood the mechanism I was excited at the prospect of releasing the news to a breathless world. I saw no reason to doubt that other people would be as glad to hear it as I had been. Bart warned me that it had not been so for him in Amsterdam. It was three years since he had discovered the mechanism, but still the world was totally ignorant of the fact. He had conducted a publicity campaign, but the scandal journalists had fastened onto the sensational aspects of the operation and completely ignored the explanation. The mechanism was never mentioned.

I had to find out for myself that it was as he said it was. I spent two years telling everyone I met about it, writing letters to papers and magazines, writing a book about it, giving talks, turning on people with sugar and vitamin C etc. etc., until finally I had to admit that it was like banging your head against a brick wall, without even a fractured skull to show for it. Hardly anything was published, no interest was raised. The world was still the same, full of empty adults unable to fulfil themselves. "Well, it's their problem", I said to myself in the end, "if they don't want to learn, why try to teach them?". Then I stopped going out and telling people and only answered questions I was asked. That way one knows there is some interest in the subject in the person to whom one is talking.

What was it that was so important about the discovery of the mechanism of brainbloodvolume? Before understanding that you need an experience and an explanation. You must increase the brainbloodvolume to experience the state of expanded consciousness. This can be done in many ways, for example by yoga headstands or breathing exercises, by smoking pot or jumping out of a hot bath into a cold bath, which puts you on total adrenal constriction and squeezes you high in a few seconds. Some people can put themselves on adrenalin at will with a magic formula. Having experienced life at the highest level, that is maximal brainmetabolism (with a far greater area of contact between bloodstream and braincells than in adult man more glucose and oxygen is taken from the blood than normally), it is very likely that you will want to repeat the experience. A trip above the clouds to the mountain top can give you a taste for heights, but to build a house and live up there you need to know all about local conditions. Having had the experience you still need the explanation. There is no substitute for studying the scroll "Homo Sapiens Correctus". Nothing essential is left out on it. All the words on it can be found in a dictionary (medical or otherwise) and they are all words with precise meanings or definitions, except the word "ego", which is defined on the second scroll "The Ego".

The LSD movement got off the ground simultaneously in Europe and in America. In the United States the "high priest" was Timothy Leary. Bart Hughes' actions had always two prime objectives, to enlighten the adult and to empty the mental hospitals of all but those with organic diseases. The effect of Leary's actions was to fill the mental hospitals with sugar-lack flip-outs.

The discovery of the mechanism of brainbloodvolume has revealed the reason for the success of trepanation in the treatment of insanity. The operation has been performed since prehistoric times. By restoring to the intra-cranial arteries and capillaries the pulsation which dies when the skull seals at the end of growth the benefits of youth are perpetuated, the ability to learn new skills and understand complicated explanations, the energy and enthusiasm to pursue dreams to their realisation. Some get these gifts by accident; fractures of the skull, mastoid operations, the loss of sight in both eyes or only one, all produce more blood in the brain.

Just as society now has the task of casting off the yoke of tyranny by reduoing government to a manageable machine to serve its purposes, so the individual must free himself from the tyranny of his ego, not by losing it altogether, so that there's no one at home in the head to give order to the limbs, but by reducing its importance to the level of an efficient civil servant. The talking ape needs an ego like a car needs a driver. The adult's ego, like his government, becomes the instrument of repression. In the adult's brain the ego feels threatened by anything which attracts attention (blood) away from its own province, the speech system. By increasing the amount of blood in all parts of the brain you dispense with the need to squeeze blood into the speech system by constricting the arteries leading to other parts of the brain. There is enough there anyway without depriving the rest of the brain of its share. This is the benefit of trepanation.

The performance of trepanation is rightly the duty of the medical profession. Bart could find no one to perform it for him, so he did it himself. He was a medical student and had sufficient knowledge of operating techniques to do this. I was able to do it only after studying the subject very carefully. My advice to other people is "find a doctor to trepan you".

Joe Mellen.