

SUGGESTOPAEDIA – DESUGGESTIVE TEACHING

COMMUNICATIVE METHOD

ON THE LEVEL OF THE HIDDEN RESERVES OF THE HUMAN MIND

My personal belief is that human hidden reserves are endless. However, science has reached an understanding that they are far larger than currently realized?.

(Dr. G. Lozanov's speech at the meeting of the twenty UNESCO experts, 1978)

(Actually, the beginning of a new science *reservology*, i.e. tenderly use the oppressed capabilities we have in our minds, starts. Instead of suggestopaedia in the future the science and the methodology will be called *reservopaedia*.)

In the very early stage when the present book was started, Bill Munro and Lupe, San Diego, U.S.A, were very kind to edit it and to advice me for some topics.

Five years later when the book was enlarged Czeslawa Rudawska, Katowice, Poland, was very kind to edit it.

It was very kind of Keneward Hill, Sofia, Bulgaria, to edit the book before publishing.

The parts of the book about the latest development of suggestopaedia-desuggestive teaching were translated by Radostina Ivanova Mihaleva, Sofia, Bulgaria.

I kindly express gratitude to Professor Setsuko Iki, Tokyo, Japan, for her help with providing me with favourable conditions for writing.

To the memory
of Prof. Dr. Evelyn Gateva
who brought Art and Beauty
into my life and into my work
Dr. Georgi Lozanov

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Suggestopaedic teaching methods (in foreign languages and other school disciplines) are completely different from all other methods of teaching.

After continuous research twenty UNESCO experts from different countries came to the following conclusions: (Published in the USA: The Journal of the Society for Accelerative Learning and Teaching, volume 3, issue 3, Fall, 1978, p.211)

“1. There is consensus that Suggestopedia is a generally superior teaching method for many subjects and for many types of students, compared with traditional methods.....

2. Suggestopaedic teacher training should be started as soon as possible.

3.....”

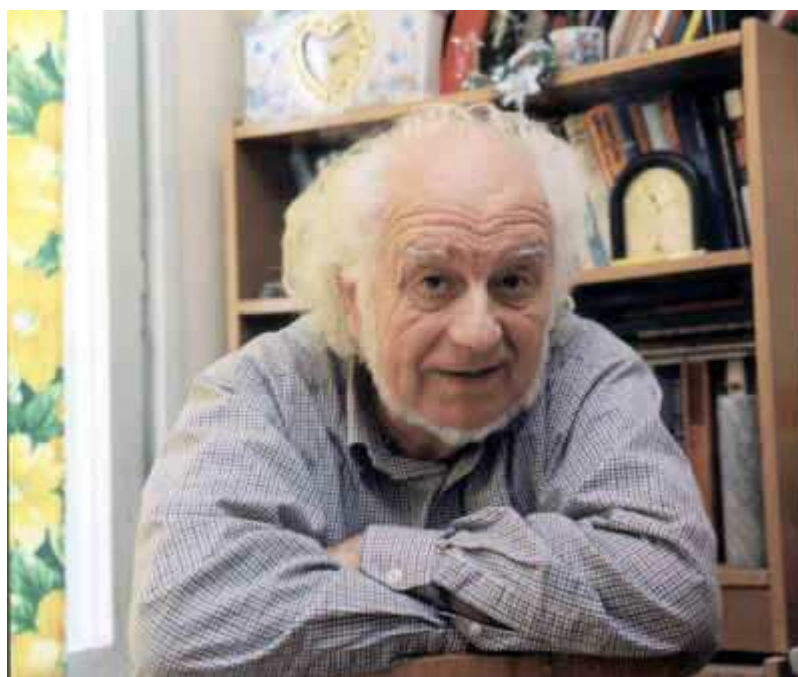
We should never ever forget that in this world of incredibly rapid implementation of innovations in all spheres of science we should not keep to the level of the pseudo morality of past epochs but the morality should make a decisive step forward unless we want to tragically devastate our children and ourselves.

The best way to liquidate something very good is not to reject it, but – to accept it and, not qualified, to imitate it.

We wouldn't advise you to try any of the methods described here without consulting a trainer certified by Dr.G. Lozanov. Many things cannot be described on paper. They have to be seen and experienced, for example, the intonation of the voice of the teacher all through the whole process of teaching not only during the concert session, or how the teaching process should oscillate, or how to use peripheral perceptions which are extremely important for acquisition etc. You should require a signed and stamped certificate from the trainer.

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**SUGGESTOPAEDIA - DESUGGESTIVE TEACHING
COMMUNICATIVE METHOD ON THE LEVEL OF THE HIDDEN RESERVES OF
THE HUMAN MIND**



The author now

**DESUGGESTOPAEDIA IS AN ART –
CONSTANTLY OSCILLATED ADAPTED ART**

Summary of Lectures 1995 – 2005
Dr. Georgi Lozanov
Vienna, 2005

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The Research Institute of Suggestology at the Ministry of Education founded and managed by Dr.Lozanov in the course of 20 years.

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In the training of teachers (not only linguists), doctors, psychologists and managers, the course material, presented in a systematic and condensed form in the present book, is for some parts considerably expanded and discussed in detail elsewhere. But even in this abridged format, it could be useful as food for thought and as a theoretical framework in order to prepare a checklist of practical activities.



The top floor of this building was the Centre of Suggestology and Personal Development at the University of Sofia, and was founded and managed by Dr. Lozanov over the course of 10 years.



The School in Victorsberg, Austria - placed at Dr. Lozanov's disposal by the local State Government of Vorarlberg, Austria for education and specialisation of teachers - which he managed over the course of 5 years.

PREFACE

Many will ask why 40 years after their creation and following their establishment in most countries, the author of the scientific term of “Suggestology” and “Suggestopaedia” seemingly offers new scientific concepts, which seem to utterly contradict the previous ones. However, that is not the case.

First of all, let me stress that the terms do not begin with the prefix “anti-” but with “de-”. This means that Suggestology and Suggestopaedia are not rejected. They remain as terms, and also as a basis for developing practical methods, but with a tendency more and more to bear in mind the humanistic love and the inner freedom of personality, the communicative freeing, deprogramming, desuggesting from the social suggestive norm which has been impressed on us over the centuries that our mental abilities are considerably limited. Suggestopaedia, however, frees us from those pathological suggestions. That is why we use the prefix “de-”.

There is also emphasis on the fact that Suggestopedia is a method of the hidden reserves of the human mind. The results have been so unexpectedly positive that they exceed those of all other methods, as 20 UNESCO experts from all over the world have also claimed and insisted. With the unusually positive byproducts of the method we can safely say that work is, in fact, going on in the field of the reserves of the mind, unknown up to now.

The essentially emphasised real humanisation of learning and the friendly relationships within the group, so characteristic of the method, raise hopes for a new culture of society now and in the future. Without these new humanistic interrelations there are no new super-results. This is a positive “trap” of nature. “If you want to learn more, more easily, more pleasantly, in a stable way and with a better impact on health – then accept Suggestopaedia, desuggestive learning, because it is learning with love.”

The so called “techniques” used in Suggestopaedia (classical art, aesthetics, songs, laughter, games, games in games etc.) are not decisive by themselves. What is decisive is communication in the spirit of love, respect for man as a human being, the specific humanitarian way of applying these “techniques”, the specific gentle assignment of complicated tasks by means of our “communicative suggestion”, the gentle and indirect correction of mistakes, the lack of complicated homework, a stimulating atmosphere, making use of conscious and sub-conscious processes and light, spontaneous absorption of teaching material.

Knowing that Desuggestology and Desuggestopaedia exist, colleagues who work in the sphere will do all they can to come close to the new development in content and approach. This will eliminate the authoritarian position (even if it is very soft) of some not properly trained teachers (psychologists and physicians as well) which is wrongly understood by some people. The already organized additional training and information will also help people to understand how to work in practice. The setting free and utilisation of the reserve capacities of the brain/mind will not be due to the visible influence of the teacher (psychologist and physician as well), but to joint work with genuine respect between the individual or the group members and the teacher. The kitsch of Suggestopaedia in general will be avoided. The reorientation of colleagues from Suggestopaedia to Desuggestopaedia will thus gradually become easier.

At the very beginning Suggestopaedia was not based on clinical suggestions but on the basis of our formulation on normal everyday life, “communicative suggestion” - like suggestion of classical art, of beautiful nature or of the loving mother, or of the loving child, or of a good, honest and reliable friend – without any insistence: only harmonious communication, i.e. to suggest is equal to allow you to choose. Very often, if not always, one wants to get such

stimulating offer-suggestions as much as possible. But some unqualified persons understood our suggestions as a kind of hypnosis. However, now with the term “Desuggestion” it is easier to understand that it is not possible to think about hypnosis in Suggestopaedia, only freedom of personality, inner freedom.

We are seeking ways to an unprogrammed, unimposed, spontaneous release of the reserve capacities (unused capacities) of the brain/mind, suppressed by social suggestive norms. Desuggestology is a science of spontaneous, not forced release from inhibiting, limiting and impairing influences. So is and was Suggestology, but some people did not understand it. Now, with the term “Desuggestology”, I repeat again, is not possible for such a misunderstanding.

The book includes my lectures of the last nine years. There have been reports of some novelties in the theory and practice of the methodology which have been acknowledged experimentally in daily work too. A number of practices (already published) have been presented from a new theoretical aspect and with new practical touches.

2. ARE THERE ANY VIRGIN, UNCONQUERED “LANDS” IN THE BRAIN AND MIND? ARE THERE RESERVE CAPACITIES?

I will not delay the answer for too long: there are! And these territories are numerous. Perhaps there is no limit to them, as the brain/mind functions which are used today are also in themselves subject to development. The more the brain/mind is used the more it develops. And vice versa. If this is a well-known fact in relation to muscles, it should be much more so with respect to the brain/mind. There are enough scientific data on the matter. We choose not to dwell in detail on the extremely interesting evidence about the mysterious achievements of ancient civilizations. We shall not discuss the information coming from various religions, occults, and yoga schools. We are only interested now in those exceptional phenomena that have been proved through research studies and can always be demonstrated by highly qualified specialists. Our aims are as follow:

1. To demonstrate that the human personality possesses potential capabilities far exceeding those recognised by generally accepted social norms;
2. To analyse the extent to which various individual achievements could be expected from all, or from most members of society;
3. To promote interest in the search for methods of exploration.

We shall dwell on the results of our investigations upon these unused capacities of the brain/mind which are mostly connected with our type of training.

First of all, in our medical psycho-therapeutic practice we have witnessed many a time fits of super recollection of a number of details from life, which have connection with the disease. This is not about Freud’s ungrounded sex hypotheses but the simple hypermnesia (super recollection). Most often this hypermnesia showed a tendency to complete healing. The better, the more systematically and the more emotionally the patient recollected, the more stabilized his/her recovery was. There are two Bulgarian psycho-therapeutic methods, those of N. Krastnikov (1929) and K. Cholakov (1933), with which the healing effect is based on hypermnesia. That is something we later noticed with suggestopaedia. The students have a considerably enhanced memory and a by-product of suggestopaedic learning is the healing

stabilization. This was something which the seven Bulgarian professors also detected. Those were specialists who under the request of the Ministries of Education and of National Health had to give a qualified opinion about the possible injuries suggestopaedia might have on health. However, they reported that suggestopaedia can be even **a psycho-therapeutic method**.

3. WHAT IS SUGGESTION? WHAT IS TENDER SUGGESTION? WHAT IS SUGGESTOPAEDIA?

SUGGESTION

In every communication, in every thought, in every feeling, in every perception and in every mental activity there exists one central, clear complex of experiences and many peripheral, background experiences. In the perception of speech, for example, the content, bearing the specificity, the basic thought, falls in the center of consciousness where it is subjected to critical analysis and logical processing. But we react not only to the sense specific for speech, but to a whole complex of accompanying and, in some cases, preceding or succeeding stimuli non specific for this speech. The number of these non-specific stimuli is inconceivably large - gestures, gait, facial expressions, expressions of the eyes, diction, intonation, a number of ideomotor movements unnoticeable for the mind, environment, the person who speaks with his level of prestige, the physiological state of expectation or biological needs of the recipient and, in general, everything which for the moment is linked with the words that are spoken. These non specific stimuli if synchronized can play some suggestive role by a change of the power of the words. The conclusion can be drawn that the suggestive is a constant and indivisible part of every communicative process. In some cases, it may increase the power of the words; in others, it may decrease; but it always participates in man's mental and emotional life.

However, the word suggestion does not involve those continuous influences in life. It is not merely an influence but a clinical term. It makes use of all those factors but they are considerably enhanced. People talk about suggestion in hypnosis and suggestion without hypnosis. With or without hypnosis suggestion always has commanding functions. The patient who is experiencing suggestion stays passive and lets his/her psychic or body experience what is being commanded. The reason for this is that both the physician and the patient believe this is beneficial to the health of the latter. And indeed, very often do the complaints fade away. But they do not think about whether there are any side effects which occur with that most often used type of suggestion characterised by the dominating commanding on the one hand, and the automatic and non-critical obedience on the other hand. That is the reason why we did not use this kind of suggestion in our clinical work in spite of the fact that the characteristic features of these suggestions make them rather tempting for work and quick effects.

Tender Suggestion

In our long-term research on the harmonious guiding of the reception towards a best decision of the student (or the patient) we have come to the development of a new type of communication without commands and non-critical automatic obedience. We have come to

the understanding of a communication where no commands exist and the problem is tenderly discussed. Due to the high prestige of the teacher (or the physician) no commanding tone, nor obedient and passive behaviour on the part of the recipient is needed as was demonstrated in the first big experiment of memorising 1000 French words and phrases in one day. With the highly prestigious teacher convinced in the high results which is evident in his/her overall behaviour, the effect of his/her teaching is really on the level of the reserves. Due to lack of terminology we have called this variant of reaching the reserves 'tender suggestion'. It is difficult to accept mutual enthusiasm and unanimity with the teacher (or the physician) as a suggestion in its classical meaning.

With hypnosis and ordinary clinic suggestion we cannot even talk about creative thinking. Even independent thinking is not evident with the former two. While with suggestopaedia and the soft suggestion we use everything is creating thinking only. This proves unquestionably that suggestopaedia and the soft suggestion we apply have nothing in common with clinic suggestion and hypnosis. This is the learning and teaching communication of the future which we have to acquire.

Instead of suggestopaedia in the future the science and the methodology will be called reservopaedia.

Although it seems a little early to talk about reservopaedia before the science reservology has been entirely established, it will be right to gradually replace the word suggestopaedia by the word reservopaedia. And the science called reservology can be developed with the initial research of the laws of reservopaedia. These laws are very typical. All we need is highly qualified and respectable scientists.

Suggestopaedia

Suggestopaedia is a teaching system which makes use of all the possibilities tender suggestion can offer. Of course, the systematic academic participation is not neglected but is always in accord with the suggestive. The first experiment of memorising 1000 French words in one day was merely a memorisation experiment. It would have served as a basis for the development of the suggestopaedic methodology. The first suggestopaedic courses that followed marked the beginning of the development of the methodology. Three stages in teaching the new lesson were recognised and they have been preserved with slight modifications. Here they are:

1. Deciphering. This was the first stage of each lesson. The teacher explained to the students in the classical way the content of the lesson, the new vocabulary, the grammar and some peculiarities so that the latter achieve speaking skills.

2. Memorisation seance. At that time we thought that hypermnesia is due to that particular seance as this was the case of the first memorisation experiment with the 1000 French words. Later the experiments showed that such a memorisation takes part on each stage of teaching. The seance was divided into two parts: active and passive. During the active seance the teacher read the whole huge bulk of the text in the foreign language while the students actively followed in the textbook. That was the reason why the seance was called active. The teacher read at a normal speed and occasionally slightly intoned some words without any music or additional instruction to the students. He/she repeated each new word three times. That was because at that time we thought that some repetition was needed for the process of

memorisation. Later the experiments showed that memorisation was very strong and so no repetition was needed. Then we introduced vertical reading without repetition of words and phrases. After the active seance when the students actively followed the text came the passive seance. It is called passive because the students did not follow the text actively. They only listened sitting calmly on their chairs. They did not receive any instructions. At a musical background (some Pre-Classical) the teacher read the whole text without the translation in a calm and normal manner. That was the end of the first course day. The next day was dedicated to the elaborations. Then the material that had been taught was elaborated by means of a lot of games and songs.

Gradually the methodology took on its final version after hundreds of experiments and thousands of students. The classical explanation of the material, i.e. deciphering, which used to comprise the first stage was replaced by an artistic introduction, i.e. a mutual game of the teacher and the students during which the whole material was taught in a playful manner, through role-plays. In this way the classical art was introduced in the methodology. The second stage, the seance (active), was carried out with selected and previously tested whole musical classical works of Mozart, Beethoven, Haydn, Tchaikovsky, etc. Let me pay tribute to Dr. Gateva who carried out the necessary experiments and suggested introducing the classical art into our work and methodology. The teacher read and intoned in accord with the music like an accompanying instrument. The passive seance was carried out with whole musical Pre-classical works by Bach, Vivaldi, Corelli, etc. On the next day the students sang classical songs. The classes were full of jokes and games. There appeared a fourth stage, that of production, when the students tell interesting stories and have conversations in the foreign language quite by themselves.

Putting on the cloak of classical art brought about the great success of the methodology. It became much easier to reach the reserves because it important with suggestopaedia not only what but much more how is being taught in order to reach the hidden reserves of mind. Furthermore, art has made the learning process much more enjoyable. Aesthetics has become particularly important in learning, and thus in life. Classical art now is an integral part of suggestopaedia-desuggestive teaching. Its educational impact has been enhanced and this is the last but not least place where ethics in relationships lie.

It is wrong to consider suggestopaedia a methodology of foreign language teaching only. In our experimental schools all the subjects were taught suggestopaedically, e.g. the children learned the Bulgarian alphabet and were able to read 40 words only on the basis of peripheral perceptions without having to put in any effort. They learned Mathematics through operas for children which were specially composed for the purpose. The children liked Mathematics and showed remarkably high grades. The subjects like Geography, History, etc. were acquired very easily, too. The other suggestopaedic methodologies are also subject to a special qualification on the part of the teacher. The results of all the subjects for all ages were reported by both the Ministry of Education at national conferences, and the UNESCO experts whose opinion was published in the American media (find detailed information at the end of the book).

4. SUGGESTOPAEDIC RESERVE COMPLEX

Suggestopaedic desuggestive teaching/learning releases a reserve complex with the following obligatory characteristics:

1. Memory reserves, intellectual activity reserves, creativity reserves and the reserves of the whole personality are tapped. If we do not release *many-sided reserve capacities* we cannot speak of Suggestopaedia.

Among the many examples of suggestively tapped reserve capacities we can mention again the following:

(a) **hypermnnesia** – super memory (in long-term memory). This super memory surpasses the possibilities of ordinary memories many times over. Hypermnnesia underlies the methods of catharsis as one of their curative mechanisms.

We can assume with great probability that the proved psycho-curing effect of Suggestopaedia is partially due to the spontaneously manifold increased memory.

Mass hypermnnesia can be brought about under the conditions of suggestopaedic instruction with both healthy and sick people, when the educational-curative process is carried out properly. Hypermnnesia as an important reserve capacity is characterized by the following specific psychophysiological laws: (i) it is manifested either after a latent period and without any conscious effort, or suddenly and spontaneously; (ii) increasing recollection without reinforcement (reminiscent curve); (iii) amnesic covering and sinking of the basic sense bearing nucleus of the complex stimulus into paraconsciousness until it is "raised" out of paraconsciousness into consciousness; (iv) making the first recollection easy under the conditions of emotional impetus, of the associative connections of peripheral perceptions and of concentrative psychorelaxation; (v) great durability of the reproduced memory traces; (vi) decreased susceptibility to tiredness, and (vii) a considerable psychotherapeutic, psychohygienic and psychoprophylactic effectiveness.

(b) **provoked hyper creativity** – suggested or autosuggested creative super productivity. Intuition is activated and states similar to inspiration arise. These are outwardly expressed in a decidedly greater creative manifestation of personality. A number of experiments have shown that the manifestation of artistic, musical and even mathematical abilities (in accordance with any given person's manifested and potential abilities) increases considerably both quantitatively and qualitatively. Suggestological experiments have shown the possibility of accelerated creative self-development. Here again we find the same psychophysiological laws that are characteristic of hypermnnesia (some absolutely the same and others with certain modifications according to the nature of the reserve phenomena).

2. Instruction is always accompanied with an effect of relaxation or at least one *without a feeling of fatigue*. If pupils get tired in lessons, we cannot speak of Suggestopaedia.
3. Suggestopaedic teaching and learning is always *a pleasant experience*.
4. It always has a favourable educational effect, softening aggressive tendencies in pupils and helping them to adapt to society.

5. A significant *psychoprophylactic and psychotherapeutical effect* can be observed in cases of functional illnesses or functional components of organic illnesses. Suggestopaedia can be used as educational psychotherapy, psychoprophylaxis and self-education.

By reserve capacities we understand the unmanifested but genetically predetermined capacities operating mainly in paraconsciousness and surpassing the normal ones many times over. The laws governing these capacities are to a certain extent, different from the ordinary psycho physiological laws. We maintain that the reserves we discover are, in fact, revealed and not created. These are normal possibilities for development of the inborn genetic capacities, probably suppressed by society, i.e. social suggestive norms. Therefore we accept that Suggestopaedia is desuggestive learning, releasing the reserve capacities for learning, for which there are plenty of data in the teaching process itself.

The tapping of man's reserve capacities can only be achieved under the conditions of excellent suggestive organisation, orchestration and harmonisation of the conscious-paraconscious functions. Though inseparably connected with consciousness, the basic "store" of the reserve capacities is in paraconsciousness.

5. Some Basic Differences between the Approaches of Suggestopaedia (Desuggestive Learning) and All Other Methods (initial information)

There are a number of major differences in the approaches of Suggestopaedia and all other traditional methods. Suggestopaedia frees the **reserves of the mind (deprogramming, desuggesting from any guided techniques in teaching, from hypnotic limitations as well, desuggesting from limiting social suggestive norms)** constantly keeping:

1. The golden proportion, the golden mean. It has been for centuries recognised as the greatest harmony in nature. In the 3rd century B.C. Euclid mentioned it. Plato and Pythagoras' schools elaborated on these issues too. Leonardo da Vinci illustrated a whole book about the golden mean, which was published in Venice in 1509. The golden means is everywhere – in the structure of minerals, flowers, animals, monuments, the human body and the cosmos. The golden mean exists in the structure of Suggestopaedia (desuggestive learning) as well. I am not going to comment on the significance of that fact, though. It is clear that it surpasses any didactic requirement of a certain methodology.

2. Multiple personality. Other methods pay attention to psychological factors, too. However, in the course of the learning process they do not observe the expressions of multiple personality. One continuously changes emotionally, thus logically. There is no other methodology which observes the constant changes in the personality of the individual student, nor approaches in which the most essential points of learning are directed to the most appropriate variant of the personality. Besides, in Suggestopaedia (desuggestive learning), teachers are taught to both homogenise the group as much as possible and to try to address the variant of the student's personality which is most receptive, thus most appropriate for learning.

3. Simultaneous, not alternating learning of the elements (partial) and the whole (global).

From a didactical point of view the partial is usually taught first and then the global is formed from it. This particular approach is very slow, laborious and demotivating. And the most important thing is that at the end one can hardly get an entirely realistic vision of the global and its structure. The modern holistic trend tries to overcome those weak points of the partial approach by starting with the global. However, this trend misses the structure and is forced to go back to the parts after the first stages. With Suggestopaedia (desuggestive learning) due to the extensive use of peripheral perceptions, the double-planness approach and paraconsciousness, it is possible to study the global and the partial simultaneously. In this way it is possible to overcome the weak points of the two approaches mentioned above.

4. Very fast creation of hypermemory and hypercreativity in paraconsciousness through peripheral perceptions and doubleplanness of the students. Regarding memorization. With all the traditional methods learning involves memorizing in the first place and then the memorized bulk is elaborated creatively. The teachers, if ever they considered that problem, would say, “What could I elaborate creatively if I didn’t have it memorized in the consciousness beforehand. There is nothing to work on in an empty space.” For centuries such has been the way of thinking of the teachers. For the same reason they apply various techniques, though sometimes tormenting, of memorizing as a basic requirement for whatever training they want to commence. But is that the way things are in fact? Is nature so limiting and severe to us? For centuries traditional university psychology and pedagogy have not offered any drastically different approach. Indeed, there have been certain attempts at introducing some memorization games, emotional stories or shock situations into teaching in order to memorize, or visualization for memorization. But all these come as a continuous and laborious start of the training process with every new lesson in order only to memorize, not develop creatively. Another alternative has been proposed by the so-called communicative approaches, which promise to enable learners to communicate freely without memorizing. In fact, this is impossible and it has led people to abandon such classes because they cannot suffer the strain exercised on them when they are required to produce speech without having learnt the language forms. In Suggestopaedia (desuggestive learning) we do not ignore the significance of memorization, as the communicative approach proposes. In the contrary, we make provisions for paraconscious, spontaneous memorization which occurs simultaneously with creative work. The students have the impression they are not memorizing, but in fact this is happening in a subtle, pleasant, almost natural way. On the other hand, as already mentioned, the whole of traditional pedagogy assigns primary importance to memorization through drilling, and this is all understandable. That is the reason why people are afraid of memorization and complain about their poor memory. That is why the world enthusiastically welcomed our first experiments at the beginning of the formation of Suggestopaedia in 1964, and mainly the experiment of memorizing 1000 French words in one day, organized by me at Postgraduate Medical Institute in Sofia. Then 1000 English words and 1200 Greek words on one and the same day, organized by me in the State Institute of Pedagogy at the Ministry of Education in 1965. The experiments war broadcast on television. The world experts came to the conclusion within the normal traditional style of thinking that learning would make a huge step forward only due to improved memory. That is what imitators of Suggestopaedia still think nowadays. They consider that everything in Suggestopaedia is connected to the application of a few “techniques” like guided relaxation, guided breathing, etc. However, they do not have those definitely positive results that have already been published.

The issue of Suggestopaedia is quite a different matter. With our very first experiments we saw that the huge bulk of memorized material takes a lot of time to be developed afterwards in creative communicative speech. According to our calculations the time spent on this equals

the time we would need if we didn't have that preliminary super-memorization. In our continuous experiments we pursued the optimal balance between increased memory and increased creative thinking. We decreased the number of isolated words and phrases to memorize from 1000 to 700 in the first lesson, but increased the number of the parts of the sentences which needed further creative elaboration. Creative thinking did show certain improvement, yet not sufficient. So we referred to the method itself where memorization in consciousness is not so much needed because we referred to the reorganization of memorization by our tender suggestions on a subconscious level, the level of peripheral perceptions, paraconscious and sub consciousness where in fact long-term memory is. It is long-term memory that we need in each and every learning process. Creative thinking and development go together with the functions of memory. For example, in the reading training of young children they do not have anything to memorize. For two days, pictures from the children's world with the word of the picture written below it hang on the walls and the first letter of the word is introduced by means of a hidden picture. The children's attention is not drawn to that sort of decoration of the room. After these two days they already know all the 40 words as well as short sentences, and all the letters of the alphabet without having learnt them during those two days. The teachers are suitably trained how to communicate with the children, how to show them their positive expectancy and so on. The activity of reading books is then developed in a happy and playful manner without the boredom and demotivation in the first phase of the introduction of letters. And this has been applied to children at the age of three. Their peripheral perceptions have introduced this information into their paraconscious, where long-term memory is. In the foreign language training of adults, for example, the students do not remember how exactly they have acquired and now use in a creative manner the numerous new words, sentences and grammar because their attention was distracted to watching a play or listening to classical music, or even participating in hundreds of didactical role-plays. Their peripheral perceptions or the double-planness of the work have imperceptibly introduced the memory items into paraconsciousness, where long-term memory is, which is much needed for studying. So the students do not suffer the boring and demotivating phase of memorisation.

This is not the only approach in Suggestopaedia. Nor the only so called "secrets" of Suggestopaedia. Actually those are only different ways of introducing a huge bulk of systemised information into paraconscious where long-term memory lies. Unless there is a profuse system of approaches for eliciting this knowledge from paraconscious into consciousness so lightly and enjoyably introduced, it will remain unutilised similar to all the chaotic paraconscious information, which inhabits paraconscious. That particular system of eliciting knowledge from paraconscious into consciousness is markedly humanistic and full of love indeed. However, the system of introducing new knowledge is a completely new approach in pedagogy, which confronts the centuries' old "principle of consciousness". The laws of subconscious are not known very well and that is what put pedagogues off entering those unfamiliar areas. They did not comprehend that consciousness can control subconscious and make use of it, gaining much time in this way.

On the pages to follow I will try to explain how we achieved an increase in creative thinking without suppressing memorizing but even vice versa.

5. soft and tender communicative suggestions with freedom of the personality to choose. No other methodology uses soft communicative suggestions with the freedom of the personality to choose. Even the existence of such suggestions is not well known. Most often a suggestion is associated with dictation without the right and freedom of choice. Some even regard it in its manipulative aspect, as is the case with hypnosis, to which we are entirely

opposed. We understand and use suggestions, which resemble a mother's or a good friend's advice, or the communication with classical art or nature when you cannot have enough communication and want more and more of, but which you can interrupt if you have some more important work to do.

6. active love for the human being. **Again with freedom** of the personality to choose. It can be seen in the whole structure of the method and the attitude of the teacher. **The means, which oscillate typically** in the method, like: funny games, classical art, aesthetics, songs, laughter, changing the names and professions, etc. are orchestrated from time to time, but they **are included in the same system**. Principals and inspectors demand that the teachers behave and have respect for the students/pupils in the traditional courses as well as at school. However, it is well known that they are not so strict in that respect. With Suggestopaedia (desuggestive learning) there is no such issue as a requirement. The structure of the lesson itself requires that love for the human being is a basic feeling in the learning/teaching process. Of course, I am not talking about any sentimental emotions. Love for the human being is called for as the only opportunity on the very first day when the students/pupils encounter a volume of material at least five times bigger than the usual amount and it cannot be acquired without genuine love, relying solely on different techniques and methods. It is unrealistic if the teachers ask the students/pupils to memorize the material because such a requirement implies that the latter are not able to do so. They will certainly think that somebody is joking with them, and as a result the course will fall apart. The teacher has no other choice but do his/her job with love, as is the approach to young children. Here lies the great paradox – the huge bulk of material on the very first day requires love in itself. Strict behaviour demanding that the students learn is quite inappropriate. Teaching with love is something the teachers need to learn by themselves. It is not necessary for them to be instructed in humanistic behaviour, and the behaviour of love for the human being in general. The methodology itself is designed in such a way that teaching with love is not a question of learning. For example, the teacher enters the classroom, announces that he/she is a film director and is going to make a film and invites them to take part as actors. So the game starts here and all through the course the students are film actors with new names and professions. Learning is disguised as preparation for the film. So, out of love for the students, the teacher next gives them the chance to choose new names, professions and biographies in the classroom so that if they make a mistake it will be attributed to the new personality. This psychological approach helps students to save their face but teachers should not discuss it with the students. As has already been mentioned, memorization is imperceptible and pleasant and activates the paraconscious, helping to store knowledge in the long-term memory. Besides, the songs, jokes, classical music and art in general as well as aesthetics as a teaching method with Suggestopaedia prove every time that the method is based on the love for the human being. The students can feel the atmosphere of love and they build firm and friendly relations among themselves which later transfer to their social lives.

7. knowledgeable teacher to know the specific way of using all the means by desuggestive teaching (i.e. songs, classical art, games changing the names and professions and so on) to create and support subconscious (paraconscious) **communications with the hidden reserves** of mind of the students

This is a new culture and a new philosophy of life. **This is another wise trap of nature:** You would like to learn five to ten times quicker, easier, in a more pleasant manner and experiencing a positive effect on your health. This is possible now. However, your learning process should be based on the above mentioned points. It is evident that the mind can

neither acquire a huge amount of information without love, nor think creatively without freedom. This is the trap of nature.

It is interesting that the Hungarian genius poet and revolutionary Shandor Petoeffi wrote the following relating to his poetical and revolutionary activities in the 19th century, “There are two things that I need on earth – love and freedom. For love I will give out my life, and for freedom I will give out my love.” A similar trend of thinking is evident in the poetry of the Bulgarian genius poet and revolutionary Hristo Botev at the end of the 19th century.

Therefore, love and freedom are necessary for the development and happiness of the human being not only in science but in many other spheres of life as well. Those are necessary in suggestopaedia too.

There are a number of other differences between the approaches of suggestopaedic teaching (desuggestive teaching) and all other methods, but those mentioned above are the most drastic.

6. GOLDEN PROPORTION

Suggestopaedia, especially in its final version of desuggestive, deprogramming and ‘acquisition’ of knowledge, skills and habits, is the only method which complies with the laws of the GOLDEN PROPORTION.

But what is in fact the golden proportion?

For ages the golden proportion has attracted the minds of many eminent philosophers, scientists, architects, etc. It is considered the most perfect proportion. It is mentioned for the first time in the 3rd century B.C. in the basic work of *Euclid*. *Leonardo da Vinci* spent much time studying it. He illustrated a book on the golden proportion and published it in *Venice in 1509*. It was found as a primary and essential principle in a great many places: in the dimensions of Egyptian pyramids, in the proportions of human body, in the size of the paintings in art galleries, in architecture and in nature – in the proportions of flowers and trees. The school of Plato and Pythagoras developed the problems of the golden section. It is known that once *Buddha* articulated his *Flower Sermon* without uttering a word, just holding a flower in silence before his listeners. Through the pattern of a flower he showed the unity and harmony in nature to them. And how could we really imagine the golden section? Let us divide a segment into two unequal parts, so that the ratio of the small part to the big one should be equal to the ration of the big part to the whole. This is a reciprocal relationship. On any given line there is only one point for such a section. And this point is called the point of golden section. Expressed in equation form:

$$A:B=B:(A+B)$$

Expressed mathematically, this is

$$\frac{a-x}{x} = \frac{x}{a}$$

What we get is the square equation $x^2+ax-a^2=0$, and the result after we solve the equation is $x=0.6180339$. Therefore, any two variables that are in a ration of 0.6180339 or within certain degrees of this ration are within the golden section.

This number finds a good expression in the Fibonacci series developed in the 12th century by *Leonardo Fibonacci* known as Leonardo from Pisa. It is expressed by a sequence of integers in which each integer is the sum of the two preceding integers: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89... etc. For example, 2+3=5, 5+3=8, 8+5=13, etc. If any integer from the Fibonacci series were taken and divided by the next one in the series, the result would be the number 0.62, and this result would be closer to 0.62 with the augmentation of their value of integers.

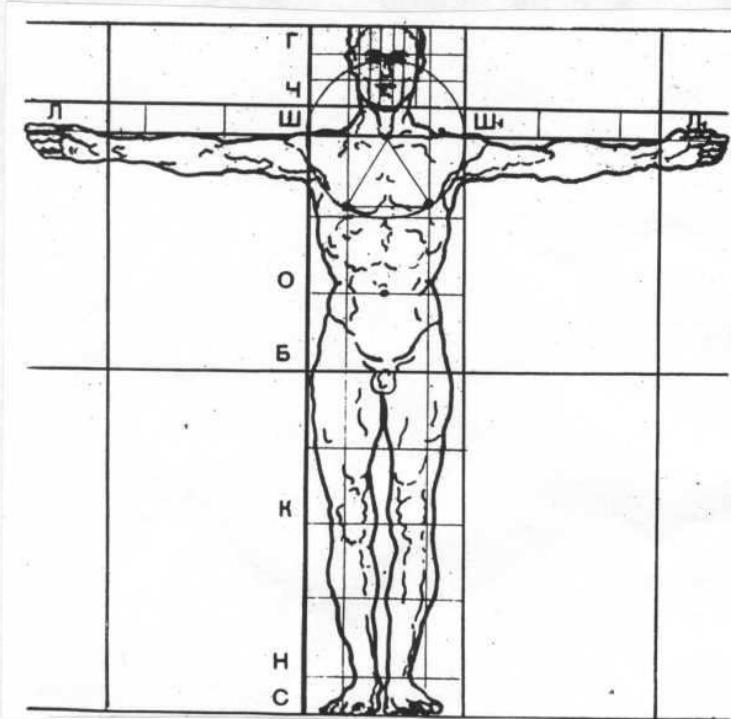
Indeed, after the fourth integer this ratio approximates to 0.618.

Such an art is frequently used in painting and architecture. For example, *Niel F.* found it between the width and height of the doors of the main portal of the castle of Monsegur used as a hiding place by the *catars* who started activities in France after the spiritual movement of the Bulgarian bogomils was destroyed by the government and they escaped to France. In accordance with many authors, *Gyorgy Doczi* pointed it out in the structure of the *daisy*, in the *aureole* of the *sunflower*, in the keys and the *structure of musical instruments*, in the *leaves of the lilac*, in the structure of the *rhododendron*, *begonia* and *cobweb*, in the *spirals of fingerprints*, in the *Pythagorean musical system*, in certain *folk dresses and caps*, in the design of some *Mexican carpets*, in the *war paints of American Indians* etc., in some *vases and amphorae* dating from hundreds and thousands of years *B.C.*, in some *tattoos from New Zealand*, in a series of *prehistoric spirals on stone or wood*, in the structure of the brain and the whole *nervous system*, in the *double helix of hereditary matter (DNA)*, in certain *Hindu, Greek and Bulgarian folk dances*. Many authors have also found it in *Egyptian hieroglyphs*, in the evolution of *various writings*, in a series of prehistoric stone *monuments for measuring the time and seasons*, in the *Cheops pyramid* and a number of *other pyramids*, in the *Tower of Babel*, in *biorhythms*, in the structure of a number of *marine animals and fish*, in the *bony structure of the dinosaur, frog, and horse*, in the *vertebral column*, in *bee flight*, in *snowflakes*, in the *spiral structure of certain galaxies*, in the structure of *insects and butterflies*, in the famous drawing of the structure of human body by *Leonardo da Vinci*, in the well known *Pythagorean triangle*, in the ancient monuments in Greece, in the *Tibetan figures of Buddha*, in the pagoda of the Yakushiji temple in *Japan*, in the sculptures of a *Chinese monk* in a moment of enlightenment, in *modern aircraft construction*, in various *mandala patterns* and a series of other cases.

Emil Georgiev pointed out the golden proportion in the basis of various sides in the structure of music.

Some examples

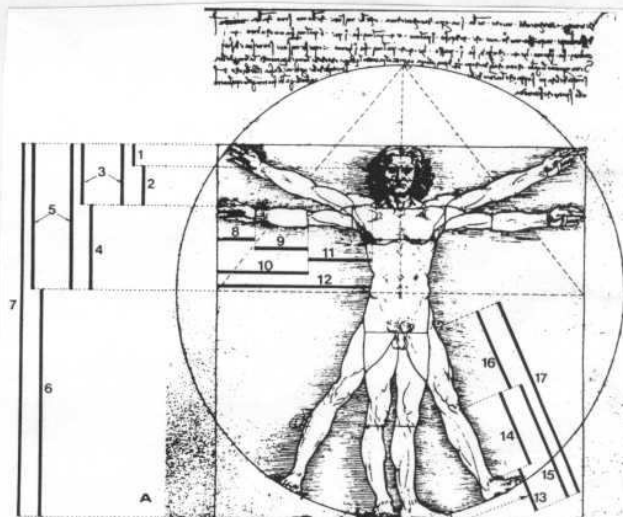
(Golden section is: the union of complementary opposites. Minor and major here are opposites united in a harmonious proportion.)



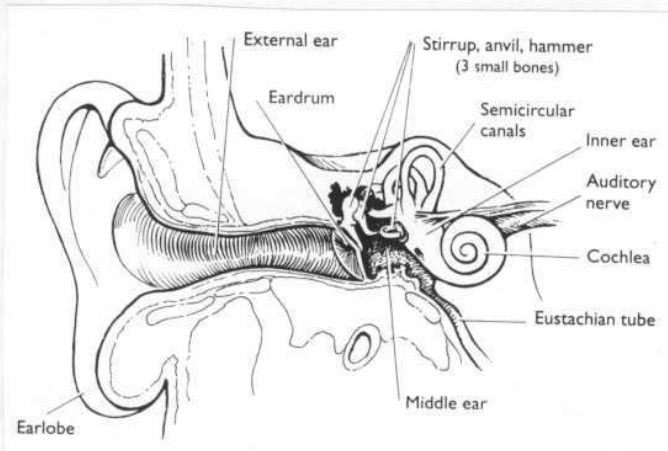
Dürer's drawing "Studying the proportions" – the ratio among the parts of human body. Human head is taken as a unit of measurement. The main unit of measurement relates to the body according to the golden section (1:2:3:5:8 – Fibonacci series).



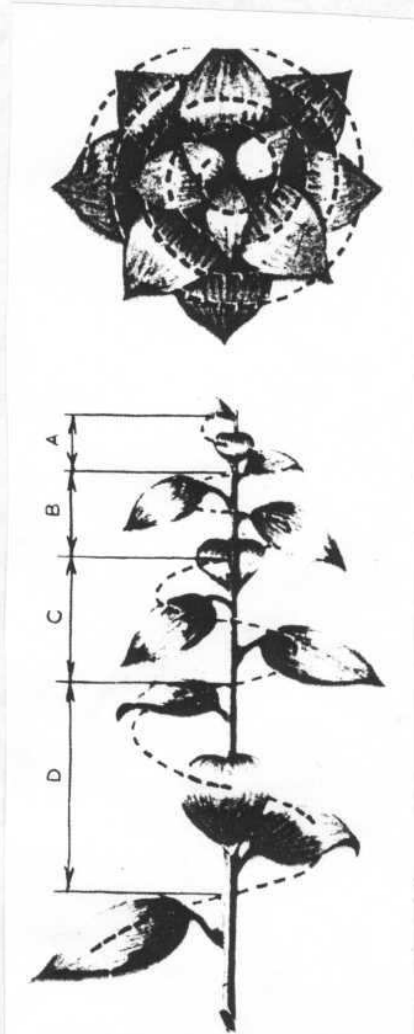
Spirals or whorls in fingerprints



The famous drawing of Leonardo da Vinci showing the Proportions belonging within the range of the golden section.



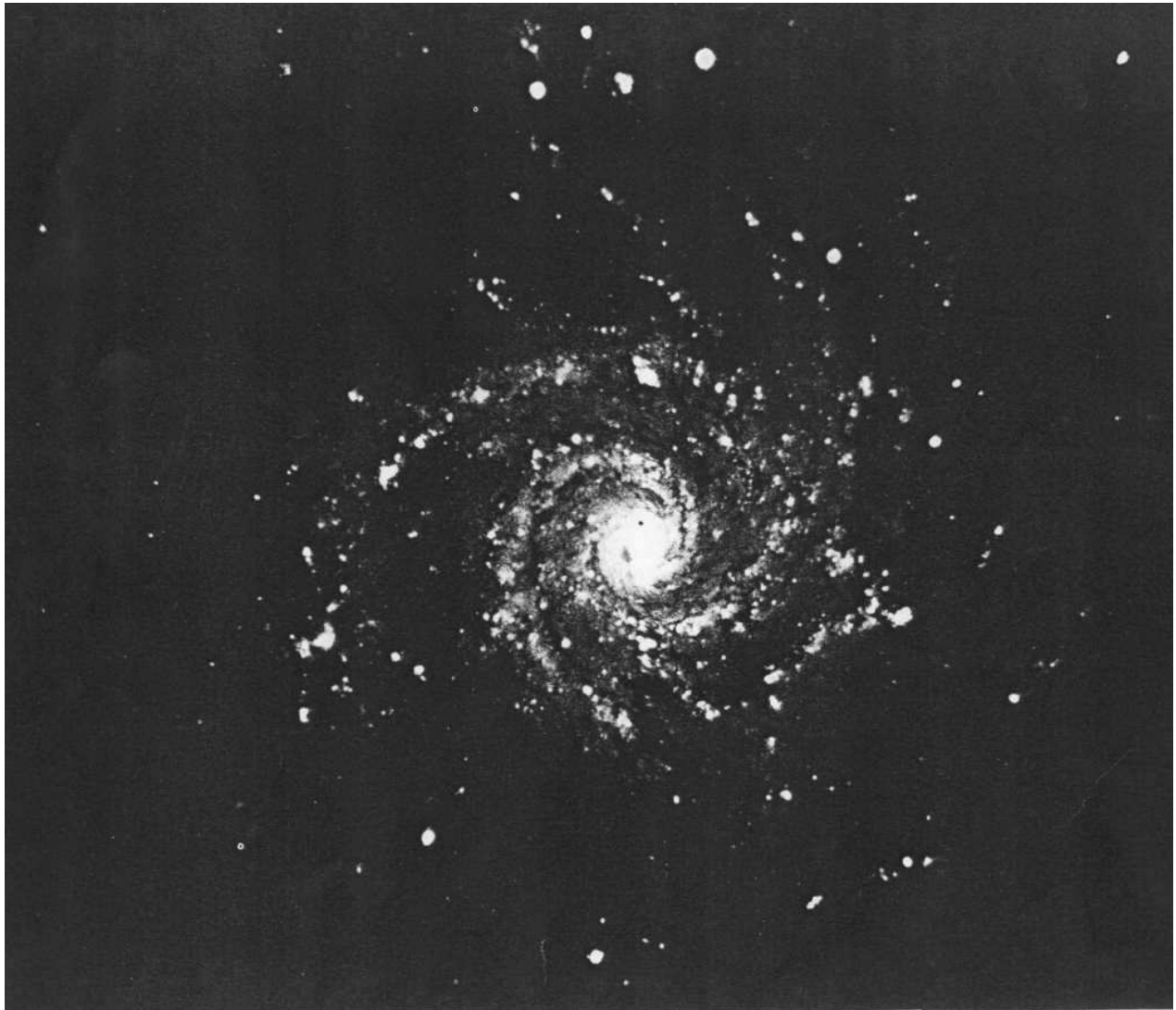
The spiral cochlear of the human ear.
 (After J.Engel, Canadian Health Guide)



The leaves are arranged along the stem spirally in a way not to stand in another's sunlight. The sum of the two previous steps of the spiral beginning from the top equals to the size of the next step, i.e. $A+B=C, B+C=D$, etc.
 (After L.Latishev and VI.Latishev)



The symbolic double woven spiral of the to snakes of Hermes – Mercurius



Spiral galaxy's mandala pattern is similar to spirals of organic growth. (After Palomar Observatory, California Institute of Technology and after György Doczi)

First of all, the very classic art, the harmony and beauty, that dominates in Suggestopaedia and facilitates the desuggestive assimilation of material, is built predominantly upon the golden section, as many authors have pointed out. But within its phases as well as in the force of the intonation and dynamics one can see that the golden section is taken into consideration. In the Foreign Language Teachers *Suggestopaedic Manual published in the USA in 1988*, we wrote on page 28, "That is where the teacher's mastery lies: to be able to conduct with precision the transition between the three tempi of work: fast, slow, moderate; to introduce light and shade in the dynamism: high, low, medium; to fix the duration of these stages according to the rules of the golden section which, for the time being, is still the soundest psychological criterion for a good balance."

If we analyse the ratios among the concert session we will see that the golden section is preserved approximately or absolutely. For example, the active concert session for the first lesson in English (according to the Foreign Language Teachers Suggestopaedic Manual, 1988, p.22) lasts for 50 minutes and the passive concert session for 30 minutes. That is $30:50=0.6$. And the second lesson has active concert session of 40 minutes and a passive concert session of 25 minutes. That is $25:40=0.625$. Golden mean is kept in all parts of the course.

In order to avoid both monotonous, drowsy or hypnotising learning, and tiring, noisy or superactive learning, the best measure proves to be the golden proportion, as we have already mentioned in the English Manual for Teachers (1988), and in the Bulgarian Manual for Teachers (p. 59, 1981).

After all, a lasting concern of the teacher is to elaborate an intuitive sense of the harmonious eternal proportions and observe these where possible for him/her. Thus he/she will take care of the more harmonious dynamics of the process of learning.

7. SUGGESTOPAEDIA – WHEN THIS TERM APPEARED FOR THE FIRST TIME

For 40 years Suggestopaedia has created problems and questions for people all over the world who wish to learn the true meaning of the term. I published this term for the first time in Bulgarian in 1966 (Suggestopaedia – a way to hypermnesia in learning, Narodna Prosveta magazine, 1966, 6, 23-41). I applied this term in English in 1967 (Suggestopaedia and memory, Proceedings of the International Psychosomatic Week, Rome, 1967, 535-539). With the publishing of this new term I unwillingly created many hardships for myself since there wasn't a traditional stable meaning, which meant i had to explain it all the time. After the publishing of the primary research I didn't have the opportunity until now to explain in a more understandable way the very true meaning of the term. Now I will do my best to explain something more.

8. THE ORIGIN OF SUGGESTOPAEDIA. THE RESERVE CAPACITIES OF MIND AND BRAIN

In my continuous psychotherapeutic activity I was able to discover that many patients of mine were above average in their capabilities exceeding the expectations regarding the potential of human personality. I was primarily interested in non-hypnotic or even non-clinical wakeful suggestive impact i.e. in everyday communicative suggestion the English word for which is to offer, to propose. So I “suggest” *but you are free to choose*. This means, not only what but how to propose so that for you this should be the most acceptable and natural thing, and the anticipated phenomenon will occur. But this should not be a kind of dictatorship. Adequate orchestration is required to involve the paraconscious with peripheral perceptions and affective stimuli. *The communication is holistic*.

A. EARLY EXPERIMENTS WITH RESERVE CAPACITIES OF MIND AND BRAIN IN MEDICINE

On this background, a series of medical experiments were performed (without hypnosis or dictating and dominating clinical suggestion). The majority of these experiments were communicated in the medical press. With this communicative suggestion, as we call it, sometimes resembling classical art and the placebo effect we conducted a group of experiments which pleased us and astonished our colleagues, for these experiments proved successful. These experiments were gradually expanded into other fields as well but primarily in education.

I will make an attempt to expose comprehensibly even for the layman the very essence from my 50 years of experience in the field of suggestology and 40 years in the field of

Suggestopaedia. I will share the evolution of my thoughts regarding the reserves (the unused potential capacity) of the brain and mind for learning through suggestopedia that I have developed, and now recently already through Desuggestopaedia.

It is not clinical suggestion in its all non-hypnotic versions and even less hypnosis in the process of learning with its pseudosecrecy that I was interested in either in the past or at present. *The reserves (not used potential capacity) of human brain and mind, and the ways to reach these reserves safely, were and still are my great dream...*

I have always considered that metaphorically speaking we humans are *fallen angels, locked up gods, hypnotised souls* that have believed in our restricted humbleness. *And we have resigned ourselves to it.* This is because any transgression of the sociohypnotically suggested range of human capacity is penalised. The history of many peoples has documented the age-old tradition of massacring the gifted people who stand higher than their compatriots. For example, there is a legend that ancient Bulgarians two or three thousand years ago killed the most gifted individuals because they believed that this was the way to send them as ambassadors to Tangra, their god (they had only one god). In more recent times, methods have been refined. Direct killing is not applied but it is a well-known fact how most geniuses live and die in poverty and oblivion for they cannot (and some of them probably do not want to) combine “heaven and earth”. Maybe this is the reason for me, when I encounter an exceptional young talent, to feel joy and pity at the same time. Many people do not understand why I say so often, “Oh, he/she is an exceptional talent..., sorry!”. But things could be changed. Can you imagine? All at once, talents are not objects of intrigues, not any stranger and incomprehensible, not rudely used and outcasts of society, not hungry... You might say, “Those are stories for children. When will people become so humane? How will they change?” And you would be right, tragically right. *But I had a dream.* And this dream incessantly whispered, talked and shouted to me, “There is a method, there is a form of communication for “locked up gods” and for “hypnotized souls who have believed in their humbleness”. There is one! There is one!” This method, this form of communication will change things. If this happens we all will learn and develop much faster and in a more creative way... and with joy. Then talents will not be so far from us. We will understand and accept them, and maybe some of us will also be seen to be gifted people.

I will not further elaborate my thoughts because you might say that we are really entering a world of fairytales. But listen to what once happened to me. I suddenly got a present. *Fortune had decided to give me a great present*, though I did not deserve such attention.

And here is the present: In my psychotherapeutic work I had once a very interesting case. In 1955 a patient of mine, who was an arch welder attending evening high school classes, told me “Doctor, now I have to go to the evening class. We were given a poem to learn by heart but I didn’t even open the textbook. If they ask me to recite it will be terrible.” I asked him, “Did you hear the poem in class?” “Oh, yes”, he answered, “we elaborated it together with the teacher”. I told him very calmly, “Don’t worry. If you have heard the poem only once in class, it is in your subconsciousness. Don’t refuse to talk. Start with the first word that comes to your mind”. And he went out. The next day he came to my office very exhilarated and said, “What did you do? It was a miracle. I was asked to recite the poem. I tried and to my surprise I recited the whole of it without any mistake”. As confirmation he showed me his mark book with an excellent mark.

I myself did not know what had happened the day before. I thought that I might have made involuntarily suggestions for refreshing his memory. I communicated the case in Bulgarian

(Suggestology, 1971, p.20) and also in the USA (Suggestology and Outlines of Suggestopaedia, 1977, p.12). I neither hypnotised him nor made any attempts with non-hypnotic clinical suggestion. I just had a calm friendly talk with him. I was convinced of what I was telling him. I was really convinced. I recently had had several lectures on the matters of spontaneous unconscious memory and in a medical journal in Bulgaria (Contemporary Medicine, 9, 1955) I even risked publishing an article on these “miracles” where in between (p.74) I wrote, “And we will certainly be amazed if we realise that, while drawing our attention selectively to phenomena which we are interested in at the moment, our conscious mind has not missed some quite insignificant and unimportant things – especially if we often encounter these things – like the number of stairs we climb every day, the number of small panes of glass of which the window of the study is made, the number of hooks in the coat-stand in the hall, the number of buttons on the clothing of people around us, etc. it should be underlined that these phenomena have nothing in common with Freud’s unconscious.”

Thus according to my theoretical anticipations (expressed partially and quite cautiously in my lectures and articles) and in my modest experimental experience at that time, I had this present – this hope that my dream was not groundless. I shared with friends, “there is a safe non-hypnotic way to the enormous potential capacities for accelerated harmonious development that are locked within us. Some were glad together with me but others looked at me quite sadly. Later I understood why. They loved me and pitied me for the complicated and hard life that was in store for me. But they didn’t know that I accepted it gladly.

This case was in fact only “one bird”. And as the saying goes, “one swallow does not make the spring”. Examinations had to be performed.

I repeated this later purposefully with other people who had to take difficult examinations. The results weren’t so dramatically high but always some positive results were to be seen. In fact, I could not repeat exactly the same spontaneous state of my mind like the first time. And that of course, reflected in the new smallest peculiarities of my behaviour that I could not notice. This time I interpreted the positive results with involuntary non-hypnotic suggestions. But now, after many years of investigations, I think that the first case was a result of a quite normal, spontaneous, desuggestive communication. I made no attempt to encourage the patient emotionally. There was nothing in my intonation and overall behaviour that could resemble a suggestive process. We talked calmly and in a friendly way, even without special involvement on my part. The communicative method for liberation of the locked-in potential capacities in the course of education and development had begun quite rightly with domination of the desuggestive component in the desuggestive-suggestive process. But to reach experimentally, theoretically and practically the final, most appropriate version turned out to be a very slow process. Thousands of persons, adults and students as well were examined.

From the first case in 1955, the gift of fortune, till the elaboration of certain methods, though they were not perfect, ten years elapsed in intensive experimental work. I had the opportunity for such an activity in my spare time at the clinic where I worked and later in my working hours at the Institute for Postgraduate Qualification of Physicians and at the Bulgarian Academy of Sciences.

In modern scientific psychotherapy, whose historical origins derive from esoteric practices, the tapping and stimulating of man’s reserve capacities lies mainly within the sphere of treatment for neurotic and psychosomatic diseases. But in proceeding with the treatment, considerable additional and identical reserve capacities may be released. This happens

sometimes in a *clinically provoked state of hypnosis*. As an example of this we can take the hypnotic "*supernatural*" recollection of forgotten or only vaguely perceived events as well as the evoked changes in the sympathetic nervous system, in metabolism, nutrition etc.

Hypnotic experimentation is of limited significance. It cannot be used on a large scale for the purpose of developing man's personality. *The personality's subordinated position* in hypnosis and its *weakened volitional self-control*, the problem of man's *susceptibility to hypnosis*, the *legal restrictions on hypnosis*, and a number of other factors make it contra-indicated, *except in hospital*.

The attempts of some psychologists to replace some psychotherapeutical terms with psychological ones, such as expectancy, motivation, attitude and set-up, and thus explain those cases where the tapping partly of the personality's reserve capacities is manifested in a not quite clear state in this field, have proved very useful indeed. Laboratory experiments have shown, however, that these psychological terms cannot completely replace the complex psychotherapeutical concepts.

The works of Barber T.X. (1962, 24, 286-299), Barber T.X. and P.D. Parker (1964, 69, 499-504), Barber T.X. (1965b, 21, 19-25), Barber T. X. (1965a, 70, 132-154), ; Barber T. X., N. P. Spanos and J. F. Chaves, 1974) are of particular interest. By giving task-motivating instructions they achieve results similar to those obtained in hypnosis. However, they do not admit that, by using the same means some sleeplike modifications in consciousness, similar to psychogenic derangements, may also arise.

But even in J.Charcot's time hypnosis as a state used to be classified at the Salpetriere under hysterical derangements of consciousness.

The question of man's reserve capacities and their accelerated harmonious development is of special importance. That is why we went through the literature of some ancient sources and also of some sources of historically later ages where such matters were discussed. We compared these data with data obtained in present day experiments in the sphere of human reserves in order to see whether there were any common psycho-physiological mechanisms. Besides this research, we organised a number of experiments. In our case it was those experiments which dealt with men's paraconscious activities and his reserve capacities by clinical hypnosis that were of importance. We had been carrying out these experiments for a period of 10 years (before the Suggestology Research Institute was established in 1966).

These experiments can be grouped as follows:

1. *Graded changes in sympathetic reactivity* in accordance with the "depth" of hypnosis suggested (as far as we can speak about "depth") (Lozanov G., 1955, 9, p. 71). In these experiments an automatic rise and fall in blood pressure was observed, the degree of the rise and fall depending on the suggested "depth" of hypnosis. The same holds true for the pulse rate and other vegetative indices.
2. *Graded changes in the latent period of motor reaction*, associative time and the character of the answers – changes which are in accordance with the suggested "deeper" or "shallower" hypnosis (Lozanov G., V. Bakalska and I. Petrov, 1957, т. II, p. 567). The relations between the mean values of these physiological factors remain constant and are in accordance with the relations between the different grades of hypnotic "depth".
3. Searching for the optimal hypnotic "depth" for the spontaneous appearance of a *model of schizophrenia* – katatone-stupor syndrome and stereotype movements . This

spontaneous appearance (as a result of the hypnotic “depth”) of a schizophrenia-like syndrome proves that A. Bostroem’s clinical observations and his belief that stereotypes run nonverbally are correct (Bostroem A, Bd, II, Allgemeine Teil II, 1936).

4. *Hypnotic age regression* and the possibility of a spontaneous, reliable and non-simulated manifestation of unconscious past functional levels of personality (Lozanov G., 1959, 9, p. 1095; 1963, 16, 7, p. 781; 1964, 17, 2, p. 201; Lozanov G., Deviations from Herring’s law of the movements of the eyeballs, Bulletin of the Physiology Institute, Bulgarian Academy of Sciences, 1966, vol.X, p. 47; Lozanov G., 1971, s. 133-142). On the background of the hypnotic “play” there arise moments of real regression to past functional levels in some activities. New anatomophysiological forms of activities are blocked and old ones are manifested. (Occasional unassociated eyeball movements with regression to the age of a new-born baby; also handwriting and drawings very much resembling, when compared later, the handwriting in old letters written in childhood and old drawings.)
5. Some degree of *small recollection* under hypnosis (Lozanov G., 1955, 9, p. 71).
6. *Biochemical changes* in blood and urine (Lozanov G., 1955, 9, p. 71).
7. A lasting *hypnotherapeutical healing effect* in cases of psychosomatic diseases.
8. *Minor surgical operations* performed painlessly and with no bleeding while the patient is in a state of hypnosis.

In some of the experiments a number of objective laws were demonstrated and afterwards these laws were taken into consideration in the development of our concept of the tapping of human reserve capacities without resorting to hypnosis. For instance, the experiments in which we were able to observe graded changes both in the vegetative reactivity and the latent period of motor reaction, the associative time, and the nature of the answers. They suggested to us that the nervous system has a tendency towards unconscious optimal algorithmisation in the communicative process and a corresponding adaptational reprogramming at every level. These experiments and those of the spontaneously appearing model of schizophrenia (syndrome of catatonia) and at times the surprisingly precise *reproduction of past activities* in hypnotic age regression showed that: (a) “nothing is lost” of past life experience; (b) not only conscious but also unconscious perceptions are preserved; (c) the reproduction of past activities is realised by emotionally associating the entire complex of stereotypes of the past levels with the self-consciousness of the actual time and place. This global past level “drawn up” to the actual time, carries with it an enormous amount of information about its separate elements. Now attention can be drawn to the latter. (d). unsuspected “reminiscences” and manifold variants of model of future normal and pathological reactions and developments are stored in the unconscious form of mental activity.

The prospects opened by the hypnotic experiments are, however, of significance only for laboratory work in a clinic. In mass practice, as we have already said, hypnosis is inapplicable. Thus we have to look for ways of tapping and developing man’s reserve capacities with the aid of suggestion in a normal waking state without hypnosis. Data found in some literary sources show that it is possible to obtain this phenomenon without going through the phase of manipulative suggested sleep. Hypnosis, as a sleeplike psychogenic veiling of consciousness is an unstable state.

B. Tender, non-manipulative, communicative Suggestion

During my research of hypnosis in my early years as a physician I came upon some literature about the negative impact of hypnosis. At that time I had already accumulated my own experience. So I stopped any further experiments with hypnosis very quickly and strenuously started searching for a soft, non-traumatic and tender method of work both in the field of psychotherapy and for the research of the supposed reserves of the mind. I was not interested in the clinical suggestion without hypnosis either, because of its imperative character, which put restrictions to the personality. In my search I came to the concept of a soft and tender communicative suggestion with which the patient had the right and freedom to choose, accept or reject the suggestion of the physician or the experimenter. Such a tender suggestion is hard to accept as a suggestion, but the terminology in this field is rather limited.

Suggestion in its mild, tender and non-manipulative variant that we use is a communicative factor, which to some extent can change the state of mind in accordance and in collaboration with the patient. From this standpoint we researched the possibilities of *that suggestion in a normal waking state*, both in psychotherapeutical treatment and laboratory experimentation. We researched:

1. The possibilities of provoking and curing allergic reactions of the antigen-antibody type with the respective biochemical changes and neurovegetative reactivity (Lozanov G., M.Markov und P.Kirchev, 1962, Band 8, heft 1, s.40) by suggestion in a waking state. We wrote: "An attack of urticaria is described, provoked by suggestion in a waking state. The attack is accompanied by alteration in the reactivity of the vegetative nervous system and also with alteration in the histaminous and cholinesterous activity."

2. A suggestively non-manipulatively obtained difference in the size of the two pupils of the eyes (Lozanov G., E. Sharankov, I. Petrov, and A. Atanasov, 1968, p. 47).



Provoked and resolved difference in the size of the eye pupils not by means of hypnosis or dictating clinical suggestions but through calm, tender, everyday communicative suggestion.

3. Suggestive, non-manipulative and non-hypnotic hypermnesia (Lozanov G., 1968, 6, p. 23; Lozanov G., 1967, p. 535; Lozanov G., 1971).

4. Suggestive, non-hypnotic anaesthesia and abdominal surgical operation carried out with tender suggestive anaesthesia and accomplished with the additional effect of less bleeding and of a shortened convalescent period (Lozanov G., 1971; Lozanov G., 1967, p. 339).



Painless 50-minute operation of inguinal hernia with reduced blood loss and accelerated healing in a 50-year-old man without hypnosis and through calm, tender communicative suggestion.

5. A common suggestive basis of all psychotherapeutical methods with concealed elements of “placebo” effects in them and enhancement of psychotherapeutical effects by using our “integral psychotherapy” (Lozanov G., 1971; Lozanov G., 1967, p. 529; Lozanov G., 1968, p. 221).

6. Common suggestive basis of the hypermnesic results of hypnopedy (Lozanov G., 1968, 6, p. 23; Lozanov G., 1971).

7. Suggestive intellectual activation and hyper creativity (Lozanov G., 1971).

8. “The symptom of the scales” – the autosuggestive linking of two psychosomatic illnesses in a mutual-balance system – one requiring a special psychotherapeutic approach (Lozanov G., 1968, p. 47).

9. Suggestive control of neurovegetative, trophic, endocrine, inflammatory and other syndromes, not only in cases of psychosomatic diseases, but also in those of organic ones (Lozanov G., E. Sharankov, I. Petrov, and A. Atanasov, 1968, p. 47).

This research under the conditions of mild, tender, non-manipulative and communicative suggestion without inducing a state of hypnosis has shown as has the similar research of other authors, that most chaotic “hypnotic phenomena” can be brought about not chaotically, systematically and usefully without hypnosis. It was especially important for us to establish the fact that under the conditions of scientific organisation of the suggestive and autosuggestive factors, control and self-control of a number of psychological and somatic functions can be achieved. The personality of a physician, his/her attitude of uncompromised love towards the human being in general, the inner freedom of the patient, the concept of the power of placebo, the knowledge of the capacities of paraconsciousness, and application of

the golden proportion in communication are important factors which will prevent from the development of a tendency for manipulative suggestion at times.

C. EARLY TEACHING EXPERIMENTS

WITH THE RESERVES OF MIND

Our research in the field of non-hypnotic suggestion confirmed our opinion that suggestion can be used successfully not only in medical practice but also in teaching. It can have its place in all spheres of activity where the highly developed human personality is a decisive factor. For example, a wide and still unexplored field is the organisation of production processes. But we ourselves have directed our efforts mainly to the field of psychotherapy and pedagogy. First, however, we had to try to formulate the concepts, the objective laws, aims of and prospects for this scientific trend, which we called "Suggestology and Suggestopaedia". A detailed description of the experimental material and our theoretical reasons for founding this science are to be found in the book "Suggestology..."(1971, 1978). The additional development throughout the past 30 years is presented in this book.

Conditions for experiments to improve memorisation by creating a pleasant, tender suggestive atmosphere in groups already formed to study foreign languages were not provided until 1964, in the Department of Psychiatry of the Postgraduate Medical Institute (ISUL). From these experiments we obtained the expected high memorization results.

Description of the experiment: At Sofia University a group of fourteen students had evening classes in French after work. The students were aged 25 to 60. A number of them were prestigious persons. There were physicians, pedagogues, scientists, and superior officials at the Ministry of Education. If the experiment proved unsuccessful that would prevent any further experiments, but if it proved successful it would be reasonable to expect a good opportunity for future work in the field. I was so convinced in the positive outcome of the experiment that I decided to carry it out. I asked the students and their teacher how many new words they had per day. The answer was 20 to 30 words. I told them that they would be able to memorise 1000 new words with my method. However, that did not mean mastering the language yet. They would have to learn grammar afterwards, acquire new speaking skills, etc. They responded slightly jokingly in spite of my high prestige as a physician. But the university teacher Ivanka Dimitrova took my words seriously. All her being, mimics, intonation, unguided, spontaneous and ideomotoric movements radiated, even imperceptibly to herself, deep conviction that the experiment would be a big success and of great use to the students. Finally, they all agreed to take part in the experiment. They chose 1000 words in the textbook crossing a word in advance if they knew it, receiving from their teacher a new one. So all of them had 1000 words altogether. That procedure took a whole day. On the next day with the same deep confidence the teacher simply read the words following my instructions. From time to time she slightly intoned her voice in order to avoid monotony, which might evoke hypnosis. That was by all means to be avoided. There was no music played, nor instructions for relaxation were given to the students. As some of the students had 2 or 3 words more she did read them as well.

The following were the final results of the written tests on the 1000 words given to each student in one study session:

A.K. -- aged 53, a physician at the Government Hospital.	100%
B.P. – aged 26, a planner at the rare metals Enterprise	98%
B.G. – aged 38, an architect at the Chamber of Commerce	97%
V.M. – aged 46, an advisor to the Ministry of Education	98%
V.M. – aged 36, a chemical engineer at the Research and Design Institute of the Electrical Industry	100%
G.D. – aged 60, chief engineer at the science and Technical Progress State Committee	96%
L.T. – aged 25, a judge	100%
P.V. – aged 48, a senior research associate at the Pedagogy institute	100%
R.V. – aged 40, a chemical engineer at the Higher Institute of Mining and Geology	90%
R.T. – aged 41, an employee at the Pedagogy Institute	100%
R.D. – aged 42, an employee at the Pedagogy Institute	100%
H.I. – aged 29, an accountant at Sofia Airport	100%
H.B. – aged 40, an employee at the Transport-Machinery State Economic Association	94%
Y.K. – aged 42, an engineer at the Science and Technical progress State Committee	98%

The first experiment with the memorisation of 1000 new French words in one session.

Average number of memorized words: 98.08%±7.39%

Consequently the average memorisation of the given 1000 words was 98.08%. Thus, we can assume with $p=0.95$ that this figure will not fall below 90.69% under the same conditions.

It was obvious that those convincing results of such a representative group promised a possible development.

This was only a memorisation experiment. On the basis of those results the methodology of tender suggestion in teaching will be developing.

My discoveries in the field of mental reserves soon became famous. The State Pedagogy Research Institute was informed of them. The Board of the Institute then took a decision to begin experimenting immediately under their supervision.

In the summer of 1965 a research group was formed at the State Pedagogy Research Institute for the study of problems arising in teaching foreign languages by the suggestopaedic system. The group was set up under a joint ordinance Nr. 2541 of 26 June, 1965, issued by the Minister of National Education and Minister of Public Health and Social Welfare. It took the research group very little time to get organised. In November of the same year experimental suggestopaedic French and English courses began.

There were 75 students divided up into 6 groups, 3 experimental and 3 control groups. Each lecturer taught two groups / an experimental and a control group, one after the other the same evening. The experimental groups started immediately with the suggestopaedic system in so far as it was developed at that time, but the control groups, although they studied the same

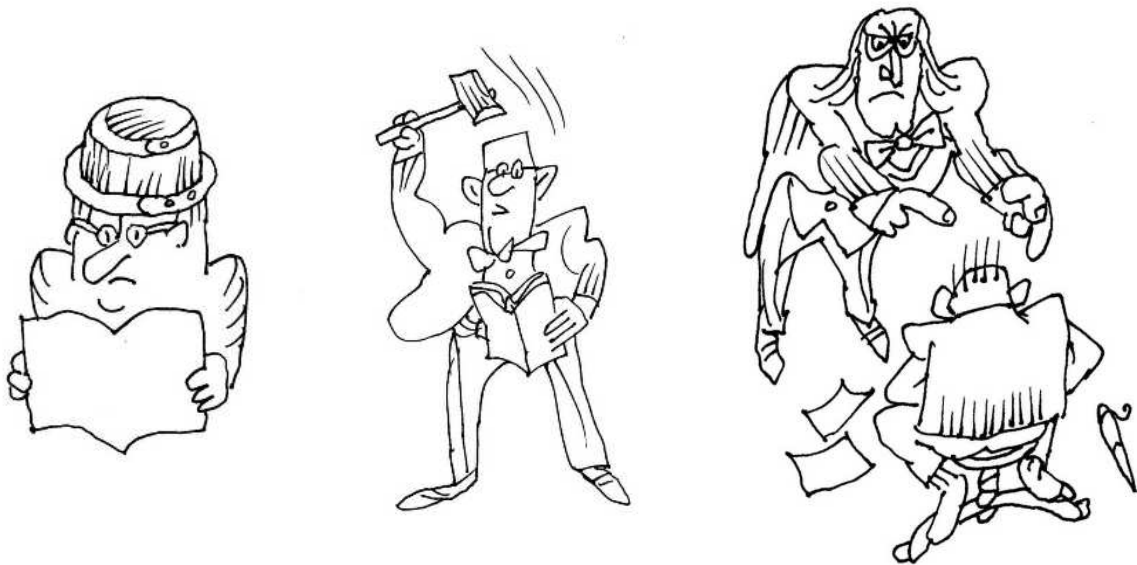
material, were taught by conventional methods. The students in the control groups did not know the nature of the experiment and were surprised by the great volume of material they were given. They decided to show what they could do and not to get behind in learning the material. A competitive atmosphere was thus created. By the eighth day, however, it became impossible for them to keep up with the groups which were taught by suggestive methods. They were visibly tired, on the verge of a nervous breakdown, and protested insistently against the unbearable burden of the program. At the same time the experimental groups were advancing rapidly, they were in excellent spirits, and learned the material without feeling any strain. A short time before the control groups refused to go on with the course, written tests were given to check the amount of material memorized. The tests showed the learning peak the control groups reached after which they were unable to learn any new material. Then the control groups began to be trained by the suggestopaedic system. They had a feeling of relief immediately when the lessons were given to them in the same way as the experimental groups. After being given desuggestive-suggestive training, the control groups caught up and attained the same level as the experimental ones. Near the end of the course a number of the nervous complaints (headache, insomnia, depression, irritability) which some students had at the start, disappeared.

Taking into consideration the exceptional results obtained during experimental teaching by the suggestopaedic method, as well as the recommendations of the Research Group, which observed and controlled the experiment, the Scientific Council of the Research Institute of Pedagogy in the Ministry of National Education suggested that the two ministries should set up a Suggestopaedia Research Section.

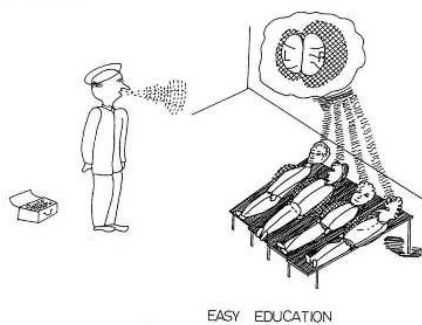
As the work of the Suggestopaedia section of the State Pedagogy Research Institute grew, some of its research went beyond the scope of this Institute. Since a number of people were involved in the experiment the results could not be kept secret. The cultural public of Bulgaria became interested. Interest was also shown in Suggestopaedia in other countries. Our success attracted due attention and conditions were created for our further research work. On 6th October 1966, the first State Suggestology Research Centre started its independent life. Television filmed an educational programme in which 15 respected citizens – scientists, politicians, public workers etc. – confirmed the amazing results from their participation in my experiments.

The incredible results provoked the interest of the Ministry of Education and the Ministry of Health as well as the President of the Republic. A series of control courses were initiated, always with incredibly good results. The tumult rose and this led to a significant expansion of experimental work. Meanwhile the methods were continuously improved. Many versions were tested. Dozens of books were written. Journalists from all over the world came. Everyone saw some version of the experiment and made a decision that it kept “*the secret*”. Thus, without my knowledge, some of the most inconceivable versions announced as mine were distributed all over the world. Journalists or non-erudite teachers, from their aptitude to simplify the methods or reduce these methods to certain techniques. We give answers to some of these claims below:

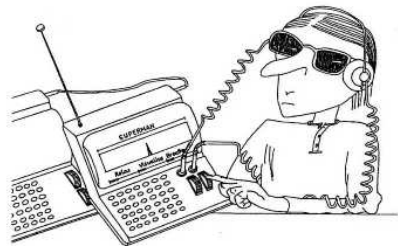
1. First of all, *hypnosis was explicitly rejected* because I already had considerable experience at the clinic, and the reference from serious authors against hypnosis was accumulating and well-known. It was also well-known that any methods using “order”, “guidance”, “monotonous intonation”, and “monotonous rhythm” might cause hypnosis and provoke in this way a series of psychogenic diseases or lead to reduced creativity, lack of will, or automatic subordination.



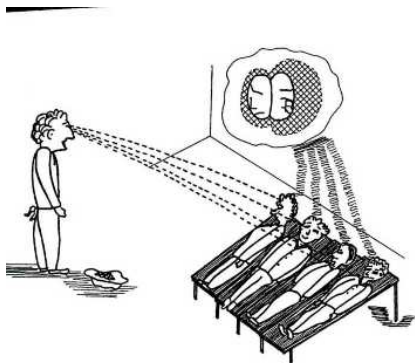
2. Any link or resemblance with *NLP (Neuro-Linguistic Programming)*, which appeared much later than Suggestopaedia, was *rejected* because any programming results from dictation and manipulation that, similar to hypnosis, suppress personal freedom. On the contrary, we provoke deprogramming from pathological programs restricting our capacities. This becomes especially clear in the newest development of Suggestopaedia – i.e. in Desuggestopaedia when the trainees are absolutely free or can even take the initiative in the process of education.
3. We have never experimented with “*breathing exercise*” and “*visualization exercises*” or “*guided fantasy*” because these could principally lead to hypnosis being at the same time a too primitive manipulation lacking any knowledge at all.



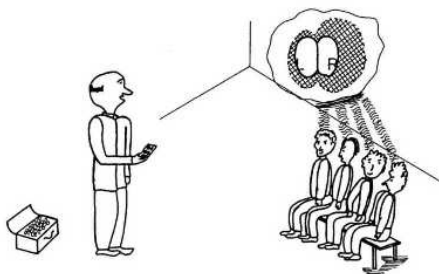
Guided breathing exercises. Some people used to believe that there was a breathing rhythm, which enhanced memory.



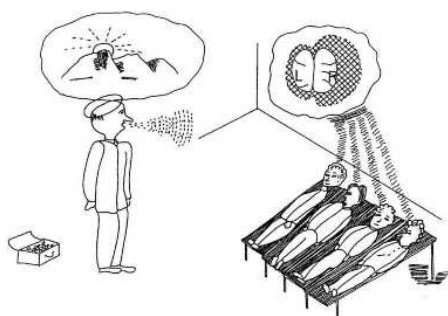
The way some people imagine a future easy training by mysterious equipment



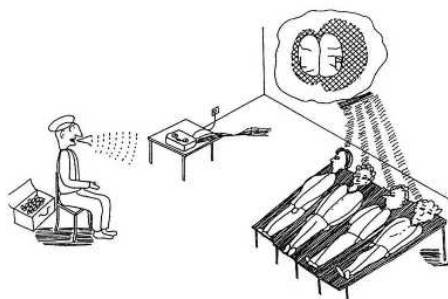
Guided relaxation (this is one of the methods to induce hypnosis).



Some people explained the effectiveness of Suggestopedia by a special diet and magic pills.



“Guided imagery” (which really is one of the methods to induce hypnosis).



Some hold the opinion that the secret lies only in the music programs, which activate the right cerebral hemisphere as well.

4. Some authors wrote that we use *reclining chairs*. That this was the reason for our great results. This statement is even ridiculously primitive, apart from being so far from the truth.
5. The two women journalists who described Suggestopaedia as “*super learning*” present an amount of false data, which only confuse readers. Moreover, these data bear nothing from the new development of Suggestopaedia.
6. Many other techniques were specified in these publications as a reason for the great results, for example, using “*alpha waves*” of the brain, isolated “*slow baroque*” music, “*selling tapes*” etc. However, our investigations took a different course. We examined peripheral perceptions, the unconscious, and affective stimuli. But first of all the teacher’s personality with their objectives, expectations and spiritual development. These did and still do underly communicative suggestion (not clinical suggestion or hypnotic impact). In this connection we examined the methods to reach *super memory*, which should be an integral part of *super creativity*. For practical purposes the matter

of their orchestration was studied, i.e. how to introduce *music, songs, games* and also what should be the *high prestige* of the teacher etc. The dozens of persons pretending to have command of the so-called secret of Suggestopaedia became all the more aggressive. That is why we introduced a system for certifying the teachers we trained. Thus anyone can prove whether his or her knowledge is real.

Dear reader, I hope that you will not take for granted each and every point I will set forth here. I hope that on the basis of your own professional background and experience you will *try and verify them for yourselves*.

9. WRONG APPROACH IN TRYING TO MEMORISE DIFFERENT THINGS IN LIFE

We often complain of difficulties in memorising (not in understanding or creativity – very curious). And the more difficult the study material, the more inappropriately we try to memorise it. What do we do?

1. We repeat the material as often as possible – sometimes aloud, sometimes by copying it again and again;



2. For the purposes of memorising we select small, difficult, and meaningless parts in isolation from the context;
3. We place the material to be memorised in the centre of our consciousness and attention



4. We neglect our motivation, fatigue, and mental state.



Many more wrong approaches are used in an attempt to facilitate memorisation. However, a great amount of evidence points to the significantly higher potential of human memory. Under certain circumstances this higher potential is not limited to the expected 10-20% improvement in comparison with the accepted average capacity but it can reach over 200-300%. In science, the term for this superior memory is hypermnesia, not supermemory, as it has been recently referred to in some publications. The “super” reminds us of “Superman” and, as in anything that smacks of pure advertising, provokes distrust.

10. CHAOTIC AND TRANSITORY HYPERMNESIA IN CLINICS

Increased memory – sometimes up to the level of hypermnesia could be clinically observed as a very rare, transitory, chaotic and non-obligatory, and a practically not useable symptom in the course of the following diseases:

1. Epilepsy: independent of the main process causing the disease, yet with changes of consciousness and a clear syndrome of ecmnesia (from the Greek “ek” and “mneme” = remembrance; i.e. simultaneous playing and remembering)
2. Schizophrenia: most often in cases of neurosis-like early stages of the disorder, with auxiliary chaotic ecmnestic symptoms.
3. Hysteria: in the presence of hysterical seizures with psychocathartic experiences of striking detail of a psychotraumatic situation.
4. Brain tumours: with symptoms ranging from psychiatric to neurological.
5. Infectious brain diseases: with symptoms ranging from psychiatric to neurological.
6. Oligophrenia: many cases have been reported. Most famous are those of the oligophrenics Inodi and Diamandi (Shipkovensky, 1954).
7. Brain damage.
8. Some types of brain surgery, for example the interventions performed by W. Penfield (1952), etc.
9. Many drugs for strengthening memory, but with non-guaranteed side effects. A whole branch of pharmacology exists but it will probably remain within the limits of experimental pharmacology. Among the variety of chemical compounds studied and partially administered in the psychopharmacology of training and memory, we should mention a few as an illustrative sample (ginseng and centrophenoxin (C. Guirgea, 1973, 1982; C. Giurgea, M. Salama, 1978); catecholaminergic drugs (L. Squire, H.

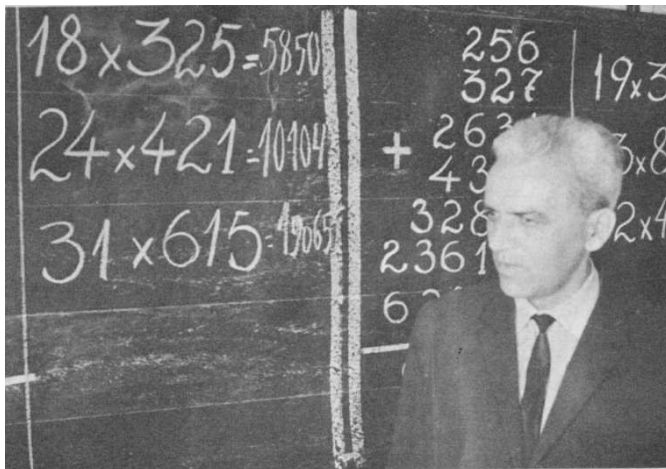
Davis, 1981); amphetamine, caffeine, mesocarb (E. B. Arushanian, U. G. Beloserev, 1978); methylphenidate (R. M. Knights, G.S. Hinton, 1969); orotic acid (H. Matthies et al., 1978); and many others).

10. Some cases of poisoning with narcotic intoxication etc.

Considerable increase in chaotic memory potential can be observed very rarely with psychological techniques (guided fantasies, some forms of guided meditation, mantras, tantras, etc.) when the users, or their trainers are not familiar with the fundamentals of psychotherapy, clinical suggestion and clinical hypnosis, and mix these two fields. However, such hypermnesic phenomena are transitory and of no practical use.

At this point it is interesting to note that some monotonous, prolonged exercises restricting personal freedom lead to moments of veiled consciousness, automatic subordination and hysteria-like ecmnesic syndromes, which are in fact chaotic hyper-remembrances. Such activities could include exposure to many hours of aggressive jazz or, on the contrary, continuously and monotonously watching a TV screen, creating conditions for monoideatism.

It is well-known also that there are cases of normal healthy people who under ordinary conditions show very high memory potential without any special effort. Such is, for example, the case of A.R. Luria's (1968) patient Shereshevsky, often described and discussed in literature. We also announced two similar cases: the Indian Yoga Shaa and the Bulgarian K.M. (1978).



Naturally existing super memory, which is a "reserve" for other people. He performed mathematical operations 4 times quicker than the electronic calculator at the Institute.

In science and art, there are also people with such a gift. Most often they do not discuss the matter, nor realise their talent. Well-known, for example, is the case of Toscanini who, in just one day, learnt by heart an entire new opera, which he had to conduct.

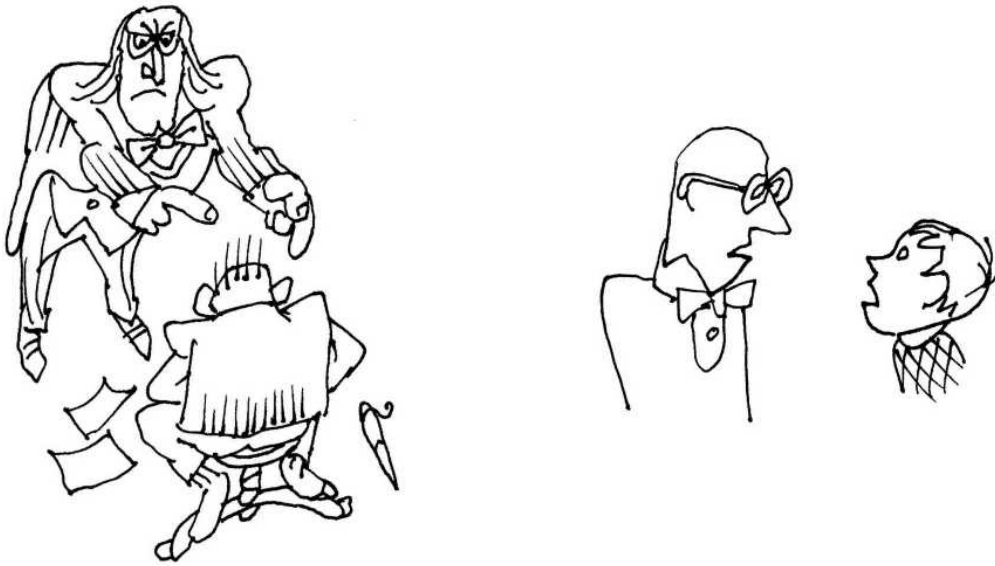
All the cases mentioned so far show beyond any doubt that increased potential for memorizing does exist. Even hypermnesia exists, i.e. memory significantly exceeding the estimated probability. In most cases, however, this memory is transitory and very often bears the characteristics of ecmnesia, i.e. hyper-remembrance, as is the case with abreactive psychotherapeutic methods or certain changes in consciousness due to illness. It can be used only within the framework of psychotherapy, but not in the course of the normal training process.

Furthermore, until 40 years ago, there was no evidence that a significantly increased potential for memorisation, up to hypermnesia, existed in every individual and could be provoked and used in the course of common educational practice *without any noxious side effects*.

With the aim of solving this problem, a number of experiments have been performed – mainly during various hypnotic states. However, the results are not encouraging. Hypermnesia cannot always be invoked in hypnosis. Moreover, the hypnotic state itself holds a number of dangers and can cause damage that will be discussed later. Notwithstanding the clear contraindications, some teachers (we believe that they were not aware of what they were doing) have organised training by means of hypnosis at various institutions.



In order to avoid hypnosis some authors have tried to draw on the reserves of memory during sleep. They cited the experience in ancient practices in Egypt, as well as the temple traditions of other cultures, when enormous passages were memorised in states which at the time resembled sleep but in our opinion, were hypnosis. A practical stimulus for the development of sleep-learning came from the doctoral thesis of the St. Petersburg physician A.M. Svydosht (1962) and later from the work of Kiev linguist L.A. Bliznichenko (1966). A number of courses were organised for learning a foreign language during sleep. International conferences were held, mainly in France. However, the advertised great results did not arrive. The dominant commanding position of the teacher regarding the sleeping pupils alienated the process of training from its most inherent features: the emotional synchrony within the normal human and training communication. This method gradually faded away.



In March, 1965 we performed experiments with this method (1978, S.151) applied in a high school by T.I., a Russian teacher. At that time, the method was called the Hypnopedic method. The results of the experiments discussed in detail in our aforementioned work clearly led to the following two explicit conclusions:

1. During training under this method, sleep turns into hypnosis; and
2. Suggestion, soft communicative suggestion in a normal state of vigilance is in itself sufficient to improve memory, and neither sleep nor hypnosis is needed.

Some early experiments in using muscle relaxation and autogenous training (Reider, E.G., S.S. Libikh, 1967) as a means of increasing memorisation failed to prove their claims to efficiency and harmlessness in ordinary practice. Furthermore, the manner of their implementation suggests a possible occurrence of hypnotic states. These experiments were conducted after the methods of Suggestopaedia were first reported. They proved that Suggestopaedia, even in its earliest phases, was not a method of muscle relaxation, as many authors tried to present it later.

In the search for methods designed for ordinary practice, the potential of clinical suggestion was also used. Clinical suggestion is, to a great extent, conditioning and subordinating, i.e. limiting personal freedom. Moreover, it programs the personality for stereotypic and non-creative answers. Although the experimental subject is conscious, these influences resemble hypnosis.

After studying all the possibilities described above, our experimental work led us to the notion of non-clinical, non-programming and non-dominant suggestion. Everyday life influences are organised in full awareness of the psychological process, freedom to inform others about their decisions and search for creative solutions. Here it is important to note that significant hypermnnesia was achieved for the first time by all trainees (although to various degrees with the individual group members). This indicates that the potential abilities of the personality, the brain and the mind reserves can be utilised by every individual, provided the appropriate methods are used.

Thus, the issue of the existence of a significantly increased potential for memorising, which can be applied in ordinary practice, including at school, was reduced merely to the specification of the methods and, most important, to the training of trainers.

We must stress again that this is not only a matter of a new significant feature of memory but also of creativity and overall personal development.

11. SUGGESTION – (COMMUNICATIVE) AS AN ART AND IN ART

Like the science of suggestion, suggestology is in an unfavourable position. To begin with, the attempt to found a science on a phenomenon which, for more than a century, has been defined in quite different ways and subjected to keen discussion, has attracted the attention of both scientists and laymen who hold preconceived ideas about suggestion. Apart from that, our standpoint that suggestion is a universal communicative factor which plays its part in every moment of our lives, though not always in an organised manner, indicates its significance. That is why it is extremely important that any experimental work on the subject should be based on theoretical clarity and the exact meaning of the terms with which it is operated should be precisely defined. There are many definitions of the term “suggestion”. In different languages these definitions have different nuances, as is the case with the term “love” which is an essential part of our definition of suggestion. Due to the lack of a more suitable word for this psychic phenomena, for now, we called the way of suggestion used by us “communicative suggestion”. And under the word “love” we understand love to the human being in general. The way of suggestion that we accept is more like sincere, friendly releasing, deblocking former psychotraumas and restrictions due to mutual trust and freedom. This friendly help is accepted with trust and love on all levels - logical, intuitive, subconscious and even spiritual. This can reveal the personality’s universal reserve capacities and stimulate its creativity. A visual representation of suggestion is art. *For is art not the greatest form of suggestion?*

As mentioned, there are many definitions of suggestion. Even definitions equating suggestion with hypnosis. And we must not associate it with the dozens of definitions for the very old understanding of suggestion only as a dictate, command, subordination and violence. For sometimes this is one of the methods to have hypnosis. But isn’t any influence and impact such a command, if it turns us into hypnotised slaves or robots?

What about the influence and impact of nature, of the mother, of the beloved one, of the child, of classical art etc? Of course, the enormous range of continuous diurnal influences and impacts has communicative and informative functions.

In any meeting, in any conversation, simultaneously with the logical and reasonable side of communication, we communicate consciously but most often unconsciously and intuitively by means of verbal intonation, numerous body movements, significant implications and verbal metaphors, through energetic fluctuations and countless known or unknown factors. But we communicate not only when we meet. Even while sleeping we communicate through the influence and the reactions of the air, energies, noises, dreams etc. – the list is infinite. The spirit, the soul and the body continuously experience influences and react to these influences in order to develop or vice versa, to suffer or degrade. Nobody and nothing in the universe is absolutely isolated. All is interacting. But the infinitely various forms of interaction are in fact infinitely various forms of communication. Thus, art is also one of these forms of communication. The scientific image or idea requires understanding while the artistic one requires not only understanding but also the experience of the perceiver. *It was more than 24*

centuries ago when Plato and Aristotle stated that art has a profound impact on personality and society. It is because art as a communicative phenomenon not only influences but also provokes additional rich associations related to the specific meaningful content. It should be emphasised that art might influence the whole personality – its intellectual development, mnemonic resources, emotional background and volitional tendencies.

On page 76 of the psychotherapy manual (1963) while I was still a doctor, before I had started dealing with Suggestopaedia, I wrote about suggestive therapy fusing with natural factors, such as “the regenerating effect of nature, the fresh air, the sun, the silence of woods, the grandeur of tree tops and the endlessness of horizons”. On page 75 I wrote of suggestion and music, “Music has been used for curing purposes ever since ancient times. Homer.....Democritus....etc. And now?”

The intellectual impact of art could be continuous or brief depending on the strength of its communicative and suggestive influence and consequent logical processing. However, the potential of art should not be absolutised. Its use in practice depends on a series of other factors, which will be discussed hereafter.

The aesthetic perception of certain creative work is always accompanied by suggestive influence. Suggestion always takes part. One of its forms – empathy, spiritual resonance – was very carefully explored in detail by the aesthetes at the end of 19th century and at the beginning of 20th century as an aesthetic reaction in contact with art. In this case suggestion could be accepted as communicative process in which the content of one psyche is transferred into another immediately through this empathy. It is realised most frequently by the emotions, peripheral perceptions and the expectancy of a respected and reliable teacher in the course of learning. In the case of art it is realised through the same mechanisms directly from the stage or indirectly through artistic work (music, paintings, architecture, literature). The communicative relation is realised through the artistic work as far as the author has skilfully put his/her ideas in it. A number of authors seek methods of greater impact.

Thus, in his letter to Theo, Van Gogh wrote about the “suggestive” hue (letters 517, 523) or about the relations between colour and Wagner’s music (letter 523): “Suggestive colour, he wrote, has a magic influence like the stars in deep blue heaven” (504). Not only is artistic work capable of such influence but so are its components – colours or tones in music, etc. Like in life, single tones or hues might provoke different reactions when combined in various ways. The tones of lion’s roar or its colour in the jungle might provoke a reaction which other peaceful animals with the same colour or pitch do not invoke. This is the reason why some artful predators (and humans as well!) try to imitate. However, not only the components of an artistic work of some kind have suggestive impact but so does the integral work. It exerts its influence by its form and content. Aesthetic suggestions are accepted together with the purely suggestive ones, and both are inseparable. But what we are most interested in, and of special significance for Desuggestopaedia, is *the need of man for more and more similar impacts*. These are in fact interactions. A great number of these interactions are unconscious. A feeling of pleasure and spiritual growth is the most common experience. Here the need of aesthetic delight is satisfied. We use such a suggestion in desuggestion. And this radically differs from commanding, automatising and hypnotising suggestions. Only the word is the same. That is why we say that we use communicative interactions as in classical art, and *Suggestopaedia itself uses this art and is a pedagogic form of art as well*.

The classical painting art, which is most often used in suggestopaedic textbooks, embodies an artistic concept of that which is global with its components, not an illustration of the separate

objects. The principle: global-partial, partial-global is best exemplified by means of the classical painting art, i.e. an illustration in textbooks. The illustrated individual objects in traditional pedagogy are separated from the whole and the principle of global-partial, partial-global is violated. Not all objects cited in the texts have been exemplified in a classical painting. However, the latter suggests the global direction. In this way the whole and the component can be really absorbed simultaneously.

12. WHAT HYPNOSIS ACTUALLY IS. TYPES OF HUMAN COMMUNICATION

In our opinion there are four types of human communication relating to the problem of suggestion, namely:

1. *Free communication* – without, of course, any possibility to avoid the variety of the natural influences we experience all the time, consciously or not.
2. *Directed but non-manipulative communication* – in a free organisation of the numerous natural impact factors such as art, prestige, para realized perceptions, emotional background, etc. while preserving the freedom of personal choice: to suggest=to offer, to propose.
3. *Clinical suggestion* – partially manipulative communication with elements of suggestive dissociation of personality.
4. *Hypnosis* – manipulative communication accompanied by an almost complete loss of self-control, with a profound and most frequently long-lasting change of personality.

This classification of communication is also made from the viewpoint of personal freedom and development. It is clear that hypnosis pertains to the fourth type, which is the most perturbing one. This type of communication (hypnosis) as well as the third type (clinical suggestion) may be applied only in a clinical environment, with patients with strictly defined clinical indications.

The third and fourth types of communication could also occur intentionally or accidentally outside the clinic in various cases. Since we are concerned here with the training process we shall restrict ourselves to consideration of the situations that are created or could occur mainly in that field. You can consider for yourselves the other domains of human communication where such cases could occur. Therefore, the next question is:

13. WHEN DOES HYPNOSIS OCCUR?

There are a number of methods in hypnotising. Our task here is not to train hypnotists but rather to indicate to teachers some of the most essential mechanisms for inducing hypnosis. This will help them not to provoke hypnosis but to guard themselves from inducing it inadvertently.

One of the oldest methods still applied to this day consists of the following: an authoritative person suggests a sleep-like state using a firm and sometimes soft voice, yet emphatic in both cases,



starting from a sensation of warmth and relaxation in the entire body. This *guided relaxation* is intended to make the subject lose touch with any sensation of the surrounding environment. Most often, it is commanded directly or only prompted that “everything happens as I say”. The voice of the hypnotist is to some extent cryptic, inferring that a miracle is already taking place. Suggestions such as “Your legs are heavy and warm, your arms are heavy and warm, your neck is flabby, your eyelids are heavy and closing, you are sound asleep...” remain valid till the end of the hypnotic séance.

Another method, which is very frequently applied is the method of *guided imagery*. With this method, a hypnotist enjoying prestige up to authoritarianism tells the subject to relax and listen to what is narrated to him. For example, “You are on top of a mountain, the sun is rising, you can feel the whiffs of pleasant fresh air... Everything is happening just as I say” (this can be said directly or merely inferred) etc. It is possible not to suggest directly a sleep-like state but automatic subordination is already taking effect. Subsequent action depends on the objective of the hypnotist’. There is also the method of *guided breathing exercises* with similar mechanisms of influence.

The following methods are also reported: *confusing suggestions* (suggesting mutually contradicted states); *sleep-like breathing* (the hypnotist breathes as if falling asleep, and the hypnotised subject imitates him/her intentionally or unintentionally); *mirroring* (the aim is affective synchrony by a mirror-like imitation of all actions of the hypnotised subject, who is unaware of the fact); *conditioning* (use of unconscious associations with elements of a formerly used complex of hypnotising stimuli); *direct brutal suggestion for hypnotic sleep* (a hypnotising command is uttered unexpectedly for the hypnotised subject); *monotonous rhythmic stimuli* (when the sleep-like state caused by this monotony is used for additional hypnotic suggestions); *fixation of attention* on an object, sensation or idea (when distracted attention is used for hypnotic suggestions); various forms of *guided and dictated meditations* (where in meditation the teacher, the guru, directly guides the mental process with suggestions about what is happening or what is being experienced, very often using monotonous music or speaking in a mysterious voice); *narco-hypnosis* (where drugs are used for the purpose of reaching a sleep-like state on the background of which hypnotising suggestions are made) etc.

What are the *common mechanisms* of these and dozens of other variations of hypnotising methods?

1. A prestigious (verging on authoritarian) hypnotist capable of modulating his/her voice and behaviour.
2. Decreased self-control due to complete trust and (most frequently) compliance, fatigue, relaxation, distracted or decreased attention, monoideatism or a-ideatism, and other similar states of the hypnotised subject.

The methods related to mirroring, conditioning and other similar techniques most frequently commence subliminally but eventually subside back to the aforementioned two basic and mutually related mechanisms.

It is quite clear that all methods employing the mechanisms of “guided” or “dictated” states of mind use in fact hypnosis or at least the induction into hypnosis. At their best, they use the third type of communication (clinical suggestion), which cannot be recommended for use in the training process. Both types of communication (*clinical suggestion and hypnosis*) can occur not only within the numerous variations of so called “*accelerative learning*” and “*super learning*” where “*guided*” techniques are used but in *ordinary school practice* as well. That is why we advise the teachers to be careful with authoritativeness and monotony at school.

To our great surprise, today hypnosis is applied everywhere and by everybody. That is why now I would like to introduce to you the publications of some of the most outstanding and well-known doctors and psychologists specialising in the field of hypnosis, who report and discuss their experimental and clinical observations on the subject.

14. WHAT DANGERS DOES HYPNOSIS ENTAIL?

There are hundreds of research reports on the positive effects of hypnosis in patients suffering from various diseases. Many of these results were confirmed in our work with patients at the psychiatric clinic. We have also done a great deal of therapeutic and experimental work at the clinics of internal diseases, dermatology and allergology. With our patients from these three clinics we used mainly non-hypnotic clinical suggestion, which shares some features with hypnosis.

The potential of hypnosis and clinical suggestion to influence the course of neurotic or psychosomatic diseases is well established. It is also established that hypnosis can have beneficial effects on some somatic diseases and not only on their psychological symptoms. It has been established that it is possible to achieve anesthesia during surgery or childbirth. It is doctors who should decide whether to use hypnosis or not, bearing in mind its side effects. These problems do not pertain to teachers, hence they will not be discussed here. The great experimental potential of hypnosis will not be discussed here either. It also concerns only the medical profession. *Here, we just want to assure you that hypnosis exists. So does clinical suggestion. The teacher should be aware of them, know when and how they occur, and avoid them.* The teacher must possess some knowledge of these matters because he/she works with people who are always experiencing some state of mind. The results of the training and educational process largely depend of these states. To some extent, the work of the teacher with people in different states of mind also affects the health and development of trainees.

As already mentioned many teachers resort to hypnotising techniques, intentionally or not. So let us now refer to *the dangers of hypnosis*.

It is a common belief (especially among laymen) that hypnosis is a sleep-like state or that it is some kind of suggestion. Neither concept reflects the truth. It is true that most frequently the hypnotised subject looks like a person half asleep, in a so-called trance, but there are cases when such an impression does not occur. W.S. Kroger and W.D. Felzer (1976) wrote that, "hypnosis is an induction of conviction or programmed faith". They added: "This is what differentiates hypnosis from forceful suggestion and persuasion. The latter two mobilise resistance, whereas hypnosis allows faith-laden suggestions to be accepted uncritically" (p.17). This idea is very close to the truth. It should only be added that the hypnotised subject is not only uncritical; his/her entire personality, in both its realised and unrealized functions, is under the influence of the hypnotist. M.H. Erickson (1976), the eminent American specialist in hypnosis, wrote quite explicitly, "I cannot ask for permission to do something in trance while she is in trance... You must be careful to protect the integrity of the personality and not exploit the trance state" (p.13). There are no guarantees that this recommendation of M. Erickson is observed everywhere and by everybody.

Another internationally recognized American specialist in the field of hypnosis, A.M. Weitzenhoffer, in his most recent two-volume book, "The Practice of Hypnosis" (1989), devoted a special chapter to "Dangers of Hypnotism" (p.24-27) where he wrote, "There are dangers in the use of hypnotism. Some are quite obvious and I think it is absurd to deny their existence as certain well-known clinicians did in the past, even when faced with actual evidence to the contrary". He reported a series of cases of damage and dangers of incorrectly implanted posthypnotic suggestions. He warned especially against damage inflicted by improperly trained clinicians and, above all, by imposter hypnotists, hypnotherapists and hypnotechnicians.

The eminent author of autogenous training I.H. Schultz (1935) recalled one such case. It referred to hysterical *blindness* which occurred following a hypnotic séance performed by a lay relative and which lasted for 14 years. After a great part of her life had passed in blindness, a specialist physician succeeded in terminating the inflicted condition.

In another book entitled "*Damaged Health Following Hypnosis*" (1954), I.H. Schultz compiled publications by more than 50 authors reporting negative impacts on health following hypnosis and abuse of the hypnotic state, and discussed the required legal safeguards. He performed his own studies at 11 university clinics as well as in many other hospitals. In just a couple of years of research he gathered data about over 100 impairments of health following hypnosis.

H.Rosen H. (1960) took a very critical position on the problem of misapplication and abuses of hypnosis. He cited (p.143) the "Report on Medical Use of Hypnosis" (1958) of the *American Medical Association* which reads, "the utilization of hypnotic techniques for therapeutic purposes should be restricted to individuals who are qualified by background and training to fulfil all the necessary criteria that are required for a full diagnosis of the illness which is to be treated".

P.F.D. Seitz (1953), H. Rosen and L.H. Bartemeier (1961), B. Teitel (1961), R.M. Brickner and L.S. Kubie (1936) and many other authors pointed out the noxious effect of unprofessionally performed hypnosis. E.R. Hilgard (1965) wrote, "Without exaggerating the dangers, there appears to be justification for discouraging amateur hypnosis and the use of hypnosis for entertainment purposes" (p.66).

The dangers of hypnosis do not consist only of the damage to *health*, the *subordinate position* of the hypnotised subject and the *abuses by imposter hypnotists* but also of the marked

tendency for increasingly *easier reoccurrence of hypnosis* following its initial induction. Having been hypnotised once, the subject is more apt to subsequent hypnosis. This has been repeatedly confirmed in the specialised literature since the beginning of the research studies at the turn of the century up to these days (Binet A. and C. Fere, 1888; Braid J., 1899, Bernheim H., 1902; Forel A., 1907; Bramwell J.M., 1913; Hull C.L., 1968; Hilgard E.R., 1965; Weitzenhoffer A.M. and B.M. Sjoberg, 1961, and others). Today this increasing aptness to hypnosis following the first séance is an ordinary clinical fact. Subjects who have been hypnotised once show increased alacrity to new hypnoses not only in relation to their original hypnotist but also to any other hypnotist even remotely resembling the first one. We observed a number of such cases in the early years of our therapeutic practice. This was one of the first symptoms that caused us considerably to restrict hypnotherapy at the psychiatric clinic.

We began therapeutic work mainly by means of clinical suggestion. It is partially manipulative, with preserved capacity for self-control. This is the major difference between clinical suggestion and hypnosis. It can be applied at the clinic with more freedom but it is not suitable for the purposes of the learning process. Even in a clinic we should not stay too long on this kind of suggestion, but pass as fast as possible on to our non-manipulative, communicative suggestion. When we began to develop Suggestopaedia by means of non-manipulative suggestion, i.e. totally preserving personal freedom of choice (to suggest=to offer, to propose), it was important for us to monitor what happens with clinical suggestibility. This type of suggestibility exists in everyone as an aptness of varying degree. The experiments we performed with 236 students trained in foreign languages by means of Suggestopaedia (1978) showed that *clinical suggestibility significantly decreases after the training course (p. 221)*. This phenomenon was contradictory to all earlier research on clinical suggestibility, which was usually reported as increasing with practice. Nevertheless, we were especially pleased with our findings since they proved that the second type of communication, directed non-manipulative suggestion, had been used. This opened a great opportunity for the activation of the unused potential of the brain/mind without the noxious effects of hypnosis or clinical suggestion.

In our opinion, adverse effects on personality are also caused by the possibility for posthypnotic suggestions to persist over the course of many years. We had three cases when the posthypnotic suggestions lasted for more than *10 years*. This means that the *hypnotic impact on personality is very persistent*. This continuous dissociation of the personality cannot be beneficial to the latter, of course, because those hypnotic suggestions are like an alien entity in the patient's psyche.

Laymen usually argue that hypnosis weakens volition. This has not been confirmed in research experiments. The increased tendency for easier induction of hypnosis, however, could be assumed to represent a weakening of willpower in the sense of a weakening of the power to exhibit resistance.

The possibility to use hypnosis as a means of increasing memory is often discussed but it is never stated whether such a memory could be used in a creative way. There are a number of publications on the creative potential of hypnosis, with a positive attitude. One of the most active proponents of this idea is W.L. Raikov (1969a and 1969b). He was able to suggest to hypnotised subjects that they were great artists, and indeed, they began to paint very well. However, it is not reported what happened after the hypnosis. Why not reproduce hypnotically a hundred or a thousand great artists? Besides, it is not known what these people could paint in the absence of hypnosis, just through support and encouragement. And the most important thing is whether they could work independently

and creatively, i.e. create new styles, produce new theories, make new discoveries etc. Or perhaps they could only play a game, in order to satisfy the will of the hypnotist? Our experiments confirm that hypnosis does not only fail to develop new creative capabilities but it restricts the existing ones as well. At first glance systematically hypnotised subjects do not appear to exhibit any difference from their personalities before hypnosis. They succeed in discharging their everyday duties. They even take the initiative. But there are no genuine novelties in their initiative. They expect all new decisions to be taken by the hypnotists. It is easier that way, some readers will probably say. In the experiments of A.M. Weitzenhoffer and B.M. Sjöberg (1961), the hypnotised subjects say that they have left all creative work to the hypnotist. The authors report: "One of the most interesting and perhaps significant distinctions our best waking performers made between carrying out waking and hypnotic suggestions was that in the first case they had to "work" very hard in order to bring about the desired results, whereas once hypnotised they did nothing – instead it was the hypnotist who 'did all the work'" (p. 218).

Despite all the dangers of hypnosis indicated above, many specialists organised very meticulously and with professional care experiments with the aim of applying hypnosis in the training process. W.B. Ziegenfuss (1962), L. Uhr (1958), E.A. Betts (1957), G. Ambrose (1961) etc. observed good results with the application of hypnosis. T. X. Barber (1965) also conducted experiments in this field. However, due to his original theory about the nature of hypnosis, he found that the experiments were not successful because of the lack of control of the critical variables. From the point of view of the theories of cognitive behaviour and on the basis of a series of experiments he concluded that the same results could be achieved through instructions substantiating the task with solid motivation.

The ideas of T.X. Barber expressed in a series of experimental publications such as Barber T.X. (1965a), T.X. Barber and P.D. Parker (1964) etc. provide a possibility to demystify hypnosis; this view approaches to a certain extent our own concept about the suggestive basis of so called hypnotic miracles. It would be interesting to consider a study on the application of hypnosis in the training process conducted by S. Krippner (1966). He organised experimental work to improve the reading skills of 49 primary and secondary school children. The parents of 9 of them wished their children to be trained by means of hypnosis. Significant improvement was achieved in both groups but the percentage was higher in the group of hypnotised children. However, the author asked himself whether this was not due to the additional attention paid to those children. He wrote, "Finally there is no assurance that the same techniques, carried out without formal trance induction, would not have produced similar results" (p. 262). But the author does not write what happens to the will of the person hypnotised many times. It is known that they become more and more susceptible to dictating suggestions often without being aware of it. Be careful when you communicate with individuals who have been hypnotised before. There is always the possibility that somebody suggests that they do something bad to you and they carry it out.

15. RELAXATION

Indeed, at the beginning of our experimental work we allowed the trainees to relax in their chairs while the teacher was reading the training program. But we have never conducted guided relaxation where the teacher dictates the trainees' sensations, the way a hypnotic séance is most commonly conducted. The teacher is not a physician and cannot involve the health and the personality of the trainees who have come to him/her to be trained.

Relaxation, if it is not guided and dictated during its conduct, has in itself a favourable impact on mental and somatic functions. At the same



time, there is evidence that relaxation serves as an auto suggestive basis for the placebo effect. In our experiments with hundreds of patients and later on with students in foreign languages, we repeatedly observed this phenomenon. Some authors have also reported similar findings. One such article was published by W.S. Agras, M. Horne and C.B. Taylor (1982). They organized experimental treatment with relaxation for patients suffering from high blood pressure. A group of 30 subjects was divided into two. Half of the patients were told that a favourable effect would occur as soon as the first séance was completed. The other group was told that the result would come after some time. Despite the similar relaxation procedure for both groups, the first group really achieved an immediate effect, as it had been suggested to them. It appeared that the suggested expectations had definitely influenced the result in both groups.

This example shows that relaxation has no independent impact and that the expectations formed through suggestion or in some other manner can play a significant role.

If relaxation, being a state in itself, is the basis and cause of hypermnesia, then the thousands of relaxed people I saw lying in the streets of Calcutta must have had enormous memory and hence speak foreign languages. Apart from that, the pathological cases which, as I noted earlier, could demonstrate temporary hypermnesia, should have been in states of relaxation. Clearly enough, they were in fact far from such states. There are people in whose electroencephalograms alpha waves prevail in their day-time activity as well. These alpha waves are most often accounted for by states of relaxation. Such people do not exhibit increased memory potential either. Therefore, some other mechanism is added to relaxation. This can be anticipation, suggestion, faith, mentality attitude etc. This seems to be the only way to explain the high efficiency of relaxation observed with certain yoga techniques, insofar as such results have been documented and proved.

In our authentic suggestopaedic courses, where hypermnesia and hyper-creativity have been proved, relaxation manifests itself in the form of calmness. This state is produced by the overall organisation of the learning process and is maintained by the real outcomes, which

each student can assess for oneself. The organisation of such a training process and the role of the trainer are a matter of training.

Since relaxation in its own right cannot produce hypermnesia, and since guided relaxation is normally an introduction to hypnosis, as has been noted not only by ourselves but also by a number of other physicians, then we should be looking for other ways to utilise the potential capacities of the brain in ordinary practice. As mentioned earlier, we have arrived at the conclusion that the second type of communication should be used, that is: guided non-manipulative, non-clinical, real-life suggestion, which we have characterised by the following clarification: to suggest = to offer, to propose. It is on the basis of this pedagogic suggestion that we have built suggestopedia.

16. PLACEBO

The most common suggestions in experiments with high *expectancy* values are the *Hawthorne* effect, well-known in the USA. (Roethlisberger F.J. and W.J. Dickson, 1939), and the *Pygmalion-in-the-classroom* effect (Rosenthal R. and L. Jacobson, 1968). The Hawthorne effect refers to experiments conducted in the Hawthorne Works of the Western Electric Company located in the Chicago area. At the end of the 20s numerous experiments were conducted there to investigate the effect of various changes in the employment conditions on employee performance. It was found that changes themselves had a non-specific beneficial effect on the performance of the employees. This effect was attributed to the expectation that every change leads to improved conditions. The Pygmalion-in-the-classroom effect is due to the expectations of the teachers that they have been given a class of gifted and clever pupils to work with. Such classes achieve better results because of a number of effects in the behaviour of the teachers who have raised positive expectations.

The placebo is known to the general public as “the white lie of doctors” when a neutral substance is given to the patient and he is informed that this is a very effective drug. Most often, good therapeutic results are achieved. In fact, things are not that simple. There are numerous studies and publications on the issue.

The placebo has been used mainly as an element of psychotherapy as well as for maintaining the respected position of the physician (Shapiro A.K. 1960, Liberman 1962, Lesse S. 1962), etc. Till the middle of the last century the placebo was related mainly to the temporary and isolated effect of “magical pills”. A.K. Shapiro (1961) proposed a broader interpretation of the placebo which coincides with our own view about the non-specific impact factors in any communication: therapeutic, professional, everyday life etc. He defines the placebo as a factor for the therapeutic effect of any medical procedure despite its intrinsic characteristics. These effects on the overall environment, for example of the aesthetics in the clinic and the entire behaviour of the medical staff in the therapeutic process are present and are equally influential in the process of training. Teachers may not be aware of the fact but all stimuli during training have an impact on its effectiveness. Therefore the high level of aesthetics from the first till the last moment of the course is a permanent methodological requirement in Suggestopaedia. Most frequently these signals are incorporated unconsciously through the peripheral perceptions and the paraconsciousness but their elimination is impossible. This is to a great extent, the content of our practical classes in teacher training.

In order to realise how strong this influence is we must be familiar with the research publications on this issue. The placebo has been found to have an influence on any organ, system, or function. For example, a placebo has beneficial effect on pain (Beecher H.K.,

1955), peptic ulcer (Backman H., H. Kalliola, G. Ostling, 1960), high blood pressure (Grenfell R.F., A.H. Briggs, W.C. Holland, 1963), angina pectoris (Amsterdam E.A., S. Wolfson, R. Gorlin, 1969; Benson H. and D.P. McCallie 1979), rheumatoid arthritis (Traut E.F., E.W. Passarelli, 1957)).

The placebo effect is effective at the psychiatric clinic as well. A positive impact has been reported on a number of psychiatric disorders, such as depressive states (Malitz S., M.Kanzler, 1971); anxiety and tension (Uhlenhuth E.H., A.Canter, J.O.Neustadt et al., 1959; Bourne H.R., 1971). Schizophrenic patients have also been influenced positively to a certain extent (Hankoff L.D., D.M. Engelhardt, N.Freedman, 1960).

The placebo effect is used not only within the framework of psychotherapy; it shares certain common features with some forms of supportive psychotherapy (Rosenthal D., J.D. Frank, 1964).

All research data clearly show that the key to the efficiency of the placebo effect is the physician with his/her profound belief in the efficacy of the therapy, accompanied by stimulating affective relations and mutual trust with the patients (Houston W.R., 1938; Wheatley D., 1967; Fischer H.K., 1956; Bogdanov M.D., C.R. Nichols, R.F. Klein, 1965 etc).

Detailed information on the stimulating significance of the placebo effect is given by H. Benson and M.D. Epstein (1975), as well as by L. White, B. Tursky and G.E. Schwartz (1985).

The reference cited here is only a small part of the literature available on the matter. Teachers should be aware that such literature exists, and that phenomena like the placebo, the *Hawthorne effect* and the *Pygmalion effect* also exist and have a great potential for impact. As mentioned earlier, their involvement in any communicative process is unavoidable and we should take them into consideration. Yet whether a system of training claiming a lasting effect should be built on such a base is another issue.

However, in Suggestopaedia a significant *difference regarding the results*, the *general trends*, and the *method* exists. In Suggestopaedia the expectancy is directed to the *potential* of the personality, and together with its results and the unexpected positive *by-product*, this potential *was unknown as individual and collective potential before*. Suggestopaedia makes sense only when it is directed to the potential of personality (3 to 5 times quicker and easier learning with a positive by-product expressed in a favourable health impact, attenuation of social conflicts and problems of the students etc.). Another difference of Suggestopaedia is that *the tutors have not got false data regarding the students they have been given, but they know that any individual possesses potential uncovered to that moment*. And the third great difference is that the tutors possess methods specifically designed to that aim.

We can state here that bearing in mind the *placebo effects does not imply their usefulness as training methods*. They are transitory, unstable, requiring constant support, and sometimes could produce *unexpected negative effects*.

That is why any attempts at explaining our suggestopaedic system of *training by means of the placebo effect*, the Hawthorne effects, and the Pygmalion effect are far from the truth.

17. PARACONSCIOUSNESS

Paraconsciousness involves subconsciousness or non-consciousness as defined by a number of authors. However it is far broader and larger than that. By paraconsciousness we understand more or less unconscious mental activity. Here we include everything that, for the given moment, is outside the scope of consciousness. Not all levels of paraconsciousness have yet found the place they deserve in suggestopaedic experimental work. But by uniting them in one system we ensure that they will be researched in the future. We must bear in mind that the psychophysiological laws governing the different levels of paraconsciousness have much in common. Paraconsciousness comprises peripheral perceptions, emotional stimuli, different variants of the unconscious, acquired dispositions (viz. Uznadze's setup, inertia and secondary automated processes, the unconscious components of motivation, attitude, expectancy and needs) and also innate and genetically predetermined unconscious dispositions. Here we include the genetically predetermined instinctive tendencies, which S. Freud reduces to dominating aggressiveness, and I.P. Pavlov explains as the instinctive basis of the conditioned reflexes. No matter which explanation we adhere to, we must take into consideration the significance of the instincts as an archaic heritage derived from phylogenesis and ontogenesis, a heritage, which unconsciously influences the suggestive dispositions in all directions. The term paraconsciousness comprises also all non-verbal automated activities in their mental reflexion. It also comprises the unconscious automated elements within the limits of conscious mental activity. When we operate with various concepts, when we read or solve problems and are, on the whole, consciously concentrating our attention on some activity, we are not aware of many elementary components which constitute these activities and are unconscious for the moment. For example: the ideas which build up notions; the letters and even the words of sentences which we happen to be reading; the unconscious judgments and premises hidden in the shortened formulas of thinking, as well as the codes and symbols. Paraconsciousness is of paramount importance for suggestopedia because we make purposeful use of many of its resources. For example, by means of a wide variety of peripheral perceptions we quickly send what is to be memorised to the long term memory. The ease of the acquisition brings about the humanisation of the learning process. Paraconsciousness is a substantial source for development of creativity. A lot of interesting ideas can be hinted at by paraconsciousness. Paraconsciousness embraces the unconscious sides of creativity as well as intuition and inspiration.

All these sides of paraconsciousness penetrate each other and take part in the desuggestive-suggestive process.

18. PERIPHERAL PERCEPTIONS

Peripheral perceptions are part of paraconsciousness. We will make a brief review because they play an extensive part in our lives and are very easy to understand and utilize. Their organised involvement can be denoted everywhere in Suggestopaedia. It is extremely important to know that they are in fact controllable, although they are part of paraconsciousness. If attention is deliberately directed to them they enter consciousness and then one can either accept or reject them. Very often, however, they can enter consciousness spontaneously as well. It is not only the character of communicative suggestion in suggestopedia and the teacher's behaviour that contribute to the freedom of the personality to choose, but the peripheral perceptions as well. In terms of strength and duration, these are normal supra-threshold stimuli. However, when these stimuli fall beyond the scope of attention and consciousness, which happens all the time, they acquire the properties of sub threshold signals. This situation is temporary and dynamic. Over the next couple of seconds,

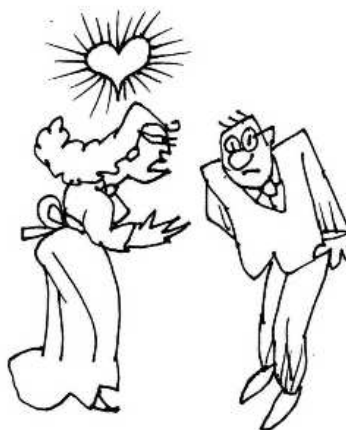
these signals may again fall within the focus of attention and consciousness, and then they will have the effect of any regular signal which is being realised. Peripheral perceptions are dynamically sub-threshold. They are relevant to the consciously perceived study program and significantly enhance its achievement. Our experiments have shown that peripheral perceptions implement long-term memory. In the moments when they are conscious, they contribute to the clarity of the task under study. At the moment when they fall in the periphery of attention and consciousness, they easily become automatic by unconsciously falling into the respective functional systems. In our suggestopaedic methods we use peripheral perceptions as a complete and extremely important system. The practical implementation of this activity is also subject of training for future trainers.

Peripheral perceptions as sub-threshold irritants demonstrate all the relationships also exhibited by common sub-threshold stimuli, which are typically quite weak and short. Peripheral perceptions, however, cannot be subsumed under so-called passive, involuntary memorization or under incidental learning because these forms represent conscious activity. They can be observed quite clearly, but are often neglected as being irrelevant. Peripheral perceptions dynamically alternate between being realised and unrealised, and are relevant to the programme of study.

Most often, the mechanism of peripheral perceptions is followed by the means of suggestion. The means of suggestion can service any of the types of communication described, from free communication to hypnosis. Their role is dependent on the level of authoritativeness requiring, at one extreme, automatic submission, or fully free and unlimited communication at the other. Thus, the means of suggestion are in fact intrinsic communicative factors. It all depends on what for and how they are being used. For example, an intonation can be soft, warm and non-domineering. Conversely, an intonation can be harsh, preemptory, manipulative. Every well-educated person, especially if he/she is a teacher, should be aware of these communicative factors, which are most often not conscious enough, yet always present. They could be divided into two groups of non-specific communicative means.

19. NON-SPECIFIC COMMUNICATIVE MEANS

The first group can include: factors of equal bilateral or multilateral communication such as *the dual plane* in providing information, and also the *intonation* and *rhythm* of speech, which can be considered also as part of the elements of the dual plane (primary plane and secondary plane) in the behaviour of the communicating parties.



The second group of factors or means of unequal influence on the communicative result could include: *the credibility* (prestige and reliability) of the source of information, *infantilisation*, in the sense of increased trust and receptivity while retaining a critical attitude and self-control, and *pseudo-passivity*, in the sense of a calm and relaxed, undisturbed and controlled activity. Infantilisation is the natural and spontaneous reaction in receiving information with a high degree of credibility (reliability). On the other hand, pseudo-passivity is largely the expression of good self-discipline, and at the same time a form of concentrative self-relaxation. Very important for the desuggestive process is the role of not artificial but real prestige (credibility, reliability).

There are various *types of prestige*: of personality, of sound logic, of the beauty found in great works of art etc. Here we are interested mainly in the authority of the teacher and that of the physician.

In most cases, the person receiving the information does not realise that this receptivity has increased because of the increased credibility of the source. He does not understand that, at a given moment, the informative process has begun to run at a higher level. More is received, understood and memorised than usual because the source has increased credibility. Experiments in this sphere were carried out in some comprehensive schools. A list of words from different poems was drawn up. These words were recorded on tape and presented to two groups of students. One of the groups, selected at random, was later told with prestige that the words were from the poetry of the prominent Bulgarian poet P.K. Yavorov, The other group was not told where the words had been selected from. Then sheets of paper were distributed to the students asking them to write down the words they remembered. The results can be seen in the table No 1.

Table No 1.

Effects of prestige for memorisation

Group	Informed	Number of subjects	Reproduced words of	Reproduced words %
I	Words from P.K.Yavorov's poetry	56	532	56.6 _± 13.24
II	No author specified	49	245	30.1 _± 13.10

The table makes it obvious that there was a considerable difference in the number of words memorised by the two groups. The statistical analysis of the material shows that the difference of memorisation between the two experimental groups is statistically reliable at a guaranteed probability of over 0.99.

It was especially important that the prestigious source was announced at the end of the experiment. Consequently, the difference in memorisation was due not to enhancing acquisition but mainly to enhancing the reproduction after perception.

A great deal more experimental research into the influence of prestige on memorisation has been carried out and all has given the same results. These experiments show that also in

school prestige plays an important role in memorisation, hence, the economic effect of establishing prestigious teachers and methods of teaching. In the suggestopaedic foreign language courses at the Suggestology Research Institute, the role played by prestige is very clearly marked. For example, a high percentage of words or phrases have been memorised due to the considerably increased prestige in individual groups. In a French language group, the meanings of 165 new words were memorised in this way on 15th August, 1967. The average percentage of memorisation for the whole group was 96.5 %. Another group had classes in the presence of specialists from abroad. From the very beginning the factors creating prestige were intensified. The control tests for the memorisation of phrases and words showed an average group memorisation of 96.3%.

In a number of similar experiments on the influence of prestige, control tests were held of the students' ability to translate from a foreign language into Bulgarian, and from Bulgarian into a foreign language. In other cases, only the translation of pronounced words or sentences was recorded. Many times the control tests were in mixed order. The results in the different languages did not differ very much.

It can be assumed, from the work in the suggestopaedic courses and our experimental research into the role of real prestige in memorisation, that the quantitative assessment of memorisation in the future investigations of this problem will also supply a quantitative criterion for the qualities of the teacher. Such a criterion for the teacher can be obtained not only from the assessment of memorisation but also from a number of other activities, and especially so from the students' creativity.

It is obvious that there is nothing mysterious or magical about these desuggestive/suggestive factors (means). They are involved, whether we want them to be or not, in any communicative process (treatment, training etc.). Even when we meet an acquaintance in the street, we unintentionally employ unrealised intonations, rhythms, facial expressions, behaviour etc. which add nuances to what we say, strengthening or abating the effect of our words.

In the very first manual of psychotherapy published in Bulgaria, where I wrote the chapter on suggestion (1963, p. 49-91), I characterised suggestion as the patient's freedom to intuitively have feelings and take decisions. I wrote, 'Non-specific psychic reactivity grasps the hidden meaning of human speech, and creates the intuitive sense of correctness and plausibility of the words we hear. It is the soil where suggestion grows.'

In my medical practice, I came across a case where a family was facing a divorce only because the wife had allegedly called a family friend 'stupid'. The husband argued, "But she said it with the intonation she used when we were dating!"

It is a well-known fact that the sincerity of a smile cannot be faked since there are facial muscles which can contract under volition into the grimace of a smile. *Musculus zygomaticus* is under double control, both conscious and unconscious. *Musculus orbicularis*, however, is under unconscious control only, and it cannot be activated by willpower to stimulate a sincere smile. We feel this intuitively. Such "markers" exist, it seems, in all means of suggestion and operate in the field of peripheral perceptions and in paraconsciousness. Thus, it is very difficult to cover up a lie in front of a listener who has a well-developed intuitive feel for the "sincerity markers".

The increased use of the above-mentioned unspecific desuggestive/suggestive factors has been verified experimentally, and it has always produced very good results with respect to

activation of the potential capabilities of the brain/mind, and mainly of memory, in its capacity for creative utilisation. The results of these experiments have been published (1978).

The second group of the suggestive/desuggestive factors (means), particularly *infantilisation* and *pseudo-passivity*, is connected with certain dynamic changes in consciousness and various levels of psychical relaxation. They are also related to the dynamic change in many of the personality characteristics, and are not just isolated states, as they might appear at a first glance. This has led us to the need to discuss an issue of particular importance in training, namely the issues of multiple personality.

20. MULTIPLE PERSONALITY



The view that we are a synthesis of a multi personality still needs further clarification. Commonly used terms include “Multimind”, “Divided Consciousness”, “Dissociation” etc. We prefer the term “Multi personality” because any change in psychic activity leads to a variety of changes in the whole personality, including functions of the body and brain. For example, an emotion or thought can automatically change the cardiac rhythm, blood pressure, respiratory rhythm, metabolism and many other body functions. It can also change the dynamics of brain activity. Electroencephalograms can accelerate or slow down. Beta and alpha waves can increase or decrease, new parts of the brain can be activated, and so on. Needless to say, EEG can be connected with changes in tension, activation of other functions of brain activity, yet not with the content of the mind. One can read in them neither the content of thought, nor that of emotion. Oligophrenics can also exhibit perfectly normal EEG.

One and the same emotion or thought changes the overall physical activity of the person as well. It can change the rhythm of physical activity, attitudes, motivations, readiness for one activity or another etc. Anything affects everything. Any partial activity is indeed a global activity, because the psychic, brain, and body activity of the whole person change to one degree or another.

We will refer to the indivisible unity of the human person as expressed in psychic, brain, and body activity as mind/brain activity, assuming that this includes body activity as well. Thus, when we talk about full or partial change of personality using only the term “mind”, we will mean the full or partial change in the person as a whole.

In this case by change of personality we will not mean the morbid definitive aberrations resulting from, say, alcoholism, schizophrenia, brain poisoning, or lasting aberrations caused by social factors. We will mean only alternative, temporary changes occurring most often as a result of internal psychic relationships of the personality - of the mind. Most often, these can be provoked by external factors as well, such as strain, stressful situations, psychological traumas etc.

But they can also be incurred by unknown causes. There are cases when children, and sometimes adults, living in an environment of irresolvable conflicts exhibit different personality traits in communicating with a different parent, teacher, friend etc. In some cases they have a memory of the differences in their own behaviour, feelings, and thoughts. In other cases no such memory exists. Their performances in the other states are engulfed by full amnesia. This dissociation of the personality, in its lightest forms, is inherent in each and every one of us. We have all noticed, for example, how with certain communicative contacts our creative energy is stimulated, inspiration prevails, while with other contacts we might feel almost dumb. The same is true of moods, and hence of thinking. It is obvious that different emotional states provoke the unfolding of different intellectual qualities. When in love, we think in one way. When depressed, our thoughts are different, we are simply different persons, ready for a different type of reactions and actions. That is why we say that there is an intellect of love, an intellect of egotism, an intellect of hatred, an intellect of fear, an intellect of hope, an intellect during and after an encounter with classical art, an intellect during and after an encounter with pseudo-art, an intellect in the case of an encounter with good people and in the case of an encounter with bad people, an intellect in the case of a real communion with nature and so on. We are so different, and quite often, should other people point out to us how different we have been, we are surprised and refuse to believe, or we offer an apology.

Such cases of dissociation of the personality have often been observed in our suggestopaedic training courses. A number of adult students, and later also children, when taking our courses, have exhibited impressive qualities in acquiring the study material at a creative level. They have studied with inspiration and attained incredibly good results. Outside the course, however, they quickly encountered a block and relapsed into being mere lesson grinders. This obvious change of personality brought us to the idea of introducing adaptive courses as part of our methodology and to make some additional changes, both for adults and young students, and for the teachers. The effect was astounding and we managed to avoid this type of negative dissociation. This is one of the cornerstones in our methodology that future trainers need to be trained in.

As a director responsible for the treatment of 350 patients in the psychiatric clinic where I worked before I embarked on my psychological and pedagogical career, I had many cases of dissociation of personality. Yet for more than 40 years now, three of these cases have been imprinted in my mind.

Case 1: Ivan, a 40-year old male, the clinic's ambulance driver. Extremely committed to his work. One night he set a store on fire without any reason whatsoever. Subsequently, he did not remember anything about it. When told about his act, he was in disbelief. The court heard all the facts and he was relieved from liability. He then wished to work for the clinic, so as to

remain under psychiatric supervision for longer. He never did anything wrong again. Throughout his 10 years with us, he retained the continuity of his consciousness and his full self-control.

Case2: Manol, a 50-year old male, a patient of the clinic for 10 years, staying in the ward for chronically ill patients, diagnosed with schizophrenia and degradation. Throughout his stay with us he never spoke a word, we often had to feed him by a probe or intravenously, he suffered from incontinence. It was in the fall when he developed bronchopneumonia. He was obviously dying. All doctors from the clinic gathered for a consultation around his bed to decide how to proceed. I had to resuscitate him. After we had been fighting hard for his life he opened his eyes, looked at me with resignation and gratitude in his dove-blue eyes, whose colour I then saw for the first time and I shall never be able to forget, and spoke calmly, slowly for the first time in ten years, "Dr. Lozanov, thank you. No need to continue. I am going home". And he expired. We all stood there, completely at a loss, not able to breathe, not a thought in our heads. We had an elderly doctor on the team, Dr. Shehanova, a psychiatrist, psychotherapist and a musician, already retired. She was the only one to find strength and say quietly, yet with strong emotion, "Boys, the soul of this man just played its swan song on a single string". We all went away silently without saying any comment.

Case 3: Vesselina, a 25-year old female, sent to us by the court for an expert medical opinion. She got involved with a group of unruly young people without any common propriety. She participated with them in a number of petty thefts and committed offences against public order by exhibiting her genitalia in public and calling out vulgar arrogant remarks. Isolated in the detention centre, she behaved properly. Every time she came into contact with her old friends, also detained, she would lapse into her vulgar behaviour with the law enforcement officers and try to steal from them. Brought to the clinic she behaved very well. She did not remember most of her actions from the past. Under hypnosis she recalled every one of them. After the psychiatric treatment she regained her memory of what happened but could not understand how it could have happened. She showed a desire to assist the clinic attendants with sanitation. On meeting her friends in the clinic she would try to talk them into changing their behaviour. She wished to be moved to another clinic, served by the nuns from a Catholic Nunnery, with strict medical care provided by psychiatric doctors. She was transferred there and later discharged in a good condition. Monitored for 20 years she did not relapse into the described induced conditions of dissociation and change of personality.

Multiple personality (two, three, or more alternating personalities) has been studied quite often in hypnotic experiments. However, it is difficult to prove whether these are personalities existing in the hypnotised subject beforehand or induced under hypnosis. For example, the experiments conducted by P.L. Harriman (1942), C. Leuba (1942), H.C. Leavit (1947) and M. Bowers and S. Brecher (1955) do not prove any affirmative evidence of the assumption that multiple personalities are not induced. It is especially important that most often there is a continuity of memories, which supports the integrity of personalities. Such incomplete dissociation of the personality is a fact of everyday life. Somewhat more convincing are the experiments with age regression under hypnosis, an area in which we have made some verification tests (1971, 1978), as we have already mentioned. These experiments were mainly held because of the ecmnesic healing syndrome. But quite often they led to a convincing regression of the personality to its previous stages of development.

The ecmnesic syndrome can be observed very clearly in a suggested age regression under hypnosis. Some scholars (Kraft Ebbing, 1927, Lowenfeld L. 1901, Platonov K. 1957, Danilevsky V. 1924, Mayorov F. 1950, Mayorov F. and M. Suslova 1952, Suslova M. 1951,

Stokvis B. 1955, Hilgard E.R. 1965) have carried out research into the question of whether the changes in the behaviour, speech, handwriting and attitude toward the world in the time of the suggested younger age of a subject made them correspondent to what they actually were when the respective subject was that age. Some rather specific methods have been employed. P. Young (1925, 1926, 1940, 1942), using test methods, investigated the intelligence at suggested younger ages of subjects and then made the same subjects simulate a younger age level in a state of normal wakefulness. He came to the conclusion that intelligence did not respond to the regressive age, and that regression to an age under six is impossible. In his experiments with adults the demonstration of a child's age without hypnosis gave results closer to the demonstrated age than in hypnotic regression. M. Orne arrived at similar conclusions (1951). T. Sarbin (1950), however, repeated Young's experiments and found that Young had not paid sufficient attention to the fact that the deepness of hypnosis may be of importance for the results. He found that intellectual regression under hypnosis is more convincing than simulated regression in a state of wakefulness. R. True (1949) in an experiment with age regression in 40 men and 10 women, asked them on what day of the week some memorable event had occurred at a suggested age. The answers he received were amazingly correct. Thus, for example, at the suggested age of 10, 93% of their answers were correct, at the suggested age of 7 – 82%, and at the age of 4 - 69 %. Before and after the hypnosis when the subjects were asked the same questions, only a small percent of their answers were correct.

L. Wolberg (1948) obtained regression down to the age of one year. Gidro-Frank L. and M. Bowrbuch (1948) found the appearance of the Babinsky reflex in suggested regression down to the age of 7 months. R. True and C. Stephenson (1951, 1952) also observed a reversal of the reflex of the soles of the feet in hypnotic regression to the age of one month. In experiments with 12 persons E. McCranie and H.B. Crasilnech (1955) found that only the volitionally controlled conditioned reflexes disappeared after the suggestion of age regression. L. Le Cron (1956), and K. Platonov (1957) reported spontaneously appearing pathological conditions in suggesting an age when the subjects had actually suffered from these pathological conditions at that age.

As (1962) restored a language (spoken by a subject in childhood, but later forgotten) in hypnotic age regression. H. Kupfer (1945) observed normal EEG when he regressed a patient suffering from epilepsy to the age he was before the disease appeared. But electrocephalographic investigations by H. Kupfer (1945), B. Schwartz et al. (1955), L. Ford and K. Leager (1948), McCranie et al. (1955), and R. True and Stephenson failed to produce the characteristic features of the suggested age. Various vegetative functions at a hypnotically suggested younger age of subjects have also been investigated. J. Horvai and J. Haskovec (1962) investigated the changes in the respiratory and pulse frequency as well as some reflexes of early age. They did not find physiological regression of these functions.

In the literature on this subject several viewpoints have been formed. Kraft-Ebbing (1927) and V. Sreznevsky (1927) hold the view that under the suggestion of a younger age there is an actual return to the suggested age – a regression of the personality, L. Lowenfeld (1901), Young (1940), J. Horvai and J. Haskovec (1962) find that there is no personality regression but a more or less successful playing of a role under hypnosis.

J. Stuchlik (1965) compared hypnotic age regression with some psychological features of dreaming. M. Erickson and L. Kubie (1941) defined two types of regression: in one, the subject recalls and acts past events, and in the other, the subject actually returns psychically and physiologically according to the suggested age. The whole experience disappears at the

same time. A. Weitzenhoffer (1953) distinguished three regressive types. To the first type belongs the hypnotized subject who plays a role; to the second, the subject who really returns to an earlier functional level; and to the third, the subject who is a mixture of the first two types. He expressed doubt regarding to what extent there can be a complete return to an earlier functional level. According to him, this would mean losing rapport with the hypnotist.

The hypnotic state in itself is already a split of the personality and is a cultivation of a new, hypnotic personality, although in many cases no amnesia is observed.

Back in 1889 Pierre Janet wrote about dissociation of the personality introducing for the first time the term “subconscious”. Alfred Binet (1889, 1890) also talked about “double consciousness”, Max Desoir (1890) talked about ‘das Doppel Ich’, Von Hartmann (1896) talked about “the Philosophy of the Unconscious”. It was after all of these and after many other authors that Freud emerged, reintroducing the term “subconsciousness”. Morton Prince (1890) introduced the term “double personality – co-conscious” and published *The Dissociation of a Personality* (1906). B. Sidis published his *Studies in Mental Dissociation* (1906).

In more modern times, the multiple personality issue in the framework of almost all hypnotic phenomena was discussed in detail by Ernest Hilgard, the US hypnologist, in his book, *Divided Consciousness: Multiple Controls in Human Thought and Action* (1977). Robert Ornstein in his book *Multimind* (1986) explored the issue. He wrote that we are not single-minded. A part of ourselves is judging our behaviour. Very often we say, “Why did I get so aggravated?” He also believes that “Something learned in one small mind does not mean that it is learned throughout the mind” (p.75).

All experimental investigation, clinical practice, the characteristic features of the learning process and the variety of everyday experiences show that dissociation of the personality, multipersonality does exist and is a fact of our everyday life. It is important to note, however, that this phenomenon occurs to various degrees. Most often, it is expressed in the dynamic and inexplicable change of logic, emotion, or action, while the continuity of memory is retained. Quite often, however, there are states accompanied by a slight amnesia. In such states, the gaps of what has been forgotten are filled in, based on subsequent events and we find, even without noticing it, some explanation for ourselves, without realising that tiny gaps have indeed appeared in our memory. These gaps can sometimes be more significant and we realise that something has happened to our memory and often do not comprehend why we have changed our attitude and behaviour with respect to a given situation. These cases are much rarer, yet there can be cases of complete and deep forgetfulness related to a complete change of personality. This occurs in certain clinical cases.

We have all had a number of cases when we could not understand our own behaviour, although it may not always contradict the basis of our personality.

For example, not long ago, I noticed that *I had acted illogically* from the viewpoint of a common-sense mind, yet I adopted the viewpoint of another mind without too much analysing. In a store in Anacortes, WA, I had to pay with a one-hundred-dollar bill. When I pulled the bill out of my wallet I had the feeling I was holding two bills stuck together. It felt thicker than it should have. I tried to separate them by rubbing my fingers with no success. And instead of persisting with some more definite effort, just to make sure I was not handing out two bills, I felt tense and decided the whole thing was stupid... and wondered why I was wasting my time on this. So I handed over the bill. Back at the hotel I remembered the

awkward and mutually exclusive duality in my attitude to the matter. I took another bill out and found that it was thinner, indeed. I had given the salesperson double the amount of the bill due to switching into another state and another opposite attitude without having any reasonable grounds to do so.

Such situations of spontaneous changes of mind without knowing why or how they occur have been shared with me by friends, patients and students. The point here is that this is not a matter of a conscious change of opinion and attitude. The mechanisms are unconscious.

Our research of extreme, almost clinical cases and of purely clinical cases has shown that this is a matter of duality or a multitude of personalities, which are not even aware of one another. Research has shown that in some cases the overall functionality level of the body changes. Psychosomatic and neurotic disorders of one of the minds do not exist with the other mind, and vice versa.

Similarly, enhanced learning of an area of study with one of the minds is not attainable by the other.

Each mind is basically a psychological state or as mentioned earlier, a psycho-physiological state. For us, for our suggestopaedic/desuggestopaedic methodologies, knowledge of the theoretical and practical aspects of this issue is extremely important, since we need to use the most appropriate state, i.e. the most appropriate mind. The number of these minds, from the slightest to complete dissociation, is infinitely vast. In training our trainers we show them how to discover the appropriate mind, how to provoke it in subsequent training and how to relate knowledge from one mind to all forms of different minds.

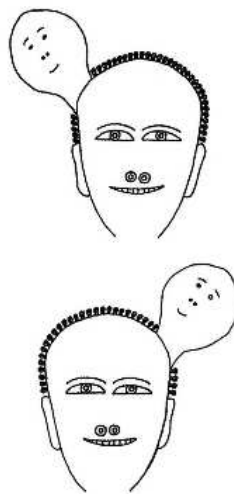
Trainers should also be trained in ways of causing this mind to prevail at their will, the mind that also makes their teaching most efficient. In the past, these states tended to be associated mainly with the degree of relaxation. But that has proven to be wrong, since the level of relaxation is a quantitative factor: deeper or more superficial relaxation. Every mind is a new quality, a new consciousness, a new personality.

During the first decade of our research we found that the state of relaxation (of course, not guided or directed by the teacher) was not stationary, not fixed to any particular level. This was to be expected, since there is no biological or psychological system which is static and not oscillating. Naturally, everything in the universe oscillates. Yet we are talking about a particular biological and psychological system. The vibrant level of relaxation, mainly on an arrhythmical level, made it impossible to embed it at the required “depth” during teaching. That is why we temporarily introduced the notion of “oscillating psycho relaxant methodology”. Teaching itself undertook vibrant intonation and, in general, an oscillating behaviour on the part of the trainer. Then, by conducting psychological and physiological research on hundreds of trainees, we found that every level of relaxation is characterised by a distinct style of functioning of the personality. What we observed at the various levels was, in fact, the manifestation of a more or less distinct personality. The different manifestations occur not only in terms of emotions, but also in terms of the way of thinking, and in the overall system of values, attitudes, motivations, the acquisition of new knowledge etc. The continuity of memory and consciousness were maintained, and for that reason the subjects did not realise that they were undergoing certain changes. It became clear that each level of psycho relaxation or, if we were to use another term, each level of vigilance, was, so to say, a different calling card of another variant of the personality.

This conclusion was further reconfirmed after we conducted a series of other experiments with groups of subjects of various ages in different situations. Thus we arrived at the conclusion that the success of training should be sought not at various levels of psycho relaxation, but rather with suitable variants of the personality features. Training remained oscillating but was considerably enriched. Now, we were looking for the suitable personality variant while retaining the continuity of memory and consciousness. We were able to observe quite clearly the different variants of the personality under fatigue, illness, anxiety, joy etc. At the same time we were looking for the personality we need in order to facilitate an accelerated acquisition of the study material.

In this respect, the choice of new names and new biographies by the foreign language students acquired a new psychological and physiological meaning for us. Not only did the trainees hide behind these names; they entered a new functional system, which could always be useful in training.

The non-monotonous oscillating behaviour and the oscillating soft intonation of the voice of the trainer during the introduction to the new lesson, and even more so during the concert session was designed to activate the most suitable personality variant and also to bring about a somewhat more lasting receptive and creative state of the personality. It was with that personality that ways of enhancing communication were to be sought. In this, again, the skill and experience of the trainer have a decisive role to play. A number of training approaches were further developed. For example, it is now a generally accepted rule to end a lesson with a song and to begin the next day's lesson with that same song. Humour is particularly important, bringing laughter into the classroom. It is well-known that laughter is the most efficient relaxing factor when it is good-hearted and spontaneous. Laughter is a typical feature of our system of training, particularly with the latest variant – desuggestive, liberating, spontaneous communication at the level of the potential capacities of the brain and the mind. In addition, no emphasis should be spared in noting that in the classroom laughter is not chaotic. It is a system within the system. The trainer has been trained as to when and how, at which particular points and with what means, as well as at what level he/she can create what appears to be natural conditions for spontaneous laughter. *This is training through laughter. Laughter! Laughter!* Remember this. Of course, teacher training is also required for this. But do not worry, it is not as hard as it might seem.



Multipersonality. It is very dynamic and vibrant.

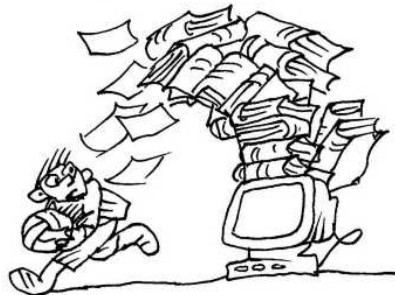
It is clear that the psycho-physiological theory of the multiple personality hidden in each and every one of us (from the faintest unexpected change in logic, emotion, attitudes, motivation etc., with a completely preserved continuity of memory and consciousness, to profound dissociation with a breach in continuity and amnesia) will be reflected also in our methods of training at the level of potential capacities of the brain and mind.

As indicated earlier, the vibrant character of the training system requires a vibrant type of approach. This safeguards the training process against any hypnotising monotony. It makes training highly interesting and motivating. It creates conditions for training to be *desuggestive*, *deprogramming*, *yet integrative*, i.e. carrying out a transfer of the knowledge absorbed from one state, from one variant of the personality, to a maximum number of other states, i.e. other variants of the personality. What is it that our methodology deprograms, what does it desuggest? The limitations suggested by the social suggestive norm, as to our own capacities to absorb study material.

Therefore it would be useful to consider, although briefly, the issue of social suggestive norms.

21. SOCIAL SUGGESTIVE NORMS

Caught in the net of the numerous social suggestive norms in most cases, we do not even attempt to do anything that is at variance with them. We do not believe that it is possible to increase our memorisation, to accelerate our creative development, to have more self-control both over our mental and physiological functions. The social suggestive norm teaches us that it is impossible and contains a note of warning not



to attempt it. And if it really happens somewhere it is considered to be a miracle, an exception or a falsification – things which we have paid dearly for. That is why suggestology in its development as a science for liberating the personality's reserve capacities (and hence for displacing the social suggestive norm and for freeing a larger virgin field of personality), naturally encounters great opposition. The concept of a social suggestive norm of the pupils' limited capacities is not to be confounded with conformism and social education.

In our discussion of the placebo we indicated that its mechanisms are much more general than has been assumed. The placebo is not a mere clinical phenomenon. It has its place everywhere in our life where information, directly or indirectly, explicitly or implicitly provided by a source of extremely high credibility, dominates. What could be a more credible source to a young child, or even to an adult, than teachers, parents, elder brothers and sisters, textbooks, training methodologies, pedagogues and historical heritage. The whole educational system assumes that there are certain limits to human capacities. Anything above and beyond these limits is perceived to be a "miracle" or advertising. As you saw at the beginning of our discussion, the increased capabilities for a significantly higher level of creative memorisation are neither a miracle, nor a lie. As for the advertisements a number of people who are not sufficiently trained and do not have a thorough knowledge of the processes tend to resort to mere advertising. But that is a different issue.



All of the above mentioned sources of “credible” information are also the victims of that information, which they absorbed back in their own childhood. And so it goes down the chain, until there is a moment when everything becomes quite clear and simple, and the chain breaks. We believe that we are now with desuggestive learning at such a moment which can, however, last for many years. It is hard to replace one system of beliefs with another.

A lot more can be said on the topic of social suggestive norms but we would be running into the field of social psychology, and that is not the purpose of this work.

We would like just to point out that the many-headed, invisible Gorgon of the placebo, which backs up the social suggestive norm is not invincible. Most often, it becomes tired, exhausted, and loses its strength. This process may take hours, days, years or centuries. Under the pressures of new realities, the system of believing changes. Under the present, most recent variant of Suggestopaedia, Desuggestopaedia, conditions are provided for spontaneous, active, integrative deprogramming, which frees the potential capacities of the brain and mind. Such a new social suggestive norm is, in fact, desuggestive; in both cases, the invisible factors are increasingly limited. This provides conditions for a considerably longer duration of the new system.

The social suggestive norms are implanted in us and determine the boundaries of our activity and efficiency, yet at the same time their “rejection”, which comes sooner or later, is enhanced by the so called antisuggestive barriers.

22. ANTISUGGESTIVE BARRIERS

This issue has been discussed by us elsewhere (1978). Here we will only highlight the most important aspects, which can be useful to teachers, but also to anyone conducting some type of training, treatment or public activity. It is common knowledge that our body has a number of self-protective mechanisms such as blood coagulation, immune system etc. We also have a self-protection system against all kinds of psychological influences. With some individuals this system is more developed, with others less so. But it does exist in everyone. In the case of certain medical conditions, it may disappear or, conversely, grow excessively into hypertrophy. We have called this system of barriers “antisuggestive” because it is activated most intensely when normal, healthy individuals are subjected to manipulative suggestive influences. Nevertheless, it exists in every communicative process.

The system of antisuggestive barriers may be viewed as a unity of three basic barriers: emotive, logical and ethical.

The emotive antisuggestive barrier is most obvious in young children with their childish negativism. They intuitively say “no” to any new and unfamiliar person. This initial “no” driven by fear and distrust, can also be observed with adults. Emotional distrust is one of the characteristics of this antisuggestive barrier. Quite frequently, even most frequently, this reaction is largely or completely unconscious.

The logical or reasoning antisuggestive barrier appears to be completely conscious. This is not quite true because very often we form our judgments unconsciously and then we “logicalise” them. This antisuggestive barrier rejects any psychological influence which contradicts common sense and reasonableness in the structure of the personality.



The ethical antisuggestive barrier rejects any influence or proposal which is counter to the ethical structure of the personality. This is another unconscious process although it can gain a conscious formulation. Ethical counteraction has been the explanation for a number of unsuccessful experiments in hypnotism. For example, if the hypnotised subject is induced to commit a crime or perform a sexual act, he would spontaneously come out of hypnosis. But is this always the case? No. If an immoral offer does not conflict with the moral structure of the personality, it may well be accepted.

These antisuggestive barriers are active both with regard to individual psychic influences and with regard to group or social influences. The strength of the social influence can, however, reshape even the antisuggestive barriers themselves. With individual influences, this occurs in isolated cases and is transitory.

In the ordinary training process the teacher often comes into conflict with the antisuggestive barriers of the students. They can, to a certain extent, be formed by the teacher, but should not be stimulated. With desuggestive pedagogy this issue does not stand because of the spontaneity and involvement of the trainees.

This spontaneity and involvement of the trainees or students is generated as a result of the specific Games. The whole learning process is a strange, pleasant, double plan game. Play the games! Enjoy the games! Life is a game, with its emotions and ambitions.

From the perspective of the multiple personality theory it becomes clear that the social suggestive norms and antisuggestive barriers with the different variants of the personality also vary and vibrate. That is why certain things are achieved more easily with certain states, while others are harder to accomplish. One of those “things” is the acquisition of new study material. Everything said so far, and a number of things to follow, indicate quite clearly that working with a methodology which makes use of the potential, so far unused capacities of the brain and mind is not a matter of getting the knack of some simple technology. It takes knowledge, training, devotion to one’s job and love for people and work. In the course of the development of desuggestology and desuggestive pedagogy, we have established the prerequisites for a methodology which frees the potential capabilities. It should be based on the fundamentals of desuggestology, the principles of desuggestive pedagogy and on the three groups of means that have their logical roots in these fundamentals and principles. Thus, we should dwell in

greater detail on THE FUNDAMENTALS OF DESUGGESTOLOGY AND PRINCIPLES AND MEANS OF DESUGGESTIVE PEDAGOGY

23. THE FUNDAMENTALS OF DESUGGESTOLOGY AND PRINCIPLES AND MEANS OF DESUGGESTIVE PEDAGOGY

Desuggestology is founded on the following three psycho-physiological fundamentals:

1. Isolated activities of consciousness do not exist. Consciousness and paraconsciousness are always indivisibly taking part;
2. Each accepted stimulus is associated, coded, multidimensionally symbolised and connected with different past states of mind.
3. The stimuli in their complexity are always connected with the dynamics of dominating different activity of the states of mind.

These three assumptions are the logical conclusions from modern psycho-physiological and psychological research, also confirmed by our experimental investigations. Careful analysis of this research allows a number of further conclusions and practical developments in various areas. In our case it is interesting to trace its implications for the training process. These basic assumptions show that linear teaching as well as the teaching of small, isolated portions, particularly when targeted at consciousness and attention, as is the prevailing practice, contradicts certain psycho-physiological laws. That is why such teaching cannot be effective. And, needless to say, it will always lead the teacher to despair. Such a way of teaching relies solely on the volume of attention and consciousness. It does not seek to connect to the para-conscious functional structures, where long-term memory takes place.

Our research confirmed this conclusion. Targeting the units to be memorised at “active attention” activates only the short-term memory, where the so-called *Miller’s Law* is in effect. In 1956 Miller published his article “The Magical Number Seven, Plus or Minus Two”. Teachers are not even aware that there is a small possibility to increase easy memorisation by enlarging the memorisation units. For example, these seven can be letters, words or numbers. According to this law, grouping the units together in chunks of reasonable size allows for the assimilation of a larger volume of information. These seven chunks or groupings actually come quite close to our understanding of long-term memory. When the isolated information stimulus “overgrows” with additional associated perceptions or an appropriate emotive filling, concentrated attention loses conscious control, and then paraconsciousness takes over the functions of analysis and lasting embedding in the brain and mind. This simultaneous overgrowth of associations, notions, emotions etc. takes place not necessarily with the assistance of the teacher or the training methodology.

According to the second basic assumption of desuggestology, the brain does not accept isolated stimuli. There is always something from the environment, the atmosphere or the state of mind of the recipient, which clings to the primary stimulus. This is the only way for it to become embedded in long-term memory. Unfortunately, teachers are not aware of the necessity for this instantaneous overgrowth, which takes place anywhere. Instead of facilitating this natural process, they often hinder it. Thus we get the monotonous repetition of isolated elements designed to enhance memory, which is ridiculous nonsense. Quite often

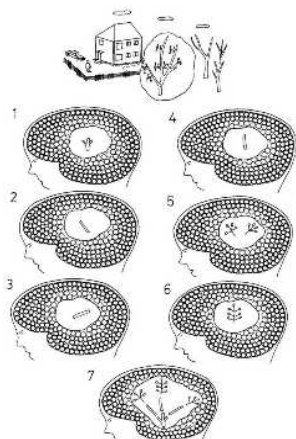
when there is an insistence on such “naked” memorisation in an attempt to train the brain to function contrary to its own laws the result is quick fatigue and boredom. This, in its turn, results in a change of the personality in all of its aspects. Therefore, the manner of memorisation has to do with the development and health of the trainee; it is not just a matter of effectiveness and depth of understanding of the study material. The stimuli do not dominate, but are different states of mind.

The most suitable and effective overgrowth of the memory material is that by natural association and emotions; these, in their turn, arise most abundantly from specially selected art of the classical type. As we shall see, this is reflected in the means of desuggestive pedagogy, which has a special group of training means, the artistic means.

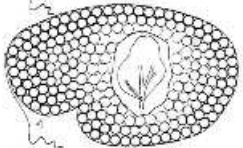
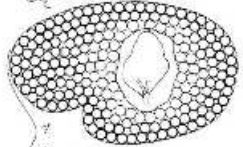
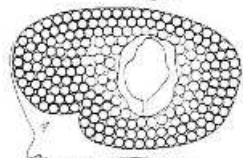
Within the basic framework of desuggestology thus defined, the principles of desuggestive pedagogy emerge. These include:

1. Joyful and spontaneous concentrative calmness;
2. Dynamic, structured and hierarchical globality – the part in the global and the global in the part; the global as a part and the part as a global; and
3. Desuggestive set-up with the aim of the spontaneous freeing of the reserve capacities of the mind and brain.

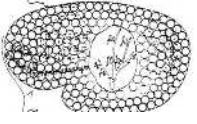
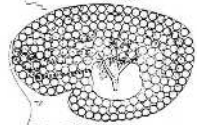
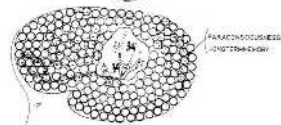
Even a quick analysis of these formulated principles of desuggestive pedagogy will show that this is not a matter of some technique that can be learned by heart and applied in a stereotypical manner. It requires the thorough acquisition of a number of theoretical laws and practical approaches. The three principles of desuggestive pedagogy cannot be viewed in isolation from one another. Each principle is an aspect of the other two. For example, if we were to adopt only the first principle, “Joyful and spontaneous concentrative calmness”, isolated from the other two, we could have joyful, entertaining training, yet we would never be able to take training up to the level of the potential capacities of the brain and mind. Through entertaining, joyful training, without taking into consideration all three principles at the same time, we might embed the social suggestive norms about the limited capacities to absorb new study material even deeper. Entertainment for and in itself, without the necessary educational properties and without its merging into a huge body of study material suggests to the trainees and school children that training is, indeed, a very difficult and inefficient process. If, at the same time, the study material is not properly structured in accordance with our theory of globality in the training process, under the second principle, no positive outcome can be expected.



Learning partially. The elements which will later be put together are memorised in the centre of consciousness and attention. However, what has been put together can never be a substitute for the whole. It still remains a whole which has been put together.



In holism, the whole is given as an outline, with no structure and no dynamics and, what is most important, only in the centre of consciousness and attention, without utilising the enormous potential of paraconsciousness.

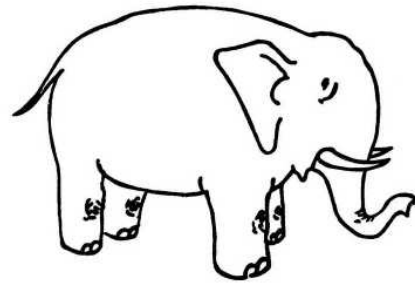
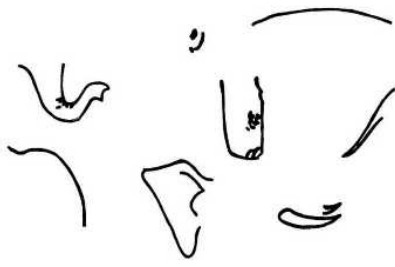


In our diagram, globality possesses structure and dynamics as well as easier retention in long-term memory by also engaging paraconscious peripheral perceptions.

If we consider each of the principles separately, which we should never do in practice, we can briefly clarify them for the purpose of our analysis:

The first principle guarantees the necessary cheerful, genuine and highly stimulating concentrative relaxation through the system of games and the system of humour, and, through visual materials which are not illustrative, but rather *stimulating* in character, as well as through the overall training communication.

The second principle refers mainly to systematisation of the study material in the textbooks and the visuals, but also to the behaviour and the system of the trainer's work. It should be very clear that the method of training determines the way the personality develops. That is why it is our belief that the traditional methods commonly used in teaching (focusing on separate elements which are then integrated into units, or the so-called partial methods) has its place mainly in academic studies, in scientific analysis, but for the purposes of mass education of



Try to see the parts within the whole and the whole in the parts. This is the second principle of desuggestive training.

children and adults it is quite outdated. Modern life has made a huge leap forward in the spheres of the ideal and the material. It is necessary to absorb a huge body of knowledge. It is necessary to master global concepts and construct new ones. It is necessary to build increasingly broader views in all spheres.

Fixing attention on the element, in isolation from the whole, attention most often remains fixed at the level of the part and then finds it difficult to grasp the larger picture. This is not to say that it makes it impossible, but it does make it harder. In addition, sometimes the whole cannot be well comprehended. A typical example is to teach children how to read by starting with the letters. It takes a long time for them to learn how to merge the letters and arrive at a word that at last has a meaning to it. Because of this approach, some people find it hard to comprehend global ideas. If learning foreign languages under this approach, the memorisation of separate words and rules of grammar does not automatically imply that the student will be able to speak and comprehend what was heard or read. The process of easy comprehension and meaningful speaking is slow and cumbersome. In addition, it creates a psycho-traumatic environment. Many people spend their whole life studying a foreign language, yet they can never speak it.

All right, some will say, let us then study in the holistic way. We might just as well use the earlier two examples: teaching young children to read and teaching foreign languages to adults. Holistic training in reading for small children involves the method of whole words or whole sentences. Yet, this method was abandoned by many. Why? Because children cram the first 10 or 20 words and, because they do not know the letters, they cannot read new words, or can only read them with lots of errors. And at this point the holistic method reverts back to the traditional method of letters or syllables.

We have a similar situation in foreign language teaching for adults. Here the holistic approach is exhibited in reading books or having free conversation without the systematic study of grammar, phonetics, vocabulary etc. The learners do speak, but make many mistakes. Again, it becomes necessary to study each of the individual elements. Yet now this is done in the existence of fixed mistakes. If the teacher is not sufficiently flexible in his/her approach, this process can be substantially slowed down.

What is the reason for the difficulties with the holistic approach? The reason is that it has no structure. Training is delivered in large parts, yet structure is left to spontaneity or to additional study.

With traditional holistic approaches, difficulties stem not only from the lack of structure but also from the very nature of their holism or globality. With them the whole is set once and for all. It is formed on the basis of the system of the discipline studied. It has nothing to do with the specifics of the personality in its rich variety of states, often reaching multiple personality.

According to the second principle of desuggestive pedagogy, the study content of textbooks, visual aids and training method must be structured while preserving the hierarchy in the structure, but the part, the element, must be discernable within the whole. At the same time, the element must show the global idea of which it is a part. Also, there must be an acceptance of the possibility for the global idea to become part of another, larger globality, and for the part to become a globality, if interest and attention focus on it. I would not like to dwell on the example of the atom and the cosmos, where the atom can be a cosmos in its own right. Rather I would like to stress that globality can change in a flexible way depending on which variant of the personality, with its new interests and emotions, is predominant at the time. It is, for instance, well known that our emotions can turn a molehill into a mountain. Love, for example, can suddenly make a person who to us used to be just another element of the community, into a whole universe giving meaning to our life. Pablo Neruda in his odes to various objects and vegetables provides an illustration of this dynamic change of view and experience, which is reflected in our subjective global attitude to a given phenomenon. Thus, for example, his Ode to a Tomato turns a vegetable, one of many, into the centre of our experience. One has the feeling that this tomato, suddenly in the focus of our consciousness and attention, has become the most important thing in the world. It seems that the whole world is now structured under the dominant hierarchical position of the tomato.

Of course, these deliberations do not change the basic principles of globalisation of the content of the study material. This is just to indicate that the personality also adds something from itself to the process. And this something must be made the best use of.

The third principle of desuggestive pedagogy suggests that once we have the necessary state of mind according to the first principle, once we have the necessary dynamic structuring of the study material in accordance with the second principle, we need to create a psychological set-up conducive to freeing the reserves of the brain and mind. What is particularly important is that this set-up needs to be spontaneously created by the teacher himself. The teacher's mastery is in facilitating the teaching-learning communication process at the levels of the reserves of the students' personalities. Naturally, certain suggestive influences are unavoidable in any communicative process, as indicated earlier. With desuggestive pedagogy the trainer does not apply even the faintest pressure or insistence. He simply communicates at the edge of the unused reserves of the brain and mind. Thus the students have the feeling that they achieve everything on their own, the help of the teacher is just the extended hand of a friend. Needless to say, such communication is a matter of training and experience on the part of the trainer.

On the basis of the discussed fundamentals of desuggestology and the defined principles of desuggestive pedagogy, specific groups of means were established for the purposes of setting up one method or another: for example, for various subjects, for various age groups, etc. These groups of means include *psychological*, *didactic*, and *artistic means* (in the sense of the means of art).

Psychological means include, first and foremost, the overall organisation of the teaching-learning communication. What is important is how peripheral perceptions will be organised. They should be organised so as to stimulate rather than to illustrate. Peripheral perceptions

include not only the posters with the content of study - hanging on the walls, but the overall classroom atmosphere. The classroom should not only meet hygienic standards, it should also be arranged in an aesthetic way. It does not have to be overwhelmingly embellished. A moderately arranged classroom interior is often much more pleasing and acceptable for the student than an obviously intentionally decorated room full of unnecessary trinkets and gadgets. It is important to have visual aids such as posters and charts done artistically and in good taste.

The teacher should be animated, inspiring, calm and enjoying the work. *Remember that the students unconsciously imitate everything they see, hear or sense.* The teacher might want to think about the freshness of his/her voice as well. It helps to do some vocal exercises before going into the classroom, such as singing a stimulating and melodious song or two.

Didactic means have been partially discussed in the analysis of the principles of desuggestive pedagogy. The material should be structured in accordance with these principles. Dynamic hierarchical structural globality must be observed not only in the textbook but also in the teaching process. Of course, the material to be worked on during one academic hour should be two to ten times larger than the amount planned in traditional methods. The enlarged methodical unit makes it possible to get a general idea of the essential objective laws of all the material studied, and the generalisation of the codes makes it possible to overcome the envisaged limitation of short-term memory. This principle demands meaningfulness in teaching, the avoidance of repeated exercises in details and the gradual introduction of the new subjects for study. The habits “hierarchy” is avoided, high motivation is created and creativity is stimulated.

There is another important and characteristic feature of suggestology involved here: while attention is drawn to the consciously understandable, generalised unity and the sense of it, paraconscious perception and thinking process the implied elements included in the general code: for instance, in teaching foreign languages the students’ attention is directed to the whole sentence, to its meaningful communicative aspect, to its place and role in the given amusing situation. At the same time pronunciation, vocabulary and grammar remain to a great extent on a second plane. They are also assimilated but the well trained teacher draws the students’ attention to them only for a short time and then goes back quickly to the sense of the whole sentence and situation. A considerable part of these elements is learned along with the whole structure without any special attention being paid to them.

For example, in teaching children to read, they do not learn the separate letters first, in order to be able later to join them to form syllables, words and sentences. But neither are they taught by the so-called “whole-word” method where no interest is shown in the letters that form the words. The children learn meaningful units – words and short sentences and they discover the letters on the second plane, in the form of finding the answers to the picture puzzle, which illustrate the material. Thus they stimulate the whole in its elements simultaneously, their attention being directed, in most cases, to the whole. According to the third principle of desuggestive pedagogy it must enhance the creation of the set-up for increased acquisition capacities. And according to the second principle it must be structured so as to reveal immediately the whole, with its internal linkages. The parts, the elements should be obvious at a glance, but as parts of a whole, and at the same time as parts of other possible wholes. Parts should carry, in accordance with the principle of *holography*, the specifics of the whole. *Everything should be reflected in everything else.* This is in agreement with the equipotential theory of the functioning of the brain, but as a combination with the basic dynamic functional structures of brain activity.

Artistic means, the means of art as mentioned earlier, is the best vehicle for spontaneous “clustering” of the memory material. In addition, they possess high motivational power. In our training process, art is not simple entertainment.

The artistic means of Suggestopaedia introduces a special kind of liberating-and-stimulating didactic art (music, literature, acting etc) into the process of teaching and learning. It is not a stage of illustrativeness in the learning process, but is built into the contents of the lesson. It promotes the suggestopaedic psychological orchestration by introducing an abundance of harmonised peripheral perceptions in a second plan.

The artistic means is used both to create a pleasant atmosphere during the process of receiving, memorising and understanding the principal information given in the lesson, and to enhance the suggestive set-up for reserves, attitude, motivation and expectancy. Through the artistic means part of the material is immediately assimilated. After this the teacher’s work becomes easier and more pleasant.

A number of experiments have been carried out in our experimental schools to check this. Table No 2 shows the results obtained after didactic suggestopaedic performances of the plays which were specially designed to give new material in mathematics in the first grade.

Table No 2

Acquisition of material in mathematics by first-graders by means of art

Grade	Number of school children	Kind of test	% of correctly solved problems
First	1312	Before performance	57
First	1312	After performance	74

As can be seen from table No 2, immediately after the performance the children learned a considerable amount of the material without noticing it. The difference is statistically significant ($p < 0.001$).

In teaching other subjects to both children and adults, didactic suggestopaedic performance always gives good results if it is correctly organised. Table No 3 shows the results of such performances in teaching English in a primary school.

Table No 3

Acquisition of material in English by primary school children by means of art

Kind of test	Number of school children	Maximum possible correct answers	Correct answers	Correct answers
			Number	%
Before performance	302	985	49	4.9
Immediately after performance	295	965	130	13.5
Delayed check – the following day (no revision)	278	913	216	23.7

The table shows that coming into contact with didactic art and without any tension the children assimilated part of the material. And the amount of the material they had assimilated increased on the following day, without their having been able to do any homework on it or to repeat it. The suggestion law of spontaneous delayed recollection, which has already been mentioned, is manifested here. All the differences are statistically significant ($p < 0.001$). It is of interest to note that experimental checks, involving problem solving and tasks similar to those given in performances, have shown very good results. The children not only memorise, but utilise the knowledge they absorb in these performances for solving their similar problems and tasks.

Our research into the part that the concert session plays in foreign language teaching for adults has also shown that during this stage the biggest percentage of the new material is assimilated by the long-term memory. It is assumed that the trainer will have some theoretical knowledge of art, and in addition will be able to play a musical instrument, sing, or, if not, play suitable pieces on the tape recorder.

Dr. E. Gateva (1991), as it has been said, made an extremely valuable contribution to the development of specific suggestopaedic art for the purposes of the training process. We use suggestopaedic art in Desuggestopaedia also, but more softly.

The use of art in the suggestopaedic training process was an issue she developed both experimentally and practically. The core of this research and study was reported in her doctoral dissertation. The practical implications of artistic means for the purposes of the suggestopaedic process are described in our *Trainer's Manual* (Lozanov G., E. Gateva, 1988), which is currently undergoing some minor alterations in accordance with desuggestive development. However, we have included the most salient features in this book.

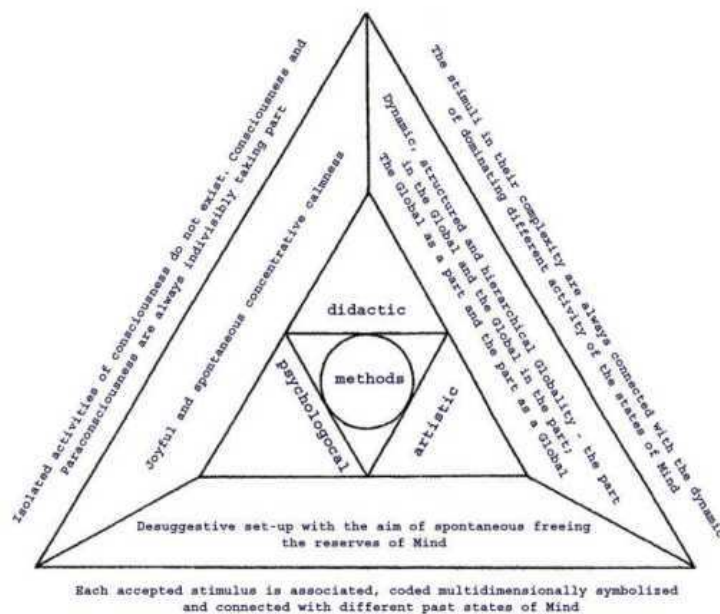
Using the three groups of means in ways adapted to the principles of desuggestive pedagogy and the fundamentals of desuggestology, as well as using non-specific communicative factors, is instrumental in creating teaching-learning methods for various study subjects and a variety of age groups, and in organising the overall training communication in which the teacher is involved.

The basis of desuggestology and the principles of desuggestive pedagogy clearly show that we consider paraconscious activity of the personality to be a factor of significant importance. As noted earlier, our experiments revealed that it is in the paraconsciousness that long-term memory takes place. In the domain of consciousness and active attention, memorisation follows Miller's Law, a law which was actually noted for the first time by Wundt in his research of the capacity of attention to process simultaneous information elements in perception and notion. Paraconsciousness is in a continuous unity and interaction with consciousness.

At this point it seems appropriate to make a clarification: in referring to consciousness/paraconsciousness, we do not mean clinical concepts of the various changes in consciousness.

Consciousness and paraconsciousness, in their interaction and interdependency, as well as in their fluctuation and continuous oscillation within the framework of the norm are an object of our analysis because this function is typical of the healthy personality during learning. One should have a good understanding of this interaction in order to achieve an efficient training process maintained in the scope of the potential capacities of the brain and mind.

The above discussion is valid for training in any subject. However, since our focus is mainly on foreign language training, we also need to consider briefly the question of



Fundamentals of Desuggestology: the outer triangle. Principles of desuggestive pedagogy: the middle triangle. Means of desuggestive pedagogy: the inner triangle.

24. THE LINGUISTIC ICEBERG

We have already mentioned that study material should not only be appropriately structured but it should be much larger than with any other method as well. That becomes possible because in Suggestopaedia the material acquired paraconsciously is much larger in quantity than the memorisation programme in the consciousness and in the centre of attention. With our methods this process is facilitated by the overall organisation of methodology, as discussed earlier. We do not rely on spontaneous clustering of elements, spontaneous association or spontaneous lodging in the paraconsciousness as a result of fatigue due to

incessant repetition of isolated elements. At the same time, however, with our approach, the traditional linguistic question of the so-called active vocabulary and grammar vs. passive vocabulary and grammar took on



particular importance. Usually, foreign language teachers tend to react quite negatively to passive knowledge. They wave away, in a gesture of annoyance, the existence of passive knowledge. This is not to say that all teachers do that, but a great number still do. On the contrary, we welcome passive knowledge as warmly as active. Why? Because passive vocabulary and grammar are much more interesting to us than that which is active. Passive knowledge is extremely useful with the following language activities:

1. Passive vocabulary and grammar makes it possible to read appropriate texts quite early.
2. Passive vocabulary and grammar makes it possible to communicate quite early and in quite a broad range. Limited capacity to make a statement using active vocabulary and grammar is compensated for by a multiple increase in comprehension due to this discovery, which brings forth communicative methods out of the training much like out of a “phrase book”, where a strictly worded question elicits a strictly worded answer. And this is to be memorised actively. If, however, the question is asked differently, and not in the way it can be found in the “phrase book”, it cannot be understood, and no answer follows. However, when we do not reject passive knowledge as useless, or even “detrimental”, we facilitate communication through comprehension, and that additionally improves self-confidence and enhances motivation.
3. The third reason for welcoming passive knowledge as willingly as active is rooted in the psycho-physiological fact that most often the path to active knowledge goes through passive knowledge. In addition, it should be remembered that with the discontinuation of language training or lack of opportunities to practice the foreign language, active vocabulary and grammar gradually merge into the passive. Besides, there are a number of levels of passivity going down to partial or total forgetfulness.

The global linguistic communication

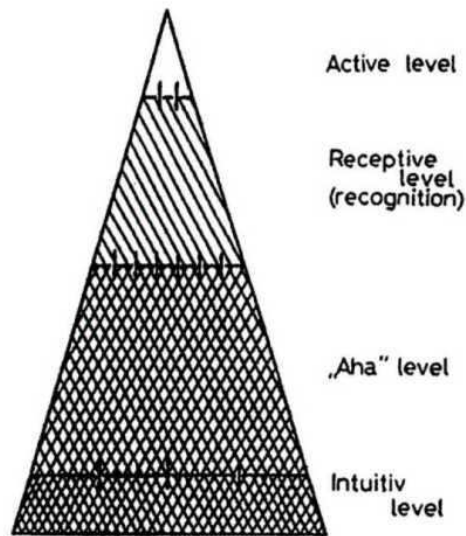


Fig. 12

Two possible approaches

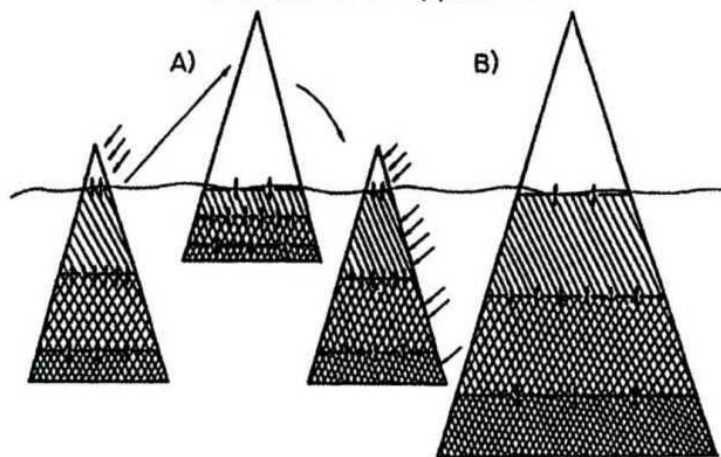


Fig. 12: Linguistic communication is always global, involving both active and passive knowledge at all levels (approach B).

Linguistic communication is always global, involving both active and passive knowledge at all levels (approach B). Thus all levels in Desuggestopaedia are simultaneously stimulated. The traditional language methods stimulate only the active knowledge of the language (approach A), but without the basis of the passive knowledge a large part of it is quickly forgotten or turns into passive.

The dynamism between conscious and paraconscious, active and passive, global vs. element, and element vs. global, uniform and multiple personality, central and peripheral perceptions points to the need to consider the problem area of FUNCTIONAL ORGANISATION OF THE BRAIN AND MIND

25. FUNCTIONAL ORGANISATION OF THE BRAIN AND MIND

The history of suggestopaedic practice, in its global artistic variant, and even more so in its more recent development as desuggestive pedagogy, has shown quite clearly that when the methodology is properly applied, no neurotic states occur, and no fatigue has been observed. On the contrary, the methodology provides a natural environment of recreation through learning, and even curative treatment through learning. The latter is not the purpose of the methodology, nor should teachers be encouraged to engage in any treatment activities. Nevertheless, this is a by-product not to be neglected. It might produce some quite interesting conclusions for medical professionals.

Neurotic states are characterised by various combinations of disorders in the emotional sphere, the vegetative nervous system, the sleep/vigilance cycle, and in memory functions. When Suggestopaedia has been applied properly and, now, with desuggestive training, as we have said, we have observed a complete absence of any complaints related to these functions. On the contrary, they are stabilised. This indicates that we can make some initial assumptions as to which anatomic substrates are involved in this harmonious activity. According to the majority of contemporary views, these functions are controlled by functional systems primarily related to the hypothalamus, the limbic system, the reticular formation and the cortex of the large hemisphere.

The hypothalamus is centrally located and has numerous connections with the front brain (the limbic system), the brain stem (the reticular system), and the hypophysis gland. It is generally considered as regulating the vegetative, endocrine, and emotional and instinctive functions.

The limbic system is a front brain complex related to vegetative visceral, affective, instinctive, behavioural activities, and to activating such states as vigilance vs. sleep, and attention vs. memory.

The reticular formation is connected with the regulation of the vigilance/sleep cycles and clarity of consciousness.

The cortex of the large brain hemispheres, or neocortex, definitely has an important part to play in the overall anatomic structure of these sophisticated functional systems. This is quite a simplified picture and research has not yet produced a commonly accepted understanding of these functions. What is important here is that, with this authentic suggestopaedic methodology and with desuggestive pedagogy, both hemispheres of the brain are used efficiently, that is, both the logical and the emotional factors are activated simultaneously and optimally.

Heated discussions are still going on as to the precise locality of memory. Many authors continue to seek the hypothetical centre of memory. This search for the centre is most evident in the theory of engrammes. Engrammes are “imprints” in the cortex of the large brain hemisphere, which retain the memories of events, images and phenomena. By way of association, or through new perception, they “come to life”, or surface. The theory of engrammes gained significant support through the experiments conducted by W. Penfield (1952). In brain surgery, he stimulated by electrodes various zones of the cortex and recorded the patients’ reactions. When electrodes were placed at certain points in the temporal zone of the central brain cortex, patients remembered and even appeared to be participating in long-

forgotten events in their lives. This was reminiscent of a tape or film, repeating in the same order parts of the individual's life. If the electrode touched a neighbouring point, a new "movie" began. When the power was turned down, the "movie" stopped. These tests produced quite an impressive effect each time the electrodes touched the left hemisphere. It seemed quite logical, then, to assume that it was in those areas that the long-sought hypothetical centre of memory lay.

Yet a number of tests, mainly involving the bilateral removal of those parts from the cortex, showed that this not always affected memory in a serious way. K.S. Lashley (1950) who dedicated his life to the search for memory engrammes, could not ascertain in any way the actual presence of such centres. He became an active proponent of the equipotential theory. A number of anatomic and clinical facts support the view that centres (and not only memory centres) are not that clearly defined as was previously considered. For example:

1. It is known that the thalamus sends information from the senses to the back central curve of the cortex, where the so-called sensory "homunculus" is formed. However, a number of investigations involving animals and people indicated that the projections of relay thalamus cores were registered far beyond the back central curve (Adrianov O.S., 1976; Zenkov L.R., 1976, etc.)
2. Surgical discontinuation of dorsal thalamus routes, in cases of severe pain, produced only temporary relief. Pain sensitivity was quickly restored.
3. Hundreds of surgical interventions have established that no lasting damage to somatic sensitivity occurs when its main relay in the thalamus is destroyed.
4. In cases of tumours in the back central curve, where somatic sensitivity is presumed to take place, over 50% of the cases did not exhibit any sensory disturbances (Zenkov L.R., 1976)

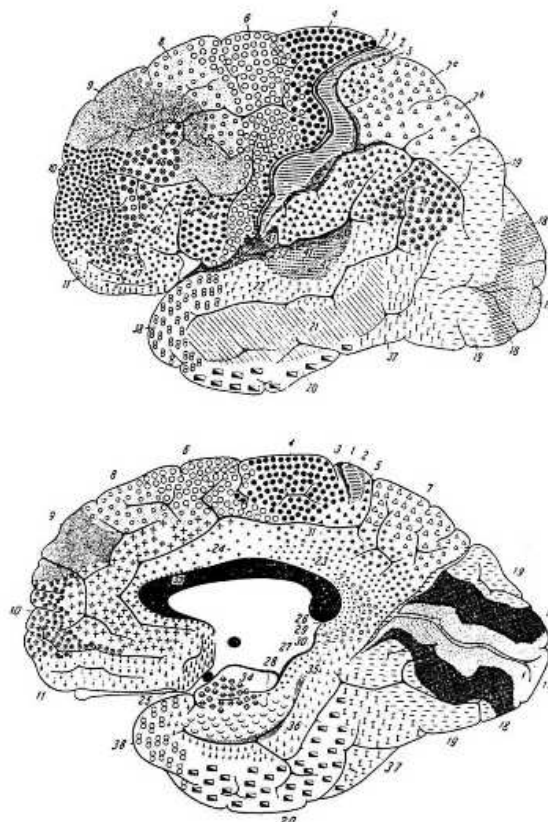
These data indicate that the cortex is involved in the origination and processing of information not only within the framework of the narrow anatomic formation but as a whole, through the functional links at various levels in its organisation. It is also clear that each section of the cortex provides, in some manner, all the information about a stimulus. (John E.R., 1972).

For many years it was a common belief that the motor centre of speech, the centre named after P. Broca (1878), was located in the lower lobe cortex of the left hemisphere (when dominant) and directs meaningful expressive speech, while the centre of receptive speech, of speech comprehension, is located in the upper back part of the temporal area of the left hemisphere (when dominant). This is the centre named after C. Wernicke (1906). In cases of disruption in the Wernicke centre there is a sensory aphasia, while disruptions in the Broca centre lead to motor aphasia.

However, a number of research studies and observations have been conducted in the meantime, questioning the existence of such a compact centre as the Broca centre. K. Pribram (1975) reports that after more than 10,000 lobotomies involving a certain damage of the Broca centre, not a single case of aphasia was observed.



Clearly, the place in the brain where one function is damaged cannot be assumed, with a sufficient degree of certainty, to be also the place where such a function occurs. Nevertheless, the Broca centre carries out motor speech, but in extremely sophisticated interactions with other functional systems of the brain. Its structure is different from what it was thought to be. The results of investigations involving electrical irritations of the brain (Ojeman G.A., 1991), positron emission tomography (PET) for measuring blood influx (Roland P.E., 1985), or for establishing a measure of metabolism (Reivich M. et al, 1985), to mention but a few, indicated that the speech centre is located much more broadly than it used to be considered for many years.



Cytoarchitectonics of the brain cortex, external and internal surface view, after Brodmann. Each field has its specific function. With regard to memory, consciousness and other psychic functions, this view seems somewhat conventional today.

Although some progress has been made in neurolinguistics, there are still many questions to be answered. For example: How is the content of the mind verbalised? How are words stored, and how are they associated with concepts; how are words reactivated? And many more.

Obviously, psychic functions are related to the brain as a whole, although certain areas may be engaged more actively than others. That is why the extirpation of one centre or another does not produce a 100% incapacitation of the respective functions.

On the basis of clinical experience and the aforementioned experimental results reported by K.S. Lashley and others, the psychic functions of the brain could find a hypothetical explanation in a comparison with the features of a hologram (from the old Greek “holos”, whole). K.H. Pribram (1966, 1969, 1971, 1975), and Pribram K.H., R. Baron and M. Nuwer (1970), P.R. Westlake (1967, 1968), T.W. Barrett (1970), and others have used the hologram not only as a metaphor but as a practical style for the functioning of the cortex. The hologram is based on the fact that when a uni-polar beam reaches a photographic plate in a special way, the resulting image has three-dimensional features. Should the plate be broken, each piece continues to hold the whole image. Similarly, if not the whole of the cortex, then at least a large portion of it receives information about all incoming stimuli. The information is not received in separate centres only; “everything is informed about everything”.

Since, in its initial formulation, the hypothesis did not take into account the hierarchic structure of the brain, *Pribram later combined the holographic hypothesis with the idea that the brain, mainly its left hemisphere, operates like a computer (1978)*. Thus he made an effort to combine the holographic type of information dissemination with the functional hierarchic structure of the large brain hemispheres into one comprehensive theory.

K.H. Pribram created a hypothesis which, on the one hand, reflects the flexible *vicarious (substitution) function of the brain*, where disrupted functions of one area of the brain cortex are gradually and slowly taken over by other areas, whilst on the other hand, his hypothesis supports the vertical and horizontal hierarchy of brain functions. V.M. Bekhterev (1896) pointed out that such a function of substitution existed not only with respect to the other hemisphere but also within the disrupted hemisphere itself. He indicated the possibility to shift functions both of the motor sphere and the sensory one. And since these are places where motion or sensations are realised, he talked about shifting conscious activity to various sections of the brain. He believed that conscious activity may shift not only along the cortex of the brain but also in the subcortex. He referred to examples of chronic operations on animals and cases of vicarious functions in newly-born infants.

Along with the many data pointing to a holographic functioning of the large brain hemisphere, there are also facts indicating that their structure is not completely equipotential. There are formations for sight, hearing and general sensitivity, command centres for the muscles etc. the motor and sensory “*homunculus*” in the front central curve and in the back central curve of the cortex of the brain hemispheres reflects the final distribution of the general sensory and motor routes.

The various parts of the cortex differ also in their cellular structure. They have different citoarchitectonics. On the basis of citoarchitectonic studies (form of the cells, density of distribution, features of cell groupings into layers, character of the borderlines etc.) of the brain cortex as a whole, K. Brodmann (1909) produced his map of the human brain cortex. The various fields on this architectonic map have various functions.

Brodmann’s map with the localisation fields provides only a relative idea of the statistical probability of obtaining one or another sensory or motor response when the respective zone is stimulated. The same is true of the projection of the periphery onto the brain cortex illustrated by the so-called “*homunculus*”. The graphic distortion of these charts is already an indication of the lack of a precise isomorphic image coming from the periphery.



The motor and sensory homunculi in the front and back central gyrus of the cerebral hemispheres.

There are a number of psychological states which cannot fit the idea about a strict localisation of psychic functions in the brain, not the views about the overall integrative activity of the brain expressed most clearly in the holographic hypothesis. One such phenomenon is the multiple personality. To us, it is especially interesting as it relates directly to every process of communication, and particularly to training communication, as discussed earlier.

We believe that there is a third possibility to find an explanation of the brain that is closer to physiological reality, closer to the mind. This, in our opinion, is a kind of a FACETED FUNCTIONAL STRUCTURE OF THE BRAIN

25. FACETED FUNCTIONAL STRUCTURE OF THE BRAIN

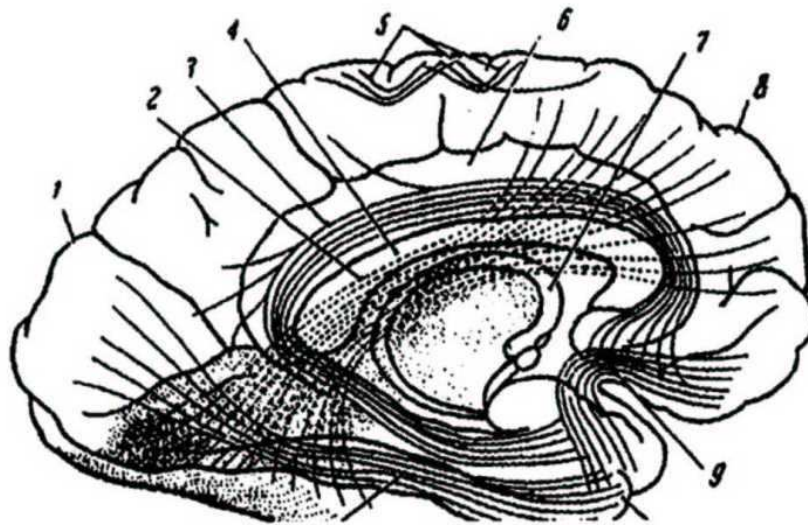
There are grounds to accept as a hypothesis that the brain is a unity of multitude of tiny little brains. This is similar to the way other organs in the human body are organised. Kidneys, for example, are made up of about two million nephrons. This is equal to two million tiny little kidneys. As a structural and functional unit of the kidney, the nephron consists of a glomerule and the tubules attached to it. Lungs contain about 70 million functional and structural units. These are the alveoli.



For the brain, such a basic functional unit can be the neuron. Taking into account the connections (synapses) among all nerve cells and their dendrids, we could imagine the astronomical number of functional possibilities of the neuron. According to H. Haug (1986), an accurate measurement involving morphometric methods established that the human brain has between 70 and 80 billion neurons. For the cortex, 14 to 20 billion neurons are estimated. The small brain cortex is estimated to have about 50 billion neurons. In addition to the neurons, with their specific function, the brain contains an extraordinary number of so-called glia cells. According to the glia index of R.L. Friede (1953), these exist in various numbers in the various regions, but on average 1.2 to 7 index units more for the neocortex; over 50 in the grey substance of the deeper regions; in the so called white substance, independent of the nerve fibres, the glia cells are almost the only type of cells. The total number of cells is over 100 trillion. Each neuron is like a separate individual. It is different from any other neuron in terms of its structure and in terms of its function. This is self-explanatory, if we recall that each neuron is located in different citoarchitectonic fields, which made it possible for Brodmann and other authors to delineate the citoarchitectonic fields of the brain according to their structure. And that structure has its respective function. If we were to calculate the connections among the separate neurons, the numbers, as we said, would be astronomical, which cannot compare even to the most advanced computers. That is why there are so many studies researching the brain, yet principal results are quite few. G. Wolf (1992) reports that over 10,000 original publications appear annually in about 180 professional magazines (p.59). He also writes (p.161) that it still cannot be determined whether the single cell should be accepted as a “Gnostic unit”, for example as a “person recognition unit”. But maybe he is too cautious.

This conclusion, from the perspective of anatomy and physiology of the brain, is very well founded and quite contemporary. However, we would like to suggest another approach in addition to this. We would like to start the other way around, from the psychological aspect of the brain. For simplicity's sake, let us consider as an example only the multiple personality, which, in its various manifestations, has been proved to be a clinical and non-clinical, normal everyday fact. It is known that in cases of actual dissociation of personality, each separate personality within the multi-personality exhibits qualities that are typical and consistent. Although certain features of the main personality are frequently retained, there are some differences even in basic moral constraints and attitudes to life. The complete personality may be “different”. If we were to transpose this onto the anatomy and functions of the brain related to personality features such as memory, emotions, speech, illnesses, etc., it seems impossible to find a proper and plausible explanation. Does the brain become different with a different personality? Does the brain change again with a second variant of multi - personality? Does the brain change back to the characteristics of the main personality? What does the brain

consider to be its main personality? And so on. It is even more complex when we need to understand brain functions with an incomplete change of personality, in the absence of amnesia and with a retained continuity of memory.



Association areas in the cortex: 1- lobus occipitalis, 2 - splenium corporis callosi, 3 - fasciculus longitudinalis sup., 4 - corpus callosum, 5 - fibrae arcuatae, 6 - g. cinguli, 7 - fornix, 8 - lobus frontalis, 9 - fasciculus uncinatus.

Indeed, the localisation theory, with its strictly fixed centres in the large brain hemispheres, cannot provide an answer to such questions. But the holographic concept, although much more flexible, cannot give an answer, either.

That is why we suggest a concept of the faceted structure and functions of the brain. This means that similarly to kidneys, lungs, and other organs, the brain can also consist of a multitude of basic functional and structural units, which can be engaged or disengaged in the various states of the multiple personality. Each of these structural and functional units is one facet, one tiny little brain. There is sufficient evidence, as discussed earlier, supporting the acceptance of the neuron to be such a unit. Practically, this view is not too far removed from the views of a number of other authors, who pose the question but do not find sufficient grounds to resolve it in this direction. The billions of neurons and their connections to billions of neurons can present a facet rich in possibilities.

Each neuron, each facet, is connected horizontally and vertically with all other neurons, for which there is sufficient anatomical evidence. This can explain why a stimulus in one facet is perceived simultaneously in large areas of the cortex. And each facet can react to a stimulus, although with some small nuances in the final effect, depending on whether it is located in the respective centres specialised for that type of activity or not.

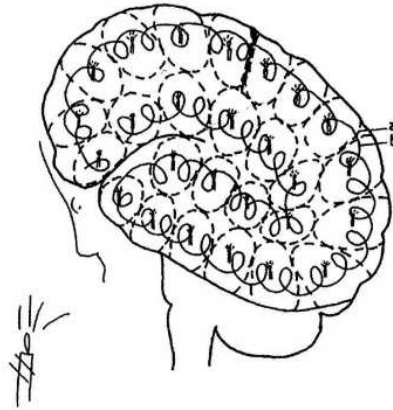
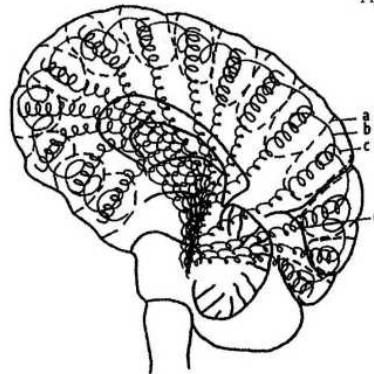


Fig. 16



The facet structure of the brain. Each "tiny brain" is connected to billions of other tiny brains, thus making possible the so called holographic function of the brain: everything is informed on everything. But it is also connected vertically with the deep vegetative centres. This allows each separate personality within the multi-personality to have its own level of activity and specificity.

Neither the localisation theory, nor the holographic theory, nor even the facet theory resolves the basic question of the character of the mind and the relationship between the brain and the mind. Discussions continue unabated. Hence, it might be a good idea to dwell briefly on the issue of BRAIN VS. MIND.

27. BRAIN VS. MIND

This is the eternal stumbling block, the eternal dispute between materialism and idealism. Many hopes have been placed on brain research but there is still no convincing experimental evidence to support one of these concepts vs. the other. The champions of the first are trying to prove how the brain produces the mind, while the advocates of the other are hoping to prove that the mind, or even the spirit, merely use the brain, much as the pianist uses the piano.

From among the many materialistic articles and books, the work of E.Edelmann (1992), Nobel Prize winner in medicine and neurophysiology, stands out for its competence and conclusiveness. He claims, "My goal is to dispel the notion that the mind can be understood in the absence of biology" (p.211). He even regards "psychology as a branch of biology" (p. 240). On p. 34, he states, "My goal is to demonstrate that the minimum condition for the mental is a specific kind of morphology". This understanding is at the core of his book. To him, the evolution of consciousness depends on the new morphology.

This represents an absolutisation of the role of structure, which, only if it changes, can enable the mind, consciousness, mental processes, and ultimately the personality, to develop and to evolve. It turns out that evolution is merely an evolution of structures. Even I.P. Pavlov (1927, 1938) who placed the principle of structuralism at the core of his work, does not exhibit such an extreme biologisation in his position. Reading such statements, one might think that only what is materialistic is scientific.

However, there are other ways as well. J.C. Eccles (1982), for example, who is also a Nobel Prize winner in the same field of medicine, in his article *Animal Consciousness and the I-Consciousness of Man*, wrote (p.399), “Since materialistic solutions fail to account for the experience of my unique existence, I am forced to assign the uniqueness of my psyche or soul to some supernatural spiritual creation. In theological terms this implies: Every soul is a divine creation, which God inspires into the foetus some time between conception and birth. This is my deepest belief in the unique individuality that leads me to the doctrine of “divine creation”. I have no other solid explanation: neither genetic uniqueness, with its fantastically impossible lottery, nor the various influences of the environment, which do not cause our uniqueness but at best modify it”.

Another eminent neurophysiologist O. Creutzfeldt (1987) wrote, “The mechanisms of the brain lend themselves to natural science analysis and, in principle, can be understandable. Yet they remain mere brain mechanisms. Reason, spirit and self-consciousness can only be understood by their own selves and, in their essence, elude the method of natural science (p.18).

In support of the views about the independent identity of the mind, and not as “something” generated by the brain, there are a number of grounds, which the above-mentioned authors have referred to. On our part, along the whole unique complexity of psychic processes, we would like to add the following two questions:

1. The velocity of psychic processes: there is no time for them, while any biological system, even if we were to accept the possibility of multiple processing of information, requires time.
2. The vicarious function of the cortex of the brain, and the migration of functions in general. If, indeed, structure determines function (due to which the Brodmann fields of different citoarchitectonic structure are addressed at specific functions), then how can one explain the takeover of psychological functions by fields and systems which are anatomically unfit for them. Is this not, to a certain extent, contradictory to the strict idea of the absolute dependency of each function of the mind, on a strictly distinct structure.

The remarkable research conducted at the University of Sheffield in the United Kingdom by neurology professor the late Doctor John Lorber give much support to the theory of vicarious possibility and migration of the functions in the brain or maybe a holographic function and even of the cited conceptions of the Nobel Prize winner J.C. Eccles for independent existence of psyche and soul (Mind). Lorber addressed a conference with a paper entitled “Is your brain really necessary?” His observations on a series of hydrocephalus with severely reduced brain tissue throws into question many traditional notions about the brain – he believes. Among the hundreds of patients with hydrocephalus he got several, who in spite of considerable atrophy of the cerebrum till total absence or retaining one to two millimetres of brain substance were very intelligent and working very well, one of them was a good mathematician. An energetic

discussion followed, partly published by Lewin Roger in Science(1980), but without final decision.

These are questions which future research will continue to look into.

One may ask, “Why did we need this long excursion into various areas of psychology, physiology and anatomy of the brain?” We needed it in order to provide a better understanding of our.

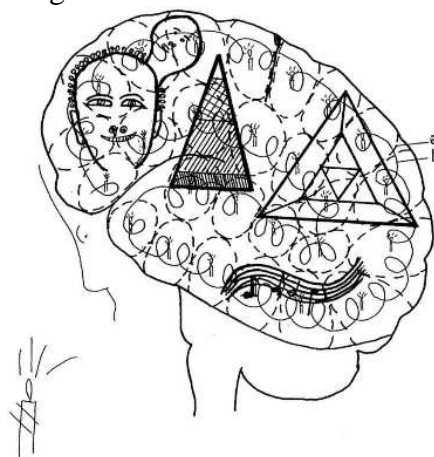
28. THEORY OF TRAINING WITH DESUGGESTIVE PEDAGOGY

The methods of desuggestive pedagogy operate in the realm of the reserves of the brain/mind (the unused capabilities of the brain/mind).

What does it mean to say that a methodology operates in the realm of the reserves of the brain/mind? Above all, it means that the methodology is not an alternative to some other methodology. This is a new culture. This is a new kind of teaching-learning, with peculiarly higher efficiency, where instead of fatigue there is rest; instead of illness due to overload, there is improved health; instead of alienation – socialisation occurs; and instead of automatic subordination to limiting norms about the capacity of the brain/mind, there is a free, yet at the same time an organised and purposeful training and personality development by means of spontaneous absorption of knowledge just like the sponge gets soaked with water, without the demotivation so typical of ordinary training..

It is clear that in this case this communication, desuggestive training communication, needs to be based on some theory. In our opinion there should be a theory behind any methodology. A pretty textbook, for example, if it is not an expression of a theory, does not deserve a second look.

The theory of desuggestive pedagogy results from everything discussed so far. We remind you, however, that which was said is just a summary. But even so, it provides a general idea. The theory underlying foreign language teaching is similar to that in teaching other subjects. There are some adaptations, but they are not that substantial. And since it is our goal here to focus on foreign language training here is a



General theoretical construct of the theory underlying desuggestive pedagogy, with its linguistic, psychological, neuro-physiological, artistic, pedagogic and psychotherapeutic aspects directed at utilising the potential capacities of the brain.

summary of the theory applicable to it. Above all, it should be remembered that the trainee is a whole personality: you do not train just one part of the brain in a foreign language; the whole person takes part. That is why, in order to match reality, a theory needs to be globally

integrative in character. Our theory has a linguistic aspect, a psychological aspect, an anatomic and physiological aspect, and also an artistic, a pedagogic and a psychotherapeutic aspect. All of these take part in everything. These aspects of our unified theory have been described. We shall not go into an in-depth analysis. That is the object of special exercises. Here it would be sufficient to list some of the specific features of each of these aspects of the general theory.

1) *The linguistic aspect of the theory includes:*

- 2) *an unusually large volume of the study material for each lesson and for the whole course;*
- 3) *special structuring of the material: global to element, element to global;*
- 4) *planning passive knowledge as well as active knowledge.*

The psychological aspect of the theory includes:

- 1) *non-specific communicative factors;*
- 2) *the multi-personality theory;*
- 3) *fundamentals of desuggestology and principles and means of desuggestive pedagogy.*
- 4) *love for the human being*
- 5) *a system of peripheral perceptions*

The anatomic and physiological aspect of the theory includes:

- 1) *localisation and holographic theories of brain function and structure;*
- 2) *facet functional structure of the brain.*

The artistic aspect of the theory includes:

- 1) *the theory of application of a classical type of art;*
- 2) *the theory of using art not as a stage for recreation, nor for entertainment, but as an integrated component of the system*
- 3) *total aesthetic organisation as a method.*

The general pedagogical aspect of the theory includes:

- 1) *the principles and means of Desuggestopaedia;*
- 2) *the extremely important requirement: “Above all, do no harm”.*
- 3) *golden proportion maintaining harmony in the teaching process.*

The psychotherapeutic aspect of the theory includes:

- 1) *the social suggestive norm;*
- 2) *the types of human communication from the perspective of freedom and personality development;*
- 3) *the “laughter system” not as relaxation but as an integral component.*
- 4) *Of course, this is a schematic presentation of information. It is important to remember, however, that these are not six theories glued together but a single theory with its aspects.*



Note: Teaching practice which does not take into account all aspects of the theory runs the risk of producing bad results. That is why this methodology should be used only by trained teachers, who have been granted a certified diploma by the author or by his licensed trainers. On the other hand, training is not as difficult as it might appear from the theoretical basis described because several synthetic approaches for quick training of teachers have been developed. Each teacher who loves his/her job can be trained.

29. A NON-PSYCHOTHERAPEUTIC, NON-PSYCHO HYGIENIC AND NON-PHYSIOLOGICAL APPROACH IN PEDAGOGY

We know, from official data, that over fatigue, neurotic diseases and manifested or unmanifested didactogeny (illnesses or suppression of children's development caused by the teacher's tactless approach) are becoming widespread today.

Instead of creating conditions for the joyous satisfaction of a personality's basic need – the thirst for information, and instead of bearing in mind the way the brain functions, teachers often seem to want to “teach the brain how to function”.

The following are some of the things in ordinary education which are inconsistent with the physiological and psychological functions of personality:

1. It is well known that in no case does the brain function only with its cortex structures, or only with the subcortex, or with only the right or the left hemisphere. The functional unity of the brain is unbreakable, even if in some cases one activity or another comes to the fore. Therefore the emotional and motivational complex, image thinking and logical abstraction must be activated simultaneously, in their complexity, in indivisible unity. But most often there are the following two kinds of deviation from this natural fact:
 - a) the teaching is addressed only to the cortical structures and the left hemisphere of the pupil, as if he/she were an emotionless and motivationless cybernetic machine;
 - b) at best the pupil is taken as a psycho-physiological entity, but the educational process is not directed globally – to all parts of the brain simultaneously – but in steps: subcortical-reticular (emotional) stage; concrete-image (visual) stage; abstract-logical (“cybernetic”) stage.
2. It is well known that analytical-synthetic activity under normal conditions is accomplished simultaneously – there is not such a thing as a stage of pure analysis, or a stage of pure synthesis. This simultaneous and indivisible connectedness of the physiological processes has its own psychological expression. It also underlies cognition – from the general to the particular (but as an element of the general) and back to the general (as a rationalised structural unity of the elements!). But these natural laws often undergo “correction” in pedagogical practice in one of the following ways:
 - a) elements are studied separately, in isolation from the sense-bearing whole; they are automated through tiring exercises and only then are they connected one after the other and systematically to form the whole;
 - b) the whole is studied without paying attention to its component parts and to the mistakes arising in this way.

In both cases attempts are made to break up the natural simultaneity of the processes of analysis and synthesis.

3. Man's personality takes part in every communicative process simultaneously at numerous conscious and paraconscious levels. This nature-granted fact is “utilised” in pedagogical practice most often in the following two ways:

- a) the principle of conscious participation in the educational process is formalised and turned into a fetish. According to it, the pupils must learn and automate each element of the material in a strictly conscious and rational manner, in spite of the fact that it can be learned to a certain degree spontaneously and intuitively at the first perception of the globally given lesson;
- b) weight is put only on the paraconscious and intuitive powers of the pupil and the necessity for a conscious finalising and creative reassessment of the material is overlooked.

Psycho-physiological laws: (1) the global participation of the brain, (2) the simultaneous processes of analysis and synthesis, and (3) the simultaneous and indivisible participation of the conscious and paraconscious processes are included in the three bases of suggestology as well as in the three principles of Desuggestopaedia. If we do not abide by these unchangeable psycho-physiological laws, the educational process becomes an inhibiting factor and one causing illness. Any educational process of that kind precludes any tapping of the reserve capacities. What is more, some sociopsychological factors are added to the psycho physiological ones and this increases the difficulties. For example:

1. The set-up of fear of learning. Many nations have some kind of a proverb that means “learning is real torture”. Making the process of teaching and learning more intensive often intensifies this fear and also the inner counteraction, both in pupils and teachers.
2. The routine social suggestive norm of the personality’s capacities being limited to a concrete degree. According to this norm, man can assimilate new material only to a definite, fairly low level. It is confirmed by certain authorities in the field of education.

The combination of the fear set-up and the social suggestive norm of man’s limited capacities under the conditions of a non-medical pedagogical approach results in mass “*covert didactogeny*”. Pupils usually suffer to a greater or less degree from “*school neurosis*”. They have no confidence in their strengths, they do not trust their own inner reserves. For them education has been turned from the natural process of satisfying the personality’s essential need – the thirst for knowledge – into a psycho trauma.

It is only too natural that with this set-up the non-medical attempts to intensify the educational process may lead to reinforcing inner mental conflicts, to the fixation of neurotic states, and rather than the results of the educational process getting better they get worse.

The set-up of fear of learning and the routine social suggestive norm of man’s limited capacities make the erroneous (from the medical point of view) approaches and methods worse. Here are some examples:

1. The material to be studied is broken up into smaller and smaller elements. These elements must be grasped, memorised and automated. They are gradually united into bigger entities. In this way there are formed some useless primitive habits on the lowest level, which have to be given up afterwards in order to build up habits on a higher level. The latter have also to be got rid of. And thus it goes on till at last we acquire habits and skills on the necessary highest operating and creative level. This building up and fixing of elementary habits, which have to be given up afterwards in order to acquire fresh higher-level habits is due to the set-up of fear of our limited learning capacities. But creating a “hierarchy of habits” worsens this set-up and lowers motivation. In addition the hierarchy of habits in any non-medically organised pedagogy is dangerous for the health. Physiological experiments have shown that one of the main causes of neuroses is the building up and fixation of stereotypes (habits), which subsequently have to be destroyed. This holds good especially for the more inert types of nervous system.

2. Another approach by which attempts are made to increase the quantity and the quality of the information obtained per unit of time, is the multiple repetition of the material.. There is even a proverb saying that “repetition is the mother of learning”. Optimum, creative and varied repetition will, of course, always have its place in the process of instruction. But monotonous repetition most often leads to boredom and to the deeper inculcating of the negative set-up of learning. Mechanical repetition suggests a weakness of the personality. It seems to signify the necessity of reinforcing the brain process. Consequently, dry recapitulation results in demotivation and in delaying the effect of the instruction instead of accelerating it.
3. Very often teachers, aware of the harmful effect which the negative set-up of students in regard to instruction and learning brings with it, deliberately introduce intervals for recreation and joking. But by introducing these intervals they in fact suggest that the pupil needs some rest and distraction. They suggest to him that his inner set-up of fear of learning and his fatigue and displeasure with it are fully justified. Gaiety that is an end in itself in the learning process and joyful pauses, no matter how recreational they may be bring a risk of still more deeply inculcating the conviction that their basic negative set-up in regard to instruction is fully justified.
4. Attempts to accelerate the process of instruction are made through mechanising and programming it. The pupil communicates with the mechanisms and obtains feedback through the programmed materials. But then the pupil is isolated from the social environment and the wealth of emotion provided by the group. Irrespective of the favourable aspects of mechanising and programming instruction, the feedback information, which the pupil obtains about the degree to which he has assimilated the assigned material, through its lack of warmth not only does not stimulate him/her, but very often reinforces his/her negative set-up of learning.

This cursory analysis of some methods, aimed at bettering the efficiency of the process of teaching and learning, shows that in pedagogical practice, in fact, pressure is often exerted on the pupils’ personality on the second plane. He reacts against this pressure. The motivation for learning is considerably lowered. Pupils begin to learn only when they are pressed by the necessity to obtain some kind of qualification for the sake of the practical requirements of their plans in life. Thus the satisfaction of their basic need – the thirst for information – is accompanied with displeasure, instead of pleasure.

Becoming aware of these negative sides of the process of instruction, pedagogues in some countries are known to have switched to the other extreme – advocating full freedom for the pupil. The pupil should be free to choose what and how he/she is going to learn. However, this search, in its essence justifiable, leads in practice to the absence of any sound form of education. Why should the pupil be given freedom in the process of instruction and not be freed from his inner fear of his own limited powers of assimilating new information. Freedom accompanied by fear of learning is equal to giving up.

30. GENERAL LESSON STRUCTURE IN FOREIGN LANGUAGES WITH DESUGGESTIVE TEACHING-LEARNING

(If you want to try, consult a trainer certified by Dr. Lozanov.)

In the desuggestopaedic variant of Suggestopaedia many aspects of the structure of our authorised method of foreign teaching for adults have been retained. The total aesthetics is of great importance - textbooks, materials, games, rooms and so on because the aesthetics is a

teaching, healing and personality harmonising method. Considerable changes have now been made in the communicative position of the teacher and student. For the sake of clarity, we shall present within the frame of our original lesson structure pattern some of its new additions and improvements.

Now, we have a *four-stage training programme: introduction, concert sessions, elaboration and performance from the students*. The fourth stage has been separated from our previous third stage because it assumes an increasing importance for the independence and self-confidence of the students.

Briefly the introduction can now be described as follows:

The teacher presents him or herself with a nationality and a new name, and a new profession borrowed from the foreign language.

At the teacher's very first contact with the students, he or she introduces a spirit of easiness and delicacy into his or her attitude towards the group as a whole and towards each student as an individual. Instead of continuously playing in front of the students as if on a stage and before taking the decision to gradually involve them in the communication, the teacher now stimulates the students to join immediately and willingly in a common game-project. The teacher chooses the most suitable project and offers it to the students, inviting them to take part. The most appropriate project is making a film in which the students can be actors. They understand the prank and willingly join in the game-project. Whenever they have difficult moments in the learning process the teacher will remind them that they are actors who carry out the project. The game-project frees them from the boredom, demotivation and fear of learning. And then each student chooses a name, a nationality, a new profession etc. in order to be included in that game-project. The teacher is specially trained to approach that particular situation.

Imitating the teacher, the students assume their new roles. A new scenario has been developed, which gives the instructions for training the teachers according to the new approach and which is discussed with the trainees. The introduction in the first lesson might take about 50 minutes, and in the next lessons, no more than 20 minutes. Use may be made of tiny props, musical records, films, as well as other suitable materials. It is recommended that this not be overdone to keep on the safe side of the grotesque.

Introduction before: the teacher was on a higher plane of communication and the students on a lower plane. The teacher's attention was directed partly to the student's limiting aspects. Thus, resistance is created; the more attention to the limiting aspects, the higher the 'wall' of resistance.

Introduction now: The teacher is on the same plane as the student. The teacher is like a very good, knowledgeable friend that students haven't seen for a long time. This relationship creates an atmosphere of calmness, student can experience an immediate reduction in anxiety. The teacher is communicating on the level of the reserve capacities. One cannot tap the reserve capacities if there is no love and freedom. Love alone cannot achieve high results - one needs a method plus love. Society's philosophy can change if we can have high results regularly. It is not so much as what is being done, as to how it is being done. Conventional teachers are re-stimulating student's limiting beliefs. Our teachers only address the 'sleeping abundance' and re-awaken that which is normal.

Do not make the student feel he must answer a question. The teacher is creating situations for the students to be active; they too are asking you questions. The set-up is that the classroom is a safe-haven for free-flowing communication. Do not be directive, e.g. 'now let's stand up' - this will remind them of traditional teaching. Keep in mind that you are like in your living room with friends. Even when playing a game, give them a reason for doing it. Provoke laughter. The teacher creates more receptive state of mind in which to introduce new information. The method directs its work on both the active and passive levels. Because of the above, we can speak of having unity on both the conscious and para-conscious, but keep in

mind that the entire teaching method reflects the unity of conscious and para-conscious. Suggestopaedia is 'happy' with both passive and active. Conventional teaching is not 'happy' with the passive. Each group will be different, so different groups need different games. The introduction leads into the session; uninterrupted transmission. Before they were looked at as individual entities. The Introduction is not only an introduction to the lesson but is an introduction to the session. Use art to inspire. The session is preparing the way to the elaboration.

The position of the teacher

The teacher should:

be friendly (but not overfriendly)

not play an actor but be spontaneous

not imitate,

create specific communication, that means communication being on the level of the unused reserves of mind,

avoid drilling or any traditional ways of memorising,

introduce a spirit of dynamism and easiness,

expect the students to know.

The artistically drawn grammatical posters, designed for the needs of the lesson, should be properly placed. They should preferably be perceived by the students peripherally – and this is particularly important in the beginning. Later on, when the material requires them, they can be quickly glanced at.

Gradually in the course of the lessons the need of posters should be phased out.

The teacher participates with the students as a knowledgeable friend, rather than acting on a pedagogical stage.

The teacher facilitates the students' participation as Co-creators of the initial act, previously presented only by the teacher. Every student is included in the act of introduction (but not asked individual questions). They participate in the lesson spontaneously.

The teacher keeps the artistic/didactic communication with the students on the border of the individual's knowledge of the language and their belief system.

In the development of this communication the teacher inspires the students to sing, to act, to play, to joke, etc, never saying "let's" or "Now we are going to...", but rather as if by chance, vaguely remembering something from the past. They are singing or playing together. The learners communicate more and imitate less than the earlier variant of the method.

The teacher knows how to apply the laughter system and the system of songs. He has been trained for the purpose. Teachers are also trained how to intonate their speech and in maintaining a vibrant communication. They have also been trained in ways of finding the variant of the learning multiple personality which is most appropriate. Teacher training must involve methods of supporting students in their switching to the "best learning variant of the personality" in each class session.

After the introduction and a *30-minute break* there is always the *concert session*: first *the active*, and immediately after that *the passive*. The two sessions must never be separated. Any attempt to separate them by having the active session one day and the passive session (which is actually pseudo-passive) on the next day does not fully achieve the anticipated effect.

The active concert session retains its overall character as described by the author and Dr. Gateva (1988). The changes to this session are a particular development of our research results. The musical compositions for the active session are emotional, with a wealth of melody and harmony in them.

Students get the translation and are informed that, whilst the teacher is reading, they are looking at the text and the translation and only listen to the music - not to try to memorise. The teacher's behaviour is solemn, as it should be when a concert is about to begin.

The teacher waits quietly until the end of the introductory movement of the music. After a clearly perceivable caesura (a breath, a short pause), reading of the text begins. The teacher's intonation varying solemnly according to the character of the musical piece.

The teacher should in his/her mind keep a little ahead of the accompaniment, so that as he/she comes to read each subsequent sentence, it is tuned in to the music: movement in major scale (jubilant mood), in minor scale (intimate and lyrical mood), the different tempi (slow, fast, moderate), and the volume (low, full of medium).

It is suggested that the teacher consult the program before each session. Information is given in it about some of the characteristic features of the respective musical compositions – for instance, the *scale (major or minor): the tempi of the movements: andante* (at a walking pace), *allegro* (rather fast), *moderato* (at an easy pace): and so on. In the ideal case, the teacher should listen to the whole musical composition before playing it for the class.

In reading, the teacher's voice should be harmonised with the nuances of the musical phrase. The diction should be pure and distinct, every word clear-cut and phonetically well moulded. The voice should be well taken up in the resonance box. The reading should be slow, and rhythmical, the breathing regular. The active session normally should not last more than 45-50 minutes (with the possible exception of the first concert session).

In order to obtain self-control over the rhythm of reading, the teacher should first read the sentence to him/herself and afterwards slowly, aloud. The musical phrase should always be kept in mind: the reading should begin when there is a strong (accentuated) note, and finish, if possible, simultaneously with the musical phrase or wait for it to come to an end. The teacher should naturally follow the brightest melodic line, regardless of the part where it appears.

When the musical line ranges to a higher register, the voice which follows should not become high-pitched but quieter and generated in the chest.

Metaphorically speaking the reading voice should join in the orchestra as a *suo modo* new instrument, which emphasises the musical phrase and makes its psychological charge easier to comprehend.

Those new words in the text which bear lexical or grammatical information of particular importance should be brought out with a kind of intonation different from that used in the rest of the sentence.

In reading the teacher should often lift his/her eyes from the book, and show attentiveness to the students through a glance at them or through a gesture.

The more the reading is kept in harmony with the character of the chosen piece of music, the more varied, more particular and more easily memorised and the material read is more easily reproduced.



During the Active Session from time to time the students stand up and read the material together with the teacher (1 – 3 times for 1 -3 minutes).

Teacher says the phrase and then students repeat together with her. When this takes place, students are given a reason for standing up and reading along with the teacher, something like since this is a special film we're making, we need to have a special voice. Before it was as if teacher was reading to a huge audience, as if she was on stage. The sessions are vehicles for allowing large amounts of information to be given at one time without fatiguing the student. Change the intonation of the last word in each of the phrases otherwise monotony sets in. There is still a slight pause before and after a word in bold. Read much slower so that students can follow the translation, punctuation, and the highlighted words. If the music doesn't have too much variety you can add variety by reading it in a solemn voice. The grammar points also must be read during the session, well-pronounced. During the concert session students are free to write in their books, or take notes.

The teacher avoids exaggerating sentimental and imperative elements in the intonation. In Desuggestopaedia reading is much softer, with a feeling of basic love for the human being, but not sentimental. Also from time to time the teacher pauses for one or two minutes to allow the students to enter the mood of the softest, most beautiful parts of the musical piece. In the course of the teacher training we prepare the teachers for all this.

In this way all the texts of the textbook blend with beauty and the reviving power of the classical musical art. It is known that it has its well-established place in psychotherapy in relation to the treatment of various health conditions. It is not by accident that the research of a number of authors has shown that classical music, with its harmony and beauty, was based on the golden proportion. So in this way we link not only our methodology but the texts from the textbook as well with the golden proportion in a firm way.

The passive concert session also remains largely the same, as described in the Teachers' Manual (Lozanov, Gateva, 1988). Some minor changes have been introduced with respect to the manner of conducting it. Reading is also softer.

During the break between the Active and Passive sessions, without drawing any special attention to it, the teacher puts an uplifting picture of nature on the wall, such as a mountain scene with the highest peaks aspiring to reach a blue sky. At the moment when the music sounds the teacher simply sits down calmly without demonstrating overt signs of passiveness and relaxation. The teacher could neglect the insignificant parts of the lesson and in this way make the session shorter if he/she is short of time.

Here the musical compositions are characterised by austerity of form, content, and intellectual depth.

The reading is normal, like everyday speech, and as artistic as the dialogue requires it should be i.e. the timbre of the voice varies slightly according to the lines of the characters and the emotion in them. The rate of reading should be that of the colloquial speech of the respective foreign language. In this session, the music is used mainly as a background, but is as loud as a normal concert.

31. Musical Programme for the First Grade of Foreign Language Suggestopaedic Courses

Session One

1. W.A. Mozart

Concerto for Violin and Orchestra in A Major № 5

Allegro aperto (9:35)

Adagio (11:05)

Rondo. Tempo di Menuetto (9:50)

Symphony in A Major KV 201 (№ 29)

Allegro moderato (8:40)

- Andante (7:25)
 - Menuetto (3:50)
 - Allegro con spirito (5:40)
 - Symphony in G Minor KV 550 (№ 40)
 - Molto allegro (8:10)
 - Andante (7:35)
 - Menuetto allegretto (4:47)
 - Allegro assai (4:50)
2. J.S. Bach
 - Fantasia for Organ in G Major BWV 572
 - Fantasia in C Minor BWV 562
 - Session Two
 1. J. Haydn
 - Concerto № 1 in C major for Violin and Orchestra
 - Allegro moderato (9:30)
 - Adagio (4:10)
 - Finale (4:10)
 - Concerto № 2 in G Major for Violin and Orchestra
 - Allegro moderato (8:35)
 - Adagio (7:05)
 - Allegro (3:45)
 2. J.S. Bach
 - Prelude and Fugue in G Major BWV 541
 - Dogmatic Chorales
 - Session Three
 1. W.A. Mozart
 - Symphony in D major “Haffner” KV 385
 - Allegro con spirito (4:55)
 - Andante (4:30)
 - Menuetto (3:30)
 - Finale presto (3:55)
 - Symphony in D Major “Prague” KV 504
 - Adagio-allegro (11:55)
 - Andante (8:50)
 - Finale presto (6:00)
 2. G.F. Handel
 - Concerto for Organ and Orchestra in B-flat Major, Op. 7, № 6
 - Session Four
 1. J. Haydn
 - Symphony in C Major № 101 “L’Horloge”
 - Presto (8:00)
 - Andante (8:00)
 - Allegro (4:00)
 - Vivace (4:00)
 - Symphony in G Major № 94
 - Adagio cantabile. Vivace assasi (12:00)
 - Andante (7:00)
 - Menuetto. Allegro molto (4:00)
 - Finale. Allegro molto (4:00)
 2. A. Corelli
 - Concerti Grossi, Op. 6, Nos. 4, 10, 11, 12

Session Five

1. L. van Beethoven
Concerto for Piano and Orchestra № 5 in B-flat Major, Op. 73
Allegro (19:30)
Adagio un poco mosso (8:00)
Rondo. Allegro (10:40)

2. A. Vivaldi
Five concertos for flute and chamber orchestra

Session Six

1. L. van Beethoven
Concerto for Violin and Orchestra in D major, Op. 61
Allegro ma non troppo (24:30)
Larghetto (11:20)
Rondo. Allegro (9:30)

2. A. Corelli
Concerti Grossi, Op. 6, Nos. 2, 8, 5, 9

Session Seven

1. P.I. Tchaikovsky
Concerto № 1 in B-flat Minor for Piano and Orchestra
Allegro non troppo e molto maestoso
Allegro con spirito (21:50)
Andantino semplice
Allegro con fuoco (15:15)

2. G.F. Handel
“Wassermusik”

Session Eight

1. J. Brahms
Concerto for Violin and Orchestra in D major, Op. 77
Allegro non troppo (22:05)
Adagio (9:25)
Allegro giocoso, ma non troppo vivace (8:05)

2. F. Couperin
Sonatas for Harpsichord:
“Le Parnasse” (Apotheosis of Corelli)
“L’Astree”

3. J.F. Rameau
Concert Pieces for Harpsichord “Pieces de clavecin” № 1 and № 5

Session Nine

1. P.I. Tchaikovsky
Concerto for Violin and Orchestra in D Major Op. 35
Allegro moderato (22:00)
Canzonetta (7:00)
Finale. Allegro vivacissimo (10:00)

2. J.S. Bach
Dogmatic Chorales for Organ BWV 680-689
Fugue in E-flat Major BWV 552

Session Ten

1. W.A. Mozart
Concerto for Piano and Orchestra № 18 in B-flat Major KV 456
Allegro vivace (11:55)
Andante un poco sostenuto (10:10)

Allegro vivace(7:35)
Concerto for Piano and Orchestra in A Major № 23 KV 488
Allegro (11:00)
Adagio (7:05)
Allegro assai (8:05)

2. A. Vivaldi
The Four Seasons, Op. 8
Spring
Summer
Autumn
Winter

32. Elaboration

Elaboration of the material taught has actually begun at the first meeting of the teacher and students. The first words the teacher says already open up a dialogue. The teacher reminds the students in between that he/she and they are going together to prepare the material necessary for the film they plan to make. However, here we mean systematic elaboration. At this stage of the training process, the new focus is on the following *requirements*:

1. The freedom and creativity of the students are encouraged even more than previously.
 2. All the stages of desuggestive pedagogy are unified during the elaboration through the use of reminding intonations, songs, the play etc.
2. The teacher continues to keep the students on the border of their linguistic knowledge.

As well as facilitating spontaneous laughter and songs, the teacher purposefully puts jokes and songs into the lesson plans to help the students with the most difficult parts of the lesson.

33. First Day after the Concert Session

First elaboration: it starts with reading; the text is divided into several parts. The reading of the first dialogue is performed mostly in chorus. cursory phonetic explanations are given on the spot. The students read the parts in the foreign language, taking a look at the translation of the text. Various alterations with the voices of the teacher and of the students are to be organised. For instance, the teacher reads aloud, in a loud voice, the students imitate, or the opposite. During the next days the students assume different roles, each one reading the lines of the character he/she impersonating. The students pass the roles onto one another, so that each student gets the chance to read. Some students read certain parts, other students read other parts. (Another possibility is to give different variants of one and the same role). The reading mistakes should be corrected tactfully, the teacher only repeating the word in the correct way, as if by chance. When the given part is read, the translation is taken away (or folded up) and the whole of the same part is translated by the students.

In a more advanced phase the teacher decides which passages should be translated and which not. In the last lessons of the course, only a few words and phrases have to be explained by means of synonyms.

While the translation is being done (without the text in the native language), some details of the part, which are important from the point of view of their lexical and grammatical features, are acted out through games and songs (and even through easy dances). All students should participate. The location in the text and the duration of the games are previously specified. Quite a lot of subject matter can be presented through these games.

Then comes the next part.



There should be group reading with the teacher from the very first session if reading difficulties in certain languages have to be overcome. The learning-to-ride-a-bicycle method should be used.

Do as much reading as possible on day 2. The reading connects to the session. The reading stabilizes the results of the session. Remember that some elaborations must also be done, because just the reading alone would be monotonous. Be sure that the grammar inserts are also read. Bold is read in a soft voice; then vice-versa. Opposite of what teacher does: for example teacher reads the bold in a deep voice and the words in a soft voice. Then students read the following phrase in the opposite way: the bold in soft and the other words in a deep voice. Men can be asked to read one phrase in a deep voice. Then women follow with the next phrase in a soft voice. You can now have women read like the men just did and the men like women say that since they are actors they are training their voices for different parts. The-King-is-coming-and-nothing-more technique. This involves the teacher to stand behind something and read the phrases to an individual student who is like on a stage. The student is not looking at his text.

If the whole dialogue cannot be dealt with in one day's period, it can be worked out to the end of the next day. This primary elaboration of the text should come as a confirmation of the students' conviction that they have mastered the material at the translation level. Now the teacher must make certain that there is an easy transition to active speaking.

34. Second Day after the Session



Second elaboration: Every day the elaboration starts with a song and finishes with a song. The group goes on with the work begun the previous day until they get through the grammatical units in the lessons. The students are immediately activated by reading and translating in a playful manner, briskly, and frequently changing the games, or playing suitable games apart from the text which the teacher chooses according to his/her judgement and intuition. If necessary the teacher reminds the students that they are working on the material needed for the film. All this is done in the respective double-plan facetious manner.

Note: During reading and translation all opportunities for analogy should be made use of. For instance, when reading a sentence the verb therein could be quickly conjugated on the spot, in chorus, and its link to the verbs in the posters could be shown furtively. In a similar fashion sentences or phrases could be remade.

The teacher reads aloud slowly and the students translate the new reading matter, either in chorus or individually (in the latter case, of their own accord). The text should form a summary of the most important lexical and grammatical units used in the dialogue, in a new way, using direct and indirect speech. The teacher encourages the students to narrate in a few words some similar text. The text should provide a basis for the students to tell a story of their own on the next day. They should think about what they will be able to narrate within the framework of such a theme (summarising in fact, the most important points in the lesson). The stories should be in direct and indirect speech. At the beginning they should be rather short, but with progress made in the respective language, they should grow longer and more detailed. They can be connected with the students' new identities and with the roles they play in class. From the middle of the course onwards, the students can tell suitable anecdotes and speak about small happenings in their own lives. The contents of these narrations should be interesting and pleasant. The teacher should be careful in choosing the theme to be thought over at home. Of course, nothing should be written down.

A lot of suitable games and/or songs should also be included in the secondary elaboration. They should always be loaded with lexical and grammatical information and be of artistic value, with a view to the general educative sides of the instruction – familiarising the students with the culture of the respective country.

The teacher takes great care in preparing for the elaboration. Decide on what games are to be used and why. On the grammar, decide which is to be activated and which is to stay on the periphery (on the passive level). Consult the grammar for each chapter to know the most important verbs, grammar constructions. Be aware of each individual's level of progress. When students speak with mistakes, correct indirectly. As students are giving their individual presentations, hardly correct them at all. These short stories they are giving give them encouragement; they see they can communicate more or less freely. During the elaborations, students do not need to cover their native language and be asked for the translations. This could cause undo stress. The teacher can gage for herself how well the students understand by how the students answer the questions during the elaboration. The whole process of translation should be easy, not stressful, almost as a matter fact. For the short stories, just ask, 'Did you understand?' No need to rigidly ask individual students for a line-by-line translation. Teacher can ask for a translation if needed. The goal is for the student to realize that they can understand new material. The elaboration must be very dynamic and very often changing the tasks: some songs, one game after another. Allow short time for thinking, more time communicating and using the language. We are looking for spontaneous use of the language.

35. General Recommendations

In the initial stages of the course the teacher might write suitable questions on the blackboard, so that when students give answers to these, the answers begin to form a story with a plot.

By skillfully steering the conversation around the theme (or themes) of the different stories given the day before, the teacher can, in an encouraging way, invite the students to retell them. Only the most inadmissible mistakes should be corrected in a soft manner and if possible indiscernably.

As soon as the first spontaneous attempts of a student to interrupt another student's story appear, the teacher must immediately take the situation in hand, and stimulate and maintain this process of spontaneous communication as much as possible and see that it becomes a regular procedure in the course. Generally speaking, one should from the very beginning, take the utmost care in the double-plan, tactful and delicate directing the students toward spontaneous conversation. This conversation should be natural, without special requirements, or allotting special role-play situations (except in cases when the students either seek or create them themselves).

The teacher should think of various ways of inspiring different forms of general conversations among the students about their everyday lives (stressing positive things, of course), either with the group conversing in chorus or individually.

From the very beginning of the course, those students who have some previous knowledge of the language should be handled very cautiously. Skill and tact must be used in keeping their participation in the lesson well in hand as regards time, so that they do not monopolize it, and to save and keep up the spirits of the real beginners who cannot understand all that the students with a smattering of the language are saying. After a certain amount of general progress has been made in the whole group, these students with some prior knowledge can display their knowledge to the full.

In general, activation should come in a more rigorous way after the third or fourth dialogue. The students can then be given roles to play more often if they express a spontaneous wish to do so.

Conversation between two or three students, either with or without a textbook, should not be allowed outside the teacher's control. For example, the beginner poses the wrong questions, thus surprising and perplexing the other beginner.

Every new working day should begin either with reading a text aloud foreign language, or with the teacher narrating some intriguing everyday story in the foreign language – taking into consideration the students' easy understanding of it.

Note: When the classroom activities tend to look like a learning process which should possibly be prevented, this fact should always be explained with the necessity to get ready in order to achieve the significant objective of the common game-project, for example making a film or the like.

During the days with concert session the tempo of the reading (andante, allegro, moderato) is the tempo of the music. During the days without concert session by 4 periods a 45 min. each the tempo of the work is following:

about 45 min. – fast

30 min.- moderato

15 min. – fast

break - 30 min.

15 min. – moderato

30 min. – fast

30 min – slow

15 min. – fast

Detailed information how to elaborate every line in the English textbook is given in our *Guide for Work (580 pages)*, 1992, Sofia University – Centre of Suggestology, unpublished (on a typewriter). We give this guide free to every teacher trained by us.

We also have a *Guide for the second level* course (advanced students) which is different from that for the first level but we are not going to review it here. We have a *Guide for Children* of different ages studying foreign languages. For each of them there is a different method. The same is true for different *subjects in school* (mathematics, history etc.) and also for adults.

We give different Guides, textbooks, a lot of materials – games, songs, wall charts, suitable arts (children's operas for mathematics etc.) and so on.

All of this information is about “*what to do*”, but about the very important “*how to do*” *the teachers need only training*. For example, the intonation cannot be described – it must be heard and corrected. The same is true for many other qualities of the teacher. Without training it is not possible to work. An art cannot be described – it must be heard or seen to feel it and to understand it. Suggestopedia (and also its desuggestive development) is an art, a pedagogical art, including a lot of classical art.

Part of the output level should be given cautiously a few days prior to the end of the course, for instance, in the form of challenging written texts, conversations etc.

During the course the students should be given easy tests to stimulate them, mainly translations into their own mother tongue, including meaningful parts of dialogues and extra texts (after the latter have been translated during the elaborations). These fragments can be given either in written form or can be read slowly by the teacher and translated extempore by the students.

Speaking one's mother tongue during the course is undesirable. This holds true both for the teacher (every time he/she comes into contact with the students) and for the students (with their gradual progress).

The Final Day (performance) has now been set out as especially significant because this is the day when the trainees demonstrate to themselves and to the group what they have learned. The class begins with a monologue, which quickly runs into dialogue. Short stories told by each trainee are an appropriate occasion to elicit additional questions and free conversation. This is a day for reinforcement and assurance. It is a particularly important and special occasion to celebrate on the final day of the course.

The course begins with one of the best songs in the language of study. The same song marks the end of the course. Now take a moment, dear reader, to think of one of the best songs you know.

The suggestopaedic system for teaching foreign languages to adults is subjected to a number of psychological principles, which should be observed. For example: good, reliable organisation of the work in the educative institution; purposeful, double-plane behaviour of

the teacher; motivating initial instructions which are read to the students; directing of the students' attention to sense-bearing wholes and easy and, if possible, unstrained assimilation of the elements; no obligatory homework, but permission can be given to the students to go through the new lesson for about 15 or 20 minutes in the morning and in the evening, only informatively, however, the way one skims through a newspaper.

The textbook is also of importance. Its contents and layout should contribute to the success of the suggestopaedic process of teaching and learning. A light-hearted story with a pleasant emotional plot should run through the textbook. The majority of the new material is given in the very first lesson – 600 to 850 unfamiliar words and the majority of the essential grammar. In this way at the very beginning the students have a wide range of language possibilities at their disposal, to cope with the communicative elaboration. Thus they do not feel “conditioned” to speak within the limits of a few words and patterns. Each line of the textbook contains parts that can be substituted by others.

Thus, without getting into structuralism per se, hundreds of patterns are assimilated at once and under natural conditions. The pictures used as visual aids are connected with the subjects of the lesson and not with elements of it. This contributes to the communicative freedom. The translation of the lesson into the mother tongue is given to the students at the beginning of the lesson to look through in a cursory way, and is then taken away. But we do not stay long at this stage and quickly pass on to the stage in which there is no translation at all.

36. RESULTS OF SUGGESTOPAEDIC FOREIGN LANGUAGE TEACHING AND LEARNING FOR ADULTS

As was mentioned above, suggestopaedic instruction when it is well organised, should release the suggestopaedic reserve complex. This does not only mean that the assimilation of new material should be considerably accelerated (usually several times over) and that the knowledge should be gained for a more lasting period on a more creative level. It is also imperative that there should also be other favourable educational and medical results.

These concomitant favourable effects of medical nature have been turned into the basis for a whole suggestopaedic system that has become a new psychotherapeutical trend. However, the attention of specialists has so far been attracted to the educational results because of their volume, durability, creative tendency and secondary motivating power. These results have been published in a number of papers on the matters of Suggestopaedia reported at conferences and symposia in Sofia (1971), Moscow (1974), Ottawa (1974), Los Angeles (1975), Washington (1975) and elsewhere.

The accumulated experience shows that steady good results identical in all countries where experiments have been carried out can be expected when the suggestopaedic teaching and learning is properly organised.



A suggestopaedic course of Italian at the Research Institute of Suggestology



A suggestopaedic course in Japanese in Japan.



Foreign language suggestopaedic course in Viktorsberg, Austria.

There can be different variants of the suggestopaedic foreign language system – from courses with several lessons per week to courses of whole days, immersion in the suggestopaedic foreign language atmosphere. The leading factor is not the number of lessons but the psychological organisation of the process of instruction. If we take as a basic pattern the 24 days' foreign language course with four academic hours per day, either no homework or only some informative reading allowed for 15 minutes in the evening and in the morning, the following results can be expected: (1) The students assimilate on average more than 90% of the vocabulary, which comprises 2000 –2500 lexical units per course; (2) More than 70% of the new vocabulary is used actively and fluently in everyday conversations and the rest of the vocabulary known at translation level; (3) The students speak within the framework of the whole essential grammar; (4) Any text can be read; (5) The students can write but make some mistakes; (6) The students make some mistakes in speaking but these mistakes do not hinder communication; (7) Pronunciation is satisfactory; (8) The students are not afraid of talking to foreigners who speak the same language; (9) The students are eager to continue studying the same foreign language and, if possible, on the same course.

This holds good also for beginners who have never learnt the respective foreign language before. It stands to reason that in teaching students who have some preliminary idea of the language, the results will be much better. The assimilation of the new material in the following second course takes place approximately at the same speed.

37. THE SUGGESTOPAEDIC SYSTEM FOR TEACHING ALL SUBJECTS IN SCHOOL AND PRE-SCHOOL AGE

Suggestopaedic teaching and learning has been introduced for all subjects in ordinary schools and in kindergartens for three to six-year-olds. The three suggestopaedic principles and the three groups of suggestopaedic means are also observed.

Of course, instruction is adapted to the age of the pupils and the specifics of the subject. The fact that, at this early age, the social suggestive norm for the limits of the human personality and for the difficulty of learning has still not been inculcated in the children is of special importance. In fact Desuggestopaedia is a preventive method protecting the children from didactogenic disorders, from lacking motivation for studying, and from all negative effects of the popular system of education.

The tutor organises the training similarly to Desuggestopaedia for adults establishing conditions for free and normal communication without tension and limitations. However, the process of learning is not chaotic.

The important thing is that the tutor must believe and not “play faith” in the top results of the training. He/she should have normal 100% expectations regarding the effect of training based on his/her experience. The system of games, songs, competitions and contact with classical arts are not forms intended to impress students (adults or children) but forms of mutual play with some participation of the tutor as well. These are forms of mutual happiness and love. This role of the tutor is as natural as his/her role in the establishment of the limitations in the rate of training – in other words, the undiscovered “reserves” of the personality.

In Suggestopaedia for children, the methods differ from the methods for adults not only due to the essential difference in the impact of the social suggestive norm on the rate of training (it is not yet so strongly rooted in children) but also because the brain of a child is still very delicate. Many areas are not myelinated. Excitation irradiates very quickly. Children cannot achieve stable and effective concentration on an object, music etc. They constantly need new activities. When presenting new material, we should pay attention to the manner of presentation. Fatigue is not caused by the scope of the material but by the manner of its presentation. Good knowledge of children’s mentality and the function of the child’s mind is an absolute necessity. Of course, this applies to any method designed for children.

The motivation for learning is natural, spontaneous, unconscious. It is equal to the natural thirst for information under conditions of play and fairy-tales. That is why one of the most important tasks of the teacher-suggestopaedist is not to allow the build up of limiting and inhibiting social suggestive norms and to ensure a natural transition from the world of play to the world of creative learning, characterised by a spirit of independence, consciousness and high motivation.

The most typical examples are found in the first grade in teaching reading, writing and mathematics and in the upper grades in teaching history, geography etc. By describing them we shall give an idea of how the teaching of other subjects is organised.

In all cases it is necessary to explain to the parents, in detailed written instructions, how to behave with the child at home, so that they are not an obstacle to the work of the teacher. It is especially important for parents to know that first-graders are exempt from doing homework and that parents’ role is as tactfully as possible to heighten the children’s motivation for learning.



Students learning mathematics by means of suggestopaedic methods. On their heads they have poles through which without wires and from a distance the laboratory at the Institute receives information about brain activity.



Children from an experimental suggestopaedic school learn while playing.



The students from the suggestopaedic classes have spare time on Saturday when they go to the mountain together with their teachers.



A children's opera for learning difficult matters in mathematics.



The author 25 years ago in his study room at the Institute.



Happy 17-year-old students learning suggestopaedically the entire school year.



The first experimental school which was placed at our disposal by the Ministry of Education – school No. 122.



The Academic Council of the Institute – 12 experts, mainly professors from various research institutes and universities, who were appointed to assess the correctness of the experiments performed.

38. INTERDISCIPLINARY RELATIONS

If we carefully analyse the principles and means of Suggestopaedia, we shall get the idea of how to understand the interdisciplinary relations.

The principles and means show that the process of teaching and learning should no longer be considered as “linear”. This means that the pupil is not to be considered as a multi-storeyed machine in which each storey works independent of the others – in the mathematical lesson “the mathematical storey is fed with mathematical knowledge, in the music lesson the “musical storey” receives its necessary information and so on with all the subjects – each activity detached from all the rest.

When the educational process is of a linear nature, which Suggestopaedia rejects, it consists of dry logicalised teaching that is separated from the essentially *inseparable* “*emotional presence*”. An educational process of a linear nature has an especially harmful effect in regard to the misunderstood “principle of consciousness”. This has led to an unsuccessful attempt to break the inherent unity of the processes of the conscious and the paraconscious. At the same time it has resulted in demotivating, unpleasant and conscious learning of isolated senseless elements before the pupils have grasped the idea of the meaningful whole, of the pleasant and motivating global unit, which is eventually formed out of these meaningless elements.

The various forms of interdisciplinary relations, at this stage of the development of Suggestopaedia can be arranged in order of importance as follows:

1. A *more emotional* atmosphere is introduced in the teaching of those subjects which are logically directed, and more logical thinking is introduced in teaching those subjects which in themselves create an emotional atmosphere without devoiding the subject of its specificity. In this way, an emotional-logical balance is aimed at.

This does not mean that emotional and logical phases should be introduced in the process of instruction alternatively, but that these two sides of the human personality should be taken into account in their inherent concomitance.

For example, in teaching mathematics the presentation of the global theme should be as lively and artistic as it is in the work with suggestopaedic operas for the first grade. The work in the other grades of the primary school should be based on the same principles.

When sub themes are elaborated and when problems are solved, the situations should be taken from actual life and given with a great deal of emotionality and in such a way that the interest of the children is aroused. The teacher’s mood should be stimulating without overloading it in any way and without keeping the children in a constant state of unnatural strain. Children should be given problems taken from the sphere of art to solve. They should sing songs, draw pictures, mould in the mathematical period, but always with some mathematical problems in view. Even the solution of the most difficult and dullest problems should be associated with an emotion of some kind of pleasant expectancy. We must bear in mind that pleasant emotions stimulate higher intellectual activity.

Conversely, in music lessons, for instance, singing and listening to music, which are mostly emotionally imbued, should be supplemented with some logical explanation of the structure of the songs or piece of music, with elements of the theory of music or in the first grade with the reading of the text below the notes.

An emotional–logical balance should be sought and achieved in a similar way in teaching all other subjects.

2. *Balance of the conscious-paraconscious* in the organisation of the lesson. This means that the teacher should cultivate a feeling for the conscious and paraconscious constituents of the process of teaching and learning. He/she should not put the accent only on consciously grasping the material nor only on the intuitive perception of it. During the process of teaching and learning any subject, we can direct the informational process to the conscious or to the paraconscious constituents. When the necessary controlled paraconscious background is insufficient, we must increase the supply of information through peripheral perceptions and emotional stimulation. And when the logical processing is insufficient, the conscious rational meaning of the material presented should be augmented. In lessons on a particular subject this optimum balance of conscious-paraconscious functions can be promoted by introducing elements taken from lessons on another subject, one which offers greater possibilities along the desired line. For example if, during a lesson in mathematics, the teacher cannot think of any way of utilising the peripheral perceptions within the framework of mathematical activity, he/she can resort to literature, music, or the fine arts, which give a greater possibility of involving and harmonising the non-specific mental reactivity, mainly the peripheral perceptions and the emotional stimuli.

Conversely, understanding of aesthetic subjects is much easier if, any time he/she is at a loss as to how to utilise the logical aspects of the object of art itself, a teacher resorts to subjects of a logical nature in order to maintain the conscious-paraconscious balance.

3. *Intedisciplinary globalisation of themes*. This means that a global theme should not comprise only definite sections of a given subject following only dry didactic requirements. They should unite, if possible, a great part of the other subjects as well, subjects which have some relation to the specific theme, without obliterating the difference between the subjects. The kernel of interdisciplinary generalisation is the knowledge and creative development of the subject which is studied. The other disciplines only give a wider meaning to its problems from another point of view and mould the questions further in relation to volume. Let us take, for example, a global unit in music. It can be enriched by some mathematical rules which are being studied at the moment and which have their place in music. In a mathematical lesson, the teacher can give examples taken from mathematics in the music lesson. Both subjects can be enriched with examples taken from poetry, where both music and mathematics play their part. And these subjects can be discovered in history, sports, fine arts, and handicraft. Mathematics, music, rhythm and the desire to read are to be found everywhere. But we must be very careful in taking this approach – an exquisite feeling for measure is required here. The work bound up with interdisciplinary relations can enhance the learning of material if some lagging is noticeable in pupils. For example, at the beginning of the first grade every occasion for reading must be made use of. Children should be made to read extra texts under notes, the texts accompanying their mathematical tasks, the instructions for their games etc.

39. TEACHING AND LEARNING READING IN THE FIRST GRADE

(If you want to try, consult a trainer certified by Dr. Lozanov.)

There is no great difference in the way first-graders and children of pre-school age (three to five-year olds) are taught to read. With younger children the process is only a few days slower. The teaching passes through the following phases:

1. On the very first day of school 30 or 40 large colour poster-like pictures of scenes from the world of children are placed on the walls of the classroom as decoration. The words corresponding to the pictures or a short sentence describing in writing the meaning of the pictures are written in large typed letters under the respective pictures. The first letters of the words are inscribed and interwoven in the respective pictures as well, in a semi concealed way. For example, below a large picture of a bear, there is written in large typed letters the word "BEAR" and the letter "B" is introduced in the picture itself, but as a picture-puzzle. The entire alphabet is given in this way and also some of the more difficult letter combinations. These poster-like pictures are placed in the pupils' field of vision. They are left for two days like this, without children's attention being drawn to them.
2. At the end of the second day of school they are taken down and shown to the children in random order with the pictures themselves concealed and only the written words showing for the children to read. Thus a situation like that of playing a game arises. At first in chorus and then separately the children arrive at recognising the words, the sentences and the letters in the pictures.
3. Twenty or thirty pictures of the same kind (if there are any left) are hung in the classroom for another two days. Then the teacher proceeds in the same way with them as he/she did with the first lot. And now all this must be organised in the form of a game or a play.
4. All the words and sentences used as captions for the pictures are written separately without the pictures and in an atmosphere of game. The children are then asked to read them quickly at random, first in chorus and afterwards separately.
5. The words and sentences already learnt are combined in short new sentences, each with one new word. The sentences are connected by some plot. They are read in chorus and from time to time by individual pupils. The children are not allowed to read separate letters or syllables. Always the whole word, or the whole sentence! Regardless of this, the teacher suggests in passing that the words are composed of letters; he/she may ask the children about the letters, but should not stop to dwell on the letters when reading. The teacher may go on to the quick reading of slides and then engages the children in quick-reading contests and games.
6. There is a didactic opera or theatre performance, often a film or videotaped performance. Some of the words already learnt and also some of the new words are given in the specially prepared performance as a way of unravelling the most interesting parts of the plot. All the children join in chorus together with the teacher and thus "help" the actors, who suggest that reading is pleasant and easy. The same performance comprises some mathematical material.
Note: The day before the performance the children read an illustrated book in chorus, together with the teacher. This book contains the libretto and score of the same little opera performance.
7. Short poems already learnt by heart by the children and made up primarily of words already familiar and of a pleasant nature are read in chorus and individually. The children must follow the place in the text with their first finger, even when the word is unknown to them.
Note: The whole of this stage takes 7-10 days from the very beginning.
8. For several days the children read their first book, which has been compiled so as to be entertaining on the basis of the pictures and contains mostly words and sentences which the children already know. This book is the suggestopaedic Primer.
9. The children read other books and texts adapted to their level of knowledge and which contain not only familiar but also unfamiliar words. The reading is in chorus, but the teacher stops

from time to time and waits for the children to continue by themselves. Sometimes the teacher only lowers his/her voice and then raises it again as soon as he/she notices that the children need his/her support. The texts should be short, emotional and rhythmical. The speed of the reading should increase gradually. The aim is to teach children how to read quickly, fusing the short words with the long ones and avoiding breaking the words up into syllables. At certain moments the chorus reading is switched to individual reading. Each text is read at most only twice so that in this way the pupils are prevented from memorizing it. After they have read the text the children retell what they have read very briefly to avoid mechanical reading. There should be no reading of texts which the children show little or no interest in.

After reading the beginners' series of booklets we pass on to reading suitable booklets available in the bookshops. The aim is to read in chorus and individually as many books as possible. The children's attention is not fixed on one book for any length of time and the teachers keep going on quickly to the next one.

Conditions are created for bringing more variety into the repetition by continual introduction of more and new material for reading. Those pupils who are already well advanced can be left to do quiet individual reading of more difficult booklets, the content of which they can narrate afterwards to the class. Meantime the class continues to read one new book after another in chorus. A transition is gradually made to increasingly expressive and artistic reading.

General survey: The method here described for learning to read has at a first glance features in common with the *method for learning whole words*. However, this is only a *superficial similarity*. We can list a number of features in which the method for learning to read differs essentially from this method. Primarily, suggestopaedic teaching and learning to read differs from the whole words method in the unity of the three principles of teaching and learning. The following more essential differentiating traits should be noted:

- a) In Suggestopaedia the pooling of the material in words and short sentences is always harmonised in unison with the psychological and artistic means.
- b) The whole word or sentence is learnt to a large degree peripherally and without a waste of time and strain for the pupils, because it is presented to them by means of the picture, which serves as decoration for the room and to which attention is not drawn. Assimilation is achieved by reading or singing memorised passages as well as through the children's opera and theatrical performances, created for this purpose.
- c) The pupils do not dwell for any appreciable length of time on one or the same short sentence to change only a word here and there. They pass on very quickly to new texts and booklets.
- d) The pupils assimilate the word as a whole but it is cursorily suggested to them that it is composed of letters. The initial letters of the words are incorporated in the pictures as a hidden element of them. The visual-auditory analysis goes to the second plane simultaneously with the cognitive stimulus of the first plane – the word or short sentence as a unit full of meaning.
- e) The synchronous group reading as a stage in suggestopaedic instruction, with its changing features, rhythm and accelerated tempo, and with the "enticing" of the children by the teacher occasionally modulating his/her voice and speaking in a low tone, is pleasant and, together with the other particularities of the method, increases motivation and creativity. In a word, suggestopaedic teaching and learning to read is a natural method, which in many respects is similar to the processes by which small children learn to speak. The children start to read without consciously learning to do it. On the first day, without realising how it happens, they can read a number of words and know all the letters.

The different phases in suggestopaedic acquisition of reading that we have enumerated and especially those with desuggestive orientation will not give the desired results unless the teacher applies the necessary psychological approach. First and foremost the teacher should love the children and play together with them. The transition from phase to phase should be

smooth, like in a game, not an exam. While being taught this methodology the teacher acquires a number of psychological approaches in practice.

40. RESULTS OF THE SUGGESTOPAEDIC TEACHING OF READING IN THE FIRST GRADE

During the first two days the pictures (about 40 altogether) hang on the walls as decoration and the children's attention is not deliberately directed to them. On the third day most surprisingly they can read all the words and know all the letters without having learnt them and this is what creates high spirits for playing games which later makes it easier for them to acquire new and more complicated texts.

The description of the method makes it clear that children begin reading as early as the second week in spite of a limited volume of reading matter. Reading skills quickly develop during the next few weeks. In the second month of the school year the children can already read any text quite fluently. This motivates them very considerably. They start asking for books. At the same time school children learning by the mainstream method in the control schools do not learn the whole of the alphabet and can read only a limited number of words and very slowly at that, in syllables or letter by letter.

Of course, we mean here those children who could not read when they came to school as well as pre-schoolers. Taking into consideration the fact that the suggestopaedic experimental schools have a five-day week with less school hours and the pupils have no homework, the results achieved acquire still greater significance. The results of research carried out in 1973/74 involving only the children of the then experimental school, who could not read when they were admitted to it, were compared with the results obtained in the control school. In this way we obtained the data given in Table No. 4.

Table No. 4.

Input and Output Reading Levels of Pupils without Preliminary Knowledge

School group	Type of control test	Number of pupils	Knew no letters (%)	Knew some letters (%)	Read word by word (%)	Read freely (%)
122 nd (experimental – 1 st)	Input 17/9/73	26	30.77	69.23	-	-
122 nd (experimental – 1 st)	Output 21/5/74	24	-	-	25.00	75.00
139 th (control)	Input 18/9/73	25	36.00	64.00	-	-
139 th (control)	Output 17/5/74	21	-	-	55.00	45.00

From the table it is perfectly clear that the children in the experimental group ended the school year with considerably greater proficiency. In the experimental group 75% of the children were able to read freely, as compared with 45% in the control group ($p < 0.05$). Similar results, all statistically significant, were obtained in a number of repeated instances of research carried out with more children. In the school year of 1975/76 the Institute was given 15 experimental schools all over the country with 1500 first graders and 14 control schools with 1300 first graders. At the end of the school year under the above mentioned conditions of a five-day week and no homework in the experimental schools, we got the following results in reading: In the experimental schools the children mastered 91.5 % of the material envisaged

for two school years (including the initial period of teaching them how to read) in 99 academic hours. At the same time the children in the control schools with a six-day week and quite a lot of homework mastered only 79.5% of the material envisaged for only one school year. The children of the experimental suggestopaedic schools were able to assimilate in 99 academic hours much better the material which in ordinary schools is covered in 334 academic hours plus homework.

Table No. 5.

Percentage Distribution of Schoolchildren in Groups According to Their Reading Habits at the Beginning and at the End of the School Year

Schools	Number of pupils	Number of pupils	Not able to read (%)	Not able to read (%)	Read word by word (%)	Read word by word (%)	Read freely (%)	Read freely (%)
	A	b	a	b	a	b	a	b
Experimental	1413	1414	84.8	11.8	5.9	21.5	9.3	66.7
Control	1228	1404	86.1	24.1	5.7	31.2	8.2	44.7

a=Input tests

b=Output tests

The data given in table No. 5. were obtained from the input (at the beginning of the school year) and the output (at the end of the school year) tests, held during the school year of 1977/78 in order to check the dynamics of the children's habits.

The differences between the initial tests (input) of the experimental and control groups is statistically insignificant ($p=0.32$) but the difference shown in the output tests is statistically significant ($p<0.001$).

The time taken to read one and the same text was on an average 68.62" in all the experimental groups, while for the control groups it was 78.78".

63.53 % of the schoolchildren of the experimental schools succeeded in grasping the meaning of a quickly read text, but only 38.32 % of the children of the control schools did so.

It must be pointed out that these results achieved in the experimental school at the end of the school year were after 90 academic hours. The results achieved in the control schools at the end of the school year were after 155 academic hours devoted to the same subject plus homework.

41. TEACHING AND LEARNING WRITING IN THE FIRST GRADE

(If you want to try, consult a trainer certified by Dr. Lozanov.)

Teaching and learning to write begins 10 or 15 days after the beginning of the school year when the children already know how to read, though not so fast. This process has also been brought up to a meaningful level by introducing global didactic units and by observing the unity of the three principles and three groups of suggestopaedic means. The plan for a writing lesson taken in one period is as follows:

1. The teacher writes a short, meaningful, emotional sentence on the blackboard, first in the normal way, then leaving a little space between the letters and words.
2. He/she makes a brief analysis of the contents and structure of the sentence – words, letters and capital letters. This is connected with some interesting children's story.
3. The pupils write down the whole sentence in their notebooks, but related to the requirements of the story
4. The teacher checks the individual work of the pupils and points out the mistakes.

5. Then the pupils write out the whole sentence again.
6. After this they write the same sentence as it is dictated to them.
7. Then another sentence with the same words is dictated to them and written down.
8. Gradually they go on to more complicated texts and dictations.
9. Note: teachers should be careful to see that the pupils do not find the writing lessons irksome. Pleasant texts should be given for copying and the musical accompaniment of suitable classical music should be included very often. In addition the pleasant atmosphere of a game is created.

42. RESULTS OF THE TEACHING AND LEARNING OF WRITING

Here again activating the reserve complex with its markedly positive “by-products” shows an outstanding fact that the children learn to write in the course of three days having one lesson each day. It is worth remembering that writing comes after the children have started to read.

43. TEACHING AND LEARNING MATHEMATICS IN THE FIRST GRADE

(If you want to try, consult a trainer certified by Dr. Lozanov.)

In teaching mathematics to pupils in the first grade one should seek not only to give the new material globally, but to find a link with the other subjects as well. In fine arts and manual training, for example, it is possible to introduce in an unobtrusive way a number of things that pupils have learnt in their lessons in mathematics. In this way the children will begin to feel that a knowledge of mathematics is indispensable and at the same time extremely interesting. Such links between mathematics and physical education (and all other subjects) can easily be found. For example, in physical education the children can count themselves, or certain numbers of children can be added to a game or taken out of it. The links with other subjects should be sought unobtrusively and in a captivating way, so that the children do not feel they are engaged in mathematical exercises.

The mathematical material for the first grade comprises everything that is in the official mainstream curriculum for the first grade and a considerable part of that for the second one. A part of the material for the third grade is also included. The whole material is divided up according to its functions into six global themes. Each theme is studied in the following four stages:

Stage One. The most essential of the new themes are first given in little musical, theatrical or recital-like scenes. The performances of these little shows, with their classical-like music, are prepared in advance by the actors and actresses of the suggestopaedic didactic theatre or they are videotaped. Some of the most essential examples of the respective mathematical theme are skillfully built into the plot of the play or the opera, which must be interesting for the children and which must not make them feel it is being used for mathematical exercises. The mathematical examples must not weigh on the performance and hinder its normal, fascinating development.

These examples must come into play at the most thrilling emotional moments of the performance as a form of the means of the denouement. The children in the audience must gradually be drawn into the play in the course of the performance. Thus they imperceptibly become actors and actresses in the play, and often show creative initiative, which improves the performance. The illustrated book with the plot (script or libretto and score) of the performance has been read to them the previous day.

At this stage and before beginning each new theme, four or five pictures, on which are depicted the most essential problems, must be hung on the classroom walls. By analogy whole sections of mathematical problems can be solved from them. Teachers should however pay no attention to these pictures; they should hang them on the walls as decoration for the classroom.

Stage Two. The following day (in one period in the classroom) the children retell the contents of the play or even replay or sing some passages from it, never failing to mention the didactic problem included in it as the means of unravelling the plot. Then an extra song is sung or a poem is learnt by heart – the song or the poem containing an essential variant of the mathematical example given in the performance.

Stage Three. The following day (in two periods in the classroom) the whole theme is given in a generalised way. Use is always made of the performance and the didactic songs and poems. The material, which is larger in amount is all subject to the same functional principle, which must be pointed out to the children. For example, it must be explained to the children that when we add 6 to 7 we add it in the same way as we add 16 to 7 or 46 to 7 or 136 to 7 and so on.

Stage Four. In the next few days (one period per day) there is fixation of the material taught, deepening the children's knowledge and solving creative tasks. Short control tests are given periodically to see the degree to which the material has been mastered and what extra help is necessary for the different pupils.

The teacher goes on to the next theme only when the control tests show that the pupils have mastered on average 70 or 75% of the material.

The ability of the teacher to suggest to the pupils through his/her conduct that the material is extremely easy to master, and to create a bright, pleasant atmosphere in the classroom is of essential importance. Homework is not given, because it suggests that there are many difficulties to master and because through homework parents are inclined to force their children to learn.

If a child of his/her own initiative, wants to solve mathematical problems at home and then shows them to the teacher, the child should be encouraged, provided that no one insists on his/her doing such tasks every day.

Introduction to the material during the first year should take place imperceptibly and in a manner that is pleasant for the children. Parents are instructed to send their children shopping, and to ask for an exact account of the change they bring back after paying for their purchases. In general, all cases in which the children's knowledge absorbed at school can be practically applied must be made use of by the parents. Children should not, however, grasp the fact that this is a form of testing their knowledge. Thus high motivation is created within children.

The mistakes the children make at first are very tactfully corrected, sometimes imperceptibly, or they are even overlooked. Stress is laid on correctly solving problems and this is underlined and encouraged.

The problems that the children are given to solve should not be worked out formally only for the sake of the mathematical material itself. In their verbal shaping there are always settings which are interesting and thrilling for children's mental make up. Thus the child must be interested in the solution of the problem itself. For instance, if there are a lot of football fans in the class, some real figures can be taken in respect to goals and scores, the members of the

teams and, on this basis, mathematical problems, which would stir the fans of the different teams, can be worked out.

The material is increased on the basis of analogy but at the same time due regard is paid to the requirements for uniting opposite operations. With the expansion of codes and methodical units, the requirements of the didactic means of Suggestopaedia are duly observed. At the same time meaningfulness is enhanced and this helps to augment the motivation of the pupils. Strict differentiation of the means, the different stages, the themes and the subjects leads to their being brought into opposition. This makes the instruction less effective. In teaching mathematics to first graders it is necessary that unceasing internal integration is realised.

44. EFFECTIVENESS OF THE SUGGESTOPAEDIC TEACHING OF MATHEMATICS TO FIRST GRADERS

The suggestopaedic teaching of mathematics to first graders meets all the requirements for developing mathematical thinking in children, and the programme covers a considerably greater amount of material than that envisaged by the Ministry of Education. The pupils are given no homework to do.

In the 1972/73 academic year the pupils in one school year with a reduced number of hours set aside for the study of mathematics than are set aside for it in the programme of the Ministry, covered the material for both the first and the second grade.

The question most often raised that year was whether the children were acquiring lasting knowledge in mathematics. For this reason control tests of the children's knowledge of the same material were made in the experimental and the control schools before and after the winter holidays. The end results are shown in the table No. 6.

Table No. 6

Retention of the Material Taught in Mathematics after the Winter Holidays in the First Grade – 1972/73 School Year

School	Type of control test	Time	% of correctly solved problems
122 nd (experimental)	Addition and subtraction with decimal transition up to 20	Before holidays	72
		After holidays	72
139 th (control)	Addition and subtraction with decimal transition up to 20	Before holidays	65
		After holidays	36

The experimental groups both before and after the holidays solved 72% of the problems. The control groups solved 65% before the holidays and 36% after the holidays ($p < 0.001$).

The data on the input and output level (1973/74 – the following academic year) in the experimental (122nd) school in comparison with the control (139th) school make it clear that as early as on 31 January the pupils in the experimental school solved 86.64% of the tasks for the first grade, and were on approximately the same input level as the control schools. At the end of the year the experimental group solved 77.39% of the tasks set for second grade pupils, while in the control group the best pupil could cope with only 5.28% of them ($p < 0.001$).

The results achieved in mathematics were corroborated by those in our large-scale experiment. In the 1975/76 school year the 1500 first graders of 11 experimental schools learnt on average 80.3% of the material envisaged for the first grade, without doing homework and with a five-day school week. At the same time the schoolchildren of the control schools learnt on an average 63.3 % of this material. The first graders of the experimental schools assimilated 81% of the material envisaged for the second grade while the second graders of the control school learnt only 66.4% of the same material. In other words, in 100 academic hours the children were able to get a better knowledge of material which in the school syllabus was to be covered in 289 academic hours plus homework ($p < 0.001$). The results obtained in the first grade are corroborated by the results obtained in the following school years.

**45. TEACHING AND LEARNING A NARRATIVE SUBJECT
(HISTORY, FOR EXAMPLE) IN THE UPPER GRADES
(If you want to try, consult a trainer certified by Dr. Lozanov.)**

The teaching and learning of a narrative subject in all grades has common characteristic features. Here we shall give a brief description of the process of teaching history.

The whole material envisaged for one school year or for two school years is generalized according to the most important sections. One global unit of this kind comprises from 5 to 10 ordinary didactic units. In this way the enlarged material is retold bringing the most outstanding facts to the fore but at the same time, mentioning some details. This peculiar summary, which is the global theme, ensures an excellent mark for the pupil if he/she is examined on the most important facts, and a good mark if he/she is examined on the details. The pupil is able to get excellent marks on the details, too, after the sub themes have been worked out.

On the basis of this global theme a synopsis is made, which must be sufficient to reproduce the whole theme.

A suitable picture illustrates the global theme and its synopsis. Looking at the picture the pupil should be able to retell the whole global theme.

The teaching of the lesson proceeds in the following way. First of all the global theme with its synopsis and the picture which illustrates it are presented to the pupils. The presentation is lively and artistic; visual and auditory aids, such as suitable films and music, are used. After presenting the global theme, in the following lessons the teacher works on the sub themes always referring to the global theme and to the other subjects.

The teacher goes on to the next theme only after the pupils have learnt on average 75% of the material and can use it in narrating. Sometimes a concert session is given to the pupils to help them memorise the synopsis of the global theme. In this respect, however, the proper measure must be observed in order to keep up the expectancy of the pupils. That is why an all-round programme has been worked out for sessions and hours of other mental activities.

RESULTS

The reserve complex can be observed and maintained here too. The material is acquired in a very enjoyable and imperceptible way. One should be careful not to allow monotony in repetitions or let the students become fed up with an artificially created atmosphere. It is necessary for the teacher to know well the psyche, interests and needs of the particular group of students, and the whole game-like or artistic forms of work should meet their demands without being chaotic, and with their knowing that everything is done for them. The teacher should be one of them. He/she should not take the role of an observer.

46. THE PSYCHOTHERAPEUTICAL EFFECTS OF SUGGESTOPAEDIA

The psychotherapeutical effect of Suggestopaedia was observed in the very first suggestopaedic foreign language courses. Hundreds of students with neurotic and psychosomatic illnesses benefited from the favourable suggestopaedic effect. This led to the use of Suggestopaedia, also as a psychotherapeutic method. More than two hundred people suffering from serious forms of neurosis were given this treatment – i.e. suggestopaedic instruction. The results obtained were much better than the results obtained through other psychotherapeutical methods. What is more, the differences between the results proved statistically significant. In a large-scale school experiment it was also established that neurotic diseases were less frequent in the children of the experimental schools than those of the control schools.

It is hardly necessary to point out that if the suggestopaedic method had demonstrated its success in teaching, but at the expense of the students' health, we would have given it up altogether.

By suggestopaedic instruction in foreign languages, the volume of material given in each lesson is considerable. In spite of this, it is easily learned by the students. It must also be borne in mind that the students on these courses most often are people who are already working in full-time jobs. They do not interrupt this work to take the course. They attend the course in their free time. That is why research was carried out to investigate the effect of suggestopaedic instruction on the health of the students. At the beginning and end of a number of courses students were asked to fill in special questionnaires. Their answers supply evidence about the state of their health at both times. The questionnaires of 396 students were processed (Table No. 7)

Table No. 7

Changes in State of Health During Suggestopaedic Instruction

Groups	Number of persons	Percentage
Negative effect	0	0
No noticeable effect	327	82.6
Positive effect	69	17.4

Besides answering the special questionnaires, the students often gave spontaneous expression to their impressions of the changes they felt during suggestopaedic instruction. Some of their impressions were given in written form. Most often their letters referred to a favourable effect on some neurotic complaint. But it is also of importance that Suggestopaedia has considerable psychohygienic and psychoprophylactic possibilities. In our (Bulgarian) school experiment comprising sixteen schools, a number of investigations were carried out in order to determine what the effect of Suggestopaedia on children was. In the course of two years (1975-76 and 1977-78) 2300 first and second graders were examined by a commission of twelve psychotherapists and four university professors. It was established that in the suggestopaedic schools neurotic disorders in children had decreased by half compared with those in the control schools. At the same time the schoolchildren had learned twice as much material as that given to the children in the control schools, and they have achieved that without any homework and under the conditions of a shortened working week.

Our collaborator prof. Dr. D. Kolarova (1973) made a remarkable investigation of 113 neurotic students (before and after the suggestopaedic course), using a vast range of modern methods. She established improvement and healing in a large percentage of the students even

up to 3 years after the course. In a group of neurotics who attended a suggestopaedic course she traced the dynamics of the individual symptoms and published her findings in table No. 8.

Table No. 8

Dynamics of neurotic symptoms during suggestopaedic foreign language training

Type of symptom	Disappeared	Improved		No change	Trans. sharpened	Total
		Considerable	Slight			
Hyposthenic	20	16	12	3	-	51
Hypersthenic	30	72	59	18	1	180
Distimen	13	6	4	1	1	25
Vegetative disorders	52	27	13	14	7	113
Quarrels In sleep	38	52	12	24	5	131
Persist. fear	7	14	11	6	3	41
Hysteric sympt.	1	1	-	-	-	2
Incl. psychogenic hypomnesia	5	3	-	1	-	9
	166	191	111	67	17	552

Together with another of our collaborators Prof. Dr. P. Balevski (1973), who in the electro-physiological laboratory of the Research Institute of Suggestology first drew attention on the favourable effect of Suggestopaedic instruction on the capability to work and reactivity of the course members, she again confirmed in new investigation with him the favourable effect of suggestopaedic instruction on different diseases, especially vegetative and high blood pressure. The psychotherapeutic, psychohygienic and psychoprophylactic sides of Suggestopaedia were experimentally studied and corroborated by Prof. I.Z. Velvovski. He wrote (1973), "We undertook a thorough study of this method as regards its theoretical foundations. It was also checked in an experimental course organised in Kharkov by a committee composed of authoritative psychoneurologists, psychotherapists, neurophysiologists and psychologists under our direct guidance. The results of this check indicated that about 2000 new words and expressions were assimilated by all students (to varying degrees, of course), without any assignments of homework. The group was composed of 12 people belonging to different age-groups and professions, the language studied was French, which had not been learned by any one of them before, and the course took 26 days, 4 hours a day, with all official duties and normal work of the students remaining unchanged throughout the course. The language was mastered to the extent of unconstrained use as a means of communication, involving the performance of sketches, songs etc. The committee of experts, composed of pedagogues who are lecturers at the Department of French Language and of other linguists, confirmed that the result obtained is unthinkable for any other method, even for a much longer period of time providing for a full day's work with the assignment of homework. The medical committee established no disturbances of the nervous system. Quite on the contrary, it established buoyancy and a good mood, and the absence of fatigue in all students. Furthermore, an improvement in general feelings was established in the case of three of the pupils who suffered from neurosis (neurasthenia and neurosis of fixed ideas). This improvement took the form of the disappearance of headaches, normalisation of sleep and appetite, and disappearance of fixed ideas and hypochondriacal symptoms... ..It is our profound

conviction that it can be considered as a foundation stone underlying the entire enormous problem and science of the psychohygiene of mental work and instruction.... This is a trend of great psychoprophylactic significance to children of school age and to young people, as well as to adults, in the process of accumulating new knowledge, particularly in the case of persisting elements of asthenisation and asthenia of various geneses (post-infectional, post-traumatic etc.).”

The conclusions given by eight university professors who were leading specialists are very clear. The conclusions are given by a special ordinance of the Minister of Health and the Minister of Education.

O R D I N A N C E

No 6705

IT IS ORDERED THAT

The Commission consisting of:

1. Corresponding Member Professor Dragomir Mateev (physiologist) – Director of the Physiology Institute at the Bulgarian Academy of Sciences, and the Geriatrics Institute,
2. Professor Lyuben Telcharov, Doctor of Medical Sciences (patho-physiologist) – Institute of Recreation and Physiotherapy at the Ministry of Health,
3. Professor Tosho Gotsev, Doctor of Medical Sciences (physiologist) – Higher Medical Institute,
4. Professor Vladimir Ivanov, Master of Medical Sciences (psychiatrist) – Rector of the Higher Medical Institute, Varna, and Head of the Psychiatry Department,
5. Professor Boris Yanev (school medicine) – Head of School Medicine Department, ISUL, and Deputy Director of Institute of Hygiene at the Ministry of Health,
6. Professor Emanuil Sharankov (psychiatrist) – ISUL,
7. Professor Dimo Daskalov, Master of Medical Sciences (physiologist) – Head of the Physiology Department, Higher Medical Institute, Varna,
8. Professor Petar Balevski, Master of Medical Sciences (school medicine) State Research Scientific Institute of Suggestology – official report to the commission, is to give its opinion about the influences of the suggestopaedic method on the health of the students thus educated.

The Commission is to investigate the documentation and the method in the Institute of Suggestology and give a written conclusion no later than 1st November, 1970.

20th Oct, 1970

Minister of Education
(S. Vassilev)

(Seal)

(Signature)

Minister of Health
(Dr. K. Ignatov)

(Signature)

C O N C L U S I O N S

CONCERNING THE INFLUENCE OF THE SUGGESTOPAEDIC TRAINING
METHODOLOGY UPON THE HEALTH CONDITION OF THE LEARNERS

In accordance with Ordinance № 6705 of the Minister of Health and the Minister of Education, a commission consisting of Corresponding Member Professor Dr. Mateev – Chairman of the Commission, Professor Lyuben Telcharov, Professor Tosho Gotsev, Professor Vladimir Ivanov, Professor Boris Yanev, Professor Emanuil Sharankov, and Professor Dimo Daskalov has familiarised itself with the documentation and methodology of the Science-Research Centre of Suggestology, and expresses the following opinion:

The Science-Research Centre of Suggestology has allotted great attention to research work on the influence of suggestopaedic training methodology upon the health condition and working capacities of the learners. This particular problem has been the focus of two of the main themes of the centre as well as of a Ph.D. thesis. Examinations of hundreds of learners using the questionnaire method and clinical and physiological research methods have been made. The changes in the pulse, blood pressure, mental capacities, reactivity to external irritating factors, electrical encephalogram and a number of other indicators have been studied. The data have been statistically processed and authenticity proved. The results obtained have been described in detail in published articles as well as in articles ready for publishing, conference reports, a report-book to UNESCO, and in Dr. G. Lozanov's book *Suggestology and Suggestopedia*.

The data from the questionnaires, the clinical and physiological examinations, and the personal audit of the commission members, show that no unfavourable changes occur in the health condition of the learners as a result of the training using the suggestopaedic methodology. On the contrary, improvement in or disappearance of certain functional disorders like headaches, migraines, irritability, insomnia, reduced working capacities etc is noticeable in a number of learners. Therefore we can state that the methodology has a psycho-therapeutical effect as well. This is subject to future research.

Another important fact has been ascertained, namely the so-called suggestopaedic séance has a calming impact due to which the learners feel refreshed, lively and calm after the lessons. In some cases their working capacities at the end surpass those before the beginning of the lesson although the academic material is rather large in volume. The physiological mechanism of the phenomenon is of particular interest.

All through the lessons the learners are in full consciousness. No cases of hypnosis or sleeping retention have been observed.

The Centre of Suggestology teaches adults as well as school children in languages, and other subjects like algebra, geometry and physics. The results from the medical examinations on them coincide with the results of the adults. At present a class in the 10th grade is being suggestopaedically taught in all academic subjects in the Centre. The lessons in class have been reduced to four hours per day while the preparation of homework is one hour daily. The number of sports classes has been increased from two to six hours weekly. The pupils are in a very good disposition. In spite of the reduced lessons in class and hours for homework preparation, the acquisition of the material is of a high standard and, what is more, the schoolchildren are in high spirits and self-confident.

Dr. Lozanov's methodology is well-based on sound physiological grounds.

It is then no wonder that the students feel refreshed and energetic with that method of learning, although the lesson has covered considerable academic material. Basically, the result is the same refreshing effect as in an enjoyable concert or play at the end of the working day. At the end of the concert one is refreshed, lively, in high spirits and feeling confident...

Desuggestion, infantilisation, games, a pleasant atmosphere, strong motivation, and humaneness so typical of the suggestopaedic methodology abolish inner restrictions, the so-called psychological barriers, and facilitate the development of motor speech abilities and stereotypes. On the other hand, emotions and artistry in teaching create dominants that integrate the activities of the brain cortex, as well as of sub-cortex areas related to emotions and memory. Stimulation of reticular formation and other sub-cortex structures is of

considerable importance for maintaining the vitality of the cortex alongside the working capacities and high spirits of the students. Emotional training coupled with the dominant determines the stability of memory traces.

All these peculiarities of suggestopaedic methodology make it substantially important for the hygiene of the learning process, which becomes healthier and more effective.

Signatures:

Corresponding Member Professor Dr. Mateev

Professor Lyuben Telcharov

Professor Tosho Gotsev

Professor Vladimir Ivanov

Professor Boris Yanev

Professor Emanuil Sharankov

Professor Dimo Daskalov

Professor Petar Balevski

47. EXPERIMENTAL PROOF IN VIENNA, AUSTRIA, IN THE STATE PEDAGOGICAL INSTITUTE AND THE LEARNING RESEARCH INSTITUTE

Suggestopaedia (desuggestive teaching and learning) started and was investigated for one year in the Postgraduate Medical Institute in Sofia, after that for one year in the Faculty of the state Pedagogy Research Institute and after that for about 20 years in the State Research Institute of Suggestology, which reached 100 collaborators in the staff-scientists, teachers, and other specialists with more by contract. At the same time we worked for 10 years with state schools, which reached up to 15 schools and even in some years 16 schools, given by the Ministry of Education. After that for 10 years in the Department of Suggestology to the State University of Sofia, at the same time for 8 years in the state Pedagogische Akademie in Vienna to the Ministry of Education of Austria, and 5 years in the Research Institute for Learning in Vienna that was created for us and during all this time in many universities and schools all over the world.

All pedagogical, psychological, physiological and other research was carried out by a group of specialists and research associates of the Suggestopedia Research Institute – neurologists, psychiatrists, psychologists, physiologists, pedagogues, and philologists. They also collaborated with specialists and research associates of various universities and research institutes – professors and associate professors in psychiatry, school health specialists, physiologists, sports specialists, psychologists, pedagogues and others – 75 people altogether, collaborating with the Institute under contract. The data obtained by us were validated by specialists and researchers of the universities of other countries: the USSR, the USA, Hungary, the GDR and other states. Theses were defended in the USSR, the USA, Austria, France and elsewhere.

The results in the school subjects (reading, writing, and mathematics) were also confirmed in Vienna, Austria. I had experiments in the Pedagogical Academy of Vienna from 1973/74 till 1979. On the first days of January 1980, going to the USA and Austria I was stopped on the border and placed under house arrest for 10 years. Probably some administrative authorities did not want this method to be applied abroad. The experiments were interrupted drastically. But the director of the Pedagogical Academy and co-director of the Learning Research Institute in Vienna, Dr. Franz Beer, published in the USA (The Journal of Suggestive-Accelerative Learning and Teaching, Volume 3, Issue 1, 1978, p.21) the very positive results up to this time. He also cites the written report – official evaluation of the responsible high level employees of Ministry of Education (Spreitzer, Rieder, Brosch) after 10 months of experimentation. They wrote (p.34):

RESULTS OF THE EXPERIMENT AFTER 10 MONTHS

1. Arithmetic: The teaching goal of the first grade was certainly reached, and second and third grade material was also taught successfully to first graders. The parents concerned are in complete agreement with the achievements.
2. Reading: It was the goal of the experiment to bring the children to a high reading ability and comprehension. For that purpose they were offered more reading material than the other first graders. By November many children could already read well. The teaching goal in reading for the first grade was already achieved by the end of the first semester.
3. Writing: In this subject the teaching goal of the first grade was reached, and a large part of the achievement goal of the second grade as well.
4. In the remaining subjects not included in the experiment the teaching goal was achieved.



The students trained according to the suggestopaedic



learning system at the Pedagogical Academy of Vienna. View in the classroom. A theatrical spectacle for learning mathematics.

PARENTS' OPINION

A total of three discussions with Dr. Lozanov, the parents, the teachers, the department head and the Principal were held during the 1974/75 school year. Periodic discussions between the teacher and the parents also took place. No negative opinions were expressed by the parents.

SUMMARY

Teachers, parents, supervisors and scientific observers (Dr. Hodl, Dr. Hulesch, Wilhelm) are satisfied with the results achieved and recommend the continuation of the experiment. The procedures listed at the beginning will be continued in the second grade. A final evaluation can only be made at the end of the experiment.

Planning for 1975/76

More visual aids, inclusion of an amateur theatre group, improvement of the reading units, inclusion of further elements of language, arts, and general education.

Vienna, June 19th, 1975

Signed: Spreitzer, Rieder, Brosch, Lozanov

Dr. Beer himself wrote (p.36):

“Summing up the results of 2½ years of the experiment we can say:

1. It has been possible to master a considerably larger amount of material with the help of suggestopedia. The achievements are both quantitatively and qualitatively better. We are on the lookout for any symptoms of overwork (exhaustion, lack of concentration, neurotic symptoms such as thumb-sucking) and we reduce the tempo as soon as we notice any of these.
2. School, instruction and learning have a positive connotation. This is an obvious advantage of the experiment.

3. The results of 2. are a genuine relationship of trust between pupils and teachers.
4. The acquisition of knowledge takes place in a playful atmosphere and motivates the children to find work more and more pleasant. The children go about their work with curiosity and eagerness.
5. The children become continuously more creative.
6. Aggression, which can be observed in comparable classes, appears much less frequently and in a much reduced form (psycho hygienic effect).
7. The wide range of material offered means that the pupils who learn quickly are always occupied and not restrained by the usual repetition of the same material.
8. The pupils are stimulated to experiment by the intensive material offered to all their senses.
9. Dictation, checking results and reading to the class confirm the achievements and spur the pupils on to more intensive work.
10. Because of high reading ability and comprehension the book becomes a source of information as early as in the first grade (the children look things up).
11. One class is now in the third year of the experiment. So far there have been no pupils who have repeated a year or have been released. The unusual rate of repetitions and releases is 8% in Austria.
12. The school success and the opportunity to observe in the classroom make the parents interested in the school and add indirectly to the motivation of the children.”
13. And all this was during the “cold war” when it was extremely difficult to take knowledge from a communist country and give it to a western country. Also it was difficult to compete successfully against different authors of textbooks, methods and so on.

48. MANY STATE OFFICES AND SPECIALISTS IN BULGARIA CONFIRMED AND GUARANTEED THE HIGH RESULTS OF SUGGESTOPEDIA

Well organised Suggestopaedia accelerates learning 5 times on average, as it was established in our experimental materials and practical results of the good teachers we trained. It is also very important to stress that the encountered side effects were confirmed as well: the favourable impact on health, on the social-psychological relations, and on the subsequent success in other subjects and within other methods. If all these effects have not occurred, the teacher should consider his/her auxiliary qualification.

Here are extracts of a report submitted in 1976 to the Minister of Education, which was discussed and accepted first by the scholarly council of the Institute made up of 12 experts – professors from various universities and research institutes. Subsequently the report was discussed at a national pedagogical meeting and published in a pedagogic journal (Problems of Education, 1976, issue 12, page 31, Sofia):

“With an order of the Ministry of Education a whole-year experiment was performed during the school year 1970/71 with a representative for Sofia 10th grade where all subjects and the integral educative work were developed according to the suggestopaedic method. The academic, educative and medical results from this initial integral experiment with the suggestopaedic learning system were reported at the First International Symposium on the problems of suggestology and were published. Since the school year 1972/73, an integral suggestopaedic experiment was organised with an order of the Ministry of Education for the students from the 1st grade of the 122nd School in Sofia. The 139th School was provided as a control school. Since the next 1973/74 school year, the experiment has been expanded with an order of the Ministry of Education to include another village school near Sofia – the school in Dragalevtsi where the first grades were again enrolled. The school in the village of Simeonovo was provided as a control school.”

The results achieved in the course of those years were discussed many times by the scholarly council of the Institute, reported to the Ministry of Education and published. A number of

committees examined the results and verified the data promulgated by the Institute. This led to the chance to expand the experiment in a broader territory within the country in view of the perspective chances allowing the introduction of the suggestopaedic system in the whole country.

With an order of the Ministry of Education the experiment during the past school year 1975/76 included schools in the town of Plovdiv and the village of Dolni Voden, the towns of Haskovo, Dimitrovgrad, Blagoevgrad, Pleven, Mikhailovgrad and the village of Marchaevo as well as three schools in the city of Sofia with 1500 children in total. The following schools were provided by the Ministry of Education as control schools: Sofia – 119th, 139th, 64th primary schools; Plovdiv – the primary school in the village of Kuklen and the school Yordan Yovkov; Haskovo – the Vassil Levski school; Dimitrovgrad – the Lyuben Karavelov school; Pleven – the Hristo Smirnenski school; Mikhailovgrad – 2nd primary school; Blagoevgrad – 2nd primary school with 1300 children in total.

We were given also schools with Turkish children and gypsy children. They received very good results as well.

We realise suggestive experience not in its clinical and hypnotic sense but as we have many times stressed, in the sense of communicative significance of art as a desuggestive and suggestive, and a liberating and stimulating factor. This means that Suggestopaedia derives its name not from suppressing methods of influence upon personality but from its integral system for liberation from preliminary negative concepts regarding the difficulties in the process of learning that have originated during one's lifetime. Therefore, Suggestopaedia is a system for liberation.

The up-to-date interpretation of the principle of consciousness requires conscious assimilation of details for the establishment of a stereotype. Later, this stereotype should be destroyed and a new stereotype should be established at a higher level. Following the establishment of this stereotype, it should be also destroyed, and the next in the hierarchy stereotype should be established. The destruction of stereotypes according to the experimental data and the theoretical postulates of I.P. Pavlov results in neurotic development. This is one of the reasons for the neurotic disorders among students. However, the hierarchy of learning stereotypes has other negative sides, for example, restriction of the consciousness of trainees, elimination of the motivation for learning, losing the general trend in the integral sense of the studied material etc. Our principle for unity of consciousness and unconsciousness overcomes this weak side of the up-to-date conception for consciousness with the requirement that training should be performed at the level of realised integrities. However, this transfer of training to a global level does not mean a turnover to the methods of the holistic approach (for example, the method of whole words) for training in the suggestopaedic system is double-sided, and the background comprises simultaneously integrities and single elements. Thus in fact, training within the framework of Suggestopaedia is dialectical in essence and performance, at the same time directed to the integrities of meaning as well as to their composite details.

Thus a real consciousness and creative work is realised at the level of integrities, and at the second level of details one assimilates the constructive elements to which consciousness reverts only sporadically if necessary.

Large teams of specialists who were not employed by the Institute and members of the organisational and methodical staff of the Ministry of Education and the Departments of Education at the districts in the country organised the examinations of the children in respect to the level of their absorbed knowledge of various subjects, state of health, psycho-physiological characteristics and level of development. The examinations at the beginning and at the end of the school year with one stage check in the end of the first term were performed by specialists from the following institutes: 12 from the Centre of Hygiene; 11 from the Institute of Neurology, Psychiatry and Neurosurgery at the Medical Academy in Sofia; 4 from the Higher Institute of Physical Culture Georgi Dimitrov, Plovdiv; 2 from the Medical

Academy, Plovdiv, 4 from the Medical Academy, Pleven; 1 from the Bulgarian Union for Physical Culture and Sports; 1 from District Psycho-neurological Dispensary in Pleven; 2 from the Research Institute of Education; 1 from the Kremikovtsi Metallurgical Works; 1 from the Psycho-neurological Dispensary in the city of Sofia; 1 from the Academy of Social Sciences.

The following institutions and specialists took part in the checks and evaluation of the control works:

1. The District departments of Education with 43 specialists.
2. The Ministry of Education with 20 specialists.
3. Other non-school institutions with 14 specialists.
4. The Research Institute of Suggestology with 17 specialists.
5. 6 headmasters (of schools) and 7 teachers.

Overall, 146 specialists who were involved in the course of the whole school year for examinations and supervision of the results.

Due to the easy learning even of more material, it became possible for the children of the experimental schools to study 5 days a week, with additional potential to increase the hours for arts and manual skills training as well as for more outdoor activities. The merger of training with education and aesthetics on the basis of labour created conditions for rapid development of harmonious personalities as well as for early revelation of talents.

It should be borne in mind that all other examinations performed and summarised mostly by specialists who were not employees of the Institute were also in favour of the experiment. For example, 7-year-old children trained according to the suggestopaedic system of education show a higher rate of development in respect to most parameters for somatic development and capability in comparison with the children from the control schools, the other parameters being essentially similar for both groups. The data for the somatic development and capability of the 6-year-old children in the course of the school year are also favourable. There are no data for an unfavourable impact of the suggestopaedic system of education upon the somatic development of the children in spite of the large material for assimilation and the higher rate of assimilation.

The examination of the general state of health and the somatic and mental incidence of diseases revealed three times as many neurotic disorders of short duration in the control schools compared to the amount of these disorders among the children from the experimental schools. Even 6-year-old student who showed a relatively higher disposition for development of neurotic reactions had lesser incidence of such reactions compared to 7-year-old students from the control schools. The available data showed that notwithstanding the greater amount of assimilated information the students from the experimental schools have shown a better potential for adaptation to the educative environment and the process of learning.

49. 20 UNESCO EXPERTS FROM ALL OVER THE WORLD CONFIRMED AS WELL

In 1977 UNESCO required from us to present a written report on Suggestopaedia in all possible aspects. Later on in the UNESCO building in Paris we did a demonstration of foreign language Suggestopaedia before a large group of UNESCO employees.

From 11th to 16th December 1978, UNESCO organised 20 experts from all over the world to research Suggestopaedia in Sofia in order to certify its high effectiveness, and to propose what to do in the future. They saw, tested, were convinced and gave an incredibly high evaluation while at the same time they proposed educating teachers. Here are extracts from their minutes:

(Published in the USA: The Journal of the Society for Accelerative Learning and Teaching, volume 3, issue 3, Fall, 1978, p.211).



Prof. Jean Lerede from Canada tests a child.

Some of the group of researchers – experts of UNESCO and at separate tables – members of the government and responsible staff of UNESCO. Behind are observers from leading institutions

Recommendations

Made by the Experts from the Working Group on Suggestology as a Learning Methodology Meeting in Sofia, December 11-17, 1978

Experts from different countries, invited in their private capacity and representing a wide range of fields related to pedagogy, presented data on their experience with suggestopedia, compared, and in some cases contrasted theoretical perspectives, visited suggestopedic classes in progress and observed a special demonstration of the effectiveness of this teaching technique. After careful deliberation they have established a number of objectives for future action and assigned priorities to them.

- 1) There is consensus that suggestopedia is a generally superior teaching method for many subjects and for many types of students, compared with traditional methods. We have arrived at this consensus following a study of the research literature, listening to the testimony of international experts, observing films portraying suggestopedia instruction

and visiting classes in which suggestopedia is practiced. The films were well prepared and the classroom visitations were impressive. However, information gained from these sources is incomplete and must be augmented by knowledge of the research data and knowledgeable opinions from informed experts.

2) Following is a listing by three areas in which Suggestopedia could be implemented:

2.a. Research and Experimentation

1. Suggestopedia should be utilized preferentially to work on pedagogical problems, especially the literacy problem with language training as one of many methods. (High).
2. The exchange of research information should be facilitated and coordinated. (Mid)
3. Emphasis should be given in developing countries to the use of Suggestopedia in primary education. (Mid)
4. An international interdisciplinary panel of experts should meet at regular intervals for information exchange and research coordination. (High)
5. Studies should be done cross culturally with suggestopedia to determine how it works in different social and cultural settings. (High)
6. International studies should be done on dyslexia with suggestopedia. (Mid)
7. An interdisciplinary group of our researchers and teachers should be formed to develop suggestopedic materials for teaching and evaluation, to discover further applications of suggestopedia, to continue the investigation of the neurological basis of suggestology, and to study the long-term effects of suggestopedia. This study should consider both internal and external validity. (High)
8. An international journal of suggestology and suggestopedia should be published simultaneously in several languages. (Low)
9. An international journal of suggestology and suggestopedia should be published in the language of choice of the author, but with simultaneous summaries in several languages as Bulgarian, Russian, Hungarian, German, Polish, French, English and Spanish. (Mid)
10. Guidelines should be developed for evaluation of films, instructional materials and school visits by visiting investigators. (Mid)

2b. Teacher Training

1. In each country all requests for scholarships for teacher training should be made through official channels. Efforts should be made to obtain more money for such scholarships. (High)
2. Standards should be set up for the training, certification and maintaining of standards of suggestopedic training. (High)
3. Different categories of competency of teachers should be used to reflect increasing levels of teaching performance in certification. (Mid)
4. Suggestopedic teacher training should be started as soon as possible. (High)

2c. Centers

1. An International Association for Suggestology and Suggestopedia should be set up that is affiliated with UNESCO and should have the assistance and guidance of Dr. Lozanov (for training, research, coordination and publication of results. (High)
2. An International Teacher Training Center should be set up in Sofia. This Center should be under the control of the International Association for Suggestology and Suggestopedia. Other centers may be established later in other countries, also under the control of this association. (High)

3. An information center should be set up now to disseminate information of suggestology and suggestopedia. (Mid)

UNESCO is requested to give its support to all these proposed activities by all possible measures and under the existing international regulations.

(Note: The resolution and recommendations of the 20 UNESCO experts could not come into effect because the author of this book, Dr. Lozanov, was without reason placed under house arrest for 10 years until the political changes in 1989.)

50. THE SKILLS THAT TEACHERS ACQUIRE DURING TEACHER TRAINING

When a cyclist has to switch from a bicycle to an aeroplane he/she undoubtedly has a lot of things to learn. In return, the speed is much greater. The same goes for desuggestive training: what is needed is not just theoretical information, but a full practical acquisition of the methodology.

Here are only some of the key points, which can only be mastered in a practical course:

1. How to conduct teaching-learning communication on the edge of knowledge and on the edge of the believing system of the individual students in the group.
2. How and when to vary the intonation and behaviour to convey the study material.
3. How to master the “laughter” system in a practical way.
4. How to practically master the “song” system.
5. How to vary the intonation during the concert session.
6. How to apply the dynamic global principle at each moment of teaching. How to make the transition from the whole to the part and from the part to the whole.
7. How to use peripheral perceptions.
8. How to prepare illustrative material and make it stimulating at the same time.
9. How to plan both active and passive knowledge.
10. How to recognise and at the same time use or avoid the placebo.
11. How to recognise the inducement of a hypnotic state and how not to allow its occurrence.
12. How to organise and utilise the three means of desuggestive teaching: didactic, psychological and artistic in their unity; so that there should not be a segment of work or rest etc. It should all flow.
13. How to keep different intensity of work at the time of elaboration near the golden proportion.
14. How to understand and to apply love for human beings.

There are a number of other principal requirements but these are closer to the understanding of a teacher who is not familiar with the methodology. As I said, mastering the described skills is not as difficult as it may seem at a first glance. On the other hand, of hundreds of teachers who have used this methodology, I do not know a single one who has willingly abandoned it. Give it a try.

It is well-known that:

1. The educational and communicative results of Suggestopaedia (and its development – Desuggestopaedia) so far have been experimentally and practically confirmed on an international scale.
2. It has been proved that the reserve complex is activated with its very positive:
3. educational,
4. health oriented and
5. psychological aspects.

6. Certain aspects of Suggestopaedia have been dealt within hundreds of Ph.D. theses in the most renowned universities in America, Europe, and Africa.
7. A big international committee of UNESCO experts came to Sofia and in the course of a week conducted profound research of Suggestopaedia in all aspects. They concluded that Suggestopaedia is the best methodology and should be immediately implemented all over the world and further developed.

We have clearly and emphatically denied that the results of Suggestopaedia (and its development – Desuggestopaedia) can be received or are due to:

- hypnosis;
- NLP – neuro-linguistic programming;
- visualisation exercises or guided fantasy;
- breathing exercises;
- use of the alpha waves of the brain;
- slow baroque music;
- various techniques described in the two journalists’ book
- “Super Learning”;
- many imitators groups and societies using the name Suggestopaedia,
- a situation without even one member professionally trained in Suggestopaedia;
- reclining chairs;
- magical pills;
- special diets;
- special audio cassettes on sale;
- etc.

Furthermore, it would be dangerous to use some of those techniques, e.g. hypnosis and others. We have also stated that in the course of suggestopaedic work the following factors are activated and thus have an impact on the educational process:

1. classical art
2. placebo
3. paraconsciousness
4. relaxation in the form of calmness
5. peripheral perceptions
6. credibility of the source of information
7. dual plane in providing information
8. intonation and rhythm of speech
9. infantilisation in the sense of increased trust and respectability
10. prestige
11. multiple personality
12. oscillating methodology
13. new names and new biographies
14. songs
15. laughter
16. specific globality
17. golden proportions
18. total aesthetic organisation as a method
19. directed non-manipulative communication and soft communicative suggestion.
20. There are some more factors. Of course, all the above-mentioned factors are essential. The teacher training is of particular importance.

The most important factors, without which Suggestopaedia (and its desuggestive development) by adults and by children as well cannot exist, are the following:

1. Covering a huge bulk of learning material.
2. Structuring the material in the suggestopaedic way: global-partial – partial-global, and global in the part – part in the global, related to the golden proportion.
3. As a professional, on one hand, and a personality, on the other hand, the teacher should be highly prestigious, reliable and credible.
4. The teacher should have, not play, a hundred percent of expectancy in positive results (,because the teacher is already experienced even from the time of teacher training course).
5. The teacher should love his/her students (of course, not sentimentally but as human beings) and teach them with personal participation through games, songs, a classical type of arts and pleasure.

Suggestopedia (and its desuggestive development) is a method of **opening the reserves of mind through love for human beings.**

The rest of the described means hitherto relate to orchestration, only *necessary orchestration.*



The conference on Suggestopedia in Helsinki, organised by the Department of Education, 20.6.1978.



Conference on Suggestopedia in Moscow, organised by the University, 1978.



Conference on Suggestopedia in Tokyo, organised by Sanno College, 1989.



A conference on Suggestopedia in Florence, Italy.



A conference on Suggestopedia in Viktorsberg, Austria.



A conference on Suggestopedia in Vienna, 14.10.1997.



International conference on Suggestopedia in Salzburg, organised by Stiftelsen Pedagogisk Utveckling, Sweden, 1990.

51. SOME BIOGRAPHY

For you to understand me properly I have to introduce myself to you and tell you how the subject, which I created is related to me – not that I am interesting but it is always better to know the author of strange statements.

Family and general activities

I was born in Sofia on 22nd July, 1926. My father was an associate professor at University and later a school inspector, a principal of a school and a teacher in history. My mother was a lawyer. I left high school as the valedictorian and then studied for six years at Sofia University. I graduated medicine and right after that I went to specialise in psychiatry and neurology but I was mostly interested in psychotherapy. I prepared a thesis at the Bulgarian Academy of Sciences and got a specialisation in brain physiology. Along with that I also enrolled in University to get my second degree in pedagogy and psychology. In between I finished my first experiments on Suggestopaedia and used them to defend my thesis for doctor of science in 1971. I was appointed a university professor.

Where I worked as a physician

In the course of my specialisation and after that I worked for five years in the largest psychiatric hospitals of the country (Byala and Kurilo) serving in the last two years as a manager of the hospital in Kurilo. I worked for 9 years in the Town Psychoneurological

Dispensary of Sofia – psychotherapy with ambulatory patients and 2 years at the Institute for Postgraduate Qualification where I thought psychotherapy to physicians. Along with this in my spare time I did experimental work on brain functions at the Bulgarian Academy of Sciences.

Where I worked as a suggestologist:

As a doctor I was able to come to conclusions about the actual existence of a considerable scope and quality of brain reserves (unused functions unknown to us) and also for the opportunity to create learning, therapeutic, educational, and communicative methods for their utilisation. Because of the extremely high effectiveness of these methods I was assigned to manage various research units: I created and managed for 20 years the State Research Institute of Suggestology which reached a total of 100 full-time employees, and I was able to equip it with the most modern electrophysiological laboratory of the time. I also created and managed for 10 years a Research centre (faculty) for Suggestology and Personal development at the University of Sofia. I was also assigned to manage for 6 years a Research Institute for Learning Studies in Austria. I established and was in charge of a Department for Suggestopaedia for Children at the Pedagogical Academy in Vienna to the Ministry of Education of Austria. Now I set up and manage methodologically many institutes and schools of learning on the five continents of the world.

Personal traits

I was a very sensitive child. My mother died when I was 2 years old. I don't remember her but I knew that she was a great person. I have always wanted to become like her. From my early age until now when I have to take important decisions I have always tried to communicate mentally with her and imagine how she would respond.

I have known and still know that she lives somewhere and somehow. My life has been very hard but with her constant spiritual help I have been able to be the happiest person on earth.

I was 18 years old when the communists took over the country and they arrested me and put me in a jail cellar all by myself and tortured me every day because I didn't notify the police about my friends' conspiracy against them. In the end they let me go on parole. I was forced to change my address a few times in order to get rid of them. After doing so I enrolled in University.

Towards the end of my studies at University the communists found me and expelled me. A professor, a friend of my mother's family and a deputy chancellor, was able to restore me and found a job for me in the country. I was able to recover but sometimes they ran into me so I had to change my jobs and deal with endless conflicts. All employers wanted me to work for them but unfortunately I couldn't stay at one place for a longer time because of my police record. In 1963 I was fired from the Psychoneurological Dispensary of Sofia and I had to work as a car mechanic for some time to support my family with a small child.

For many years on end I worked in the aforementioned official state research institutes that I founded. My work was evolving and developing, and the methods were improving thanks partly to many of my gifted co-workers as well. The first suggestopaedic experiments about a huge linguistic amount in French were carried out under my guidance by the teacher Y. Georgieva and I. Dimitrova, the second being an associate professor at Sofia University. The first suggestopaedic textbook in French were designed under my guidance by ass. Prof. I. Dimitrova. Later our research associate A. Novakov joined the team. Everybody worked most enthusiastically. Hundreds of students were on the waiting list to be taught in our courses. The experiments in the courses added to the methodology. In the course of 20 years we made dozens of experimental textbooks. The last textbook in French made under my guidance was designed by Z. Ivanova and E. Yordanova, who were well advanced in the methodology. The

teachers both in the English and the German teams worked as enthusiastically and creatively. There used to be numerous discussions on the methodology. The remarkable courses of M. Dimcheva, L. Kozhuharova, M. Chukova, and K. Pashmakova (the latter also carried out some useful psychological experiments as a research associate) have been remembered up to this very day. And the first experiments with young children in primary schools were carried



Prof. Dr. Gateva – deceased 1997

out and/or organised with the invaluable help of my veteran associate Z. Dumeva. I received a lot of help from my assistant, Prof. Dr. Gateva – musician and linguist. She joined my institute six years after it had been founded. She also *helped me find the better place of classical art, which I had already begun to introduce. She helped me improve musical sessions and enrich the methods with examples, she revised and created new textbooks, she composed many songs for the foreign language studies as well as the children's operas, which I needed to teach mathematics according to my methods. But she died from cancer in 1997. I have always been grateful to her for her deep understanding and*

significant contribution to my methods as well as for the beauty she so skillfully applied to my work.

One year after the UNESCO conclusion the government stopped me at the border when I was going on an official trip to the USA, took my passport and placed me under house arrest which lasted for ten years until the change in 1989. I didn't have the right to travel; they stopped my lectures at the University and on television, I didn't have the right to send and receive letters, I couldn't publish anything, I couldn't talk on the phone with people from abroad either etc. I was only allowed to travel from my home to the institute. During that time imitators from other countries offered to the world some versions of theirs on my behalf but these had nothing in common with true suggestopedia. I couldn't protect myself; I didn't even have the full information of what was going on in the world

After the political changes in 1989 I was again free and began to educate teachers and physicians. I couldn't publish much before the changes in 1989 because my theory about love and the freedom of personality needed to activate the reserves of mind was in dangerous contradiction with the official ideology of the communist regime. In the new situation after this date I lived in Austria and I had to work partly in order to make a living.

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Never before had a human being dared go so far before Dr. Lozanov did. He seems to us even much greater because, in fact, he is so very close to us. With time he will find his own place in the chain, and history will restore his real dimension for him.
Robert Galisson, La suggestion dans l'enseignement, Paris, 1983.