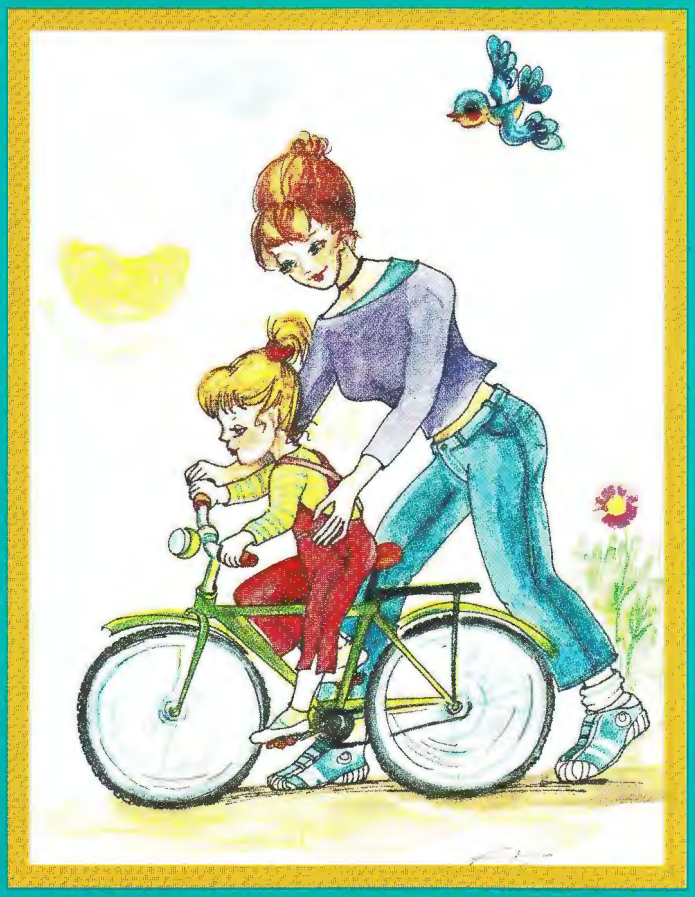
SUGGESTOPEDIA/ RESERVOPEDIA



THEORY AND PRACTICE OF
THE LIBERATING-STIMULATING PEDAGOGY ON
THE LEVEL OF THE HIDDEN RESERVES OF
THE HUMAN MIND

GEORGI LOZANOV

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

To the memory
of Prof.Dr. Emanuil Sharankov
who gave his unfailing support
to the innovative and humanitarian spirit
of Suggestopedia
in the first difficult years

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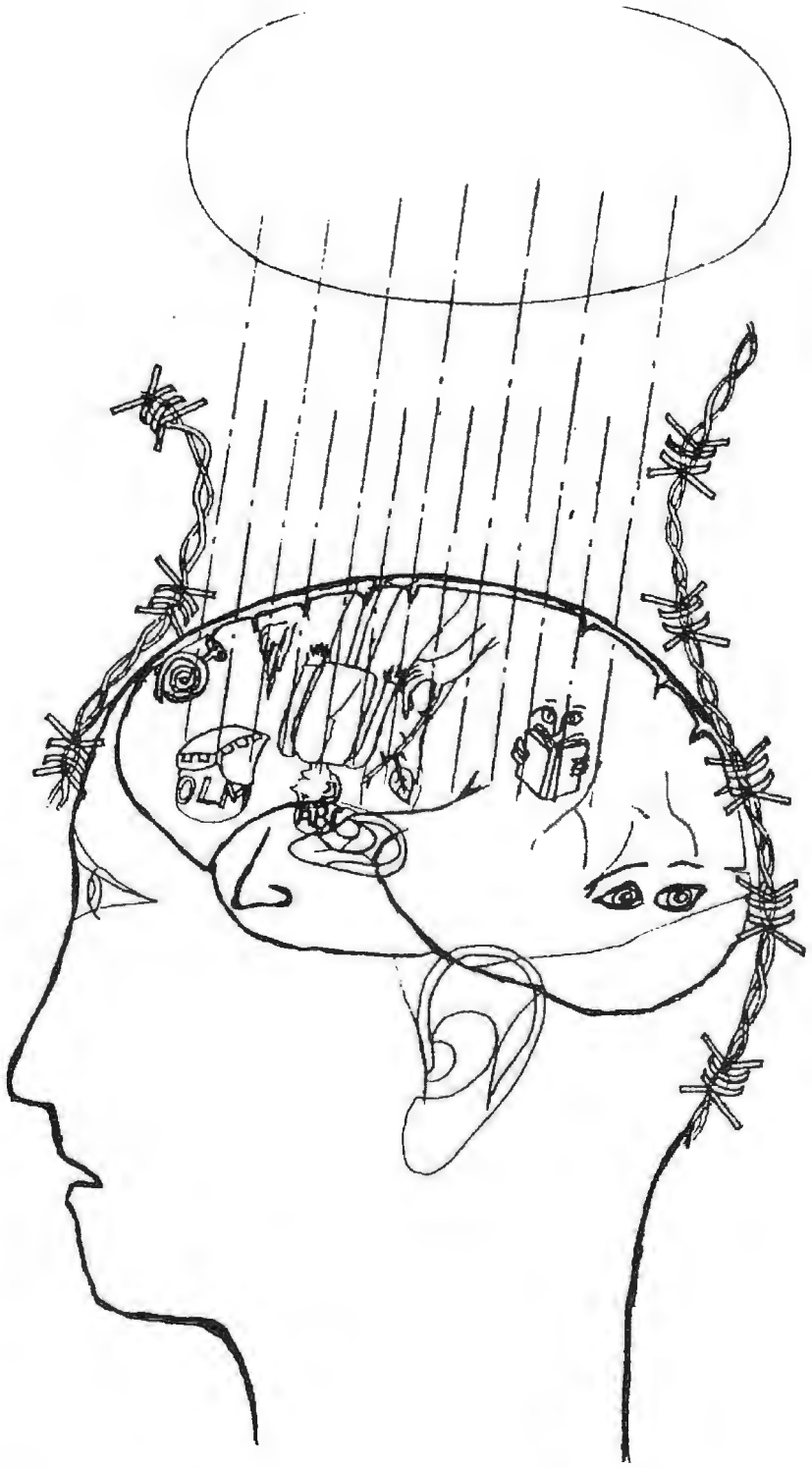


SUGGESTOPEDIA / RESERVOPEDIA IS AN ART OF TEACHING AND LEARNING, WHERE ALL THE RESERVES OF PERSONALITY ARE BEING TAPPED WITH LOVE

Suggestopedic / Reservopedic teaching methods (not only for foreign languages but also for all 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:

"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. Suggestopedic teacher training should be started as soon as possible.

3. ....."

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

We should never ever forget that, in this world of incredibly rapid implementation of innovations in all spheres of science, we should not remain at the level of the pseudo morality of past epochs but 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, without proper qualifications, to imitate it.

We wouldn't advise anyone to try any of the methods described here without consulting a trainer recommended 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 through the whole process of teaching and 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.

Acknowledgments

I would like to express my deep gratitude and recognition to all those people of merit who in the very first years of the development of suggestopedia as a science gave it their unhesitating support:

Prof Dr Ilya Zacharievich Velvovski, a world – known Ukrainian psychiatrist and psychotherapist with discoveries in the area of suggestology, who organized experimental suggestopedical courses and supported the development of suggestopedia.

Luidmila Zhivkova, a Minister of Culture in Bulgaria during the communist regime, who championed the idealistic and humanitarian character of suggestopedia in the hardest times.

Dr Josef Bandion, the director of the Ludwig Boltzman Geselschaft Institute, Vienna, Austria and collaborator of the President of Austria, who provided us with peaceful working conditions in Austria.

I would also like to thank all the noble scholars from all over the world that saw the humanitarian philosophy and the scientific corroboration of suggestopedia and advocated it in their research and publications.

In the very early stage when the present book was started, Bill Munro and Lupe Escamilla, San Diego, U.S.A, were very kind to edit it and to advise me on some topics. Five years later, when the book was enlarged, it was very considerate of Czeslawa Rudawska, Katowice, Poland to edit it. It was very kind of Keneward Hill, Sofia, Bulgaria, to edit the book before its first publication. I am indebted to Radostina Ivanova Mihaleva, Sofia, Bulgaria who was very kind to translate the parts of the book about the latest development of suggestopaedia-desuggestive teaching. My heartfelt gratitude goes to Setsuko Iki, Tokyo, Japan, for her help with providing me with favourable conditions for writing. I am also very grateful for the contribution of Leo Boudreau, Ottawa, Canada and Setsuko Iki who made valuable suggestions for this expanded edition of my original book, extensively reviewed its English translation and edited it. I am deeply grateful to the late associate professor Gloria Marie Caliendo, USA, for her dedication to suggestopedia/reservopedia and for her enthusiasm to contribute to the final edition of the book - a desire prevented solely by her untimely demise.

Finally, I would also like to thank my young collaborator Vanina Bodurova, Bulgaria, who, when I started losing my sight because of my old age, lent me her eyes to read and when I started losing my dexterity lent me her hands to write.

CONTENTS

PREFACE

Many will ask why the author of the scientific terms "Suggestology" and "Suggestopedia",[1] 50 years after their creation and their dissemination in many countries, offers new scientific concepts, "Desuggestology", "Desuggestopedia", "Reservopedia" and "Reservology".

First of all, let me stress that the terms "Desuggestology" and "Desuggestopedia" do not begin with the prefix "anti-" but with "de-". This means that Suggestology and Suggestopedia are not rejected. They remain as terms, and also as a basis for developing practical methods. But the new terms emphasize the tendency to bear in mind the perspective of the communicative freeing – de-programming, de-suggesting – from the social suggestive norms impressed on us over the centuries that our mental abilities are considerably limited. Suggestopedia, therefore, frees us from those pathological suggestions. That is why we use the prefix "de-".That is why the focus of this book is on Suggestopedia as a desuggestive pedagogy.

There is also a new emphasis on the fact that Suggestopedia is pedagogy of the hidden reserves of the human mind. Therefore bearing in mind that non-manipulative suggestion is the means and the reserves of mind – the end of this type of pedagogy– we will use the terms Suggestopedia/ Reservopedia throughout this book and for the future. The results of Suggestopedia are so unexpectedly positive and generally superior to those of other methods, as 20 UNESCO experts from all over the world have stated in their 1978 report, the additional effects of the method – favouring and improving the health and education– so unusually positive, that we can safely say that with Suggestopedia / Reservopedia, work is, in fact, going on in the field of the reserves of the mind unknown up to now. Reservology, as a science, integrates in its proper perspective the science of suggestion and desuggestion.

The essential emphasis on real humanization of teaching-learning and on the friendly relationships within the group, so characteristic of the method, raises hopes for a new societal culture, now and in the future. Without these new humanistic interrelations there are no new super-results. This is a positive "trap" of nature. "*The release of the suggestopedic reserve complex can be achieved only if there is LOVE for the human being.*"

The so called "techniques" used in Suggestopedia / Reservopedia (classical art, aesthetics, songs, laughter, games, games in games, etc.) are not decisive by themselves. What is decisive is the communication in the spirit of love, respect for man as a human being, the particular 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

[1] In this book the term "suggestopedia" will be used as a synonym for other terms also used by us in our writings: suggestopaedia, suggestopedagogy, suggestopedy.

lack of excessive homework, the stimulating atmosphere, the use of conscious and sub-conscious processes, and the easy, spontaneous absorption of the teaching material.

Knowing that Reservopedia, Reservology, Desuggestology and Desuggestopedia (or Desuggestive pedagogy)[2] exist, colleagues who work in this field should do all they can to integrate the new development in their syllabus content and approach. This will eliminate the wrongly understood authoritarian position, even if it is very soft, adopted by some un-properly trained teachers, psychologists and physicians as well. Additional training and information is already organized to help practitioners understand how to apply the new developments in their practice. As a result, 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, if any, in the work in Suggestopedia/Reservopedia, in general, will be avoided.

Since its very beginning Suggestopedia/Reservopedia has not been based on clinical, commanding suggestions but rather on our definition of *non-manipulative communicative suggestion* – like the suggestion of a loving mother or a loving child, or of a good, honest and reliable friend, without any insistence or authoritarian position: only harmonious communication. For the revealing of the reserve capacities this *spontaneously absorbed suggestion* relies on the increased prestige factor, the excellent organisation of the harmonious communicative factors, confirmed by the unconscious peripheral perceptions. But some unqualified persons understood our formulation of suggestion as a kind of hypnosis. However, now with the term "Desuggestion" it is easier to understand that it is not possible to link hypnosis with Suggestopedia/ Reservopedia for it refers essentially to the freedom of personality, to inner freedom.

This book includes our lectures of the last years. It also includes reports on changes in the theory and practice of the methodology which have been acknowledged experimentally in daily work. A number of known practices are being presented from a new theoretical framework and with new practical touches.

[2] While the term Suggestopedia continues to be used in the book, we will use mainly Reservopedia and Desuggestive pedagogy, i.e. pedagogy freeing from the social suggestive norm to reflect the new emphasis on the hidden reserves of mind and the desuggestive component of the suggestive-desuggestive dynamic always present in every communicative process. The desuggestive component will also be manifested through the use of the terms Desuggestology and Desuggestopedia.

PART ONE

OVERVIEW OF THE BASIC CONCEPTS AND THE EARLY DEVELOPMENT OF SUGGESTOPEDIA/RESERVOPEDIA

1. ARE THERE ANY VIRGIN, UNCONQUERED "LANDS" IN THE BRAIN/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 these reserve capacities since the brain/mind functions which are used today are also 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 is enough scientific data on the matter. We choose not to dwell in detail on the extremely interesting evidence about the mysterious achievements of some ancient civilizations. We shall not discuss the information coming from various religions, occult groups, 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.

We have developed the science of Suggestology with its pedagogic application Suggestopedia, Desuggestive pedagogy and now Reservopedia with the following aims in mind:

1. To demonstrate that the human personality possesses potential capabilities far exceeding those recognized by generally accepted social norms;

2. To analyse the extent to which various documented individual achievements demonstrating the use of potential reserves can be expected from all, or most members of society ;

3. To promote interest in the search for methods capable of releasing the unused potential reserves of the brain/mind.

In this book, we shall dwell on the results of our investigations upon these unused capacities of the brain/mind which are mostly connected with Suggestopedia/ Reservopedia.

The development of Suggestopedia originated in the context of our medical psycho-therapeutic practice, where we first witnessed manifestations of hypermnesia. Many times we saw, in our patients, fits of super recollection of a number of details from life which had a connection with their diseases. This phenomenon is not related to Freud's ungrounded sex hypotheses, but is a manifestation of simple hypermnesia (super recollection). Most often, this hypermnesia showed a tendency to enhance 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-ther-

apeutic methods, those of N. Krastnikov (1929) and K. Cholakov (1933), where the healing effect is based on hypermnesia. This mechanism we have noticed in the suggestopedic learning environment as well: the students show a considerably enhanced memory accompanied by a by-product of stabilization of healing in case of some neurotic complaints. This was confirmed by a commission of eight Bulgarian professors, specialists who under a mandate of the Ministries of Education and of National Health were requested to give a qualified opinion about the possible harm Suggestopedia might have on health. They reported that, on the contrary, Suggestopedia has a psycho-therapeutic effect, and that its methodology is substantially important for the hygiene of the learning process.[3] Therefore, Suggestopedia could be used for medical purposes too. Nowadays, there are already physicians worldwide who refer their patients to suggestopedic courses in cases when no other methods have helped them improve their condition.

2. WHAT ARE THE BRAIN/MIND RESERVES CAPACITIES? WHAT IS THE RESERVE COMPLEX IN RESERVOPEDIA?

2.1 Reserve Capacities

By reserve capacities, we understand the unmanifested but genetically predetermined capacities operating mainly in paraconsciousness and surpassing the normal ones by many times. The laws governing these capacities are, to a certain extent, different from the ordinary psycho-physiological laws. We maintain that the reserves we tap are, in fact, revealed and not created. These are normal possibilities of development – part of the innate genetic capacities, probably suppressed by society, i.e. social suggestive norms. Their systematic release creates a perspective for a fuller and more harmonious development of man.

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

(a) Hypermnesia – super long-term memory

[3] See Section 26 for a detailed report on the psychotherapeutical effects of Suggestopedia.

This super memory surpasses the possibilities of ordinary memory by many times. Hypermnesia underlies the methods of catharsis as one of their curative mechanisms.

We can assume with great probability that the proved psycho-curative effect of Suggestopedia/Reservopedia is partially due to the spontaneously manifold increased memory. Hypermnesia in many people can be brought about under the conditions of suggestopedic/ reservopedic instruction with both healthy and sick people, when the educational-curative process is carried out properly.

Hypermnesia, as an important reserve capacity, is characterized by the following specific psycho-physiological laws:

(i) recollection of memorized information manifested either after a latent period and without any conscious effort, or suddenly and spontaneously;

(ii) increased recollection of memorized information without the need of reinforcement (reminiscent curve);

(iii) amnesic covering, entering and sinking of the nucleus bearing the basic meaning of the complex stimulus into paraconsciousness until it is "raised" out of paraconsciousness into consciousness;

(iv) easy first recollection, under the conditions of emotional impetus, of the associative connections of peripheral perceptions and of concentrative psycho-relaxation;

(v) great durability of the reproduced memory traces;

(vi) decreased susceptibility to tiredness, and

(vii) a considerable psychotherapeutic, psycho-hygienic and psycho prophylactic effectiveness.

(b) Provoked hyper creativity – suggested or auto suggested 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 psycho-physiological laws that are characteristic of hypermnesia, some absolutely the same and others with certain modifications according to the nature of the reserve phenomenon.

***(c)* The suggestive and auto suggestive control of pain, blood loss, neurovegetative functions, the trophic, the metabolism, etc.**

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

2.1.1 The Phenomenon Hypermnesia

We often complain of difficulties in memorizing, but very curiously, not in understanding or creativity. And the more difficult the study material, the more inappropriately we try to memorize 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 memorizing, we select small, difficult, and meaningless parts in isolation from the context;
3. We bring the material to be memorized to the centre of our consciousness and attention;

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

When repeating strenuously and analysing, we deprive the whole stimulus of its peripheral, non-specific, «overgrown» components. Thus we want to sneak into the long term memory via the centre of attention and consciousness, through short-term memory. Neglecting the help of dual-plane, we, in fact, go against the natural memory mechanisms and an opposite effect is achieved.

Many more wrong approaches are used in an attempt to facilitate memorization. However, a great amount of evidence points to the existence of a significantly higher potential for 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 beyond 200-300%. In science, the term for this superior memory is hypermnesia, not super memory, 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.

2.1.2 Chaotic and Transitory Hypermnesia in Clinics

Increased memory, sometimes up to the level of hypermnesia, can be clinically observed as a very rare, transitory, chaotic, random, and a practically unusable symptom in the course of the following diseases or conditions:

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" = recollection)
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 psycho cathartic experiences in striking detail of a psycho traumatic situation.

4. Brain tumours: with psychiatric symptoms added to the neurological.

5. Infectious brain diseases: with psychiatric symptoms added to the neurological.

6. Oligophrenia: many cases have been reported. Most famous are those of the oligophrenics Inodi and Diamandi (Shipkovensky, 1954).

7. Brain damage.

8. Brain surgery: Some types of brain surgery, for example the interventions performed by W. Penfield (1952), etc.

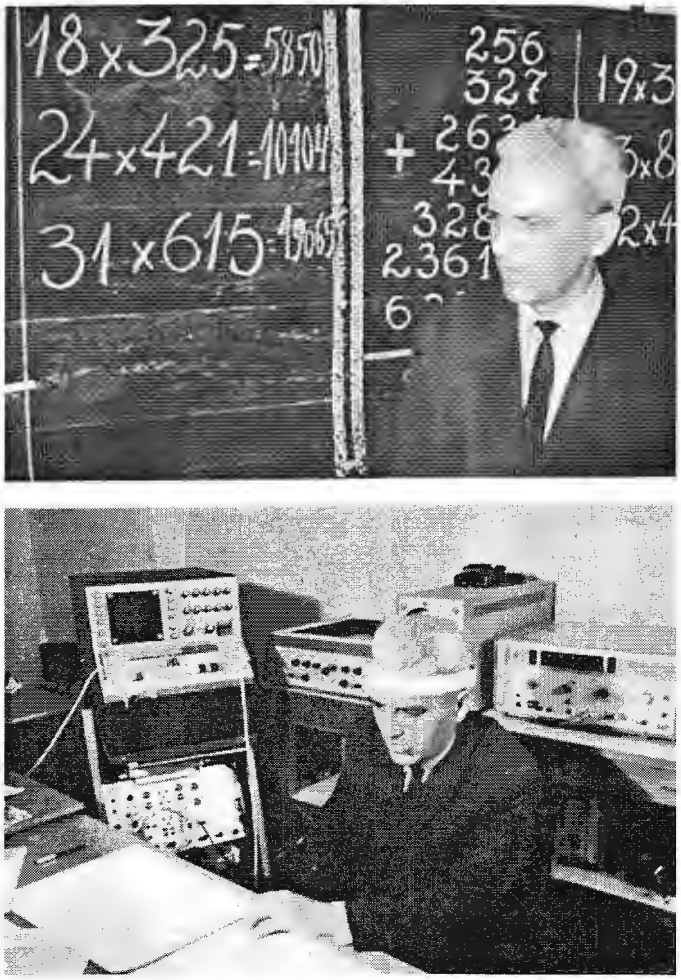
9. Drug effects: Many drugs for strengthening memory, but with random side effects. A whole branch of pharmacology exists but it will probably remain within the limits of experimental pharmacology. Among the variety of chemical compounds studied and partially administered in the psychopharmacology of learning and memory, we should mention a few as an illustrative sample (ginseng and centrophenoxin (Guirgea,C., 1973, 1982; Giurgea, C., M. Salama, 1978); catecholaminergic drugs (Squire, L., H. Davis, 1981); amphetamine, caffeine, mesocarb (Arushanian,E.B., U. G. Beloserzev, 1978); methylphenidate (Knights,R.M., G.S. Hinton, 1969); orotic acid (Matthies, H., et al., 1978); and many others).

10. Poisoning: 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 ecmnestic 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 monoideaism.

It is also well-known 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 presented two similar cases: the Indian Yoga Shaa and the Bulgarian K. M. (Lozanov, G., 1978).



Naturally existing super memory, which is a "reserve" for other people. This man 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 realize their talent. Well-known, for example, is the case of Toscanini who, in just one day, learned 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 probabilities. 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 learning process.

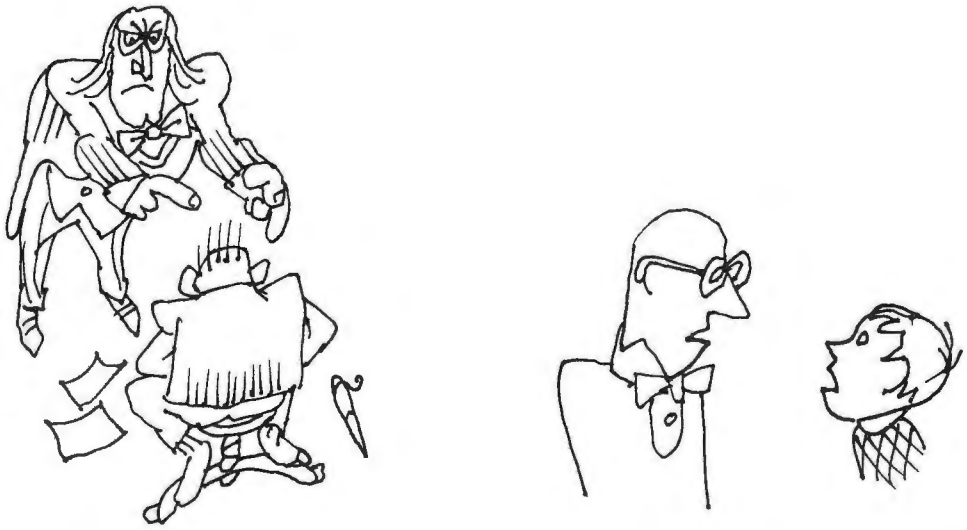
2.1.3 The Search for Hypermnesia in Everyone

Until 40 years ago, there was no evidence that a significantly increased potential for memorization, 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 were performed – mainly during various hypnotic states. However, the results were not encouraging. Hypermnesia is not always provoked 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 cognizant of what they were doing) organized training by means of hypnosis in different countries.

In order to avoid hypnosis, some authors have tried to draw on the reserves of memory during sleep. They cited the ancient practices in Egypt, as well as the temple traditions of other cultures, when enormous passages were memorized 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. Svyadosht, (1962) and later from the work of Kiev linguist L.A. Bliznichenko, (1966). A number of courses were organized for learning a foreign language during sleep. International conferences were held, mainly in France. However, the advertised great results were not achieved. The

dominant commanding position of the teacher regarding the sleeping students alienated the process of learning from its most inherent features: the emotional synchrony within the normal human and teaching communication processes. This method gradually faded away.



In March 1965, we performed experiments with this method which was applied in a Bulgarian high school by T.I., a teacher of Russian (Lozanov, G., 1978, p.151). 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 learning under this method, sleep turns into hypnosis; and*
> *2. Suggestion, non-manipulative 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 memorization failed to prove their claims to efficiency and harmlessness in ordinary practice. Furthermore, the manner of their implementation suggested a possible occurrence of hypnotic states. These experiments were conducted after the results of the suggestopedic method were first reported. This proves that Suggestopedia, even in its earliest stages, 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 explored. But clinical suggestion has, to a great

extent, a conditioning and subordinating effect, i.e. limiting personal freedom. Moreover, it programs the personality for stereotypic and non-creative answers. Although the experimental subject is conscious, these suggestive 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-manipulative suggestion. With this suggestive communication, everyday life influences are organized in full awareness of the psychological processes, respecting the individual's freedom to inform others about their decisions as well as stimulating their search for creative solutions in all situations. Here, it is important to note that significant hypermnesia was achieved for the first time by all students, although to various degrees with the individual group members. This indicated that the potential abilities of the personality, the brain and the mind reserves, could be accessed in every individual, provided the appropriate methods were used.

Thus, the issue of the existence of a significantly increased potential for memorizing, which could be applied in ordinary conditions, including school practice, was reduced merely to the specification of the methods and, most important, to the training of teachers.

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

2.2 The Suggestopedic Reserve Complex

Tapping of one reserve is not an isolated process. Each reserve capacity is accompanied by a group of related ones thus a whole reserve complex is formed.

Suggestopedia/Reservopedia, as a desuggestive pedagogy, releases a reserve complex with the following obligatory components:

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 suggestopedia. These can be specified as follows:

– Increasing of the volume of the memorized information units for a time unit 100-200% and more than that which is permissible with the social suggestive norm (exceeding the expectation)

– Increasing the duration of what has been memorized. – turning the classical "Ebbinghaus" type of "curve of forgetting" into the typical suggestopedical type of "curve of spontaneous recall" or "of the high start plateau" with a considerably slower decreasing curve.
– Increased memory effectiveness– easy involvement of what has been memorized into the intellectual creative process
– Increased activity of mental or creative processes
– Increased concentration and flexibility of attention
– Keeping the basic suggestopedic reserves activated (regarding memory, intelligence, thinking, attention) for a long time (months, years) after completing the course without repeated reinforcement.

2. Instruction is always accompanied with an effect of rest or at least one of absence of fatigue. If students get tired in lessons, we cannot speak of Suggestopedia / Reservopedia.

3. Suggestopedic / Reservopedic teaching and learning is always a pleasant experience. Thus we can add the following:

– Optimal increased auto controlled positive emotional tonus in the process of hyper acquisition with suggestopedia
– Lack of hypertension during hyper acquisition with suggestopedia
– Liberation from the fear of learning and hyper learning.

4. It always has a favourable educational effect, softening aggressive tendencies in students and helping them to adapt to society.

– One`s view of life is broadened
– Disalienation and improvement of the abilities to communicate occur
– Improvement of the balanced and harmoniously developed person, widening of interests.

5. Significant psycho prophylactic and psychotherapeutic effects can be observed in cases of functional illnesses or functional components of organic illnesses. Suggestopedia/ Reservopedia can be used as educational psychotherapy, psycho-prophylaxis and self-education.

6. Physiologically, the body's immune system is strengthened during and after the process of hyper acquisition by means of suggestope-

dia. Improvement, calming and harmonization of the objective physiological data (EEG, associative experiment, blood pressure and pulse) during and after the process of hyper acquisition are registered.

7. Acknowledging the multimind, module simplified scheme of personality development, the scheme of the „drawers": suggestopedia increases considerably the integration of the „different personalities" in us, of the different minds, intelligences, consciousnesses, modules and „drawers". Thanks to its multilevel relaxation-suggestive and structure-holistic associative approach (unlike all clinical conditioning suggestive– dissociating and suggestive-partial approaches) suggestopedia improves the completeness of the communications and the development on the „horizontal line" (interhemispheric unity of the brain) as well as on the „vertical line" (cortex-sub cortex unity). This is confirmed by the aforementioned complexity of the released and used suggestopedic reserves. Hence the considerable perspective for personality development and greater integration of its „separate personalities" into a unity.

3. THE ORIGIN OF SUGGESTOPEDIA/RESERVOPEDIA. THE EARLY EXPERIMENTS WITH THE RESERVE CAPACITIES OF MIND AND BRAIN

For years, the true meaning of the term "Suggestopedia" has created problems and generated questions for people all over the world. We used this term for the first time in a Bulgarian publication in 1966 (*Suggestopedia – a way to hypermnesia in learning*, Narodna Prosveta magazine, 1966, 6, 23–41). We also used this term in English in 1967 (*Suggestopedia and Memory*, Proceedings of the International Psychosomatic Week, Rome, 1967, 535–539). With the publishing of this new term, we unwillingly created many hardships for ourselves, since there was no traditional stable meaning for it. This meant that we had to explain it all the time. After publishing the primary research on Suggestopedia, we did not have the opportunity until now to spell out in a more understandable way the true meaning of the term. Now we will do our best to explain it better.

In the context of our ongoing psychotherapeutic work, we discovered that many of our patients sometimes manifested qualities that were extraordinary and exceeded the expectations regarding the potential of the human personality. Then, we were primarily interested in non-hypnotic and non-clinical wakeful suggestive influence, that is, in everyday communicative suggestion, a word which in English means to offer, to propose. In this sense, I "suggest" *but you are free to choose and to absorb*. This refers, not only to ***what*** but to ***how*** to propose, so that, for the person, the suggestion will be a most acceptable and natural thing and the anticipated phenomenon will occur. But this proposing should not be a kind of imposition. Adequate orchestration is required to involve the paraconscious, with peripheral perceptions and affective stimuli. *The communication is holistic*.

3.1 Early Experiments in Medicine with the Reserve Capacities of the Brain/Mind

On this background, a series of medical experiments were conducted, without hypnosis or dictating and dominating clinical suggestion. The majority of these experiments were communicated in the medical press. With this communicative soft or tender suggestion, as we call it, we conducted a group of experiments which pleased us and astonished our colleagues, for

these experiments proved quite successful. Gradually, they were expanded in medicine, but were mainly focused on the field of education.

We will attempt to expose in a comprehensible way, even for the layman, the very essence of our 50 years of experience in the field of Suggestology and more than 40 years in the field of Suggestopedia. We will share the evolution of our thoughts, regarding the unfolding of the reserves (the unused potential capacities) of the brain/mind in learning through spontaneously absorbed suggestion, in the development of Suggestopedia, up to its most recent development as Desuggestive pedagogy and Reservopedia.

Neither the clinical suggestion with all its non-hypnotic versions, nor even less hypnosis with its pseudo-secrecy used for the learning process has ever interested us. *The reserves (unused potential capacity) of the human brain/mind, and the ways to reach these reserves safely, were and still are our great dream...*

We have always considered that, metaphorically speaking, we humans are *fallen angels, locked up gods, hypnotized souls* that have always believed in a self-limiting humbleness. And that we have resigned ourselves to it. This is because any transgression of the socio-hypnotically suggested range of human capacity is penalized. 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 killed the most gifted individuals because they believed that this was the way to send them as ambassadors to Tangra, their sole god. In more recent times, the methods have been refined. Killing is not literally carried out, but it is a well-known fact that 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 why we feel both joy and pity when we encounter an exceptional young talent. Many people do not understand why we so often say, "Oh, he/she has an exceptional talent.., so sorry!" But things could be changed. Can you imagine? All at once, talented people are not objects of intrigues, not strangers and incomprehensible individuals, rudely treated 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 we had a dream*. And this dream incessantly whispered, talked and shouted to us, "There is a method, there is a form of communication for "locked up gods" and for "hypnotized souls who believe in their humbleness". There is one! There is one!" This method, this form of communication will change things. If this happens, we will all learn and develop much faster, and in a

more creative way... and with joy. Then talents will not be so strange for us. We will understand and accept them, and maybe some of us will also be seen as gifted people.

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

And here is the present: In our psychotherapeutic work, We once had a very interesting case. In 1955, one of our patients, who was an arch welder attending evening high school classes, told me, "Doctor, I now 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, it will be terrible." We asked him, "Did you hear the poem in class?" "Oh, yes", he answered, "we elaborated it together with the teacher". We told him very calmly, "Don't worry. If you have heard the poem only once in class it is in your paraconsciousness. 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 our office very excited 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". And as a confirmation, he showed us an excellent mark in his mark book.

We ourselves did not know what had happened the day before. We thought that We might have made involuntarily suggestions for refreshing his memory. The case was communicated in Bulgarian (Suggestology, 1971, p.20) and also in English (Suggestology and Outlines of Suggestopedy, 1978, p.12). We had neither hypnotized him nor made any attempts with non-hypnotic clinical suggestion. We just had a calm friendly talk with him. We were convinced of what we were telling him. **We were really convinced**. We had recently had several lectures on the matter of spontaneous unconscious memory and, in a medical journal in Bulgaria (Contemporary Medicine, 9, 1955), We had even risked publishing an article on these "miracles", where on page 74, We wrote, "And we will certainly be amazed if we realize that, while drawing our attention selectively to phenomena in which we are interested at a particular moment, our unconscious 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 subconscious."

Thus in accordance with our theoretical anticipations (expressed partially and quite cautiously in our lectures and articles), and in our modest experimental experience at that time, we had this gift – this hope that our dream was not groundless. We shared this with friends; "There is a safe, non-hypnotic way to enormous potential capacities for accelerated harmonious development, capacities that are locked within us." Some shared our joy, but others looked at us quite sadly. Later, we understood why. They loved us and pitied us for the complicated and hard life that was in store for us. But they did not know that we accepted it gladly.

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

We repeated on purpose this experiment later with other people who had to take difficult examinations. The results were not so dramatically high, but they were always positive to some degree. In fact, we could not repeat exactly, within ourselves, the same spontaneous state of mind as the first time. And that, of course, reflected in the new smallest peculiarities of our behaviour in an unnoticeable way. At that time, we interpreted the positive results with involuntary non-hypnotic suggestions. But now, after many years of investigations, we think that the first case was a result of a quite normal, spontaneous, desuggestive communication. We made no attempt to encourage the patient emotionally. There was nothing in our intonation and overall behaviour that could resemble a suggestive process, as practised in hypnosis or the clinical context. We had talked calmly and in a friendly way, even without special involvement on our part. From the very beginning our communicative method for freeing the locked-in potential capacities in the process of education and personal development had relied on the domination of the desuggestive (freeing) component in the desuggestive-suggestive process. But the development at the experimental, theoretical and practical levels, of the final and most appropriate version of this desuggestive-suggestive communicative method turned out to be a very slow process. Thousands of persons, adults and students as well, were tested.

From the first case in 1955, the gift of fortune, until the development of some practical methods, though they were not perfect, *ten years elapsed* in intensive experimental work. We had the opportunity for such research in my spare time at the clinic where we worked, and later during our 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 lie mainly within the sphere of treatment for neurotic and psychosomatic diseases. In proceeding with the treatment, considerable additional and identical reserve capacities may be released outside the sphere of treatment. This happens sometimes in *a clinically provoked state of hypnosis*. As an example of this, we can observe 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 of the tissues, etc.

But 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 a hospital* environment.

The attempts of a few psychologists to replace the psychotherapeutic terms in the field of hypnosis with psychological ones, such as expectancy, motivation, attitude and set-up, to explain those cases where the personality's reserve capacities were partly tapped in this field of psychotherapy, have proved to be particularly useful. Laboratory experiments have shown, however, that these psychological terms cannot completely replace the complex psychotherapeutic concepts of hypnosis and suggestion.

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. These authors take a cognitive-behavioural view of hypnosis. By giving task-motivating instructions they achieve results similar to those obtained in hypnosis. However, they do not admit that, by using these means, some sleep-like modifications in consciousness, similar to psychogenic derangement, may also arise.

But it was already in J.Charcot's time that, hypnosis, as a state, used to be classified at the Salpetriere under the 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 from 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 we could identify any common psycho-physiological

mechanisms. Besides this research, we organized a number of experiments. In our case, it was the part of the experiments which dealt with man's subconscious (paraconscious) activities and his/her reserve capacities in hypnosis that was of importance. We had already been carrying out these experiments for a period of 15 years when the Suggestology Research Institute was established in 1966. These experiments can be grouped around the following areas:

1. Graded changes in neuro-vegetative reactivity in accordance with the "depth" of suggested hypnosis (in as much 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, volume .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 – a catatonic stupor syndrome of the stereotyped 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 stereotyped movements 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 on the movements of the eyeballs, Bulletin of the Physiology Institute, Bulgarian Academy of Sciences, 1966, vol. X, p. 47; Lozanov G., 1971, pp. 133-142). On the background of the hypnotic 'play', there arise moments of real regression to past functional levels in some

activities. New anatomo-physiological 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 hypnotherapeutic 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 for tapping the 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 suggested to us that the nervous system has a tendency towards unconscious automatic mathematical modelling of the systematically connected information processes. And this modelling is obviously aimed at the optimal algorithmisation in the communicative process and a corresponding adaptational reprogramming at every level. These experiments and those with regard to the spontaneously appearing model of schizophrenia (catatonic syndrome) and at times the surprisingly precise ecmnesia – *reproduction of past activities*– in hypnotic age regression showed that:

1. Nothing is lost of past life experience;
2. Not only conscious but also unconscious perceptions are preserved;
3. The reproduction of past activities is realized by emotionally associating the entire complex of stereotypes of the past levels with the self-consciousness of the present time and place. This global past level "drawn up" to the present time, carries with it an enormous

amount of information about its separate elements. Subsequently attention can be focused on them;

4. Both 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 up 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 sleep-like psychogenic veiling of consciousness is an unstable state.

3.2 Spontaneously Absorbed, Non-Manipulative, Communicative Suggestion in Psychotherapy

During our research on hypnosis in our early years as a physician, we came upon some literature about the negative impact of hypnosis. At that time, we had already accumulated our own experience. So, very quickly we stopped any further experiments with hypnosis, and strenuously started searching for a soft, non-traumatic, non-manipulative and non-commanding method of work, both in the field of psychotherapy and for research on the supposed reserves of the mind. We were not interested in clinical suggestion without hypnosis either, because of its imperative character, which puts restrictions to the personality. In our search, we came to the concept of spontaneously absorbed 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 *spontaneously absorbed suggestion* is hard to accept as a suggestion, but the terminology in this field is rather limited.

The mechanism of this type of suggestion is characterised by a complete absence of pressure or command from the prestigious source. If we have to talk about *any influence, it is,* in fact, *a form of liberation from the limitations of the acquired negative notions and psycho traumas.* The positive effect appears not as a result of any coercion exercised on the limitation but of the specially organised communicative delivery. That is why our type of suggestion resembles the intimate mechanism of desuggestion, i.e. liberating from the previous negative states which, in one way or another, place the person-

ality into an unfavourable position. In this communication the received beneficial effect on health is not due to any direct pressure to intensify the positive tendencies but to the possibility of finding a way of harmonising them with the fixed negative tendencies in the mind of the patient and then weakening them. Thus the positive ones prevail and can be developed. In this communication it is the positive, harmonious that is enhanced. The counteraction is not direct, since this can trigger its intensifying but rather the counteraction`s importance is downplayed. For example, the patient B.M. came to us with the complaint of hand paresthesia. We did not command, "Your hands stop feeling pins and needles" but with a soft intonation we explained that such states may have appeared before but they quickly disappear after short distracting of the attention from the obsessive neurotic feeling.

Suggestion in its mild, spontaneously absorbed 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 psychotherapeutic 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 neuro – vegetative reactivity (Lozanov G., M.Markov und P.Kirchev, 1962, Band 8, heft 1, s.40) by suggestion in a wakeful state. We wrote: "An attack of urticaria is described, provoked by suggestion in a wakeful 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).

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 non-manipulative 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).

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

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

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

6. A common suggestive basis of the hypermnesic results of hypnopaedia (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 auto suggestive 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 neuro-vegetative, 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, spontaneously absorbed, non-manipulative and communicative suggestion without inducing a state of hypnosis, has shown, similarly to research of other authors that most chaotic "hypnotic phenomena" can be brought about non-chaotically, systematically and usefully without hypnosis. It was especially important for us to establish the fact that under the conditions of scientific organization of the suggestive and auto suggestive 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 unfailing love towards the human being in general, the inner freedom of the patient, the knowledge of the capacities of subconsciousness / paraconsciousness, and the application of the golden proportion in communication are important factors which will prevent from the development of a tendency for manipulative suggestion. The patient-physician relations in this kind of communication are always harmonious, and of a non-commanding nature.

3.3 Early Teaching Experiments with the Reserves of Mind

Our research in the field of non-hypnotic spontaneously absorbed or soft suggestion confirmed our opinion that suggestion can be used successfully not only in medical practice but also in teaching. This type of suggestion can have its place in all spheres of activity where communication is a decisive factor. 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 Suggestopedia". A detailed description of the experimental material and our theoretical reasons for founding this

science can be found in our book "Suggestology and Outlines of Suggestopedy" (1971, 1978). The present book contains the additional developments in the theory and practice in the course of the past 30 years.

Conditions for experiments to improve memorization by creating a pleasant, non-manipulative suggestive atmosphere in foreign language study groups were not provided until 1964, in the Department of Psychiatry of the Postgraduate Medical Institute (ISUL) in Sofia, Bulgaria. From these experiments, we obtained the expected high memorization results.

Description of the 1965 experiment [4]

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 suggestopedic system. The group was set up under a joint ordinance, Nr. 2541 of 26 June, 1965, issued by the Minister of National Education and the Minister of Public Health and Social Welfare. It took the research group very little time to get organized. In November of the same year, experimental suggestopedic 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 on the same evening. The experimental groups started immediately with the suggestopedic system, in so far as it was developed at that time, but the control groups, although they studied the same material or subject content, 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 the suggestive method. 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 suggestopedic system. They had

[4] See Lozanov 1978, pages 13–23 for a detailed description of the experiment.

a feeling of relief immediately when the lessons were given to them in the same way as to the experimental groups. After being given desuggestive-suggestive teaching, 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 suggestopedic method, in an official letter of 3.02.1966, the Research Group, which observed and controlled the experiment, reported to the Scientific Council of the Research Institute of Pedagogy in the Ministry of National Education and the latter suggested that the two ministries should set up a Suggestopedia Research Section.

The activity of the new Suggestopedia Research Section grew quickly and eventually we decided to conduct the first experiment whereby 1000 unknown French words were memorised in just one study session.

Description of the 1966 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. They were physicians, pedagogues, scientists, and senior 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.

We were so convinced in the positive outcome of the experiment that we decided to carry it out. We asked the students and their teacher how many new words they studied per day. The answer was 20 to 30 words. We told them that they would be able to memorize 1000 new words with our 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 our high prestige as a physician. But the university teacher, Ivanka Dimitrova, took our words seriously. All her being, mimics, intonation, unguided, spontaneous and ideomotor movements radiated, even imperceptibly to herself, her 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 our 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 any instructions for relaxation given to the students. As some of the students had 2 or 3 more words, 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 that study session:

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

Statistical results for the first experiment with the memorization of 1000 new French words in one session:
Average number of memorized words: 98.08% ± 7.39%
Consequently, the average memorization 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 is obvious that those convincing results with such a representative group opened the door to further experimentation. But this was only a memorization experiment. On the basis of those results, the methodology of spontaneously absorbed, non-manipulative suggestion in teaching not only languages, but consequently all subjects, started its development.

As the work of the Suggestopedia 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 cultivated public in Bulgaria became interested. Interest was also shown in Suggestopedia in other countries. Our success attracted due attention and conditions were created for further research work. On October 6, 1966, the first State Suggestology Research Centre started its independent life. Television filmed an educational program in which 15 respected citizens – scientists, politicians, public workers etc. – confirmed the amazing results from their participation in our experiments.

3.4 Evolution of the Suggestopedic/Reservopedic Learning System

3.4.1 The Integral Psychotherapy Model

If we accept that the mechanisms of the psychogenic illnesses are suggestive, as it can easily be seen by specialists, then the treatment of these illnesses is by desuggestion – freeing from these ill suggestions as the illnesses with psychogenic aetiology could be called.

The limitations in our intellectual capacity are most often suggestive due to the suggestive influence of the society which does not stimulate our development. This is due to the lack of genuine humanitarian communication in society.

In our psychotherapeutic work we developed the so-called integral psychotherapy, which encompassed a wide variety of communicative methods

ranging from the prestigious and delicate explanation of the psychotherapist to the spontaneous abreaction, and excluded the methods of Jung, Freud, as well as commanding clinical suggestion and hypnosis.

This psychotherapy can be applied individually or in group.

It comprises the following stages:

1. A conversation with and check-up of the patient to determine the diagnosis. In the course of the conversation, the peripheral perceptions of the psychotherapist hint that the patient's illness is in the group of the curable ones.

2. A healing session – a direct psychotherapeutic session in which we formulate the traits of the disease and how they will disappear.

a. Active

In the active session we go through a logical analysis, at times together with the patient, of the treatment of the disease. The speech of the psychotherapist is impregnated with optimistic, emotional and stimulating intonation.

b. Passive

In the passive session, which follows immediately after the active, we repeat our therapeutic formulations in a quick tempo, characteristic of the everyday speech.

3. In our next meeting with the patient, we help her/him perform the previously disturbed functions in normal conditions and we hint again, in our dual – plane behaviour, that everything has been resolved.

4. In one of the subsequent meetings, we let the patient show on her/his own the degree to which the disturbed function has been recovered. In comparing the positive outcome with the initial state the patient builds up confidence which protects him/her from future neurotic bouts.

This psychotherapeutic model, adapted accordingly, was applied to the teaching-learning system suggestopedia.

3.4.2 Towards a suggestopedic methodology

The first experiment of memorizing 1000 French words in one day was merely a memorization experiment. It served as a basis for the development of the suggestopedic/ reservopedic methodology. The first suggestopedic/ reservopedic courses that followed marked the beginning of the develop-

ment of the methodology. Three stages in teaching the new lesson were recognized and they have been preserved with slight modifications.

The following terms are in chronological order to describe the evolution of the suggestopedic/reservopedic teaching and learning cycle[5].

1. Pre-session stage (Introduction).

The first stage of the lesson is organised with the purpose of creating a psychological set-up for an easier memorisation.

2. Session (Memorization séance; Active Session and Concert Session; Musical Sessions; Melodrama and Recital)

In the beginning, we thought that hypermnesia was due to that particular séance as this was the case of the first memorization experiment with the 1000 French words. Later the experiments showed that additional memorization takes part, to a certain degree, during each stage of teaching in such soft suggestive conditions. The séance was divided into two parts: active and passive. During the active séance, 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 séance 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 memorization. Later the experiments showed that memorization was very strong and so, no repetition was needed. Then, we introduced vertical reading without repetition of words and phrases. After the active séance, when the students actively followed the text, came the passive séance. It was called passive because the students did not follow the text actively. They only listened calmly. They did not receive any instructions. On the musical background of parts of Pre-Classical music works, the teacher read the whole text without the translation, in a calm and normal manner. That was the end of the first course day.

3. Post-Session (Elaboration)

The next day was dedicated to the elaborations of the material via a system of role-play, games and songs.

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[5] For further information on the first variants of the cycle stages please refer to A. Novakov, K. Pashmakova, "Organisation of the Process of Instruction in the Suggestopedic Training in Foreign Languages" Problems of Suggestology, p. 298, Sofia 1973 and G. Lozanov " Suggestology and Outlines of Suggestopedy", p. 271, Gordon and Breach 1978.

Gradually the methodology took on its final version after hundreds of experiments and thousands of students. The pre-session stage was enriched and marked the beginning of an artistic story, related to the content of the whole textbook, which was to evolve in the course of the period of instruction. In the second stage- the session-the active session was carried out on the background of selected and previously tested whole musical classical works of Mozart, Beethoven, Haydn, Tchaikovsky, etc. The active session would now be called an "active concert session" (melodrama). Let me pay tribute to Dr. E. Gateva who carried out the necessary experiments, and suggested a more professional introduction of classical art into our work and methodology. An important development was that the teacher now read and intoned in accord with the music like an accompanying instrument. As for the passive concert session, it was now carried out on the background of whole musical Pre-classical works by Bach, Vivaldi, Corelli, and other great masters. On the next day, the students sang classical songs. The classes were full of jokes and games. There also appeared a fourth stage, that of production or performance, when the students told interesting stories and had conversations in the foreign language quite by themselves.

Putting on the cloak of classical art added beauty to the success of the methodology. Art has made the learning process much more enjoyable. Aesthetics has become particularly important in learning, and hence in life. Classical art now is an integral part of reservopedia - desuggestive pedagogy. As a result, its educational impact has been enhanced.

It is wrong to consider suggestopedia/ reservopedia as a methodology of foreign language learning only. In our experimental schools, all the subjects were taught suggestopedically/ reservopedically, 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 especially 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 suggestopedic/ reservopedic methodologies in these subjects are also subject to a special qualification on the part of the teacher. The results of experiments with different 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.

3.5 False Versions of Suggestopedia/Reservopedia

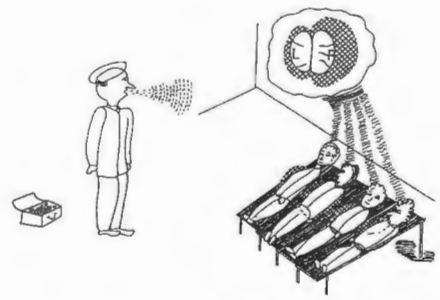
The incredible results of the first experiments provoked the interest of the Ministry of Education and the Ministry of Health as well as the President of the Republic. A series of control courses were initiated, always with remarkably good results. The level of interest rose and this led to a significant 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 decided on that basis that it had found *"the secret"*. Thus, without our knowledge, some of the most inconceivable versions were publicized as ours and distributed all over the world. Journalists and/or non-erudite teachers simplified the methods or reduced them to a number of techniques. We respond briefly to some of these false versions below:

1. First of all, ***hypnosis was explicitly rejected*** *because we already had considerable experience at the clinic, and the published information of 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.*

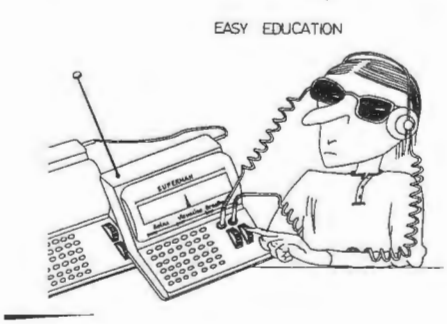
2. Any link or resemblance with NLP (Neuro-Linguistic Programming), *which appeared much later than Suggestopedia,* ***is rejected*** *because any programming results from dictation and manipulation similar to hypnosis, suppress personal freedom. On the*

contrary, we provoke deprogramming from pathological programs restricting our capacities. This becomes especially clear in the newest development of Suggestopedia / Reservopedia i.e. in desuggestive pedagogy where the students are absolutely free and can even take the initiative in contributing to the process of education. For example, in the stage of elaboration, when playing some games or choosing the songs to be sung, they can freely suggest new variants.

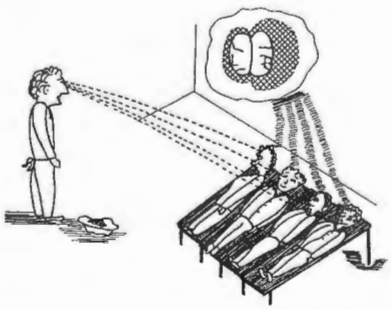
3. We have never experimented with "guided breathing exercises" and "guided visualization exercises" or "guided fantasies" *because these could in principle lead to hypnosis, being at the same time forms of primitive manipulation without any knowledge of it.*



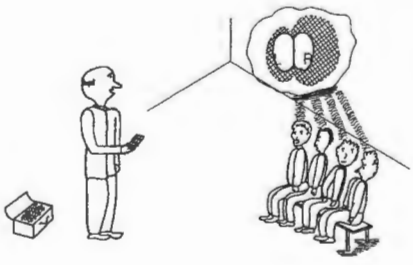
Guided breathing exercises. Some people used to believe that there was a breathing rhythm which enhanced memory.



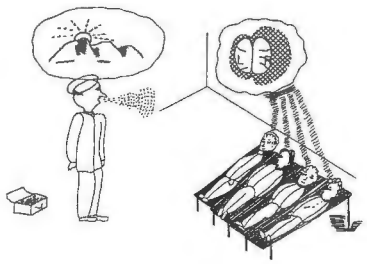
The way some people imagine future easy training with mysterious equipment.



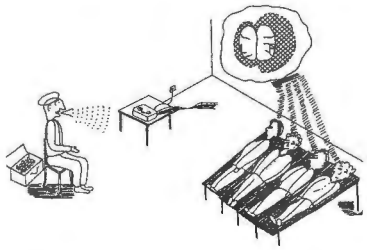
Guided relaxation (this is one of the methods to induce hypnosis).



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



"Guided imagery" (this 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.*** *And 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 female journalists who described Suggestopedia as ***"super learning"*** *present an amount of false data, which only confuses readers. Moreover, these data bear nothing to the new development of Suggestopedia/ Reservopedia.*
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, 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 along with his/her objectives, expectations and spiritual development. These did and still do underlie the communicative suggestion (not clinical suggestion or hypnotic impact). In this connection, we examined the methods which fostered *super memory in their capacity, as an integral part, to develop super creativity.* For practical purposes, we studied the ways of introducing *music, songs and games* as components of the entire psychological and harmonious orchestration, whereby the *high prestige* of the teacher plays a leading role. And, the dozens of persons pretending to have a command of the so-called secret of Suggestopedia / Reservopedia became all the more aggressive. That is why we introduced a system for certifying the teachers we trained. Thus anyone could prove whether his or her knowledge is genuine.

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 test them for yourselves*.

4. WHICH SUGGESTOLOGY? WHICH SUGGESTION? WHICH SUGGESTOPEDIA/RESERVOPEDIA?

4.1 Suggestology and 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 or the basic thought bearing the specificity of the message falls in the centre of attention and consciousness where it is subjected to critical analysis and logical processing. But we react not only to the specific meaning of speech, but to a whole complex of accompanying and, in some cases, preceding or succeeding stimuli non specific to this speech. The number of these non-specific stimuli (and most often they are peripheral perceptions) is inconceivably large – gestures, gait, facial expressions, expressions of the eyes, diction, intonation, and a number of ideomotor movements unnoticeable to consciousness. *The peripheral perceptions are fluctuating – when they pass into consciousness they are no longer peripheral but ordinary, conscious perceptions.*

We also include in the field of non-specific stimuli the environmental components, the level of prestige of the speaker, the physiological and psychological state of expectation of the recipient as well as his/her biological needs; in general, everything which at that moment is linked with the words that are spoken and is emitted unconsciously, volitionally uncontrollable. These non– specific stimuli, if synchronized, can play some suggestive role by changing the power of the words and by serving as the control for their authenticity. 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 it; but it always participates in man's mental and emotional life when communicating.

The Suggestology (Reservology), which we have been developing, is the science of that type of suggestion which liberates us from the previous nega-

tive conditioning. With this type of suggestion information is wanted and absorbed with expectancy, without coercion and controlled by harmoniously organized peripheral perceptions.

Peripheral perceptions (i.e. so called weak signals) of any type are of particular importance to this kind of communication. *Subliminal peripheral perceptions are uncontrollable by volition.* These weak signals are emitted by the trained prestigious teacher and the general organization of the teaching process, and they are absorbed subconsciously by the students (or the patients if those refer to psychotherapy). *These peripheral perceptions absolutely guarantee the authenticity of the link or access to the aimed-at hidden reserves to enable exceptionally fast learning (or healing, in the case of psychotherapy).* It would be impossible for a teacher to reveal reserves throughout the teaching process, i.e. learning as a minimum 2 to 3 times faster and better, and up to 5 to 10 times faster and better, without substantial homework, without fatigue and, besides, with a favourable effect on the students' health and social climate in the group unless he/she knew for sure that such student reserves do in fact exist. That is an axiom because *the peripheral perceptions reveal the truth*. It thus becomes obvious that suggestology, and suggestopedia respectively, constitute a genuine science that opposes any coercion, any hypnosis or manipulative commanding suggestion.

However, the word suggestion does not only refer to those continuous influences in day to day life. It is also a clinical term. As such, it makes use of all these factors but they are considerably enhanced. In this clinical context, scientists (therapists, physicians, etc.) talk about suggestion in hypnosis and suggestion without hypnosis. With or without hypnosis, this suggestion always includes commanding functions, i.e. communication is not free, but coerced. The patient who is experiencing suggestion stays passive and lets his/her psychic or body experience be 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, the patient's problems fade away. But the therapists do not think about the side effects of this most often used type of suggestion characterized by a dominating or commanding position on the part of the therapist and by non-critical obedience on the part of the patient. 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 results.

In a clinical environment, hypnosis is obtained by means of authoritative, intoned command that tolerates no objection. That command is either direct or throughout the stage of relaxation, whereby breathing is similar to

the one in the stage of sleep. That is also the way clinical suggestion acts, yet without reaching the stage of hypnosis. It is evident that the modes applied in a clinical environment have nothing to do with the suggestion which is the object of Suggestology, just like our Suggestotherapy in Medicine and Suggestopedia in pedagogy. Both from a theoretical and practical perspective, clinical suggestion with or without hypnosis and our spontaneously absorbed, non-manipulative suggestion are mutually exclusive. Any authoritative order could have very bad impact on the character of an individual or give rise to an illness, as described by many doctors and our own surveys, too.

It is of vital importance to understand well the reservopedic definition of suggestion, since this kind of suggestion is the means of control of the methodological approaches in Reservopedia.

4.2 Spontaneously Absorbed, Non-manipulative Suggestion in Suggestopedia/ Reservopedia

In our long-term research for a way to organize in a harmonious and synchronized way the reception of non-specific stimuli while respecting the student's (or the patient's) freedom of choice, we have come to the development of a new type of communication without commands and non-critical automatic obedience. Relying mainly on the high prestige of the teacher (or the physician) without a commanding tone, or obedient and passive behaviour on the part of the recipient, we demonstrated in our first big experiment that it was possible to memorize 1000 French words and phrases in one day. *When a highly prestigious teacher has an overall behaviour which manifests clearly his deep conviction that high results will be obtained, the effect of his/her teaching is really on the level of the reserves of the mind.* Due to a lack of alternative terminology, we have called this variant means of reaching the reserves of mind *'spontaneously absorbed, non-manipulative suggestion'.* This 'non-manipulative suggestion' with its particular characteristics bringing about a relationship of enthusiasm and harmony between the teacher and the student (or the physician and patient) cannot possibly be considered as suggestion in its clinical meaning.

With hypnosis and ordinary clinical suggestion, we cannot even talk about creative thinking. Even independent thinking is not evident with the former two. While with Reservopedia and the spontaneously absorbed, non-manipulative suggestion we use, *creative thinking is omnipresent and at*

the core of the process. This proves unquestionably that Reservopedia and the 'soft suggestion' we use, have nothing in common with clinical suggestion and hypnosis. This is the learning and teaching type of communication of the future which we have to acquire.

In the pedagogy of the hidden reserves of mind, this spontaneously absorbed, non-manipulative type of suggestion has been insured through the first law of Suggestopedia/ Reservopedia – Love. This specific type of non-manipulative suggestion can successfully find its place in the clinic too, as it is the peripheral perceptions which clearly and unambiguously confirm this humane attitude reflected in the first law of Suggestopedia/ Reservopedia. There is no dictation, no coercion there. There is warmth and mutual understanding.

4.3 The Psycho– Physiological Bases of Suggestology (Reservology)

Suggestology (Reservology) is founded on the following three psycho-physiological brain/mind basic functions:

1. Isolated activities of consciousness do not exist. Consciousness and paraconsciousness are always indivisibly taking part.

2. Each accepted stimulus in paraconsciousness is associated, coded, multidimensionally symbolized and connected with different past states of mind.

3. The stimuli in their complexity are always connected with the dynamics of dominating different activities of the states of mind.

These three brain/mind functions are the logical conclusions from modern psycho-physiological and psychological research; also, they have all been 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 teaching process.

These basic brain/mind functions show that linear teaching as well as the teaching of small, isolated portions of information, 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 information which can be processed at any one moment in time by attention and consciousness. It

does not seek to connect to the paraconscious functional structures, where long-term memory takes place.

Our research confirmed this conclusion. Targeting the units to be memorized at the level of "active attention" activates only 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 achieve easy memorization by enlarging the volume of memorization units. For example, these seven units 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.

In our opinion, depending on the nature of these seven chunks or groupings we can actually overcome the short-term memory and 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/mind. This simultaneous overgrowth of associations, notions, emotions, etc. does not necessarily require the assistance of the teacher or the teaching methodology.

According to the third basic brain/mind function of Suggestology (Reservology), 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 necessary existence of this instantaneous "overgrowth" of each stimulus, which takes place all the time. Instead of facilitating this natural process, they often hinder it. Thus, we get the monotonous repetition of isolated elements of information as a means to enhance memory and this is ridiculous nonsense. Quite often, an insistence on such "naked" memorization, in an attempt to train the brain to function contrary to its own laws, leads to quick fatigue and boredom. This, in turn, results in a change of the personality in all of its aspects. For the way of achieving memorization impacts the development and health of the learner; memorizing is not just a matter of effectiveness and depth of understanding of the study material.

It is not the "naked" stimuli which dominate in the process of memorization, but rather the complex of the stimuli impregnated with the different states of mind. The most suitable and effective overgrowth of the study material to be memorized occurs 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 laws as well as the means of desuggestive teaching, more specifically in the special group of artistic means of the methodology.

Within the basic framework of Suggestology (Reservology) thus defined, the seven laws of Suggestopedia (Reservopedia) emerge.

4.4 The Seven Laws (*Condicio Sine Qua Non*) of Suggestopedia/Reservopedia

In as much as our concept of suggestion is based on the conscious-paraconscious free, spontaneous absorption of information by the students through peripheral perceptions, in an organised, non-manipulative communicative process, and in opposition to dictating hypnotic and clinical suggestion, Suggestopedia/ Reservopedia is a teaching system which makes use of all the possibilities this suggestion can offer. Its application in learning and teaching has led us to formulate the following seven laws – *condicio sine qua non* – of Suggestopedia/ Reservopedia which form the basis of every reservopedic teaching and learning communication. They are so closely intertwined that they must also be *simultaneously respected at all times* during the teaching process.

It should be borne in mind, however, that these conditions can lead to the hidden reserves of mind only when the teacher– reservopedagogue has a high personal and professional prestige.

There is no Suggestopedia/Reservopedia without prestige.

Prestige can create prestige. Studying in the class of a prestigious professor creates prestige for the student. Studying at a prestigious university creates prestige for the student, which will later ensure higher effectiveness in his/her work. Reservopedia, created in the course of many years of labour, has gained prestige. The teachers trained by the author of Reservopedia, get a certificate and thus share the prestige of the methodology. If the teachers do not keep all the requirements of Reservopedia and therefore the results decrease, gradually the prestige of all the teachers in Reservopedia will decrease.

If we turn to our book "A Manual of Psychotherapy" (1963, p.73), we can read a definition of a psychotherapist which holds true for the reservo-pedagogue:

"It was as early as the ancient Hindus who used to demand from the doctor to have a pure and noble heart, not to be driven by financial interests, to be ready for a devoted service to their patients. Special attention was paid to the doctor's aspect. He had to be very well dressed, to have agreeable looks, to smell sweet.

It is clear that from the perspective of modernism these rules were grounded on a deep scientific sense. The doctor exerts influence on the patient by means of the whole complex of unsuspected rich stimuli. His emotional state has an effect on the patient too. It will be quite hard for a grim doctor to inspire confidence and optimism in bright perspectives. He has no right to transfer his personal problems in his working hours. The doctor must know that the psychotherapeutic sessions are hours dedicated to a sacred ritual. Then he must only be a doctor".

Due to the importance of this question, it will be considered further in the book from an experimental perspective.

Suggestopedia/Reservopedia is built upon the following seven laws – *condicio sine qua non*.

The First Law of Reservopedia is: Love

It is well known that no fine accomplishments have been made in this world without love. Love is also an essential condition for accessing the reserves of mind. Love creates serenity, trust and contributes to the prestige of the teacher in the eyes of the students and thus opens the ways of tapping the reserves in the personality`s paraconsciousness. Love cannot be played as the students will feel that. But it should not be understood as some sentimental, soft mood, since this attitude brings about negative reactions. Love should be experienced as genuine love for the human being. We do not advise any teacher to start working at the level of the reserves if they do not possess sincere, humanistic love. They should better wait until they reconsider the teaching process of communication as an expression of love.

In Suggestopedia/ Reservopedia, the teacher`s love to the learners can be best illustrated by means of **the metaphor of a mother or father teaching their children how to ride a bicycle** without the child being able to tell at each moment whether the parent is holding the bicycle from behind or not.

In the same way, reservopedic learners are mostly unaware of their teacher`s support. For example, during all productive stages in the reservopedic cycle in foreign language acquisition, the introduction, the elaboration and the last stage of performance when learners express themselves more freely and creatively, the teacher provides subdued and *unobtrusive guidance*, modelling and *implicit, tactful correction* of the learners output without their, most often, realizing that they are being corrected. The teacher provides the correct version of the learners' utterances in such a tenderly suggestive way that the learners do not even feel that they have committed an error. Errors are never analysed on the spot and teachers never suggest that learners should try harder.

This metaphor illustrates the quality of the psychological relationship between teacher and learner which is much like the relationship of mother to child. The example of the bicycle is used here to emphasize the aspect of LOVE, the caring and loving support of the teacher to the learners, to whom it is most welcome just because it is tenderly offered and not imposed upon them. Thus they are feeling secure.

Love, together with the other laws, creates the necessary cheerful, genuine and highly stimulating concentrative relaxation. This presupposes mental relaxation and non-strained concentration. It calls for calmness, steadiness, inner confidence and trust. Under these conditions of positive emotions, creative mental activity and the global learning process are characterized by an absence of fatigue. The principle of joy and concentrative calmness is realized through the system of games and humour, and, through visual materials which are not illustrative, but rather *stimulating* in character, as well as through the overall teaching communicative interaction.

The Second Law of Reservopedia is: Freedom

When there is Love, there is Freedom. Freedom empowers the teacher to exercise his / her judgement and personal decisions within the main reservopedic framework of the lesson to adapt it to the traits of each group. It also allows the students to choose whether to take part in some activities such as a game, a song, etc. that might not be in harmony with their disposition. They are also absolutely free at any moment to go out of the classroom without, of course, disturbing the work of the group. The principle of freedom is one of the most basic elements which distinguish Reservopedia from hypnosis. In hypnosis, the hypnotized subject is unable

to choose, to act freely, spontaneously, to interrupt the process or do anything unless the hypnotizer has ordered so.

Freedom gives the opportunity to the student to listen to their inner voice and to choose their way to the reserves of mind at different moments of the process of instruction. Freedom is not being dictated by the teacher, it is a spontaneous feeling in the student that they do not obey the methodology but are free to enjoy it and give personal expression in accordance with their personal traits, i.e. Reservopedia is not an imposition; on the contrary, it is opening the door to personal expression.

The Third Law of Reservopedia is: Conviction of the Teacher that Something Unusual is Taking Place

The state of conviction that something extraordinary, different from the social suggestive norm, is taking place with no fail, leads to the state of inspiration of the teacher. This inner jubilation is reflected in the peripheral perceptions of the teacher and perceived by and created in the students. What is particularly important is that this set-up is spontaneously created by the teacher's state of mind and the students happily resonate with it, most often subconsciously. This is how the so called suggestive relationship is created at the level of the reserve complex. The teacher's mastery is in facilitating this teaching-learning communication process of resonance. Naturally, certain suggestive influences are unavoidable in any communicative process. With Reservopedia, however, even the faintest pressure or insistence on part of the teacher, is a hindrance to this process. He/she simply communicates at the edge of the unused reserves of the brain and mind in keeping with the seven laws of Reservopedia. 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.

At present, students are able to assimilate the study material from a minimum of two to three times and up to five to ten times faster and better, with favourable effects upon health, than the results of traditional methodologies. And, in the future, this rate of learning may be augmented much further. The teacher using Reservopedia must be well informed about the results of all the other contemporary methods in order to be able to judge objectively.

The teacher`s expectations are both about his/her own ability to activate the reserve capacities of the learners as well as about the learner's ability to learn at the level of the reserves. These expectations can be felt by the

learners through the peripheral perceptions and unconscious signals arising from the teacher`s voice, facial expression and their overall non verbal behaviour. Due to the genuineness of these signals and the impossibility for these to be simulated by the teacher, the students perceive them without hesitation. This automatically leads to the tapping of the reserves. It is a mutual process of teacher`s expectations affecting the expectations of the learners, i.e. expectations create expectations, and this happens naturally, spontaneously, without any force.

The Fourth Law of Reservopedia is: Manifold Increase of Input Volume

In Reservopedia, the study material presented to students in a specific time frame, must be, as **a minimum,** at least 2 to 3 times (times, not percent) larger in volume than the existing established norm by the other methodologies. For example, the study material in a one month course of foreign language teaching must always be at least two times more voluminous than a typical similar language course. In fact, such a suggestopedic course for beginners will comprise 2000 to 2500 lexical units, surely going much beyond the minimal requirement of study material volume. This proportion holds good for the other subjects too. If the traditional norm changes with time, in a few years or generations, the reservopedic course must also be modified in light of the constant stimulation of evolution. Taking into consideration that a number of national and international expert commissions have confirmed that the methodology has a psychotherapeutic, psycho hygienic, educational effect, it is more than sure that we should not let the big volume of study material be decreased. *If, in the reservopedic framework, the study material is kept within the traditional boundaries, it will only confirm and reinforce the suggestive social norm about the limited capacity of the human being. Thus evolution will be delayed.*

The Fifth Law of Reservopedia is: Global-Partial, Partial-Global; Partial through Global

In all subjects, when the new study material is taught, there must not be a separation between the element and its whole. They must never be taught and learned in an isolated mode. For example, the words, grammar, etc., do not exist separately from the language; they are part of the discourse. Each global is part of a bigger global and thus it goes to infinity.

On the one hand, this concept is based on some investigations on brain functioning where the parts of the brain contain information about the whole brain. In addition, in exposing the brain/mind functions of Reservology, it is said that the human being reacts as a whole and that the stimuli are accepted in a complex way. This again shows that the elements do not exist apart but always as parts of the whole.

On the other hand, from a philosophical point of view, there is the great theory that the whole is in the part and that the part is in the whole; they are indivisible. There are no isolated entities. That is why when learning, the element is to be learned together with the whole. The global gives additional nuances to the element. The atom reflects the laws of the Universe and the Universe is in the atom.

When this condition is respected in pedagogy, the results are better. There is no attempt to isolate the element with force. All theoretical conclusions have their experimental corroboration.

The condition global – partial, partial – global, partial through global where the global is leading is one of the main factors contributing to the harmonising of the teaching process. The mastery of the teacher lies in the decision he/she has to make about what will be accepted as global.

The Sixth Law of Reservopedia is: The Golden Proportion

The Golden Proportion reveals a law of harmony in the universe to which the reservopedic teaching and learning process of all subjects must be submitted. Harmony inspires harmony and overcomes the psychic chaos often provoked by traditional pedagogy. Harmony is essential in the process of teaching and learning such a big volume of study material in a short period of time. The relations among the parts and the whole are in a golden proportion in the reservopedic process of communication. Learning capacity is enhanced when the teaching process skillfully finds the proper balance with respect to rhythms, intonations, emotional stimulus, etc.

The Seventh Law of Reservopedia is: Use of Classical Art and Aesthetics

Classical art and aesthetics are used in Reservopedia as especially effective mediators of non-manipulative communicative suggestion because of their capacity to emit an indefinite number of non-specific stimuli which

nourish the abundance of peripheral perceptions unnoticeable to the senses functioning through conscious awareness.

Reservopedic art creates conditions for optimal psycho-relaxation and harmonious states which *help* create a spontaneously increased acquisition state and enhance the capacity to tap the reserves of mind in a pleasant atmosphere. It aids reaching the state of inspiration and diverts the attention from the "ill place" where there is fear associated with learning. Classical art is introduced through specially selected works in classical music, through songs and arias, literary selections, reproductions of masterpieces, etc.

4.5 The Means of Suggestopedia/ Reservopedia

On the basis of the discussed brain/mind functions of Suggestology (Reservology) and the defined seven laws of Suggestopedia / Reservopedia, specific groups of means were established for the purpose 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 organization of the teaching-learning communication. What is important is how peripheral perceptions will be organized. It should be done so that they will stimulate rather than illustrate. Peripheral perceptions include not only the wallcharts 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.

"The fresh and correctly trained and rich in overtones voice of the suggestologist and suggestopedagogue is able to transmit the most subtle nuances of thought and speech, transport enormous quantities of information saving time, cause spontaneous hypermnesia at the moment or by delayed manifestations,

provoke increased reproducibility of new or old knowledge, set up states of concentrative psychorelaxation, of inspiration and enlightenment, and can unlock the personality psychophysiological reserves. When we also add the mimics, postures and other body movements following the voice motion, then this wealth of peripheral and even subliminal perception increases many times, spontaneously and with no deliberate efforts." (E. Gateva, 1991)

We recommend this voice training to be supervised always by a specialist – vocal pedagogue.

Didactic means have been partially discussed in the analysis of the laws of Suggestopedia/ Reservopedia. The study material should be structured in accordance with these laws. Dynamic hierarchical structural globality must be observed not only in the textbook but also in the teaching process. Of course, the study 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 study units of the method make it possible to get a general idea of the essential objective laws of the global content of the material studied, and the generalization of the codes makes it possible to overcome the expected limitation of short-term memory. This principle demands meaningfulness in teaching, the avoidance of repeated exercises on details and the gradual introduction of the new subjects of study. The habits "hierarchy" is avoided, high motivation is created and creativity is stimulated.

There is another important and characteristic feature of Suggestology/ Reservology involved here: while attention is drawn to the consciously understandable, generalized unity and its meaning, paraconscious perception and thinking process the implied elements included in the general code: for instance, in teaching foreign languages the students' attention may be directed to the whole sentence, to its meaningful communicative aspect, to its place and role in the given amusing communicative 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 meaning 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 dis-

cover the letters on the second plane, as a hidden picture in the illustrative material, while their attention is being driven to the meaningful word. It all happens naturally, spontaneously in the game-like form of finding the answers to the picture puzzle, which illustrate the words or sentences. Thus, the illustrative pictures stimulate the whole in its elements simultaneously; the students' attention being directed, mostly, to the whole.

According to the third law of Suggestopedia/ Reservopedia, the teacher needs to create the psychological set-up for increased acquisition capacities. And according to the fourth law, the course content 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 equipotentional theory of the functioning of the brain, but in combination with the basic dynamic functional structures of brain activity. We will discuss this question a little bit later.

Artistic means, the means of art, as mentioned earlier, are the best vehicle for spontaneous "overgrowing" or "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 Reservopedia introduce a special kind of liberating-and-stimulating reservopedic art (music, literature, acting, etc.) into the process of teaching and learning. It is not a stage of illustration in the learning process, but is built into the contents of the lesson. It promotes the reservopedic psychological orchestration by introducing an abundance of harmonized peripheral perceptions on a second plane. The artistic means are used both to create a pleasant atmosphere during the process of receiving, memorizing 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 were carried out in our experimental schools to check this. Table 1 shows the results obtained after didactic reservopedic performances of plays which were specially designed to introduce new study material in mathematics in the first grade.

Table 1

Acquisition of mathematical content 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 1, immediately after the performance the children learned a considerable amount of the content without noticing it. The difference is statistically significant ($p<0.001$).

In teaching all subjects to both children and adults, didactic reservopedic performances always give good results if they are correctly organized. Table 2 shows the results of such performances in teaching English in a primary school.

Table 2

Acquisition of English content by primary school children by means of art

Kind of test	Number of school children	Maximum possible correct answers	Correct answers Number	Correct answers %
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 reservopedic art, without any tension, the children assimilated part of the study material. And the amount of the study 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 memorize, but utilize the knowledge they absorb in these performances for solving other similar problems and tasks.

Our research into the role 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 teacher will have some theoretical knowledge of art, and in addition, will be able to play a musical instrument, sing, or, if not, play the tape recorder in suitable places.

The use of art in the suggestopedic learning process is an issue E. Gateva (1991) developed both experimentally and practically. The core of this research and study was reported in her doctoral dissertation. The practical implications of introducing artistic means for the purposes of the suggestopedic process are described in *The Foreign Language Teacher's Suggestopedic Manual,* (Lozanov G., E. Gateva, 1978). These practical implications have undergone some minor alterations in accordance with the latest development of reservopedic desuggestive pedagogy and we have included the most salient features in this book.

Using the three groups of means in ways adapted to the laws of Suggestopedia/ Reservopedia and the brain/mind functions of Suggestology / Reservology, 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 organizing the overall communicative teaching interaction in which the teacher is involved. Of course here we mean the teaching-learning communication using our methods to tap the potential capacities of the human being which are suppressed by the social suggestive norm.

The mind/brain basis of Suggestology / Reservology and the laws of Reservopedia 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 paraconsciousness that long-term memory takes place. In the domain of consciousness and active attention, memorization follows Miller's Law, a law which was actually noted for the first time by Wundt in his research on the capacity of attention to process simultane-

ous 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 refer to clinical concepts directed to 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 teaching process maintained in the scope of the potential capacities of the brain and mind.

4.6 Outline of the Methodology of Reservopedia

In practice, the seven laws of Reservopedia find themselves imbedded in a methodology which has been developed over a period of many years. While highlighting the integration of the above seven laws, we will now present an outline of the methodology of Reservopedia as it applies to foreign language teaching. Its spirit, however, is preserved in the design of the methodologies for the other subjects too.

Of course, in the methodology the systematic structuring and delivering of the program content is not neglected but it is always in accord with the suggestive-desuggestive dynamics. Both our experiments in our psychotherapeutic work and all the early memorization experiments served as a basis for the development of the reservopedic methodology. The first reservopedic courses that followed marked the beginning of the development of the methodology.

The first teaching unit of a foreign language course contains approximately 800 lexical and over 20 grammatical units. Both teacher and students cannot conceive that such a huge amount of material, presented at once on the first day of class, can be remembered by the students in one, two or three days by means of the existing modes. In fact, this huge amount of input is many times larger than the existing social suggestive norm for what constitutes human potential, a social norm developed throughout the ages by parents, teachers and society in general. It is well known that trying to learn such an amount of material in a short time by using pressure on students with conventional methods is doomed to failure and will be very damaging to the students' health.

However, the situation is different for the trained, prestigious reservopedic teacher who is deeply convinced that each student has hidden reserve

potential to learn and that he/she has the ability to activate these reserves. This conviction comes both from the knowledge about the first experiments described on the preceding pages of this book and from their own experience confirmed in everyday work. It is communicated mainly through the peripheral perceptions (subliminal signals) coming out of the teacher, but also from the whole environment existing for the teaching-learning process.

Instead of telling the students to learn the material by themselves and to come on the following day to work further on it and develop the respective language communication skills, the teacher begins right away with a *game*, a *play* which is unexpected by the students. Otherwise, the students would be scared and nobody would come on the following day. The teacher enters the class and declares, „You do not know me but I know you. I am a film director. I am making an interesting film but I need actors. Would you like to take part? I pay well." The confused students understand that this is a joke and the game begins. That is how it goes on till the end of the course. The teacher never says, „Play this or that". But just like a mother would play with her children, so the teacher begins playing with the students. That game will continue through all the stages, in different forms, to the end of the course.

The students go through most of the material from the first teaching unit in a playful mode not noticing how 80 minutes have elapsed. Here appears the love of the teacher, the motherly love. It must be clear that there is no Reservopedia without this loving care for the students. The presentation of a large amount of material to the students is an absolute requirement in the pedagogy of the hidden reserves of mind and such a presentation of voluminous material without this love cannot achieve positive results. The opposite is true, since the students could be harmed without it.

Throughout the work, while introducing a new item, a song for instance, the teacher will ask the students, „Would you like...?", rather than order them what to do. In case a student does not like to participate in a game or song, he/she could stay in class and only watch. However, this has happened very exceptionally so far. The students have complete freedom to share „love and freedom." Therefore, here is what we call suggestion. There is no order, no dictatorship, no cheating, and no subjugation of the critical faculties. There is absorption of information in an environment of soft, harmonious communication with elements of art. The length of the activity so far is 80 minutes long besides the initial 10 minutes for some administrative issues.

A 30 minute *Pause* follows, not a rest since students do not need it. They use the time for a cup of coffee or tea, a snack, a refreshment, etc.

The *Pause* is followed by the *Active* and *Passive Concert Sessions.* During the *Active Session*, specially selected and experimented classical music is played while the teacher is reading, basically following the movements of the musical piece, in a way like a new instrument, yet not imposing his/her voice. The music volume is not tuned as a background one, and yet it is lower than the voice of the teacher. Meanwhile, the students read for themselves the text in the foreign language and its translation. Once or twice, they stand up and read several pages aloud together with the teacher. The *Active Session* of Unit 1 is 50 minutes long (see *The Foreign Language Teacher`s Suggestopedic Manual, 1988. p. 22).*

The *Passive Session* of Unit 1 is 30 minutes long. During that time the teacher reads clearly, at a normal speed for the language on the background of preclassical music. The length ratio of the Passive to the Active Session is 30: 50 = 0.6, and of the Active session to the total duration of both sessions, 50: 80 = 0.62.

The Active Session for Unit 2 is 40 minutes long and the Passive one is 25 minutes, the ratio again being 25 : 40 = 0.62. Here is the Golden Proportion. Besides, as indicated by some authors, the music itself is composed on the basis of the Golden Proportion. It is present in many places in the method. It guarantees the retention of material delivered by reservopedic means. As a law of harmony, it is present everywhere in Nature and Cosmos.

The peripheral perceptions, i.e. the weak signals, which we most often are not aware of, are emitted by the teacher who has been specially trained. They are also taken into consideration in the preparation of the teaching materials. Some practical approaches, like the method for teaching reading to young children for instance, are based on peripheral perceptions, but the teacher has been previously trained on how to take advantage of them.

In all the stages, the introduction, the concert sessions, the elaboration and the performance, the study material is always presented and developed in such a way that the element and its whole are always kept in unity. For example, the content is incorporated and takes its meaning in a global context such as a story; through peripheral perceptions, the elements are perceived and assimilated in long term memory simultaneously with the global; in activations, the teacher will attract the attention to specific elements such as verb tenses while maintaining its unity with the global context of the sentence and the story. Hence the global-partial and partial-global law is respected at all times.

Thus, the seven laws of Reservopedia, i.e. the conviction of the teacher that something unusual is taking place, the Golden Proportion, the motherly *love* and the *freedom* of the students to choose and decide, the large volume

of study material, the global-partial dynamics, the use of classical art and aesthetics are essentially imbedded components in the definition of the event that we call spontaneously absorbed, non-manipulative suggestion. Not understanding these conditions, that of course is the basic mistake that our imitators make; i.e. they imitate the games, songs, etc., slightly increasing the size of the teaching text but still staying within the framework of the social suggestive norm, not being aware of the vast world of peripheral perceptions.

The instruction must always take place in a pleasant emotional ambience. It is not to be expected that the high, long lasting results of suggestopedia and its stimulating by-products on health and the socio–psychological relations etc, will be achieved through some dry introduction of various techniques such as those already mentioned: guided relaxation, guided fantasy, breathing exercises, hypnotising manipulations, etc.

Each one of the four stages of the reservopedic « *encounters*»[6] teaching – again it is better to say «*reservopedic communication*» – is full of emotion, appropriate for the occasion, just like it is in life, without leading to the grotesque. The jokes, games, and other elements of Reservopedia are introduced as a system; they have been previously thought about and prepared. The teacher has been previously trained to this purpose. There is no homework as we understand it in the traditional sense of the word, as a command, order and obligation but rather homework is perceived as a spontaneous need to enrich the personal culture. In Reservopedia an interest, pleasure, nice memories are created and thus a desire for self-instruction appears.

This is a new culture and a new philosophy of life. *This is another wise trap of nature:* You would like to learn a minimum of two to three times faster, even up to five to ten times faster, more easily, and in a more pleasant manner, while experiencing a positive effect on your health. This is possible now. However, your learning process should be based on the above mentioned components. 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.

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[6] This term referring to a casual get – together is closer to the true meaning of Reservopedia; in a well organized teaching process, where the students imperceptibly acquire knowledge and communication skills in the foreign language via games, songs, jokes, different strange or interesting stories and other broad forms of communication, as opposed to what is called study, lectures, drills etc.

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,

"Two things I need on earth
And these are love and freedom.
For love I'll give out my life,
For freedom – all 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.

It is our belief that 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 also necessary in Reservopedia.

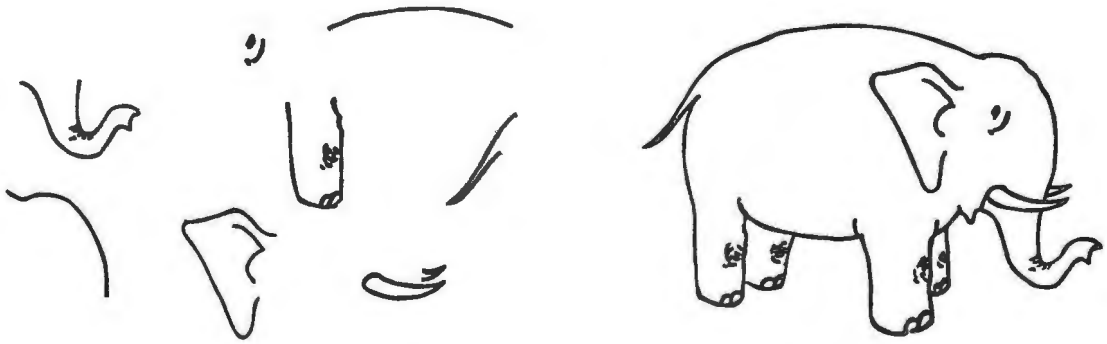
There is no Reservopedia and the reserves of the mind/brain cannot be accessed if the seven fundamental laws are not known and applied by the prestigious teacher. These laws introduced here in a summarized way will be exposed thoroughly in the next sections in integration with other important concepts which are essential to a complete understanding of Reservopedia.

PART TWO

THEORETICAL FRAMEWORK

5. Global – Partial; Partial – Global

Here we will elaborate in more detail on the fifth law of suggestopedia. We will refer mainly to the systematization of the study material in the textbooks and the visuals, but also to the teacher's behaviour and work system. It should be very clear that the teaching method determines the way the personality develops. That is why it is our belief that the traditional methods or so-called partial methods commonly used in teaching which focus first on the acquisition of separate informational elements and secondly endeavour to integrate them in global units have their place mainly in academic studies and in scientific analysis. But for the purpose of mass education of children and adults these are quite outdated



Try to see the parts within the whole and the whole in the parts. This is the fourth law of Reservopedia.

Modern life has made a huge leap forward in the spheres of ideas and material progress. Learners are now required to absorb a huge body of knowledge. They must master global concepts and construct new ones. It is necessary to build increasingly broader views in all spheres.

When attention is focused on the elements, in isolation from the whole, it 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 attached to it. Because of this approach, some people have difficulties in reading comprehension. In learning foreign languages under this approach, the memoriza-

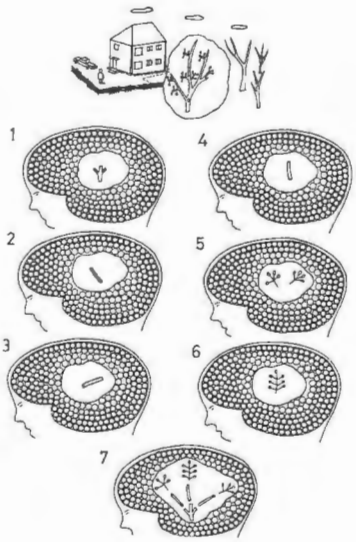
tion of separate words and rules of grammar does not automatically imply that the student will be able to speak and comprehend what was heard or read. With this approach, the process of developing easy comprehension and meaningful speaking is slow and cumbersome. In addition, it creates a psycho-traumatic 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 teaching of reading to 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 then, 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 learning letters or syllables.

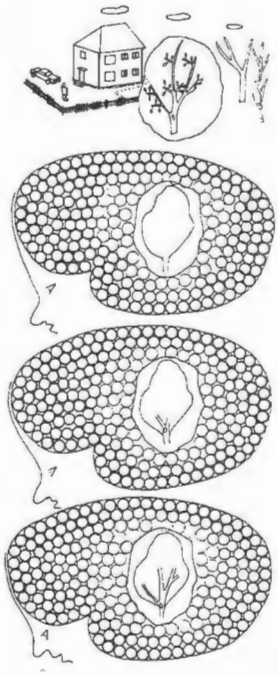
We have a similar situation in foreign language teaching for adults. Here the holistic approach manifests itself through the reading of books or the initiation of free conversations without the systematic study of grammar, phonetics, vocabulary, etc. The learners do speak, but make many mistakes. Again,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

What is the reason for the difficulties with the holistic approach? The reason is that it does not integrate the structural components of the studied subject. The content to be learned is delivered in large parts, yet its structure is left to non-organized spontaneous learning or to additional study at an advanced stage.

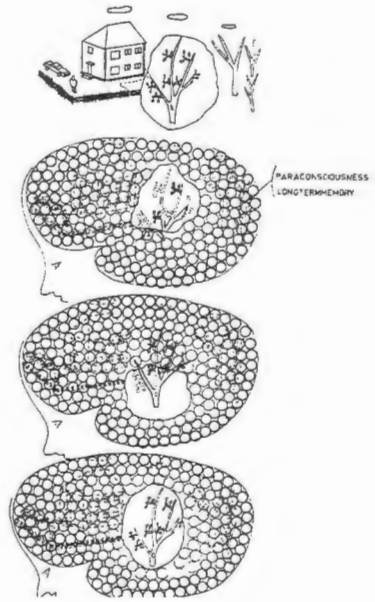
With traditional holistic approaches, difficulties stem not only from the lack of attention to structure but also from the very nature of their holism or globality. With them, the whole is set once and for all. It is formed on the basis of the system of the discipline studied. It does not take into consideration the specifics of the personality, with its rich variety of states, often reaching multiple personality.



Learning partially. The elements which will later be put together are memorized 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 utilizing 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.

According to the fifth law of Reservopedia, the study content of textbooks, visual aids and teaching method must be structured while preserving the hierarchy in the structure, but the part, the element, must also be discernable within the whole. At the same time, the element must show the global entity of which it is a part. Also, there must be an acceptance of the possibility that this global entity can become part of another, larger globality, and for the part to become globality, if interest and attention focus on it. We do not intend to dwell on the example of the atom and the cosmos, where the atom can be a cosmos in its own right. Rather we 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 globalization 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.

In the general lesson structure in foreign language teaching with Reservopedia, for example, the global theme is developed throughout the four stages as variations on a theme. A game, an intonation, a gesture, a song are intertwined parts reminding of the whole.

6. THE GOLDEN PROPORTION

Suggestopedia/ Reservopedia, especially in its final version of desuggestive, deprogramming learning and acquisition of knowledge, skills and habits is the only method which complies with the laws of the GOLDEN PROPORTION.

6.1 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 BC 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 the Egyptian pyramids, in the proportions of the human body, in the size of the paintings in art galleries, in architecture and in nature and in the proportions of flowers and trees. The school of Plato and Pythagoras developed the problems of the golden section. In his book "Power of Limits" G. Dozci narrates about *Buddha* who once 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 them the unity and harmony in nature.

And how can we really imagine the Golden Proportion? Let us divide a segment into two unequal parts, so that the ratio of the small part to the big one is equal to the ratio 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 the Golden Proportion. Expressed in equation form:

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

Expressed mathematically, this is

$(a-x) / x = x / a$

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 ratio of 0.6180339 or within certain degrees of this ratio are within the Golden Section or Proportion. 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 the value of integers.

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

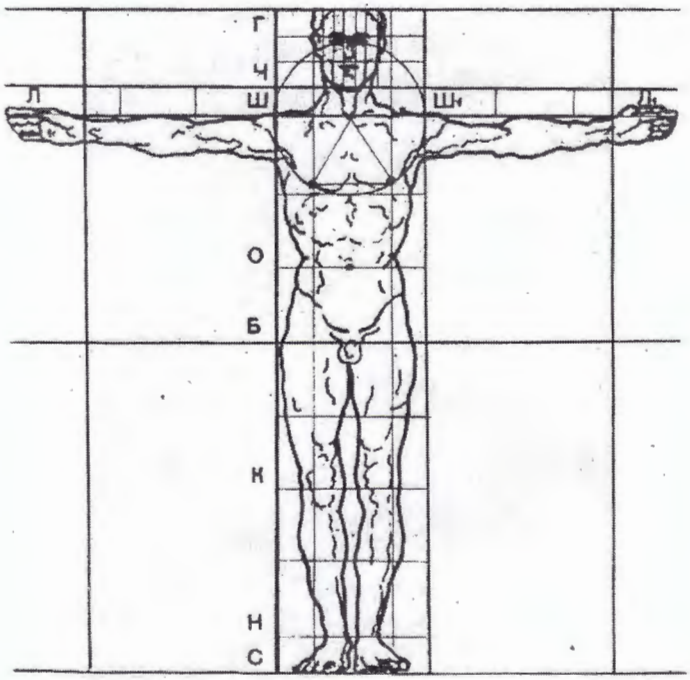
Such a ratio is artfully and frequently used in paintings and architecture. For example, *Niel F.* found it between the width and height of the doors of the main portal of the castle of Monsegur. This castle was used as a hiding place by the *catars* who started activities in France after the spiritual 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*, 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.

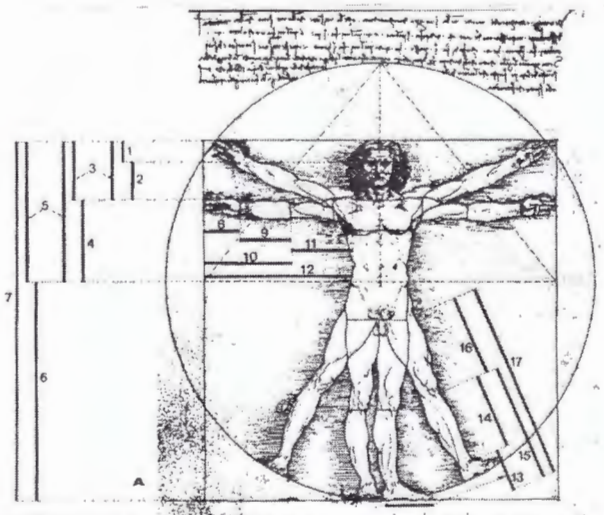
Some examples

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

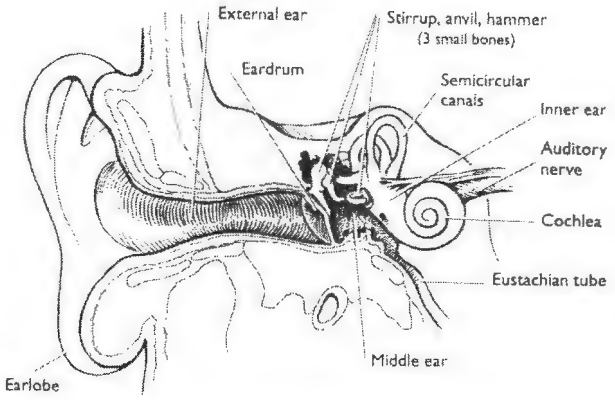


Dürer's drawing "Studying the proportions" – the ratio among the parts of human body. Human head is taken as a unit of measurement. The main unit of measurement relates to the body according to the golden section (1:2:3:5:8 – Fibonacchi series).

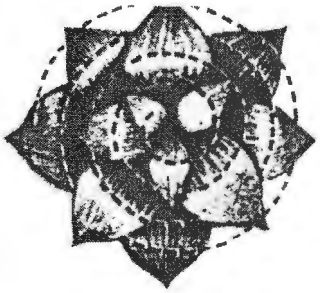
Spirals or whorls in fingerprints

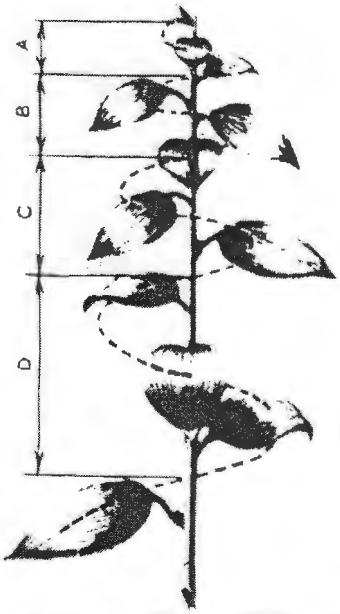


The famous drawing of Leonardo da Vinci showing the Proportions belonging within the range of the golden section.

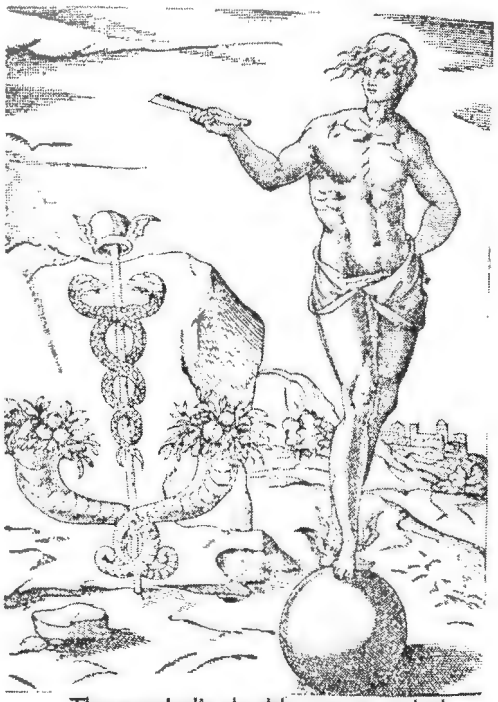


The spiral cochlear of the human ear.
(After J.Engel, Canadian Health Guide)

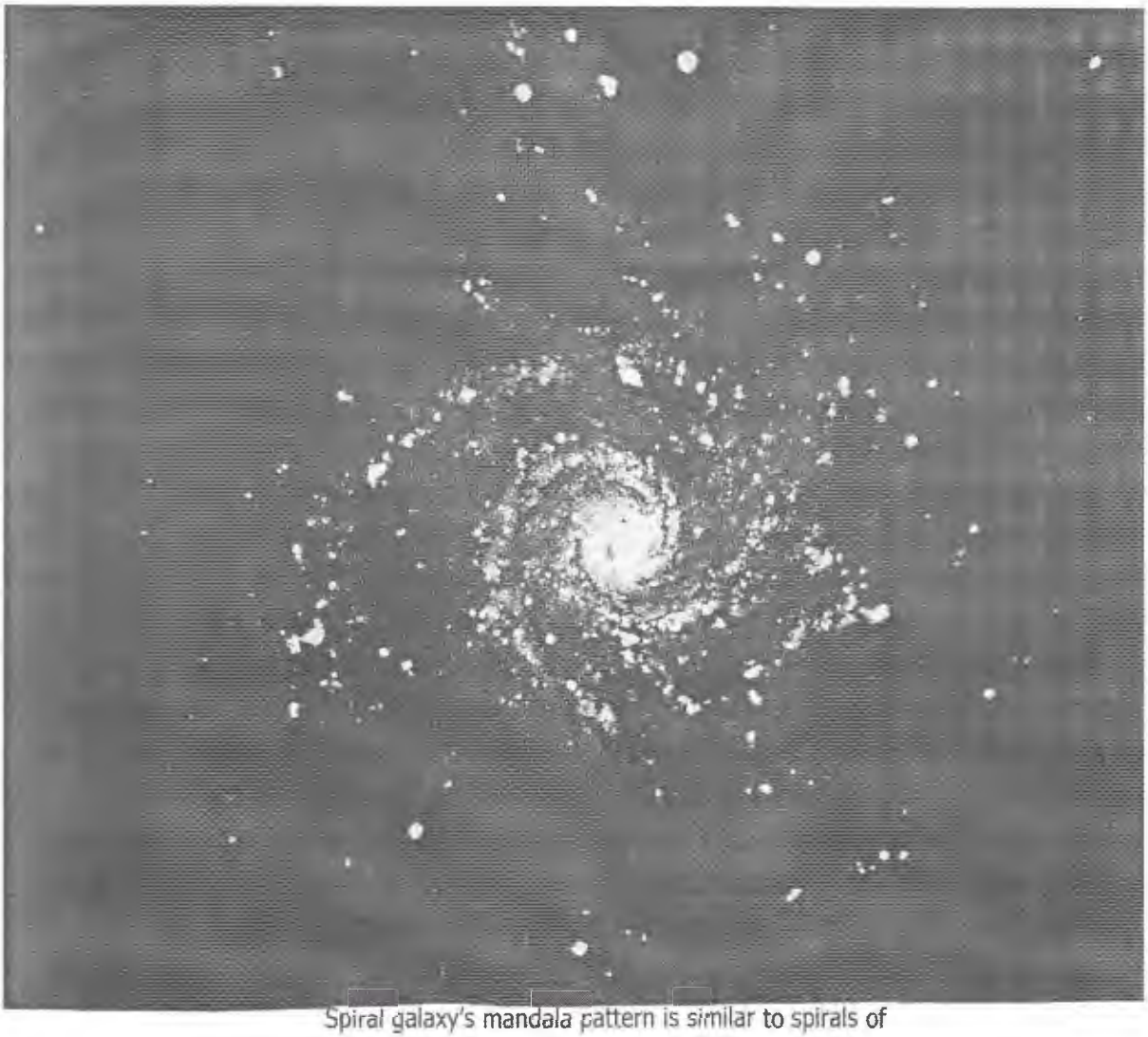




The leaves are arranged along the stem spirally in a way not to stand in another's sunlight. The sum of the two previous steps of the spiral beginning from the top equals to the size of the next step, i.e. A+B=C,B+C=D, etc.
(After L.Latishev and Vl.Latishev)



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)

6.2 The Golden Proportion in Reservopedia

First of all, the classic art form, the harmony and beauty, that dominates in Reservopedia and which facilitates the desuggestive assimilation of material, is built predominantly upon the Golden Proportion, as many authors have pointed out. Within the lesson stages as well as in the force of the intonation of the teacher`s voice and its dynamics, one can see that the Golden Section is taken into consideration. In *The Foreign Language Teacher`s Suggestopedic Manual,* 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 within the concert sessions, we will see that the Golden Proportion is preserved approximately or absolutely. For example, the active concert session for the first lesson in English lasts for 50 minutes and the passive concert session for 30 minutes. That is 30: 50=0.6. And the second lesson has an active concert session of 40 minutes and a passive concert session of 25 minutes. That is 25: 40=0.625. The Golden Mean is kept in all parts of the course.

In order to avoid both monotonous, drowsy or hypnotizing learning, and tiring, noisy or super active learning, the best measure proves to be the Golden Proportion, as we have already mentioned in the English version of the manual for teachers (1988), and in the Bulgarian version (p. 59, 1981).

In the end, a lasting concern of the teacher is to develop an intuitive sense of the harmonious eternal proportions and observe these wherever possible for him/her. If the Golden Proportion is not respected, students and teachers will feel tired. The slightest signs for such a state should be the signal for the teacher to change and to re-establish the harmony in the process of teaching and learning.

7. SPONTANEOUSLY ABSORBED, NON-MANIPULATIVE SUGGESTION AS ART AND IN ART

As 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 ardent discussion, has attracted the attention of both scientists and laymen who hold preconceived ideas about suggestion. Nevertheless, our standpoint that suggestion is a universal communicative factor which plays its part in every moment of our lives, though not always in an organized manner, attests to its indisputable significance. For this reason it is extremely important that any experimental work on the subject should be based on theoretical clarity and the exact meaning of the operational terms

used 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 and one of the seven laws of Reservopedia. Due to the lack of a more suitable word for this psychic phenomenon, for now, we called this type of suggestion used in Reservopedia *"spontaneously absorbed non-manipulative suggestion"*. And, under the word "love", we refer to love for the human being in general. In spontaneously absorbed, non-manipulative suggestion, love, as we accept it, is more like sincere, friendly and even motherly communicative interaction based on mutual trust and freedom directed towards the release and unblocking of former psycho traumas and acquired restrictions. This friendly help is accepted with trust and love on all levels – logical, intuitive, subconscious and even spiritual. Thus realized, this friendly interaction or love could help to reveal the personality's universal reserve capacities and stimulate its creativity.

As mentioned earlier, there are many definitions of suggestion. Some definitions even equate suggestion with hypnosis. But our definition must not be associated with the dozens of definitions related to the very old understanding of suggestion as a dictate, a command, subordination and violence. For often, methods based on such suggestion lead to hypnosis. And how can we encourage or support these kinds of suggestive influences if they turn us into hypnotized 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 rational side of communication, we communicate consciously but most often unconsciously and intuitively by means of verbal intonation, numerous body movements, significant undertones 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 of and our reactions to air, energies, noises, dreams etc. – the list is virtually 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. Everything is interacting. And these infinitely various forms of interaction are in fact countless and diversified forms of communication.

Thus art is also one of these forms of communication. If we want to imagine the non-manipulative suggestion, we may turn to art. *For is art not the greatest form of suggestion?* 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 which bind to the specific semantic content of the work of art. It should be emphasized that art can influence the whole personality – its intellectual development, mnemonic resources, emotional background and volitional tendencies.

During our psychotherapeutic practice, we wrote about the suggestive therapy intermingling with natural factors, such as "the regenerating effect of nature, fresh air, and the sun, the silence of woods, the grandeur of tree tops and the infinity of horizons".[7]

And this is how we described the relation between suggestion and music[8]: "Our observations have shown that some (Bulgarian) folk melodies have a considerable invigorative impact on the apathetic – aboulic patients, who seemed to be deeply devastated by the illness. Music has been used for curing even serious somatic diseases ever since ancient times. Homer narrates how the ancient Greeks had stopped the rage of Black Death epidemics by the power and enchantment of music. Democritus, in his medical works on lethal infections says: "Snake bites can be cured by the music of flute when performed skilfully and melodically." Curing by means of music and culture therapy, as a whole has found an ever increasing application in contemporary medicine."

The intellectual impact of art can 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 made an absolute. Its use in practice depends on a series of other factors, which will be discussed hereafter.

The aesthetic perception of a specific creative work is always accompanied by suggestive influences. This type of natural 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 the 20th century, as an aesthetic reaction when in contact with art. In this

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[7] "Manual of Psychotherapy" (E. Sharankov, G. Lozanov, I. Petrov, 1963, p.76)

[8] ibid. p.75

case, suggestion can be understood as a communicative process in which the content of one psyche is transferred into another immediately through empathy. However, in the learning context, it is realized most frequently by emotions, peripheral perceptions and the expectancy of a respected and reliable teacher, all of these factors harmoniously organized and orchestrated. In the case of art, the suggestive impact is realized through the same mechanisms directly from the stage, i.e. in a theatrical presentation, or indirectly through artistic works (music, paintings, architecture, and literature). The suggestive communicative relation is achieved through the artistic work in as much as the author has skilfully put his/her ideas in it. A number of authors also discuss other ways through which the impact of art can be increased.

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" (letter 504). Not only is an 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 the 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 arouse. This is the reason why some artful predators (and humans as well!) try to imitate them. However, not only the components of a given artistic work have a suggestive impact but so does the work as a whole. 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 what is of special significance for Reservopedia, is *man's need for more and more similar influences*. These are interactions and a great number of them are unconscious. A feeling of pleasure and spiritual growth is the most common experience.

Here, in Reservopedia the need of aesthetic joy is satisfied. We use such type of suggestion in reservopedic pedagogy. And this radically differs from commanding, automating and hypnotizing suggestions. Only the word is the same. That is why we say that we use communicative interactions as in classical art, and *Reservopedia itself uses this art and is a pedagogic form of art as well*. Because of the use of classical art, the personality can develop freely and harmoniously.

Our observations and conclusions from the psychotherapeutic work we transferred to the development of Suggestopedia. This is how we described

part of the early suggestopedic methodology in "Proceedings of the International Psychosomatic Week in Rome", p.536 and p.537:

"At the present state of elaboration of the method, the séance proper is carried out in the following manner: the unfamiliar words and expressions are read once, followed by translation into the Bulgarian with a special intoned impregnation. During all this time, the students are actively following the programme of words and expressions, both acoustically and visually...Then they are merely required "not to pay attention to what is taught, to be distracted, to take a rest, and to feel as if they were at a concert". On certain occasions we obtained this state of "concert listening" not through preliminary explanation but through actual listening to specially selected music." (Lozanov G., 1967).

In the course of our experimental work, art was used not only in the teaching-learning process for adults but for children too. During the first years of the scientific work in the Institute, the children's didactic play "Milorish and Shiloram", created for the purpose of teaching and learning of reading and mathematics in the first grade, exerted a very positive influence upon the children.

The classical painting art form, which is most often used in reservopedic textbooks, embodies an artistic concept which maintains the unity of the global with its components, rather than conceptualising art as an illustration of separate objects. The law: global-partial, partial-global is best exemplified by means of the classical painting art form, i.e. illustrations 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 appearing in the texts have been exemplified in a classical painting. However, the latter suggests the global direction. In this way, the whole and the components can be really absorbed simultaneously.

Art does improve the process of teaching and learning, bringing about all the positive side effects–education, therapy, enhancing the self esteem, etc. It should be borne in mind, however, that the positive outcome in Reservopedia, is not due to the art pieces alone but rather to the skillful teacher, who wholly involves all his/her being in the communication process and respects the seven laws.

8. HYPNOSIS AND ITS DANGERS

8.1 Types of Human Communication

In our opinion, there are four types of human communication related 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. Purposeful but non-manipulative communication – in a free organisation of the numerous natural influential factors such as art, prestige, para-realised 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 manifesting 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 teaching 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: when does hypnosis occur?

8.2 When Does Hypnosis Occur?

There are a number of methods used in hypnosis. Our task here is not to train hypnotists but rather to indicate to teachers some of the most impor-

tant methods used to induce hypnosis. This will help them to avoid provoking hypnosis as well as guard them 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 leading to 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 contradicting 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 hypnotized subject, who is unaware of the fact); *conditioning* (use of unconscious associations with elements of a formerly used complex of hypnotizing stimuli); *direct brutal suggestion for hypnotic sleep* (a hypnotizing command is uttered unexpectedly for the hypnotized 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 hypnotizing suggestions are made) etc.

What are the *common mechanisms* of these and dozens of other variations of hypnotizing 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, monoideaism and other similar states of the hypnotized 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 teaching 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 you to the publications

of some of the most outstanding and well-known doctors and psychologists specializing in the field of hypnosis, who report and discuss their experimental and clinical observations on the subject.

8.3 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 anaesthesia 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 teaching and educational process largely depend on these states. To some extent, the work of the teacher with people in different states of mind also affects the health and development of the students.

As already mentioned intentionally or not, many teachers resort to hypnotising techniques. 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 hypnotized 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 hypnotized subject is not only uncritical; his/her entire personality, in both its realized 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 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 impostor hypnotists, hypno-therapists and hypno-technicians.

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.

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 hypnotized subject and the *abuses by impostor hypnotists* but also of the marked tendency for increasingly *easier reoccurrence of hypnosis* following its initial induction. Having been hypnotized once, the subject is more apt to subsequent hypnosis. This has been repeatedly confirmed in the specialized 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 hypnotized 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 to restrict considerably 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 Suggestopedia 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 Suggestopedia showed that *clinical suggestibility significantly decreases after the training course* (Lozanov, 1978, 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 com-

munication, organised, 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 post-hypnotic suggestions to persist over the course of many years. We had three cases when the post-hypnotic 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. to 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 hypnotized subjects do not appear to exhibit any difference from their personalities before hypnosis. They succeed in discharging their everyday duties. They even take initiatives. But there are no genuine novelties in their initiatives. 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. Sjoberg (1961), the hypnotized 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 hypnotized, 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 organized very meticulously and with professional care experiments with the aim of applying hypnosis in the teaching 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 teaching process conducted by S. Krippner (1966). He organized 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 hypnotized 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 hypnotized 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 hypnotized before. There is always the possibility that somebody suggests that they do something bad to you and they carry it out.

9. RELAXATION

As we saw in the previous chapter, one of the ways to induce hypnosis is guided relaxation. It is also used in some of the methods which imitate suggestopedia.

Indeed, at the beginning of our experimental work, we allowed the students to relax in their chairs while the teacher was reading the curriculum content to be learned. But we have never conducted guided relaxation where the teacher dictates the students' sensations, the way a hypnotic séance is most commonly conducted. The teacher is not a physician and cannot get involved in the physical and psychological health of the students who have come to him/her to learn.

Relaxation, if it is not guided and dictated during its conduct, but rather if it occurs spontaneously, has in itself a favourable impact on mental and somatic functions.

There is data, however, indicating that relaxation could serve as a basis for suggestive influences. 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, was the basis and cause of hypermnesia, then the thousands of relaxed people we saw lying in the streets of Calcutta would have had enormous memory and hence been able to speak foreign languages. Apart from that, the individuals in pathological cases which, as we noted earlier, demonstrated temporary hypermnesia, should have been in states of relaxation. Clearly enough they were in fact far from such states. There are people whose electroencephalogram alpha waves prevail in their day-time activity as well. These alpha waves are most often associated with states of relaxation. However, such people do not exhibit increased memory potential either. Therefore, some other mechanism must be added to relaxation. This can be anticipation, suggestion, faith, set-up, 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.

On p. 275 of our book "Suggestology" published in Bulgarian in 1971, we write:

"After conducting a number of experiments, we came to the conclusion that muscle relaxation is not necessary for the hypermnesia phenomenon to take place. It was found that "Psycho-relaxation" was more important for the successful teaching-learning process. For the memory functions to perform correctly, it is necessary to create a calmness state, thus a detachment from all the disturbing psychological influences can be assured. The student should be free not only from his/her suspicions or doubts but also from their everyday worries, from their life and work predominant preoccupations."

In our reservopedic courses, where hypermnesia and hyper-creativity have been clearly demonstrated, relaxation manifests itself in the form of calmness. This state is produced by the overall organization of the learning process and is maintained by the real outcomes, which each student can assess for themselves. The organization of such a training process and the role of the teacher are a matter of training.

Since relaxation, in its own right, cannot produce hypermnesia, and since *guided relaxation is normally an introduction to hypnosis*, i.e. it limits the

personality's free will, as has been noted not only by us but also by a number of other physicians, then we should be looking for other ways to utilize the potential capacities of the mind/brain in ordinary practice. As mentioned earlier, we have arrived at the conclusion that the type of communication to be used is the following: organized non-manipulative, non-clinical, real-life suggestion, which we have characterized as soft suggestion, in which to suggest = to offer, to propose. It is on the basis of this pedagogic suggestion that we have built Suggestopedia/ Reservopedia.

10. 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 1920s, numerous experiments were conducted there to investigate the effect on employee performance of various changes in the employment conditions. It was found that the 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 Hawthorn effect and the Pygmalion – in – the – classroom effect are most often interpreted as types of placebo.

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, R. 1962, Lesse, S., 1962), etc. Until 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 influential factors in any communication: therapeutic, professional, everyday life etc. He defines the placebo as a factor in the therapeutic effect of any medical procedure, despite its intrinsic characteristics. These effects on the therapeutic process of the overall environment, for example, of the aesthetics in the clinic and the entire behaviour of the medical staff, are present and are equally influential in the process of teaching. We believe, however, that this is the direct suggestive influence of everything which surrounds us, while placebo presupposes the relation between a known factor with another indifferent one. Teachers may not be aware of the fact, but all stimuli during teaching have an impact on its effectiveness. For example, the high level of aesthetics from the first until the last moment of the course is a permanent methodological requirement in Reservopedia. Most frequently, these signals are incorporated unconsciously through the peripheral perceptions and paraconsciousness, and their elimination is impossible. This is to a great extent, the content of our practical classes in teacher training.

In order to realize 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), and 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 prestigious 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* 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 teaching system claiming a lasting effect should be built on such a base is another issue.

However, in Reservopedia, the use of the placebo effect has unique characteristics *regarding the results*, the general *trends*, and the *method*. In Reservopedia, the expectancy is directed to the *potential* of the personality, and together with its results and the unexpected positive *by-products*, this potential *was unknown as individual and collective potential before*.

Reservopedia, in all its complexity, makes sense only when it is directed to the potential of the personality manifested in 3 to 5 times quicker and easier learning, along with positive by-products expressed in a favourable health impact, an attenuation of social conflicts and problems of the students etc.

Another characteristic difference of the placebo effect in Reservopedia is that *the teachers do not have false data regarding the students they have been given, but they know that any individual possesses potential uncovered up to that moment.*

And the third great differentiating characteristic of expectancy in Reservopedia is that the teachers possess methods specifically designed to that aim.

We have to bear in mind the existence and the positive effects of the placebo factor, and reservopedia does make some use of the placebo effects, but the method is not based on the use of these effects. They are transitory, unstable, requiring constant support, and sometimes could produce *unexpected negative effects.* The higher the prestige of the source of information, the more continuous and stable the placebo effect is.

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

11. 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 all 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 suggestological 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 psycho physiological laws governing the different levels of paraconsciousness have much in common.

Paraconsciousness comprises peripheral perceptions, a part of the spontaneous emotional stimuli, different variants of the unconscious, acquired dispositions (such as Uznadze's setup; habits, 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 which have not been reflected into consciousness. 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 at that 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. In the concept of paraconsciousness we include the world of the exteroceptive and interoceptive subsensor stimuli, the second plane of the communicative processes, as well as the numerous unconscious forms of association, coding and symbolising, which have an informational, algorithmical, and pre-programming effect upon the personality.

Paraconsciousness is of paramount importance for Reservopedia 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 memorized to the long term memory. The ease of the acquisition brings about the humanization of the learning process. Paraconsciousness is a substantial source for the 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.

Here we do not want to elaborate on the questions parapsychology raises, despite their being very interesting and also related to the paraconsciousness. The research results in this area have been continuously debated.

12. PERIPHERAL PERCEPTIONS

12.1 Peripheral Perceptions and Suggestion

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 organized involvement can be denoted everywhere in Reservopedia. It is extremely important to know that in fact they can be made use of, 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, some of them can enter consciousness spontaneously as well. It is not only the character of non-manipulative communicative suggestion in Reservopedia 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 (conscious) stimuli. However, these stimuli fall beyond the scope of attention and consciousness, and then they acquire the properties of sub-threshold (sub-conscious) 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 be-

ing realized. 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 underlie long-term memory through suggestion, which they secure as a criterion for credibility. 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 automated by unconsciously falling into the respective functional systems. In our reservopedic 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 teachers.

For example, we recommend the future suggestopedagogues to have vocal training. The purpose is not for the teacher to become a professional singer. Through vocal training the voice of the teacher can acquire better communicativeness, be in harmony with the auditory apparatus of the student and transmit the information without an effort. Thus we take care of the non volitionally exuded signals of the communication. Another example can be the introduction to the unconscious influence of the harmony of the ballet dancer's art: the future suggestopedagogues will be trained in the art of dancing too.

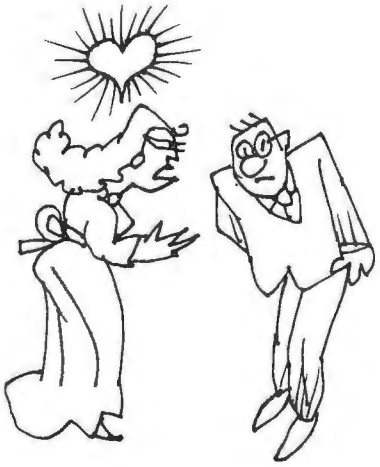
Peripheral perceptions, as sub-threshold irritants, demonstrate all the relationships also exhibited by common sub-threshold stimuli, which are typically quite weak and short. Peripheral perceptions, however, cannot be subsumed under so-called passive, involuntary memorization or under incidental learning 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 realized and unrealized, and are relevant to the programme of study.

Most often, the means of suggestion follow the pattern of the mechanism of peripheral perceptions. 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, unauthoritative 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, peremptory, and 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, and can be divided into two groups of non-specific communicative means.

12.2 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, *infantilization*, 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. Infantilization is the natural and spontaneous receptive reaction when one receives information given by a source 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 but not guided muscle relaxation as it has been misinterpreted by the untrained practitioners.

12.2.1 The Importance of Prestige

Very important for the desuggestive process is the role of real prestige (credibility, reliability) as opposed to an artificial one.

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 realize 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 memorized than usual because the source has increased credibility. Experiments in this sphere were carried out in some Bulgarian 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 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 3.

Table 3

Effects of Prestige on Memorization

			Reproduced words	Reproduced words
Group	Informed	Number of subjects	Number of 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 memorized by the two groups. The statistical analysis of the material shows that the difference of memorization between the two experimental groups is statistically reliable at a guaranteed probability over 0.99.

It was especially important that the prestigious source was announced at the end of the experiment. The difference in memorization was due not to

activating the acquisition but mainly to activating the reproduction straight after perception.

This experiment is extremely important for future research: where and how do these words come from? From paraconsciousness. The experiment shows that the volume of information perceived in paraconsciousness is much bigger than what is consciously produced and the suggestion of prestige can activate part of this material memorized in paraconsciousness. This interpretation of the phenomenon is the first that comes to one's mind. Its corroboration will be confirmed by the future experiments.

A great deal more experimental research into the influence of prestige on memorization has been carried out and all has given the same results. These experiments show that, in schools also, prestige plays an important role in memorization; hence, the economic benefits of ensuring the presence of prestigious teachers and methods of teaching. In the suggestopedic foreign language courses at the Suggestology Research Institute, the role played by prestige was very clearly marked. For example, a high percentage of words or phrases were memorized only because of the considerably increased prestige factor in individual groups. In a French language group, the meanings of 165 new words were memorized in this way on August 15, 1967. The average percentage of memorization 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 memorization of phrases and words showed an average group memorization of 96.3%.

In relation to the role of prestige, some "pure" (i.e. based only on high prestige) experiments were conducted to estimate the level of memory increase. Thus a teacher who found it hard to believe that such "pure" results could be achieved suggested that we make an experiment with words that were not known by the students, that is, were not related to the text, had no phonic resemblance to any Bulgarian words and were not connected in a sentence. His suggestion being accepted, we decided to eliminate all the other elements from the active session. The words were to be read once and calmly, without intonation and concert atmosphere, only on the basis of the high prestige of the Institute. A test was made before the elaboration of the words on the following day. The average percentage of memorisation of the whole group was 97, 2% (Lozanov, G., 1971, p. 217).

In a number of similar experiments on the influence of prestige, control tests were administered to measure 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 experience with reservopedic courses and our experimental research into the role of real prestige in memorization, that the quantitative assessment of memorization, in the future investigations of this problem, will also supply a quantitative criterion for assessing the qualities of the teachers. Such a criterion for evaluating the teachers performance can be obtained not only from the assessment of memorization 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 unrealized or unconscious 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 we wrote the chapter on our understanding of suggestion (Lozanov, G., 1963, p. 49-91), we characterized suggestion as including the patient's freedom to intuitively have feelings and make decisions. We 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 our medical practice, we 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 zigomaticus 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 non-specific 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 utilization. The results of these experiments have been published (Lozanov, G., 1978).

The second group of the suggestive/desuggestive factors (means), particularly infantilization in the sense of increased trust towards the reliable source of information and pseudo-passivity, is connected with certain dynamic changes in consciousness and various levels of psycho-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 teaching, namely the issue of *multiple personality.*

13. MULTIPLE PERSONALITY

13.1 The Phenomenon of Multiple Personality

The view, that we are a synthesis of multi-personality still needs further clarification. Commonly used terms include "Multimind", "Divided Consciousness", "Dissociation", etc. We prefer the term "Multiple 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 unsolvable 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 reservopedic 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 component in our courses – level 3 club activities – as part of our methodology, and to make some additional methodological changes, both for adults, young students and for teachers as well. 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 teachers 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.

Case 2: 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 and we

often had to feed him by a probe or intravenously. He suffered from incontinence. It was in the autumn when he developed bronchopneumonia. He was obviously dying. All doctors from the clinic gathered for a consultation at his bedside to decide how to proceed. We had to resuscitate him. After we had been fighting hard for his life he opened his eyes, looked at us with resignation and gratitude in his dove-blue eyes, whose colour we then saw for the first time and we 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 making 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 hypnotized 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 with any conclusive evidence

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 (Lozanov, G., 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 at 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.

A. 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 provoked regression of 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 "Multi-mind" (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, multi-personality 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 realizing that tiny gaps have indeed appeared in our memory. These gaps can sometimes be more significant and we realize 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, we noticed that we *had acted illogically* from the viewpoint of a common-sense mind, yet we adopted the viewpoint of another mind without too much analyzing. Once, in a store in America, we had

to pay with a one-hundred-dollar bill. When we pulled the bill out of my wallet we had the feeling we were holding two bills stuck together. It felt thicker than it should have. We tried to separate them by rubbing our fingers with no success. And instead of persisting with some more definite effort, just to make sure we were not handing out two bills, we felt tense and decided the whole thing was stupid.... and wondered why we were wasting our time on this. So we handed over the bill. Back at the hotel we remembered the awkward and mutually exclusive duality in our attitude to the matter. We took another bill out and found that it was thinner, indeed. We 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 us 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.

13.2 Multiple Personality and Reservopedia

Each mind is basically a psychological state or as mentioned earlier, a psycho-physiological state. For us, and for our reservopedic/ desuggestive 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 teachers, we show them how to discover the appropriate mind, how to provoke it in subsequent learning and how to relate knowledge from one mind to all forms of different minds.

Teachers should also be trained in ways of causing this mind to prevail over the other states of mind at their will, the mind that contributes to the most effective teaching and learning. 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. Non-manipulative suggestion provokes that richness of the individual. The forms of guided relaxation, on the contrary, impoverish it.

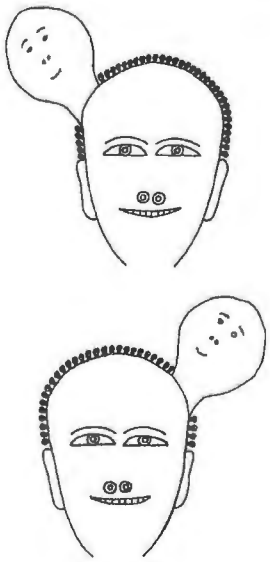
During the first decade of our research, we found that the state of relaxation (of course, not guided or directed by the teacher) was not stationary, not fixed to any particular level. This was to be expected, since there is no biological or psychological system which is static and not oscillating. Naturally, everything in the universe oscillates. Yet we are talking about a particular biological and psychological system. The vibrant level of relaxation, mainly on an arhythmical 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 teacher. Then, by conducting psychological and physiological research on hundreds of students, we found that every level of relaxation is characterized 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 realize 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 teaching should be sought not at various levels of psycho relaxation, but rather with suitable variants of the personality features. Teaching 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 students hide behind these names; they entered a new functional system, which could always be useful in teaching.

The non-monotonous oscillating behaviour and the oscillating soft intonation of the voice of the teacher 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 teacher have a decisive role to play. A number of teaching 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 teaching, 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 teacher 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 learning 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 teaching at the level of potential capacities of the brain and mind.

As indicated earlier, the vibrant character of the teaching system requires a vibrant type of approach. This safeguards the learning process against any hypnotizing monotony. It makes learning highly interesting and motivating. It creates conditions for learning 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.

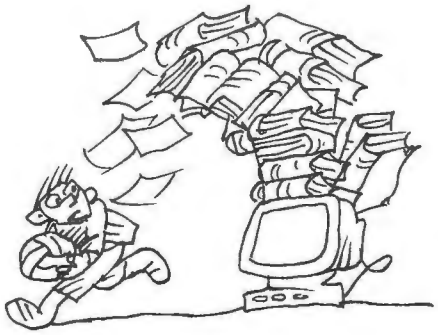
What is it that our methodology deprograms from, what does it desuggest?

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.*

14. 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 are all neurotically ill, under society's psychotraumatic suggestion that our abilities are limited to their current state. We do not believe that it is possible to increase our memorization, 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 it 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 Reservology 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 students' 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, teaching 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 memorization 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 child-

hood. 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 with Reservopedia we are now 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 could 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 just would like 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 pressure of new realities, the belief system changes. Under the present, most recent variant of Reservopedia as a desuggestive pedagogy, 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 negative placebo 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.*

15. ANTISUGGESTIVE BARRIERS

This issue has been developed in detail in *Suggestopedy and Outlines of Suggestology* (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: affective, logical and ethical.

The affective 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 "rationalize" 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 hypnotized 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 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 teaching 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 Reservopedia as a desuggestive pedagogy, this issue does not stand because of the spontaneity and involvement of the students. They are generated as a result of the specific games. The whole learning process is a strange, pleasant, double-plane 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 and 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.

16. THE PROBLEM OF BRAIN/ MIND

16.1 Functional Organization of the Brain / Mind

The history of reservopedic practice, in its global artistic variant, and even more so in its more recent development as a desuggestive pedagogy, has shown quite clearly that when the methodology is properly applied, no neurotic states occur, and no fatigue is observed. On the contrary, the methodology provides a natural environment of recreation, and even a curative effect through learning. The latter is not the purpose of the methodology, nor should teachers be encouraged to engage in any curative activities. Nevertheless,

this is a by-product not to be neglected. It might even generate some quite interesting conclusions for medical professionals.

Neurotic states are characterized by various combinations of disorders in the emotional sphere, the vegetative nervous system, the sleep/vigilance cycle, and in memory functions. When Reservopedia has been applied properly, as a desuggestive pedagogy, we have observed a complete absence of any complaints related to these functions. On the contrary, they are stabilized. This indicates that we can make some initial assumptions as to which anatomic substrates are involved in this harmonious activity occurring in the learning process. 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, 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 properly applied desuggestive learning methodology and 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 for a hypothetical centre of memory. This search 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 perceptions, 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. These reminiscences had the appearance 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 lies.

Yet a number of tests, mainly involving the bilateral removal of those parts from the cortex, showed that this did not always affect 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.

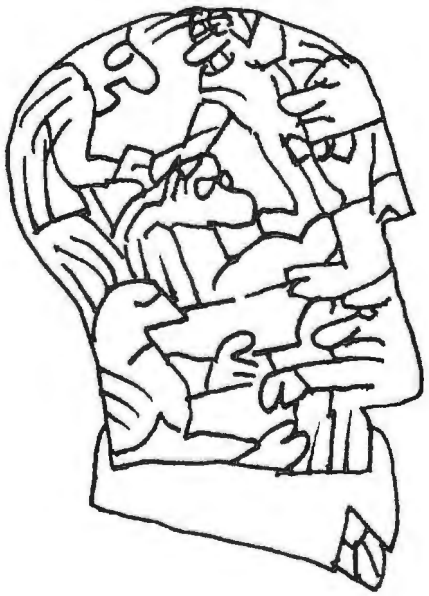
3. Hundreds of surgical interventions have established that no lasting damage to somatic sensitivity occurs when its main relay in the thalamus is destroyed.

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 organization. It is also clear that each section of the cortex provides, in some manner, all the information about a stimulus. (John E.R., 1972)

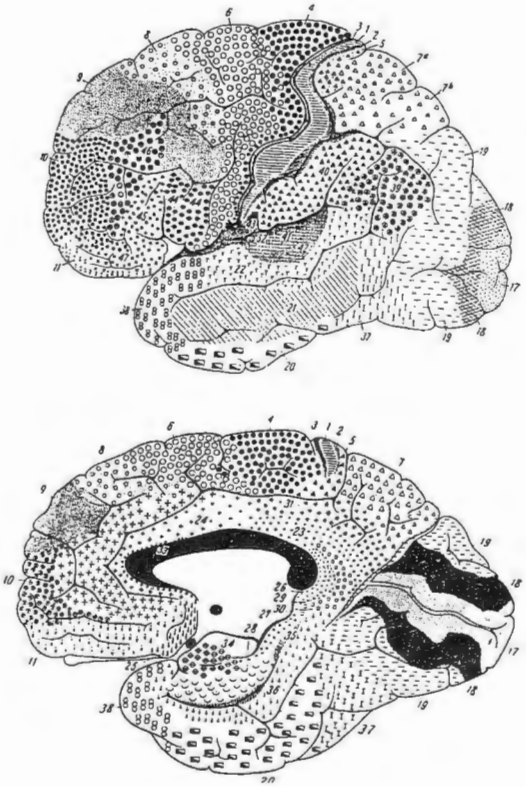
For many years it was a common belief that the motor centre of speech, the centre named after P. Broca (1878), was located in the lower lobe cortex of the left hemisphere (when dominant) and directs meaningful expressive speech, while the centre of receptive speech, of speech comprehension, is located 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 verbalized; how are words stored; how are they associated with concepts; and 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. Barett (1970), and others have used the hologram not only as a metaphor but as a practical model 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.

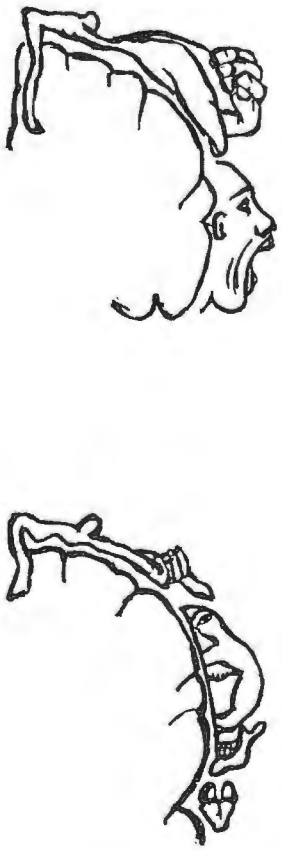
K.H. Pribram created a hypothesis which, on the one hand, reflects the flexible *vicarious (substitution) function of the brain*, where disrupted functions of one area of the brain cortex are gradually and slowly taken over by other areas, whilst on the other hand, his hypothesis supports the vertical 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 realized, 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 cytoarchitectonics. On the basis of cytoarchitectonic 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 localization 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.



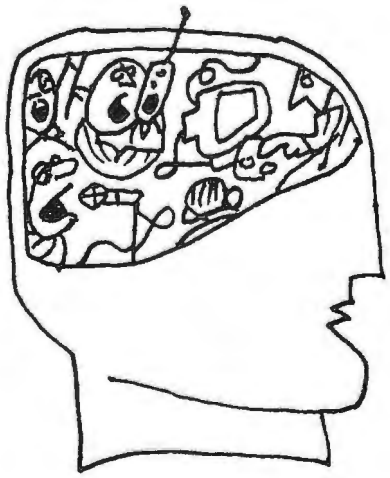
The motor and sensory homunculi in the front and back central gyrus of the cerebral hemispheres

A number of psychological states cannot fit the idea about a strict localization of psychic functions in the brain, nor 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 teaching communication, as discussed earlier.

We believe that there is a third possibility in searching for an explanation of the brain that is closer to physiological reality, and closer to the mind. This, in our opinion, is a kind of a *faceted functional structure of the brain.*

16.2 Faceted Functional Structure of the Brain

There are grounds to accept as a hypothesis that the brain is a unity of a multitude of tiny little brains. This is similar to the way other organs in the human body are organized. 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.

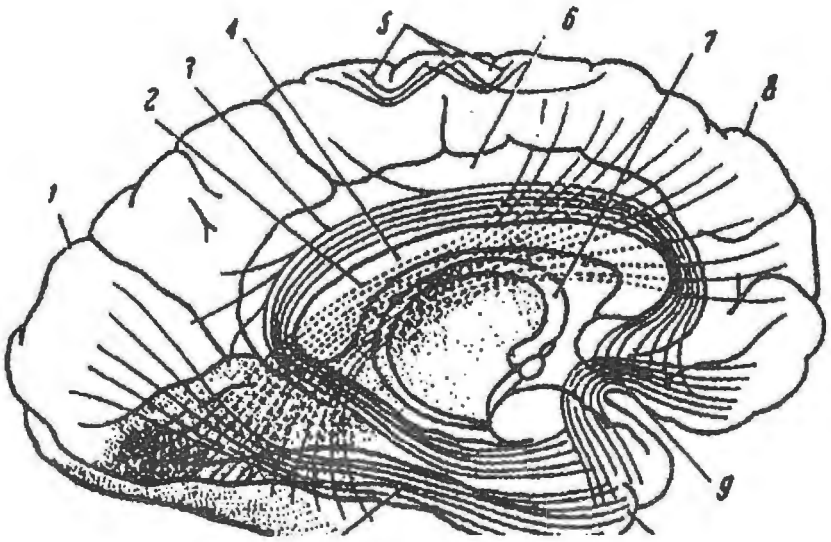


For the brain, such a basic functional unit could be the neuron. Taking into account the connections (synapses) among all nerve cells and their dendrites we could imagine the astronomical number of functional possibili-

ties 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 glial cells. According to the glial 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 glial 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 cytoarchitectonic fields, which made it possible for Brodmann and other authors to delineate the cytoarchitectonic 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 definitive 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 localization 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 the concept of a faceted functional structure 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 specialized for that type of activity or not.

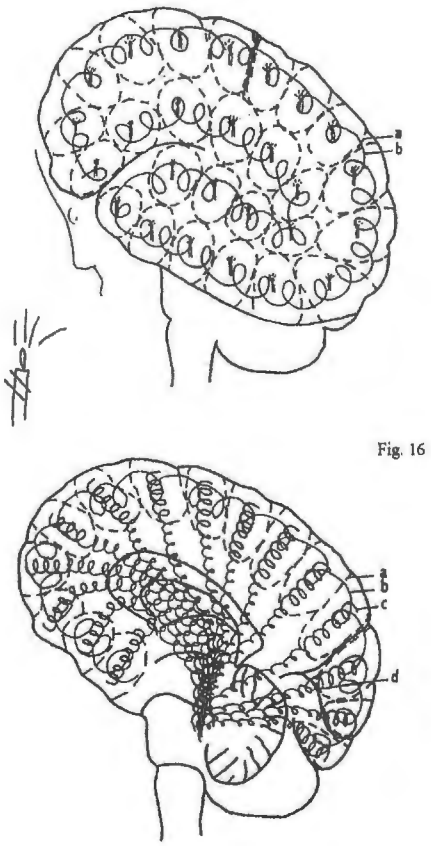


Fig. 16

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 localization theory, nor the holographic theory, nor even the facet theory resolves the basic exciting 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.

16.3 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 uses 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 absolutization 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 biologization 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: psychic processes are not bound by time, 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 (according to which the Brodmann fields of different cytoarchitectonic structures 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 the professor of neurology the late Doctor John Lorber gives much support to the theory of vicarious possibility and migration of the functions in the brain, or maybe to the theory of a holographic function, and even of the cited conceptions of the Nobel Prize winner J.C. Eccles for the 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 had several, who were very intelligent and worked very well, in spite of considerable atrophy of the cerebrum up to total absence or with only one to two millimetres of brain substance left; indeed one of them was a good mathematician. An energetic discussion, partly published by Lewin Roger in *Science* (1980), followed the presentation, but without any final conclusion.

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 own approach to brain/mind theory as it applies to the reservopedic desuggestive learning pedagogy.

17. THEORY OF TEACHING-LEARNING WITHIN RESERVOPEDIA

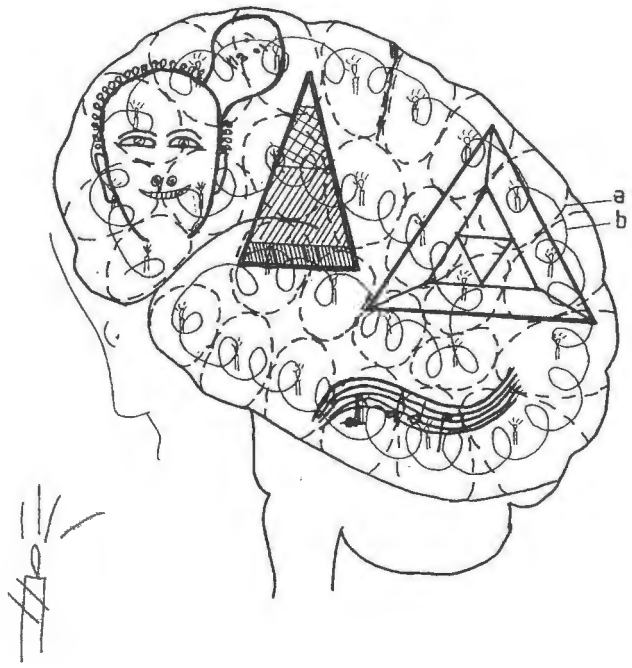
The methods derived from Reservopedia operate in the realm of the reserves of the brain/mind (the unused capabilities of the brain/mind).

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 organized and purposeful learning 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 learning.

It is clear that, in this case, this communication, desuggestive teaching 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 Reservopedia results from everything discussed so far. We remind you, however, that what 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.

Above all, it should be remembered that the learner is a whole personality: you do not train just one part of the brain in a foreign language or in any other subject; 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 psychological aspect, an anatomic and physiological aspect, and also an artistic, a pedagogic and a psychotherapeutic aspect, as well as a humanistic aspect. All of these take part in everything. These aspects of our unified theory have already been described. We shall not go into an in-depth analysis. That is the object of special exercises. Here it is sufficient to list some of the specific features of each of these aspects of the general theory.



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

The psychological aspect of the theory includes:

1. *The Brain/Mind Functions of Reservology.*
2. *The Seven Laws of Suggestopedia / Reservopedia.*
3. *The Means of Reservopedia.*
4. *Non-specific communicative factors.*
5. *A system of peripheral perceptions.*
6. *The multi-personality theory.*

The anatomic and physiological aspect of the theory includes:

1. *The localization and holographic theories of brain function and structure.*
2. *The facet functional structure theory of the brain.*

The artistic aspect of the theory includes:

1. *A theory of application of a classical type of art.*

2. A theory of using art not as a stage for recreation, or for entertainment, but as an integrated component of the system.
3. Total aesthetic organization as a method.

The general pedagogical aspect of the theory includes:

1. An unusually large volume of the study material in each lesson and for the whole course.
2. The special structuring of the study material: global to element, element to global.
3. Planning passive knowledge as well as active knowledge.
4. The extremely important requirement: "Above all, do no harm".
6. The 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 a relaxation but as an integral component.

The humanistic aspect of the theory includes:

1. The development of personality through the educational process.
2. The enhancement of harmonious communications and socialisation.

Of course, this is a schematic presentation of the 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, teachers who have been granted a certified diploma by the author or by his licensed trainers.

On the other hand, training teachers is not as difficult as it might appear from the theoretical basis just described because several synthetic ap-

proaches for quick training of teachers have been developed. Every teacher who loves his/her job can be trained.

18. NON-PSYCHOTHERAPEUTIC, NON-PSYCHO HYGIENIC AND NON-PHYSIOLOGICAL APPROACHES IN PEDAGOGY

We know, from official data, that over-fatigue, neurotic diseases and manifested or un-manifested 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 practices 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 pattern:

a. teaching is addressed only to the cortical structures and the left hemisphere of the student as if he/she were an emotionless and motivationless cybernetic machine;

b. at best, the student 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 in the brain 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 rationalized 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, meaningful whole; they are automated through tiring exercises and only later are they connected one to the other systematically to form the whole;

b. the whole is studied without paying attention to its component parts and to the mistakes arising as a consequence.

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

3. A person's personality takes part in every communicative process simultaneously at numerous conscious and paraconscious levels. This

nature-granted fact is "utilized" in pedagogical practice most often in the following two ways:

a. the principle of conscious participation in the educational process is formalized and turned into a fetish. According to it, the students 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. importance is attached only on the paraconscious and intuitive capacities of the student and the necessity for a conscious finalizing and creative reassessment of the material is neglected.

The psycho-physiological laws, that is:

- global participation of the brain,
- simultaneous processes of analysis and synthesis,
- simultaneous and indivisible participation of the conscious and paraconscious processes,

are included in the three fundamentals of Reservology as well as in the seven laws of Reservopedia. If we do not abide by these unchangeable psycho-physiological laws, the educational process becomes an inhibiting factor and one causing illness in the students. Any educational process of that kind precludes any tapping of the reserve capacities. What is more, some socio-psychological factors are added to the psycho-physiological ones and this increases the difficulties. For example, the following are introduced or reinforced:

1. The fear of learning set-up. Many nations have some kind of a proverb that means "learning is real torture". Making the process of teaching and learning more intensive often increases this fear and also the inner conflicts, both in pupils and teachers.

2. The existing social suggestive norm in respect to the personality's capacities being limited to a specific level. According to this norm, man can assimilate new material only to a definite, fairly low level in terms of quantity. It is confirmed by certain authorities in the field of education.

The combination of the fear set-up and the social suggestive norm about man's limited capacities under the conditions of a non-psychohygienic pedagogical approach results in mass "covert didactogeny". Students 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-psychohygienic attempts to intensify the educational process may lead to reinforcing inner mental conflicts, to the fixation of neurotic states, and the results of the educational process get worse rather than better.

The fear of learning set-up and the existing social suggestive norm about man's limited capacities worsens, from the psychohygienic point of view, the erroneous approaches and methods. Here are some examples:

1. The material to be studied is broken up into smaller and smaller elements. These elements must be grasped, memorized and automated. They are gradually united into bigger entities. In this way, some useless elementary habits are formed on the lowest level, which have to be given up afterwards in order to build up habits on a higher level. The latter may also have to be thrown out later. And thus it goes on until 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. And creating a "hierarchy of habits" worsens this set-up and lowers motivation. In addition, the hierarchy of habits in any non psycho-hygienically organized pedagogy is dangerous for the learner's 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. Multiple repetition of the study material is another approach by which attempts are made to increase the quantity and the quality of the information memorized per unit of time. There is even a proverb saying that "repetition is the mother of knowledge (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 rooting or entrenching of the negative set-up of learning. Mechanical repetition suggests a weakness in the personality. It seems to signify the need to reinforce the brain processes. Consequently, dry and none-creative repetition

results in demotivation and in delaying the effect of instruction instead of accelerating it.

3. Very often, teachers, aware of the harmful effects brought about by instruction and learning, which create a negative learning set-up in students, deliberately introduce intervals for recreation and joking. But by introducing these intervals, they in fact suggest that the students need some rest and distraction. The suggestion is that their inner set-up of fear of learning and their fatigue and displeasure with it are fully justified. Gaiety or fun implemented as an end in itself in the learning process as well as joyful pauses, no matter how recreational, further raise the risk of still more deeply ingraining the conviction that their basic negative set-up in regard to instruction is quite reasonable.

4. Attempts to accelerate the process of instruction are made by mechanizing and programming it. The student communicates with machines such as computers and obtains feedback through the programmed study material. But then, the student is isolated from the social environment and the wealth of emotions provided by the group. Irrespective of the positive benefits brought by mechanizing and programming instruction, the feedback information, which the student receives about his performance in assimilating the assigned material, because of its lack of warmth, not only does not stimulate him/her, but very often reinforces his/her negative set-up towards learning.

This cursory analysis of some methods aimed at increasing the efficiency of the teaching and learning process, shows that, in fact, in pedagogical practice, pressure is often exerted on the student's personality on a second plane. He/she reacts to this pressure. The motivation for learning is considerably lowered. Students 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 student. The student 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 capabilities in regards to assimilating new information? Freedom accompanied by fear of learning is equal to giving up.

PART THREE

RESERVOPEDIA IN PRACTICE

19. TEACHING FOREIGN LANGUAGES

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

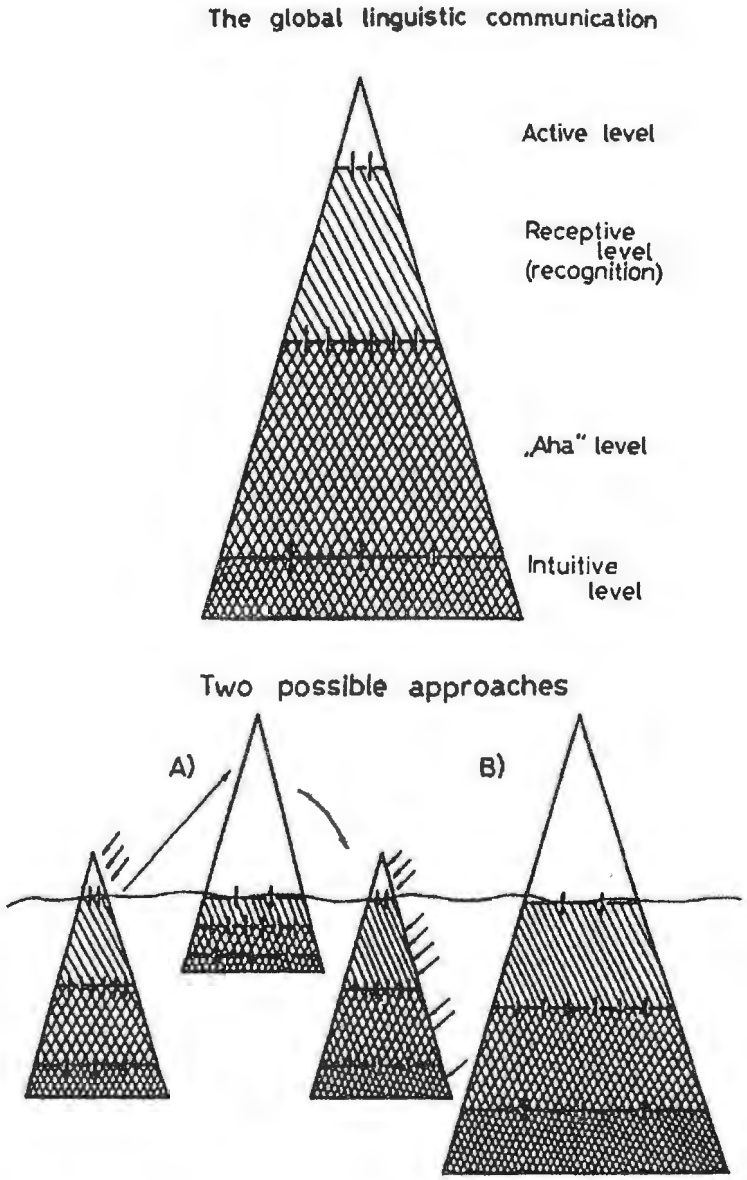
19.1 The Psychophysiology of the Linguistic Iceberg

We have already mentioned that not only should the study content be appropriately structured but also it should be much larger than with any other method as well. That becomes possible because in Reservopedia the study material acquired paraconsciously is much larger in quantity than what can be memorized in consciousness by focussing on what is in the centre of attention. With our methods, this process of acquiring a much larger amount of information is facilitated by the overall organization of the methodology, as discussed earlier. We do not rely on spontaneous clustering of elements, spontaneous association or spontaneous lodging in the paraconsciousness as a consequence of fatigue resulting from 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 takes 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, in our methodology, both passive and active knowledge are welcomed as warmly. Why? Because passive vocabulary and grammar find wider recognition and importance in the suggestopedic teaching-learning system.



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

Passive knowledge is extremely useful with the following language activities:

1. Passive vocabulary and grammar make it possible to read appropriate texts quite early.

2. Passive vocabulary and grammar make it possible to communicate quite early and in quite a broad range. The limited capacity to make a statement using active vocabulary and grammar is compensated for by a multiple increase in comprehension. Because of this discovery of the importance of passive knowledge, communicative methods are brought out of teaching much like out of a "phrase book", where a strictly worded question elicits a strictly worded answer. And this must be memorized actively. If, however, the question is asked differently, and not in the way it is found in the "phrase book", it cannot be understood, and no answer follows. However, by not rejecting 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 as willingly as active knowledge 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 teaching 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.

19.2 Description of the Four Stages in the Lesson Structure/Suggestopedic Cycle

The present section of Foreign Language Teaching has been elaborated with the help of Dr. E. Gateva, a musician and a linguist, for which we will always be grateful.

In the latest development of Reservopedia, many aspects of the structure of our original method of foreign language teaching for adults have been retained. The global aesthetic component continues to be of great importance in textbooks, materials, games, classrooms and so on, because aesthetics is a teaching, healing and personality harmonizing factor in the whole method. "Beauty will save the world", said Dostoevski.

But considerable changes have now been made in the communicative relationship between the teacher and the student. We shall present here, within the frame of our original lesson structure pattern, some of the new additions and improvements. But we shall not describe how these improvements are to be implemented since without specific teacher training it is not possible to really understand the practical implications of these changes. Those interested in using Reservopedia should seek teacher training through certified teacher trainers.

Before the beginning of each course an obligatory *pre-test* is performed in compliance with the seven laws of suggestopedia/ reservopedia. It is the first impression that the student gets from the teacher. The test has a manifold purpose. On the one hand it helps determine the group where the student will feel best and on the other, the pre-test will provide data for the experimental proof of the suggestopedic/ reservopedic process of teaching and learning.

Now, we have a four-stage training programme: introduction, concert sessions, elaboration and performance from the students.

The fourth stage has been separated from the previous third stage because it assumes an increasing importance in developing independence and self-confidence in the students.

Stage 1: The Introduction

The introduction is an artistic and witty overture to the theme.

Briefly, the Introduction can now be described as follows:

The teacher presents him or herself with a nationality, a new name, and a new profession borrowed from the foreign language. *At his or her very first teaching contact* with the students, the teacher 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 therefore delaying the decision to gradually involve them in the communication, the teacher now invites the students to join immediately and willingly in a common game-project. The teacher chooses a most suitable project and offers it to the students, inviting them to take part. A 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. And then each student chooses a name, a nationality, a new profession, etc. in order to be included in that game-project. Whenever

they have difficult moments in the learning process, the teacher will remind them that they are actors who are carrying out a project. The game-project frees them from the boredom, demotivation and fear of learning. The teacher is specially trained to approach that particular situation.

Unconsciously imitating the teacher, the students spontaneously assume their new roles within the context of the scenario provided or suggested in the textbook. The introduction in the first lesson might take about 50 minutes, and in the next lessons, no more than 20 minutes.

Introduction before: Because the teacher appeared more like an actor/actress on a stage in front of his audience, the teacher was putting himself/herself on a higher level of communication and the students on a lower level. Also, the teacher's attention was directed partly to the student's limiting aspects. Thus, resistance was created; the more attention to each student's weaknesses, and the higher the "wall" of resistance.

Introduction now: The teacher puts himself/herself on the same level as the student. The teacher behaves like a very good, knowledgeable friend that the students haven't seen for a long time. This relationship creates an atmosphere of calmness and students can experience an immediate reduction in anxiety.

The teacher also skilfully communicates on the level of the reserve capacities of the brain/mind. 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 about human potential can change if reservopedic courses achieve high results regularly. It is not so much a question of what is being done, as to *how* it is being done. This is what gives humaneness to the communicative process and is opposed to the simplified definition of suggestion used in Suggestopedia. Conventional teachers are re-stimulating the student's limiting beliefs. Trained reservopedic teachers only address the "sleeping abundance" and re-awaken that which is normal.

The teacher does not make the student feel he must answer a question. The teacher creates situations for the students to be active; they too ask the teacher questions. The teacher establishes a communicative set-up, which ensures that the classroom is a safe-haven for free-flowing communication. The teacher should not be directive, e.g. saying "now let's stand up" – this will remind them of traditional teaching. The teacher must keep in mind that he/she is like in his/her living room with friends. Even when playing a game, the teacher should give them a reason for doing it. He/she provokes laughter. This way the teacher creates a more receptive state of mind for the introduction of new information. The method focuses on both

the active and passive levels of knowledge. As a result, we can say that the method achieves a unity of both the conscious and para-conscious. But we must keep in mind that the entire teaching method reflects the unity of the conscious and para-conscious. Reservopedia is "happy" with both passive and active knowledge while conventional teaching is not "happy" with the passive component. Each group will be different, so different groups need different games.

The communicative position of the teacher

The teacher should:

- be friendly (but not over friendly); observe the distance – proximity
- not act like or imitate an actor but be spontaneous;
- create a specific type of non-manipulative suggestive communication, i.e. a communication which is tuned to the level of the unused reserves of mind;
- avoid drilling or any traditional ways of memorizing;
- introduce a spirit of dynamism and easiness;
- have high expectations about the students' capacity to learn.
- the teacher should give equal attention to both sexes and special attention and care to the weaker students.

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 Introduction, which previously was presented only by the teacher. Every student is included in this stage spontaneously.

The teacher chooses her/his own artistic/didactic position but she/he is neither an actor, nor a director, nor a conductor. The classroom is not a stage. At the same time, he/she must be far from the familiar "transformations" of teachers and students into actors. She/he must possess the qualities of an excellent actor but at the same time avoid such a role. He/she must know well the state of knowledge of each student and focus on didactics accordingly but discretely, behind the artistic emotion. The students must be interested and involved in this "game". These are not the typical school "dramatizations" of separate parts of the school programme. This is globalized art "on the edge" of art, pedagogy, psychotherapy and game mingled with a lot of joy and laughter. This is a happy deviation from the "ill place" where learning is associated with fear and it is in no way a song, a poem, a joke used in order to have a break from the pedagogical process, split from the study syllabus.

This is a pleasant process of instruction which is psychotherapeutic, psychohygienic and suggestively directed towards the big material. This is achieved in the process of training of the new teachers as reservopedagogues.

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.

For the introduction of the first lesson: In order to avoid conscious analysis that appears in the course of the didactic narrative, the teacher should speak relatively quickly but he/she should frequently repeat the phrases, naturally, as if incidentally, or simply habitually. It would be a good idea to present the same information in the third person singular with respect to the members of the group: what is the name of any of them, his/her profession, what languages he/she speaks, where he/she comes from, etc.

The teacher knows how to apply the laughter system and the system of songs. He has been trained for this purpose. Teachers are also trained on how to use different voice tones in their speech and maintain a dynamic and oscillating type of communication. They have also been trained in ways of finding the multiple personality variant which is most appropriate for learning. Teacher training must include methods of supporting students in their switching to the "best learning variant of the personality" in each class session.

The artistically drawn grammatical posters, designed for the needs of the lesson, should be properly placed. They should preferably be perceived peripherally by the students – and this is particularly important at the beginning of the lesson. Later on, when the study material being elaborated refers to the content of the posters, they can be quickly glanced at. Gradually, in the course of the lessons, the need of posters should be phased out.

The Introduction stage leads into the concert sessions stage like an uninterrupted transmission. At first, they were looked at as separate entities. But the Introduction is not only an introduction to the lesson but is an introduction to the session. Art is used to inspire. The session is preparing the way to the elaboration.

The purposes of this type of introduction are manifold:

1. *to create immediately a warm, joking, calm, friendly atmosphere*
2. *to show the student that it is very easy for them to communicate in the foreign language, which is very important to the development of the course*

3. to help them realize that learning will not be a hard and unpleasant experience, but just the opposite – an easy and pleasant one.
4. to help the teacher to master the global way of thinking and presenting the most important lexical and grammar units to be acquired in the according theme

Stage 2: The Concert Sessions

After the introduction and a 30-minute break, there are always the concert sessions: first the active, and immediately after that the passive.

Both sessions consist of a reading of the lesson text in accordance with appropriately selected music. They are vehicles for allowing large amounts of information to be introduced all at once without fatiguing the students. The two sessions must never be separated. They are both sides of a whole. 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 concert session facilitates the creation of a concentrative psycho-relaxation and enhances the memorization process to a high degree. Again we must emphasize that teacher training is absolutely required to carry on appropriate and effective concert sessions.

The Active Concert Session (Melodrama)

The active concert session retains its overall character, as described in the Foreign Language Teacher's Suggestopedic Manual (Lozanov, 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 are given the translation and are informed that, while the teacher is reading with a specially modulated voice and intonation, they are to look at the text and the translation, and to listen to the music without trying to memorize anything. In fact, as E. Gateva defined it, it is a type of melodrama.

The more the reading is kept in harmony with the character of the chosen piece of music, the more varied and particular the reading, then the more easily the study material read will be memorized and reproduced.

The active session normally should not last more than 45-50 minutes (with the possible exception of the first concert session).

During the active session, from time to time, the students are invited to participate in the reading of the text. Before, the students were not invited to participate in the reading; it was as if the teacher was reading to a huge audience, as if he/she was on stage.

In Reservopedia as a desuggestive pedagogy, 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 classical music 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 manner, we link in a firm way not only our methodology but also the texts from the textbook with the golden proportion.

In the active session (melodrama) we follow the rhythm of the music *but the most important moments are underlined and appear to be somehow out of tune* and then again, we go back to the rhythm. The suggestive is hidden behind the music. The music itself is influential but it is not directed towards the reserves with concentration. It creates the emotion and facilitates the

process. There is Reservopedia without art but such a Reservopedia is not needed. We need Reservopedia with beauty. That is why the application of art and aesthetics is a law, the seventh law of Reservopedia.

The Passive Concert Session (Recital)

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

Here, the musical compositions are characterized 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.

The musical programme for the first level of foreign language suggestopedic courses remains the same as the one included in Gateva (1991).

SESSION I

1. Active Session

W.A. Mozart
Concerto for Violin and Orchesta in A-dur, № 5
Allegro aperto (9'35")
Adagio (11'5")
Rondo. Tempo di Menuetto (9'50")

Symphony in A-dur K. 201, № 29
Allegro moderato (8'40")
Andante (7'25")
Menuetto (3'50")
Alegro con Spirito (5' 40")

Symphony in g-moll, K. 550, № 40
Molto allegro (8'10")
Andante (7'35")
Menuetto Allegretto (4'47")
Allegro Assai (4'50")

2. Passive Session

J. S. Bach
Fantasy for Organ in G-dur, BWV 572
Fantasy in c-moll BWV 562

SESSION II

1. Active Session

J. Haydn
Concerto № 1 in C-dur for Violin and Orchestra
Allegro moderato (9'30")
Adagio (4'40")
Finale (4'10")

Concerto №2 in G– dur for Violin and Orchestra
Allegro moderato (8'35")
Adagio (7'05")
Allegro (3'45")

2. Passsive Session

J. S. Bach
Prelude and Fugue in G– dur BWV 541
Dogmatic Chorales

SESSION III

1. Active Session

W.A. Mozart
Symphony in D-dur " Haffner", K. 385

Allegro con Spirito(4'55")
Andante(4'30")
Menuetto (3'30")
Finale Presto (3'55")

Symphony in D-dur " Prague", K. 504
Adagio-allegro (11'55")
Anadante (8'50")
Finale Presto (6')

2. Passive Session

G. F. Handel
Concerto for Organ and Orchestra in B flat-dur, Op. 7, №6

SESSION IV

1. Active Session
J. Haydn
Symphony in C-dur, № 101, "The Clock"
Presto (8')
Andante (8')
Allegro (4')
Vivace (4')

Symphony in G-dur, № 94
Adagio cantabile vivace assai (12')
Andante (7')
Menuetto Alegro molto (4')
Finale. Alegro molto (4')

2. Passive Session

A. Corelli
Concerti Grossi, Op. 6 № 4, 10, 11,12

SESSION V

1. Active Session

L. v. Beethoven
Concerto for Piano and Orchestra № 5 in E flat-dur, Op. 73
Allegro (19'30")
Adagio un Poco Mosso (8')
Rondo Allegro (10'40")

2. Passive Session

A. Vivaldi
Five Concertos for Flute and Chamber Orchestra (g-moll, F-dur, g-moll, g-moll, C-dur)

SESSION VI

1. Active Session

L. v. Beethoven
Concerto for Violin and Orchestra in D-dur, Op. 61
Allegro ma non troppo (24'30")
Larghetto (11'20")
Rondo Allegro (9'30")

2. Passive Session

A. Corelli
Concerti Grossi, Op. 6, № 2,8,5,9

SESSION VII

1. Active Session
P. I. Tchaikovsky
Concerto № 1 in b flat-moll for Piano and Orchestra
Allegro non troppo a molto maestoso

Allegro con spirito (21'50")
Andantino semplice
Allegro con fuoco (15'15")

2. Passive Session

G. F. Handel
Water Music Suite

SESSION VIII

1. Active Session

J. Brahms
Concerto for Violin and Orchestra in D-dur, Op. 77
Allegro non troppo (22'05")
Adagio (9'25")
Alegro giocoso, ma non troppo vivace (8'05")

2. Passive Session

F. Couperin
Parnasse; Apotheosis on Corelli; Stars Sonata in g-moll; Sonatas for Harpsichord

J.F. Rameau
Concert Pieces for Harpsichord, Nºs 1, 5

SESSION IX

1. Active Session

P. I. Tchaikovsky
Concerto for Violin and Orchestra in D-dur, Op. 35
Allegro moderato (22')
Canzonetta (7')
Finale Alegro vivacissimo (10')

2. Passive Session

J. S. Bach
Dogmatic chorales for Organ, BWV 680 – 689
Fugue in E flat-dur, BWV 552

SESSION X

1. Active Session

W. A. Mozart
Concerto for Piano and Orchestra № 18 in B flat-dur, K 456
Allegro vivace (11'35")
Andante un poco sostenuto (10'10")
Allegro vivace (7'35")

Concerto for Piano and Orchestra in A-dur № 23, K. 488
Allegro (11')
Adagio (7'05")
Allegro assai (8'05")

2. Passive Session

A. Vivaldi
Quartets "The Four Seasons"
Spring
Summer
Autumn
Winter

Stage 3: Elaboration

The session is followed on the second day of the course by the elaboration stage. The principal aim of this stage is to activate the new content in a way that will foster the development of specific language skills. Every day of this stage starts with a song and finishes with a song.

Elaboration of the material taught actually began at the first meeting of the teacher and students. The first words the teacher says already open up a dialogue. Meanwhile, the teacher reminds the students that he/she and they are together going to prepare the material necessary for the film they plan to make. However, here we mean systematic elaboration. At this stage of the teaching 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 Reservopedia are unified during the elaboration through the use of intonations, songs, the play etc. reminding the students of early stages.
3. The teacher continues to keep the students on the border of their linguistic knowledge. This means he/she speaks to them at a linguistic level always a little beyond their present knowledge and skill level.

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

The songs, which constitute another element in reservopedic art, have artistic, didactic and psychotherapeutic functions but not these of entertainment and relaxation. Relaxation comes as a by-product. Some of the songs have as a purpose to show the ethno-psychology of the people whose mother tongue is being studied. There are some arias and songs which help create a calm state but what is decisive is again the behaviour of the teacher; his/her own calmness is unconsciously perceived and imitated by the students. This unconscious imitation always exists in the communication process.

Stage 4: Performance

The last stage of each lesson is an opportunity for the students to review the most important elements in the lesson. The students come to realize that they can already master most of the important study material. It is also, above all, a stage where the students are invited to engage in more extensive free, spontaneous and creative use of the language.

The teacher should think about 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.

The performance stage on the *final day* of the course has 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 a dialogue. Short stories told by each student 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.

Detailed information about 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 typewritten text. We give this guide to every teacher we train. There is also a *Guide for the second level* course (advanced students) which is different from the one for the first level but we are not going to review it here. There is also 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 also give to trained teachers 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 only need training. For example, the proper 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 do appropriate work. An art cannot be described – it must be heard or seen to feel it and to understand it.

Reservopedia/desuggestive pedagogy is an art, a pedagogical art, including a lot of classical art.

Testing the output level should be done cautiously, a few days prior to the end of the course, for instance, in the form of challenging written texts, conversations etc. Because of the creation of a stimulating ambience, there is not even the slightest reminder of a typical exam atmosphere. (Refer to the Foreign Language Teacher's Manual)

During the course, the students are given easy tests to stimulate them, mainly translations into their own mother tongue, including meaningful parts of dialogues and additional 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 reservopedic system for teaching foreign languages to adults is subject to a number of psychological principles, which should be observed. For example: good, reliable organization of the work in the educative institution; purposeful, dual-plane behaviour of the teacher; motivating initial instructions which are read to the students; directing of the students' attention to meaningful and easy wholes 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, in the way one skims through a newspaper.

19.3 The Suggestopedic Foreign Language Textbook

The textbook is also of importance. Its contents and layout should contribute to the success of the reservopedic process of teaching and learning. A light-hearted story with a pleasant emotional plot should run through the textbook. The majority of the new study 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 constrained 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.

19.4 Results of Reservopedic Foreign Language Teaching for Adults

As was mentioned above, reservopedic instruction when it is well organized, should release the reservopedic reserve complex. This does not only mean that the assimilation of new material should be considerably accelerated, usually several times faster than with other methods, and that the knowledge should be acquired for a more lasting period, and on a more creative level. It is also imperative that there should also be other favourable educational and health-positive results.

These concomitant favourable effects of a psycho-hygienic nature have been turned into the basis for a whole reservopedic system that has become a new psychotherapeutic 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 issues of Suggestopedia 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 reservopedic teaching and learning is properly organized.

Such an example can be the pilot project to implement Suggestopedia in the Language Teaching Programme of the Canadian Foreign Service Institute conducted from 1992 to 1998. One of our students, Leo Boudreau, who was the project leader, reports that:

"Courses were given to 24 students in six different groups of students with different profiles in regards to their previous knowledge of French, learning aptitudes, educational and professional backgrounds. While this sample of trained students is still small, we believe that the method used to determine the rate of acceleration of learning provides an acceptable measure of the acceleration of learning through Suggestopedia in this pilot project.

.....

The average acceleration of learning in Pilot project I was 2.3; in Pilot project II, it was 2.7; an d in Pilot project III, although inconclusive, the results suggested a likely acceleration of learning of 3 times or more.

(Compared with the time required to reach the same proficiency level in the Public Service Commission (PSC) program and the American Foreign Service Institute program)

.....

Maybe the most significant aspect of the results achieved in this pilot project is that it has demonstrated that the acceleration of learning achieved with Suggestopedia can be maintained over courses with many levels and over a long period of time.

.....

The results of our courses show that the average rate of acceleration could be maintained even though the courses to reach proficiency level A and proficiency level B included from three to five levels or sessions over a period of time of up to ten months. This strongly suggests that the results obtained with Suggestopedia cannot be attributed to the placebo effect and that indeed Suggestopedia is just as effective over the long term as it is in the short term.

.....

Dr. Lozanov maintains that the typical results of Suggestopedia are not limited to the acceleration of learning but must include other by-products such as positive health effects. While we were fully aware of this, our goals in this pilot project did not include any method to observe and measure any of these accompanying effects, such as the health benefits."

There can be different variants of the reservopedic foreign language system, from courses with several lessons per week to courses of whole days, immersion in the reservopedic foreign language atmosphere. The leading factor is not the number of lessons but the psychological organization of the process of instruction.

A reservopedic course of Italian at the Research Institute of Suggestology.

A reservopedic course of Italian in Japan

Foreign language reservopedic course in Viktorsberg, Austria

If we take as a basic pattern the 24 day foreign language course with four academic hours per day, with 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) About 60% of the new vocabulary can be used actively and fluently in everyday conversations and the rest of the vocabulary is known at the translation level;
(3) The students speak within the framework of the whole essential grammar;
(4) Any text (of a similar context) can be read;

(5) The students can write (short and simple messages) 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, with a similar course.

This holds good also for beginners who have never learned 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 level course takes place approximately at the same speed.

20. THE RESERVOPEDIC SYSTEM FOR TEACHING ALL SUBJECTS IN SCHOOL AND PRE-SCHOOL AGE

Reservopedic teaching and learning has been introduced for all subjects in public schools and in kindergartens for three to six-year-olds. The seven laws of Suggestopedia/ Reservopedia as well as the three groups of suggestopedic/ reservopedic 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 Reservopedia is a *preventive method* protecting the children from didactogenic disorders, from absence of motivation for studying, and from all negative effects of existing systems of education.

The teacher organizes the instruction process similarly to the way Reservopedia is applied 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 teacher must believe and not "play faith" in the expected much superior results of the teaching process. He/she should have normal 100% expectations regarding the results of teaching, based on his/her experience. The system of games, songs, competitions and contact with classical arts are not activities intended to impress students (adults or children) but activities of mutual play, with some participation of the teacher as well. These are activities of mutual happiness and love. This role of the teacher is as natural as his/her role in the establishment of a set-up of unlimited capacity to learn – in other words, a capacity related to the undiscovered "reserves" of the personality.

In Reservopedia for children, the methods vary from the methods used for adults not only because of 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 study 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 mental, affective and social development and the functioning 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, and 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-reservopedagogue 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, characterized 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 organized.

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 the parents' role is, as tactfully as possible, to heighten the children's motivation for learning.

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

Children from an experimental reservopedic school learn while playing.

10th grade students spend their free Saturday in the mountains

First grade students learn mathematics by means of a suggestopedic opera

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

Happy 17 year-old student learning reservopedically 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.

21. INTERDISCIPLINARY RELATIONS

If we carefully analyse the laws and means of Reservopedia, we shall get an idea of how to understand interdisciplinary relations.

The laws 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-storied machine in which each storey works independently 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 subject matter detached from all the rest.

When the educational process is of a linear nature, the type which Reservopedia rejects, it consists of dry rationalized teaching that is detached from the essentially *inseparable "emotional"* element. 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 non motivating, 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 Reservopedia can be arranged in order of importance as follows:

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

This does not mean that emotional and rational 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 suggestopedic 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 to solve taken from the sphere of art. They should sing songs, draw pictures, mould in the mathematical period, but always with some mathematical problems in view. Even the solution to 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 about 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 emotion-logic balance should be sought and achieved in a similar way in teaching all other subjects.

2. **Balance of the conscious-paraconscious** *in the organization 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 study 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 utilizing 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 harmonizing 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 utilize 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. **Interdisciplinary 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 when addressed 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 concurrently 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.*

22. TEACHING READING IN THE FIRST GRADE

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

22.1 Method

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 stages:

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 children's field of vision. They are left for two days like this, without the 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 game-like situation arises. At first in chorus and then, separately, the children arrive at recognizing 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 organized 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 individually.

5. The words and sentences already learned 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 learned, 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 study 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 learned by heart by the children and made up primarily of already familiar words and of a pleasant nature are read in chorus and individually. The children must follow the place in the text with their forefinger, 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 suggestopedic 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 read-

ing 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 unto 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 for which the children show little or no interest.

After reading the beginners' series of books we pass on to reading suitable books 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 children who are already well advanced can be left to do quiet individual reading of more difficult books, the content of which they can narrate afterwards to the class. Meanwhile 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, reservopedic teaching and learning to read differs from the whole words method in the unity of the seven laws of teaching and learning. The following more essential differentiating traits should be noted:

1. In Reservopedia, the pooling of the material in words and short sentences is always harmonized in unison with the psychological and artistic means.

2. The whole word or sentence is learned to a large degree peripherally and without a waste of time and strain for the students, 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 memorized passages as well as through the children's opera and theatrical performances, created for this purpose.

3. The students 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 books.

4. The students 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.

5. The synchronous group reading as a stage in reservopedic 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, reservopedic 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 stages in reservopedic acquisition of reading, that we have enumerated and especially those with desuggestive orientation, will not achieve the desired results unless the teacher applies the appropriate psychological approach. First and foremost, the teacher should love the children and play together with them. The transition from stage to stage 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.

22.2 Results of the Reservopedic Teaching of Reading

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 learned 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. Read-

ing 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, in the sense that they can pronounce easily every word and read the sentences even if they don't understand them. This motivates them considerably. They start asking for books. After a similar period of time, in our experimentations, school children learning by the mainstream method in the control schools did not learn the whole of the alphabet and could 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 reservopedic experimental schools had a five-day week with less school hours and without homework, the results achieved acquire still greater significance. The results of research carried out in 1973/74 involving only the children of the experimental school, who could not read when they were admitted to it, were compared with the results obtained in the control school. This provided us with the data presented in Table 4.

Table 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 (%)
122nd (experimental 1st)	Input 17/9/73	26	30.77	69.23	-	-
122nd (experimental 1st)	Output 21/5/74	24	-	-	25.00	75.00
139th (control)	Input 18/9/73	25	36.00	64.00	-	-
139th (control)	Output 17/5/74	21	-	-	55.00	45

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 achieved the following results in reading: In the experimental schools the children mastered 91.5 % of the study material normally covered in 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 study material normally covered in one school year. The children of the experimental reservopedic schools were able to assimilate, in 99 academic hours, much better the study material which, in ordinary schools, is covered in 334 academic hours plus homework.

Table 5

Percentage Distribution of Schoolchildren in Groups According to Their Reading Habits at the Beginning and at the End of the School Year[9]

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

[9] For more detailed information on the data please refer to Lozanov, G. "Suggestology and Suggestopedy, Theory and Practice, Working Document for the Expert Working Group, UNESCO, 11-16 December 1978, Sofia"

The data given in table 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 reading skills.

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 average 68.62'' in all the experimental groups, while for the control groups it was 78.78''.

63.53 % of the school children 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.

23. TEACHING WRITING IN THE FIRST GRADE

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

23.1 Method

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 very fast. This process has also been brought up to a meaningful level by introducing global didactic units and by observing the unity of the seven laws and three groups of reservopedic 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 students write down the whole sentence in their notebooks, as it is related to the requirements of the story.

4. The teacher checks the individual work of the students and points out the mistakes.

5. Then the students 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.

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 very often be included. In addition, the pleasant atmosphere of a game must be created.

23.2 Results of the Reservopedic Teaching 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.

24. TEACHING MATHEMATICS IN THE FIRST GRADE

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

24.1 Method

In teaching mathematics to students in the first grade, one should seek not only to give the new study material globally, but to find a link with the other subjects as well. In teaching fine arts and manual skills, for example, it is possible to introduce in an unobtrusive way a number of things that students have learned 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 made. 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 study 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 study 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 reservopedic didactic theatre or they are videotaped. Some of the most essential examples of the respective mathematical theme are skilfully 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 kind of means for 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

learned 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 generalized way. Use is always made of the performance and the didactic songs and poems. The study material, which is larger in volume, 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 their creative problem solving skills. 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 students.

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

The ability of the teacher to suggest to the students through his/her conduct that the study 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, be under the impression 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 psychological 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 study 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 Reservopedia 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 be realized.

24.2 Effectiveness of the Reservopedic Teaching of Mathematics

In our experimentations, the reservopedic teaching of mathematics to first graders met all the requirements for developing mathematical thinking in children, and the program covered a considerably greater amount of material than that envisaged by the Ministry of Education. The students were given no homework to do.

In the 1972/73 academic year, the students, in one school year, with a reduced number of hours set aside for the study of mathematics compared to what is planned for it in the program of the Ministry, covered the study 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 administered in the experimental and the control schools before and after the winter holidays. The end results are shown in table 6.

Table 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
122nd (experimental)	Addition and subtraction with decimal transition up to 20	Before holidays	72
		After holidays	72
139th (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 January 31, the students 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 students, while in the control group, the best student 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 learned on average 80.3% of the study material planned for the first grade, without doing homework and with a five-day school week. At the same time, the schoolchildren of the control schools learned on average 63.3 % of this material. The first graders of the experimental schools assimilated 81% of the study material planned for the second grade while the second graders of the control school learned 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 were corroborated by the results obtained in the following school years.

25. TEACHING A NARRATIVE SUBJECT (HISTORY, FOR EXAMPLE) IN THE UPPER GRADES

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

25.1 Method

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 study material in the curriculum for one school year or for two school years is organized 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 students. 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 learned on average 75% of the study material and can use it in narrations. Sometimes a concert session is given to the pupils to help them memorize 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 students. That is why an all-round program was prepared for sessions and hours of other learning activities.

25.2 Results

Activation of 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 needs 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.

26. THE PSYCHOTHERAPEUTIC EFFECTS OF RESERVOPEDIA

The psychotherapeutic effect of Reservopedia was observed in the very first reservopedic foreign language courses. Hundreds of students with neurotic and psychosomatic illnesses benefited from the favourable reservopedic effect. This led to the use of Reservopedia as a psychotherapeutic method as well. More than two hundred people suffering from serious forms of neurosis were given this treatment – i.e. reservopedic teaching of foreign languages. The results obtained were much better than the results obtained through other psychotherapeutic 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 reservopedic method had demonstrated its success in teaching, but at the expense of the students' health, we would have given it up altogether.

In the reservopedic teaching of 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 were people who were already working in full-time jobs. They did not interrupt their work to take the course. They attended the course in their free time. That is why research was carried out to investi-

gate the effect of reservopedic 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 7).

Table 7

Changes in State of Health During Reservopedic 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 reservopedic teaching. 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 Reservopedia 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 Reservopedia 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 reservopedic 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 study material as that given to the children in the control schools, and they had achieved that without any homework and under the conditions of a shortened studying week.

A few years before our school experiments, our collaborator, prof. Dr. D. Kolarova (1973), made a remarkable investigation of 113 neurotic students (before and after the reservopedic 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 reservopedic course, she traced the dynamics of the individual symptoms and published her findings which can be seen in table 8.

Table 8

Dynamics of neurotic symptoms during reservopedic foreign language training

Type of symptom	Disappeared	Improved		No change	Trans. sharpened	Total
		Considerably	Slightly			
Hyposthenic Hypersthenic	2030	1672	1259	318	-1	51180
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 to the favourable effect of reservopedic instruction on the capability to work and reactivity of the course members, Dr. D. Kolarova again confirmed, in a new investigation with him, the favourable effect of reservopedic instruction on different diseases, especially vegetative and high blood pressure.

The psychotherapeutic, psychohygienic and psychoprophylactic sides of Reservopedia were experimentally studied and corroborated by the eminent Soviet (Ukrainian) 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 organized 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 were 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, normalization of sleep and appetite, and disappearance of fixed ideas and hypochondriacal symptoms. It is our profound conviction that it can be considered as a corner stone concerning the whole issue and science of the psychohygiene of mental work and teaching. This is a trend of great psychoprophylactic significance for children of school age and for young people, as well as adults, in the process of acquiring 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 [following] a special ordinance of the Minister of Health and the Minister of Education.

ORDINANCE

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 suggestopedic 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)(Signature)

Minister of Health
(Dr. K. Ignatov)(Signature)

(Seal)

CONCLUSIONS

CONCERNING THE INFLUENCE OF THE SUGGESTOPEDIC TEACHING 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 suggestopedic teaching 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 PhD 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, and 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 suggestopedic 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-therapeutic effect as well. This is subject to future research.

Another important fact has been ascertained, namely the so-called suggestopedic 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 al-

though 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 suggestopedically 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, infantilization, games, a pleasant atmosphere, strong motivation, and humaneness so typical of the suggestopedic 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 the suggestopedic 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"

Due to the fact that the first law of Suggestopedia/ Reservopedia is LOVE, which is present at every moment of the teaching-learning process and helps the harmonization of both students and teacher, Reservopedia / Suggestopedia is not only a psychotherapeutic method but a psychohygienic one too. Since the mood is jubilant, like "a holiday of the mind", the feeling of time disappears. From an emotional perspective, the students turn into small children who, when problems arise, look for some support in their parent until they calm down and find harmony again. This is achieved through the soft organization of the teaching-learning process and the specific qualification of the teachers to demonstrate kindness throughout their whole behaviour. How many times all of us – adults and children alike – have needed to have an understanding person by our side? He/she does not have to talk about the help they provide, he/ she does not even have to let any hint about it. If you help a person, you should not talk about it, not even allow the other person to guess it. And then it happens.

The future psychotherapists should really think about that, because it is not a simple claim. It is a scientifically corroborated fact.

Conference on Suggestopedia in Helsinki, organized by the Department of Education, 20.6.1978.

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

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

Conference on Suggestopedia in Florence, Italy.

Conference on Suggestopedia in Viktorsberg, Austria.

Conference on Suggestopedia in Vienna, 14.10.1997.

International conference on Suggestopedia in Salzburg, organized by Stiftelsen Pedagogisk Utveklung, Sweden, 1990.

27. THE SKILLS THAT TEACHERS ACQUIRE DURING TEACHER TRAINING

If we could sing while talking
If we could dance while moving
If we could draw while writing
If we could overcome time,
space and velocity
While thinking...
In order to feel the Love of Our Creator

After E. Gateva's Notes

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

Here are 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 when conveying 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 recognize and at the same time use or avoid the placebo.

11. How to recognize the inducement of a hypnotic state and how not to allow its occurrence.

12. How to organize and utilize the three means of Reservopedia: didactic, psychological and artistic in their unity so that there should be no succession of work or rest, etc. It should all flow.

13. How to keep different intensities of work during the elaboration stage within the Golden Proportion.

14. How to understand and to apply love for human beings.

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

The teacher should be aware that:

1. The educational and communicative results of Reservopedia (and its development as a desuggestive pedagogy) 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:
– educational,
– health oriented and
– psychological aspects.

3. Certain aspects of Suggestopedia have been dealt with in hundreds of PhD theses in the most renowned universities in America, Europe, and Africa.

4. An imposing international committee of UNESCO experts came to Sofia and, in the course of a week, conducted profound research on Suggestopedia in all aspects. They concluded that Suggestopedia was the best teaching method and should be immediately implemented all over the world and further developed.

The teachers should also know that we have clearly and emphatically denied that the results of Reservopedia can be achieved by 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";
– 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 reservopedic work, the following factors are activated and thus have an impact on the educational process:

1. *paraconsciousness*
2. *prestige*
3. *peripheral perceptions*
4. *psychorelaxation in the form of calmness*
5. *specific globality*
6. *credibility of the source of information*
7. *dual plane in providing information*
8. *intonation and rhythm of speech*
9. *infantilization in the sense of increased trust and respectability*
10. *multiple personality*
11. *oscillating methodology*
12. *new names and new biographies*
13. *songs*
14. *laughter*
15. *placebo*
16. *Golden Proportion*
17. *classical art*
18. *total aesthetic organization as a method*

There are some additional factors. Of course, all the above-mentioned factors are essential. Teacher training is of particular importance.

In accordance with the seven laws of Reservopedia, the most important factors without which Reservopedia for adults and for children as well cannot exist are the following:

1. Covering a huge volume of learning material;

2. Structuring the study material in the suggestopedic way: global-partial, partial-global, and global in the part – part in the global, in accordance with 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 expectancy with respect to obtaining positive results, (because the teacher is already experienced, even from the time of the teacher training course);

5. The teacher should love his/her students (of course, not sentimentally but as human beings), respect their freedom and teach them with personal participation through games, songs, a classical type of arts and pleasure.

6. The dynamic of the teaching process should always respect the law of harmony proposed by the Golden Proportion.

Reservopedia is a method for **revealing the reserves of mind through love for the human being.**

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

PART FOUR

VALIDATION OF RESERVOPEDIA

28. EXPERIMENTAL PROOF IN BULGARIA AND IN VIENNA, AUSTRIA, AT THE STATE PEDAGOGICAL INSTITUTE AND THE LEARNING RESEARCH INSTITUTE

28.1 Experiments in Bulgaria

Reservopedia started and was investigated for one year at the Postgraduate Medical Institute in Sofia, and after that for one year at the Faculty of the State Pedagogy Research Institute. There followed, for about 20 years, research at the State Research Institute of Suggestology which reached 100 collaborators in the staff-scientists, teachers, and other specialists, and some more people working on a contractual basis. During this period, we worked for 10 years with state schools; we reached up to 16 schools, which were assigned by the Ministry of Education. And then, for 10 years, we worked in the Department of Suggestology of the State University of Sofia. And we were also involved in many projects during all this time with 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 Suggestology 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 we collected 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.

28.2 Experiments in Vienna, Austria

From 1973 to 1980, we collaborated for eight years with the State Pedagogische Akademie in Vienna reporting to the Ministry of Education of Austria, and for 5 years with the Research Institute for Learning in Vienna, which was created for us. The results obtained in the school subjects (read-

ing, writing, and mathematics) in Bulgaria were also confirmed in Vienna, Austria. We supervised experiments in the Pedagogical Academy of Vienna from 1973/74 until 1979.

On the first days of January 1980, while leaving for the USA and Austria, we were stopped at the border and placed under house arrest for 10 years. Some administrative authorities probably 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. 21-37) the very positive results achieved up to that time. He also cites the written report of an official evaluation of the results after 10 months of experimentation, which was prepared by high level employees of the Ministry of Education (Spreitzer, Rieder, Brosch). 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 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 22 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 create 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.

The students trained according to the suggestopedic system at the Pedagogical Academy of Vienna. View of the classroom and a theatrical spectacle for learning mathematics.

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."

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.

29. MANY STATE OFFICES AND SPECIALISTS IN BULGARIA CONFIRMED AND GUARANTEED THE HIGH RESULTS OF RESERVOPEDIA

Well organized Reservopedia accelerates learning 5 times on average, as it was established in our experimental programs and by the practical results obtained with the good teachers we trained. It is also very important to stress that the encountered positive 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 with other methods. If all these effects did not occur, the teacher had to consider acquiring additional training 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):

"Under an order of the Ministry of Education, a whole-year experiment was performed, during the school year 1970/71, with a representative sample of the Sofia 10th grade where all subjects and the entire educative work were developed according to the suggestopedic method. The academic, educative and medical results from this initial integral experiment with the suggestopedic learning system were reported at the First International Symposium on the Problems of Suggestology and were published. After the school year 1972/73, a comprehensive suggestopedic experiment was organized 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. After the next 1973/74 school year, the experiment was expanded under 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 proclaimed by the Institute. This led to the opportunity to expand the experiment on a broader territory within the country, in

the perspective of allowing eventually the introduction of the reservopedic system in the whole country.

Under an order of the Ministry of Education, the experiment during the 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; this involved 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; this involved 1300 children in total.

We were also given schools with children from the Turkish and Roma ethnic groups. They obtained very good results as well.

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

The current 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 also be destroyed, and the next in the hierarchy of stereotypes should then 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 global meaning of the studied material, etc. Our principle on the unity of consciousness and unconsciousness overcomes this weak side of the current conception of consciousness, by requiring that teaching be performed at the level of global entities. However, this transfer of teaching to a global level does not mean a turnover to the methods of the holistic approach (for

example, the method of whole words); because teaching in the reservopedic system is double-sided, and the background comprises simultaneously the global and single elements. So, teaching within the framework of Reservopedia is dialectical in essence and performance, being at the same time directed to the meaning of global entities as well as to their inherent or constitutional details.

Thus real consciousness and creative work is attained at the level of global entities and, at the second level of details, one assimilates the constitutive elements to which consciousness reverts only sporadically if necessary.

Large teams of specialists who were not employed by the Institute and staff members dealing with issues of organization and methods at the Ministry of Education and the Departments of Education in the districts of the country organized the testing of the children. They were tested with respect to the level of knowledge acquired in various subjects, their state of health, psycho physiological characteristics and level of development. The testing at the beginning and at the end of the school year, as well as a one time check at 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 and 7 teachers.*

Overall, 161 specialists were involved in the course of the whole school year for the testing and supervision of results.

Because of the easy learning of even more material, it became possible for the children of the experimental schools to study 5 days a week, with the additional potential to increase the hours dedicated to teaching arts and

manual skills as well as increasing outdoor activities. The merger of education with aesthetics within teaching 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 testing performed and summarized 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 reservopedic system of education showed a higher rate of development with 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 suggesting an unfavourable impact of the reservopedic system of education upon the somatic development of the children in spite of the large volume of study material proposed 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 less 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 had shown a better potential for adaptation to the educative environment and the learning process.

30. CONFIRMATION OF THE RESULTS BY 20 UNESCO EXPERTS AND THEIR RECOMMENDATIONS

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

(Part of our Speech at the meeting of twenty UNESCO experts, 1978)

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

From 11th to 16th December 1978, UNESCO organized a group of 20 experts from all over the world to research Suggestopedia in Sofia, in order to confirm 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 training 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).

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.

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

Prof. Jean Lerede from Canada tests a child.

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:

2a. 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)

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10. 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)

11. An international journal of suggestology and suggestopedia should be published simultaneously in several languages. (Low)

12. 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.

However, the resolution and recommendations of the 20 UNESCO experts could not come into effect because we were placed under house arrest for 10 years until the political changes in 1989 without being given a sound reason for it.

Nevertheless, scholars from all over the world continued to render their support.in their daily work despite the lack of communication with me

The French educator Robert Galisson in his book *La suggestion dans l'enseignment,* Paris 1983, writes:

"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."

EPILOGUE

Where does suggestopedia lead to? You may ask. To easier learning. To easier learning and health improvement. To easier learning and educational improvement.

There is already research in the sphere of social sciences on our type of suggestion, where "to suggest" is "to offer, to propose" without any coercion, any guided techniques, but with the possibility of the personality, who has found him/herself in a harmonious environment, to be freed from previous negative conditioning and be stimulated to tap the reserves of mind. This definition is opposed to the clinical meaning of suggestion understood as a communicative relation of order and obedience at the expense of loss of personal freedom.

The published book,doctoral dissertation, of the Anglo-Swiss Professor of Social Sciences and Linguistics Sonia Dougal "Front Line Story. The Language of Suggestion and Desuggestion on the Front – Line in Italy (1943-1945)" describes what she calls a process of conversion in some of the soldiers – the liberation from the negative conditioning of the direct suggestions of the War propaganda and adoption of a more humane and tolerant attitude towards the Italian people which had consequently a positive effect on the development of their personality.

In conclusion she writes:

"It is at that point that the student of suggestion becomes disoriented on approaching a theory such as Lozanov's because he gives no indication that these phenomena may really be categorized as such since Lozanov's Suggestion, with capital "S", basically stands for liberation from conditioning followed by the activation of some of the human personality's reputed millions of unused, because as yet untapped, brain cells.

But if Lozanov's view is correct, then the influence of "Suggestion" (as opposed to "suggestions") only really began in a big way after the British fighting men stepped onto Italian soil in 1943. This implies that all the "verbal junk" which was hurled at them through newspapers, pamphlets, radio and especially through political speeches, which shocked and confused them, which bred hates and suspicions within them, which mobilized their emotions and sent electrifying messages through their brains, which took them out onto the streets with placards and drove them to send their sons and husbands to the front with tears of pride in their eyes: all this had nothing whatsoever to do with Suggestion because it referred to a totally different and a very much more sinister sort of kind of communication:

something which one should label as manipulation, propaganda, any name one chooses to give it... but never, never that sacred appellation " Suggestion" (with a capital "S")!

.....

Lozanov's theory offered new insights into the manner in which they (the soldiers) may have been freed from the fetters of such conditioning: through the shock of confrontation with this *"strange people in a strange land"*; through a weird challenge context created by those *"dubious"* characters who were *"undersized, unctuous, smiling with pleated blue-black jowls and plump white hands tapering like a mole's"*: the *"pops"* of some *"miserable little brat, some nine years old, who succeeded in ruining the lunch for everyone"*; through infantilisation and *the little girl clutching her doll as she stepped back in fear*; and the *hot potato which the soldier ate in the silent company of a hungry but happy child*; through role-play by *"shouting"* and *"threatening"* and shutting one's eyes and hearts to the *"tears and protestations"* of some *"penitent" "kerb-crawling Tout"*; through pseudo-passivity in the Concert Halls which *"breathed atmosphere"* where the music of *"Beethoven's seventh swept up to its climax"* carrying with it each individual who was " *temporarily lifted beyond the bounds of racialism, nationalism and other –ism"* to *"reach a common level plane"*; through the *"Gnocchi, tagliatelle, agnellotti, risotto, lasagne"* and the colours of the silk *stockings"* and the very lovely *"signorinas"*; and through the rhythm of Italian life and of the streets, the *"swaying"* and *"lifting"* and *"colliding"* in a *"let's-all-be-pals" fashion*; and through the art ; the architecture; and the *"unwavering crimson-glow"* of the *"enormous violet –grey mass of the volcano"*

All this, without a single sentence of direct verbal persuasion!"[10]

If our type of suggestion could have influenced positively the social relations, then we believe you understand that the careful orchestration of its factors offers good hope for our children.

[10] All quotes come from the soldiers' letters and articles in the British front-line newspaper "The Union
Jack". The italics is ours. (N.A.)

BRIEF BIOGRAPHY

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

Where I worked as a physician

In the course of my specialization 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 taught 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, on a considerable scope and quality, of brain reserves (unused functions unknown to us); and also about the opportunity to create learning, therapeutic, educational, and communicative methods for the use of these reserves. 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 of Suggestopedia for Children at the Pedagogical Academy in Vienna, under the Ministry of Education of Austria. Now I am setting up and supervising at the methodological level 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 have always known 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 did not inform 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 and so I had to change my jobs and deal with endless conflicts. All employers wanted me to work for them but unfortunately I could not stay at one place for a longer time because of my police record. In 1963 I was fired from the Psycho neurological 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 suggestopedic experiments on the memorization of a huge amount of French words were carried out under my guidance by the teachers Y. Georgieva and I. Dimitrova, the second being an associate professor at Sofia University. The first suggestopedic 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 out and/or organized with the invaluable help of my veteran associate Z. Dumeva. Our collaborator Prof Dr Petar Balevski, a physiologist, in the most complicated times conducted in our state-of– the– art electroencephalographic laboratory a series of electroencephalographic and other physiological investigations, published in the scientific press of the time, thus giving an objective endorsement for the physiological and harmless tapping of the reserves of brain/mind. Our collaborator Prof Dr Dimitrina Colarova, a psychiatrist conducted scientific research on the students' health state and thus experimentally corroborated that via suggestopedia neuroses can be cured

I received decisive help with respect to the methodology from my assistant, Prof. Dr. Evelina Gateva – an exceptionally talented musician and linguist. She joined my institute six years after it had been founded. She also

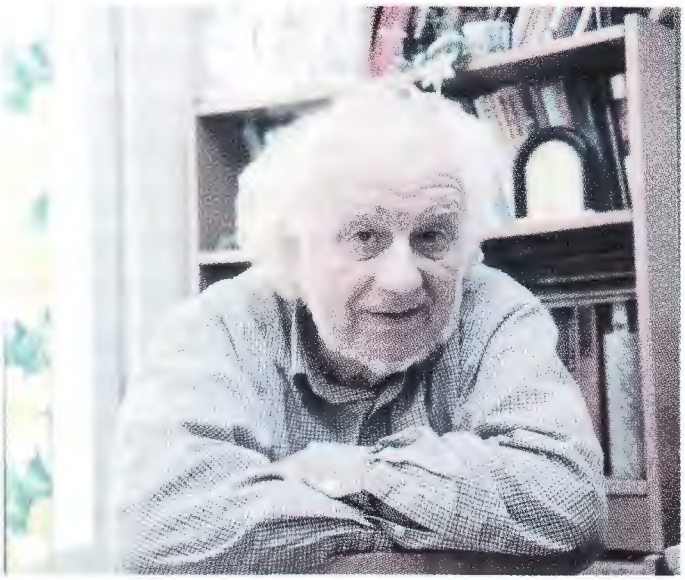
Prof. Dr. Gateva – deceased 1997

helped me find the most appropriate place of classical art, which I had already begun to introduce. She helped me improve musical sessions and enrich the methods with examples; she conducted magnificent Italian and Spanish courses; she revised and created new textbooks; she composed many songs for the foreign language courses 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 will always be grateful to her for her deep understanding and significant contribution to my methods as well as for the beauty she so skilfully introduced into my work.

One year after the UNESCO conclusions, 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 political changes in 1989. During this period I did not have the right to travel; they stopped my lectures at the University and on television; I did not have the right to send and receive letters; I could not publish anything; I could not 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 could not protect myself; I did not even have the full information about what was going on in the world.

After the political changes in 1989, I was again free and began to train teachers and physicians. I could not 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.

With the help from my noble and honourable friends from all over the world, I did what I could. I hope that the future generations will follow in our steps. This is a perspective for a new culture.



The author now

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

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

The School in Viktorsberg, Austria – placed at Dr. Lozanov's disposal by the local State Government of Vorarlberg, Austria for training and specialisation of teachers – which Dr. Lozanov directed over the course of 5 years

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