

Raise a Genius!

By Laszlo Polgar

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Foreword

Genius = Labor + Luck

Happiness = Labor + Luck + Love + Freedom

This book of mine appeared in Hungarian in 1989. In it I described and summarized my psychological and pedagogical experiments regarding my daughters' and my 15-year educational experience.

I do not present a prescription, merely a point of view. I do not wish to exhort anyone to raise a genius. I wish to demonstrate that it is possible. I urge no one, I encourage no one, everyone must decide for themselves what they wish to do. I can only pass on my pedagogical system, and guide everyone along the road that I followed, confident that it is possible and worthwhile to raise geniuses, for they can and indeed have become happy people.

My daughters are grown. Now they are practicing their professions and raising their own children. They wish to raise them as fulfilled, creative, and happy people, as they themselves are.

In my conception, education is good for the individual and desirable and useful for society. A genius is a collective creation who becomes a communal treasure.

Let us not fear to raise our children with optimism and courage (without begrudging the material expense!). Prodigies are not miracles, but natural phenomena; indeed they must be formed as natural phenomena. Parents and society are responsible for the development of the children's capabilities. A large number of geniuses are lost because they themselves never learn what they are capable of.

Our experiment, our program, and our way of life has been repeated independently many times throughout the course of history (consider primarily the childhood stage of a genius's life). We wish merely to elucidate them and endeavor by this to elevate them to a theory.

I wish you successful child-raising!

Budapest, 2004

I. Mysteries of Pedagogical Experiments

1. Instead of an introduction . . . the Polgar family

“If I am not for me - who is then for me; but if I am only for me - why do I live?” - The Talmud

“No one is a prophet in his own town.” - Proverb

“The truth is very often persecuted, but never suppressed.” - Livy

If, in the 50's or 60's, anywhere in Western Europe one said, "I am Hungarian," the first reaction from those around was probably, "Hungarian? Then Puskás, football... 6:3...", and the door for communication closed. The first reaction at the end of the 80's was most often, "The Polgar sisters... chess... and the Olympic Games in Seoul..." How did you live with this unusual popularity?

It also happened for us, that people in the West did not know who we were, and then people started talking about “The Polgars and Erno Rubik.” We were amazed and at the same time delighted to learn that we were those Polgars. We were “the Hungarian miracle, the three sisters, the world- famous children.” Around 40,000 favorable articles appeared about us. Of course people did also write unfavorably about us, mostly in Eastern Europe.

Ill will is not always masked behind reservations and doubts. Didn't people think that you treated your children like chess pieces or marionettes?

If we considered our daughters as manipulable figures, merely as objects and not as subjects of education, would we have been able to attain such a result? Without the active collaboration of their open, freely-chosen, independent agency and personhood we could have achieved nothing. In this kind of education the active participation of the child is almost as important as that of the educator. If they had not wanted to cooperate, they would truly have been marionettes, but from marionettes you cannot raise geniuses. I do not restrict them - on the contrary, I provide the possibility for children to attain the highest possible level of freedom. I open doors to freedom. In practice I create the opportunity for them to do what they love. Apart from that, I take care of them, nurture their psyches, and manage them in specific areas; I smooth their paths. Do not misunderstand me! During the past 20 years I have sometimes happened to say, “Look, children, you must do it this way!” But that is not characteristic. It makes up a maximum of 1 percent; we almost always discussed everything communally, and let them decide. Of course they are not marionettes. In a traditional school children are certainly marionettes to some degree: one wakes them early and sends them to school, where during class time they are pulled and pushed arbitrarily by teachers and their peers.

There is much truth in that. Thus it happens that a 6-year-old child joyfully crosses the threshold of the school in September, but by Christmas does not retain much of that joy. I believe you: one cannot form a creative person without independence, and one cannot guide even your children to the summit against their will. However, it does not follow that this kind of child will be happy, or that they will stay fulfilled throughout their life.

No, and I never said that every outstanding person is logically a happy one. A person's potential and self-estimation does not necessarily coincide. It can happen that someone is a genius and unhappy at the same time. Joyless, for their life is unhappy, the people around them do not accept them, they have not been successful in attaining some intended end goal, some sure thing has developed unluckily, etc. But at the same time the opposite can happen. In that case the people around them accept them, and they are satisfied with themselves; they can establish a surplus in their life, for they are useful for their fellows and attain success. Then out of that springs happiness. It is not by chance that asking a "difficult person" if they would order their life the same way over again we most often receive the answer "Yes." Indeed this could not be otherwise; geniuses are at least as happy as other people.

I do not assert that the way to genius leads necessarily to happiness, but indeed that it is more likely to than other ways. As it concretely concerns my daughters, they confirm - thank God - this last assertion. Those who think otherwise do not seem to have enough information, or maybe are envious or jealous. My daughters are in fact fulfilled, joyful, happy people. Those who know them personally can confirm this.

Permit me to ask about personal matters. What kind of viewpoint on life, or world view, do you have?

In 1968 or '69, around the age of 22-23, I joined the Communist party, and at 35 (around 1981) I left - chiefly as a result of my conflict with the Hungarian Chess Association. My problems were not primarily with the theory of Marxism, although I did not agree about many matters. For example, I did not agree with the fact that they constructed neither their movement nor society in a democratic way. I also did not agree with their educational practice and that they in fact condemned special education for the gifted or elite. I did not agree that they neglected education for the politically gifted or elite. I also did not agree that they did not replace inappropriate and elderly leaders with younger, more capable people.

As concerns my view of life: I have worked 15 hours a day since I was 14. For me, quality is the main thing. I wish to do everything always at the highest level. Mediocrity, the orientation to the middle, I refuse out of principle. I strive for the summit despite obstacles, obeying the admonition of Michel de Montaigne: "In a great storm, sailors in ancient times invoked Neptune: O God! You will save or destroy me according to your will. But whatever you will, I will steer my ship as necessary!"

What kind of person do you think you are?

A person who shapes his environment, his destiny, his society, and himself. If I think through my life in my mind, I can deduce my character, my me-ness, from it. If I consider my personality traits, I can predict my destiny, because they are interrelated. Of course certain ethnic distinctives can be found in me, like over-strenuous working, over-emotionality, yearning for accomplishments, the central role of the family, the desire to develop the capabilities of my daughters, and from time to time possibly also a bit of aggression and noise. But do not misunderstand me! I do not assert that I like all of those, and I do not assert that I wish to develop them in me. Only that these characteristics in practice have social effects.

Attacks that I have sustained from authorities have also influenced me. I have been in conflict with many people. These influences, although they have certainly been constructive to my personality, have worsened some matters: the efficacy of my work and my health. I have worked very hard in the past 25 years. I have slept very little. Thus I now feel a bit weary.

From time to time people accuse you of obstinacy, of insufficient diplomacy, and some even think you aggressive. What you think of that?

In my opinion, persistence and consistency do not equal obstinacy. Emotionality about problems and dynamism does not equal aggression. However our societal conditions sometimes provoke aggression in us. I consider it a virtue that I do not accept unprincipled compromises. Of course I do not consider myself perfect, and in some cases I certainly have been obstinate, even aggressive; but one must know that aggression is very often a consequence of frustration, and that, I believe, we receive abundantly. An aggressive posture is characterized by hostility, provocation, violence, and offensive conduct, causing suffering and damage. This is absolutely inaccurate with respect to me or us.

I wish to be persistent and consistent, but not obstinate. I wish to progress to the established goal. I endeavor not to worry too much about obstacles, but??? try to defeat them. I endeavor to stay true to my humanist principles despite hardships and misery, passive or active opposition, visible or camouflaged attacks. In some cases people do everything - at least it seems to me - to completely nullify us as people. This struck us first directly from Sandor Szerenyi (the first secretary of the Communist Party from 1929-1931, sometime vice-leader of the cultural and science section of the Hungarian Socialist Labor [Communist] Party, president of the Hungarian Chess Association for many decades), second and indirectly - as was evident in his recent statement - from Janos Kadar (former first secretary of the Communist Party, sometime president of the Chess Association). They seemingly could not forgive me for my way of thinking, built on humanism and judged so over-audacious, as well as my departure from the Communist Party. Around that time, at our second meeting, Szerenyi received me, without even a greeting, with the words, "You are a crook, an anarchist," and later followed with threats. After that for long years we were not allowed to travel out of the country. We only received passports to travel to the West in 1985. (Zsuzsa then already held the first place in the global rank of female chess players.) It was typical that in a press conference around then Sandor Szerenyi claimed that "Laszlo Polgar is in medical opinion not a completely normal person." If we had

not attained international celebrity with explosive speed, if we had not been so famous, our careers could have ended tragically.

In my opinion it is not true that I am a quarrelsome, agitated, aggressive, greedy, and violent person. I think of myself as an honest, sincere, plain-spoken person, very sensitive about justice. I have a great love of freedom and thirst for knowledge. I am very happy that to my knowledge I have deceived no one. Regarding my work I have established very high requirements, although I also understand those people who live otherwise. Other people possibly consider me an extremist, but I prefer to call myself an optimistic realist.

The essence of your pedagogical system is to raise happy geniuses. Speaking about yourself, I cannot help but wonder: in your opinion, do you consider yourself a genius?

I can only say that I have created something that up to now no one else has created. In this sense, then, probably yes.

Are you happy?

This question surprises me, but I believe that yes, I am. I have a beautiful family, a happy marriage, three beautiful, healthy, happy, intelligent children, and I feel as well that in my work I can enjoy the pleasure of creation, for I have done something that will last. I believe that I am happy.

2.The tipping point: heredity or education, giving or receiving?

“I do not believe in genius, only persistent courageous labor.” - M. Reger

“Anyone can attain my level, if he is as diligent as I have been for my entire life.” - J.S. Bach

“Every unfinished matter seems unrealizable for those who are incapable of great things.” -
J.F.P. Retz

Your opponents probably also know or feel that in itself the game of chess is merely a tool that you use to realize an important, one could say cultural-historical, goal. What then is the essence of your experiment and what philosophical problem underlies it?

The essence of my pedagogical program is that in my opinion, every healthy child can be raised to be an outstanding person, in my words, a genius. When we began this work with my wife, we read through a large collection of books and studies. We examined the childhoods of many eminent people and noticed that all who became geniuses specialized very early in some field, and we could also document that beside them always stood a father or mother, a tutor or trainer, who were “obsessed” - in the good sense of the word. So on the basis of our research we could rightly conclude that geniuses are not born: one has to raise them. And if it was possible to raise an outstanding person, we definitely needed to try this. So we did, and our attempt brought success.

In the end I would like to prove that socialization, development within society, and in that context the genius-izing of a person, depends firstly not on their native biological powers: their way of life is not decided from birth; it must be considered principally as a social product, in practice, a result of nurture. To express it provocatively, I often say, “Genius is not born, genius is raised.”

By means of my complete system I would like to prove this idea, and my whole life, my former studies, my completed experiments, my plans for the future - everything is directed towards this. Although my three daughters’ chess results have already proved in a pedagogical sense the correctness of my experiment, nevertheless I do not assert that this result could today satisfy the millennia-old philosophical question of the relationship between endowments of birth and acquired features, considering the simultaneous natural and social makeup of the person.

Regarding the pedagogical consequences of my theory I am certain, but not even I can attempt to definitively decide the general philosophical connections??? underlying my experiment. In relation to this, to use the words of Wallon, I can only say, “I cannot give a definitive solution, I can only indicate a direction.”

In the current discussion between philosophy and genetics, no viewpoint has yet won out. I wish to turn this situation around by means of a program of action.

I wish for society, and can assert, that on this hypothesis can be constructed a coherent system on which pedagogy can be confidently based, and functioning according to it, achieve success, as my experiment proves.

There has been significant acknowledgement of your successful experiment, and you have been invited to be a patron of the upcoming conference of the European Society for Talent in 1990 in Budapest. In this year's conference in Zurich as well, the unstructured discussion, about which you spoke earlier, had a good atmosphere. For example, Sebastian Coe, two-time Olympic champion, said that society is responsible for talent. The world-famous physicist Manfred von Ardenne opined that talent is not merit, but a gift. The president of the World Council for Talent, Harry Passow, stated, "Talent is a possibility - children are talented if we educators name them talented."

In the development of my system I have started from two facts. On the one hand current genetics still knows very little about the person; what it knows relates primarily to diseases. On the other hand, a healthy human has such an elastic cerebral system and flexible developmental structure that their efficacy can be developed to a high degree by pedagogical methods. The way is open for pedagogy, since children are developable, and from the viewpoint of the intellect they can be formed in any manner. (The outstanding Hungarian author Gyula Illyes notes in his journal about the well-known English stolidity: "The English are English following school; even their famous impassivity they get from there, not from their mothers' wombs.")

The American psychologist J.B. Watson has confidently stated for several decades that if he were given a dozen healthy babies he could raise them to be anything, whether scientists or criminals. Following the same concept, the Soviet psychologist V. Turchenko says, "It is better not to say that geniuses are not often born; say rather that we do not often raise them." I myself incline to the psychological-pedagogical optimism of Watson, Turchenko, the Japanese psychologist Suzuki Sunigi and the Austrian psychiatrist A. Adler: for this reason I began to develop and explore the capabilities of my three daughters. I began working on the basis for this before their births. It should be mentioned as well that there exist so-called talent-forming, genius-educating schools in Japan, Israel, the German Democratic Republic, the US, etc. (for example the "Superbaby Farm" of Glenn Doman in Philadelphia).

These thinkers, similarly to me, are of the opinion that the average person uses only 20-25 percent of the capability of their brain, although its capacity could be exploited much more effectively. A person can utilize their 1,300-gram much more than 20-25%, but one must begin working towards this goal very early. Glenn Doman's team considers the age of three to be the limit, when the bodily, spiritual and creative development of the child is still remarkably accelerable. I also am close to this viewpoint, although I consider the time limit to be more elastic.

There are also those among Hungarian specialists who evaluate your program positively. For example, Dr. Istvan Harsanyi, the eminent Hungarian expert on talent research reviewed your work on Hungarian Radio (1986-07-12): “I am convinced that the Polgar family experiment is the most important Hungarian psycho-pedagogical experiment in the thousand-year history of our state. (...) I believe this without reservation... Watson cannot prove his methods in practice, because he has never received those dozen healthy infants... I consider this the most important Hungarian psycho-pedagogical experiment, because Watson’s principles have been applied with great success, and also because it is a matter of not one but three children. This in fact presents the most interesting and strong proof of the whole affair. Indeed, when has it been deduced from any kind of genetic experiment that the subjects must have identically inherited the same capabilities? Certainly never!... This experiment is very important as well because of the fact that to my knowledge there has never been the possibility of experimenting in this area.”

Right. The uniqueness of my experiment lies in that it is - one could say - a family group experiment, made possible by the birth of my three daughters. I have built my pedagogical optimism on this result. On this basis I think that every biologically healthy child can be raised to be a genius; every healthy child is born with enough general endowment that from them can come a high level personality.

This then is the starting point. Would you summarize the basic principles of your concept, so we can later discuss them separately and in detail?

I would summarize my ideas in five theses:

1. The first relates to the traditional discussion about the role of natural and societal, from birth or acquired, hereditary and “educational” factors. Before everything, I started with being concerned not with two, but with three factors. I conceive of the personality of the person as a complex union of these three factors. In a personality are found simultaneously (1) biological endowments from birth, (2) things received by acquisition throughout life and (3) responses fought out and “sweated” out from oneself. That is, the value of a personality consists of three parts: the interacting trio of endowments, things received, and responses. The personality is thus at the same time:

- An endowment of nature
- An effect of the environment
- A creation of the individual

In this trinity I consider the crucial link to be the effect of environment, of society. Really, depending on age, all of them have different roles: in the first months of life biological effects dominate, for the first ten years society is undoubtedly increasingly emphasized, and later the activity of one’s own personality strengthens. But from the viewpoint of the development and freedom of the personality the deciding link is seen through the passage of time to be one’s existence in a society.

2. The next thesis relates to the interpretation of existence in a society. In this I call out two aspects. On the one hand the immediate surroundings of a person (family, friends, etc.), on the other their more distant circumstances. The first mediates imitative “heredity,” the second socio-cultural “heredity.” Thus, aside from biological heredity, it is also the effect of the family model and the historical-cultural heredity of the larger society that determines the nature of a person.

A member of society shares in human nature. The individual lives out their own development under the effects of societal forces like self-realization. From this it follows that education must consider a child also as a co-author.

3. The third thesis relates to the way to develop creativity. In my opinion, every healthy person is born with sufficient biological endowments to be able to specialize these general endowments in some concrete form of action. As opposed to many other pedagogues and parents, I see the task of education not in exploring or finding in the child “innate” or hidden capabilities. If we assume the existence of a general endowment in each child, I start from this: that we must develop in them some special capability.

Sometimes I have heard your reply to pedagogues' remarks that genius is born and not raised. You respond sarcastically: it is easier to not educate than to educate a genius.

Yes, right. By my basic principle, every child born healthy is potentially a genius, and if one pays enough attention, they will in fact become one.

4. My next thesis is that one can and must consciously organize the development of geniuses, and it is not sufficient to leave them to chance.

Self-evidently, education in itself is not all-powerful, for it depends also on concrete social conditions. But the fact that its effect is enormous empirically proves my results.

In parallel to the different responses to the biological, genetic and philosophical questions above, several tendencies in pedagogy are delimited between two extremes regarding the role of education. One extreme is the theory of laissez-faire. Its representatives say that human capability will manifest even when nothing is done towards that goal. According to this, the task of the pedagogue is to leave the student free, as they already are; in the best case one merely smoothes the way. The outstanding Roman pedagogue Quintilianus (35 - 96 CE) often mentioned this concept: “A teacher must explore the student’s native inclinations and adapt to them, for we cannot act contrary to nature.”

Opposed to this tendency is the tendency to assert the total power of education. Among others, the French philosopher C.A. Helvetius (1715-1771) mentions this: “Education conquers all. Give us education and we, in no more than a century, will change the character of Europe.”

In the ideas of Helvetius much is true, and on an individual level I also come close to this idea; nevertheless in social dimensions I can in no way agree with him. For indeed it is also a fact that pedagogical effects stand under the influence of the social environment: and such is the social need, the demand, that creates the general practice of education.

5) My fifth thesis is pedagogical humanism, according to which the essence of the formation of personality is the striving for as perfect self-realization and as complete happiness as possible. Every person should strive to attain the greatest result attainable by them, and realize oneself - this can bring about one's own happiness and also that of others. The pedagogue's task is also to aim for - as it is possible - not the average, but the peak. Considering outstanding achievements positively, one should fix human happiness as the ultimate goal for oneself. Therefore it is possible and necessary to raise geniuses, because, among other things, this guarantees the most certain road to happiness.

II. Education is Also Possible This Way

1. Contemporary Schools

“Human history is a contest between catastrophe and education.” - H. G. Wells

“We have succeeded in transforming the most joy-giving human activity into a painful, tedious, spirit- and soul-confounding experience.” - J. Hill

“Traveling along his way, the cripple leaves hesitant fleet-footed adventurers behind.” - J. F. Bawes

It is generally known that you are a pedagogy fanatic; however, you did not put your daughters in school; they did their studies as private students. Why?

The fact that I did not send my daughters to school is of course connected to the fact that I hold an unfavorable opinion of it. I criticize contemporary schools because they do not educate for life, they equalize everyone to a very low level, and in addition they do not tolerate the talented and those who diverge from the average.

Let us take this step by step, and start with your first remark: schools do not educate for life. Is the old Latin saying “One learns not for the sake of school, but of life” pointless?

Contemporary schools are separate from real life in that they function sort of as laboratories. There is no link with domestic or political or local public life, or the everyday cares of living one's life on the one hand, and school on the other.

My daughters, who have never visited a school, grew up much more in the context of real life. Contemporary schools do not promote a love of learning. They do not inspire to great achievements; they raise neither autonomous people nor communally-oriented ones.

Schools do not manifest or develop potential capabilities in people, at least as much as they could.

It seems to me that the second point of your critique of schools is related to this. That is, they equalize everyone to a very low level. How would you clarify this?

It's a simple matter. If all the schools in the country are of only one type, the model is like this: in each school there are, besides a few outstanding people, many mediocre and weak people. The mediocre are closer to the weak than to the outstanding. Of course a teacher cannot adapt to those few outstanding people, so the teacher presents material that is appropriate for the majority. Thus for the outstanding, class time becomes tedious. Even if the teacher wished to, the teacher cannot “tailor” the study material for most of the students' individual needs. So they cannot make each child work to their potential. Too often they must make the whole class

mechanically repeat more or less identical tasks. In the current organization structure they only speak about instruction providing problem-solving skills, but in practice this is unrealizable. Thus both pedagogues and students suffer in school.

Let us move on to your third criticism. How much do contemporary schools disrupt the development of talented children?

They hinder the development of talented children in that school instruction is tedious for them. It has been proven that a too-easy load is more tiring than an optimum load. As well, contemporary schools do not tolerate psychologically atypical children, and the group discriminates against everyone who differs from the average. The Hungarian poet Dezso Kosztolanyi did not write without cause, when saying goodbye to his son going to school for the first time, "My hand still fumbles at his hair; I let him leave, although I feel I am throwing him into a tiger cage." The specialist literature also attests to this, that contemporary schools are disadvantageous for unusually capable children.

Symptoms of ill health appear in many talented children because of damage from school (insomnia, various kinds of cardiac problems, headaches, abdominal pains, neuroses and psychoses). It is most worrying that children take them from their community. Permit me to mention as a curiosity that famous people often failed in school. Thomas Mann failed three times during his school studies. Albert Einstein was considered a very bad student by his instructors. In his school reports they noted, "He thinks slowly, is agitated, obsessed with stupid dreams." Robert Roentgen they determined to be "extremely untalented." James Watt was considered "heavy and dim," etc.

Clement Lanny and his colleagues, who studied aggression in school, collected numerous examples showing how neglected, sometimes extremely neglected, were students in school groups.

School groups are also very unstable; peripheral children are susceptible to the influence of mass opinion. It is sufficient for the leader of some group or other, even for a trivial reason, to incite antipathy towards any member of the group. As well, the famous American pediatrician Benjamin Spock says that one easily brands unusually capable children as "keeners" or "nerds" etc. And the unfortunate student immediately becomes a punching bag for the group, often for many months. The Hungarian psychologists Imre and Alice Hermann warn about the cruel conduct of children, emphasizing that, "The cruelty is not intentional, but is no less wounding to the target." To that I can add what Plutarch wrote: "Boys throw frogs in jest, but the frogs die in earnest."

So it is not by accident that people often propose that someone should do something to ameliorate the disadvantageous situation of the talented. In the West German magazine Bunte Illustrierte (12/1980) I read an article titled "Unusual ability - Unhappiness?" Currently in Hungary many are now calling for an improvement in the situation of the talented. The renowned geneticist Endre Czeizel writes, "Paradoxically, mentally challenged children enjoy advantages, as there is a separate school system for them, while no solution is seen for the talented.

In America, by contrast, they have worked on a talent-nurturing program, even including training on educating extraordinarily capable children in pedagogical instruction. The Society for Helping Extraordinarily Capable Children was founded in Hamburg in 1978. And in the Soviet Union they do a lot in the instruction of the talented in special schools. For example, there are this kind of school in Novosibirsk, there are sport schools in Tashkent, and the Lomonosov University in Moscow.

In Hungary, if I understand correctly, it is not possible to use an educational structure in primary school that differs from the standard, and private instruction for extraordinarily capable children is not permitted.

Truly not. When my wife and I investigated the outcomes and ways of life of extraordinary people, we decided that to fulfil our educational duty we would not choose the traditional form, but we would teach our children privately. When my first daughter, Zsuzsa, reached the age of compulsory education, I petitioned to release her from attendance at school six months before the start of the school year. I argued from foreign examples and from her current progress, because I felt the development of her capabilities would be threatened in school. The ministry refused my petition many times, despite the fact that many supported it in writing.

Let me quote from that petition. Janos Szabolcsi, a middle-school teacher and international chess master, said, "I support the petition, because the risk of granting it is trivial compared to the seemingly great, even world shaking, result that is foreseen." The chess instructor Laszlo Alföldi: "A globally significant result and very rapid progress can certainly be expected from Zsuzsa Polgar. As a private student she can continue her studies for an extended period with complete success, and at the same time make possible the maximal structured development of her ability in chess."

Despite this my petition was refused for a long time. An officer of the relevant authority even visited us, accompanied by a member of the security police armed with a machine pistol, to deal with the matter. I received warnings many times from various authorities that someone had initiated charges against me for not observing the law concerning compulsory education.

We spent a great deal of energy until we won that battle and received permission from the Ministry of Education. The decision was as follows: "The child is unusually capable; I release her, strictly as an exception, from daily attendance at school."

We had waited for this liberation for nine months. Later, with the birth of our next child the problem began again from the beginning. We succeeded painfully and arduously in arranging for her to be a private student as well.

2. Every child is a promise

“We are wiser when older, but we learn more easily when younger.” - Aristotle

“Many things can be acquired with money, many by deceit, and many by falsehood. But there is one thing that can be obtained only by honest labor, for which a king must work as hard as a coalman... and that is knowledge.” - The Talmud

“Chance can create not only a thief, but sometimes a great person.” - G. C. Lichtenberg

What are the main pedagogical principles that you consider worthy of following both in the education of average people and in that of the talented?

Among my pedagogical principles some that occupy an important place are awakening and holding the interest of the child, requiring accomplishments from the child, trust in them, and praise and admiration for their accomplishments. (Plutarch writes, “According to Xenophon, there is no sweeter music than when one is praised.”) In the Soviet Union an experiment was performed focused as a basic principle on admiration for children’s accomplishments. The result was a very intense evolution of the child’s capabilities. Apart from that, the central role of success is also one of my pedagogical principles.

A few days ago I returned from New York, where during a visit to a school I happened to see a slogan on the wall: “Every child is a promise.” Indeed, on every level of pedagogy, in every form of instruction, pedagogy must start from this fundamental concept.

It is very important that the child likes what they are doing; only then will it be possible to inspire a long period of fruitful labor. The formation of a deep interest plays a great role in the evolution of the personality, principally from the viewpoint of developing abilities. The interested child develops their abilities using less energy, while attaining greater success, and becoming less tired.

How do you view the relationship between success and failure?

I generally ask for positive stimuli. In my opinion one must create a pedagogical situation in which the lived experience of success is much better than that of failure. This is valid for every child, but is most important for the talented.

The experience of success or failure, as Adler demonstrates, greatly influences the self-confidence - or uncertainty - of the child. According to P. Michel as well, the experience of success, the admiration of others, and the recognition of teachers, significantly stimulates further action, increases the trust of the child in their knowledge and ability to a high degree. According to Frank, failure, suffering, and fearfulness decrease achievement. Following a number of successive failures, even a damaging inhibitory complex can be created. With an increase in stress, action becomes more superficial and behavior less calm.

Similarly, in the opinion of M. Juck, success experienced in one area increases (and failure decreases) the level of aspiration in other areas.

Helm's experiments prove that experience of success decreases the time necessary for solving later tasks, and increases the elasticity and ideational richness of the mind, while following failure there can be hindrances, rigidity, and relative ideational poverty in thinking, and problem-solving time increases.

Achievements can often be under- or over-valued. Which of these is less useful from a pedagogical viewpoint?

Pedagogically, only accurate estimation is good; psychologically of course over-estimation is less dangerous than under-. But let us not forget, morally, and therefore psychologically, too much external success (praise, distinction, reward) makes a child too self-confident, and this can result not only in a malformed character, but also a diminished capability for achievement.

As Marta Nemes writes, "It is one thing to progress by means of internal striving toward a conceived goal, and another by external applause." External acknowledgement alone does not equal success. However, external acknowledgement is also important, but in the end it results in the mere form of effective achievement, in contrast to the internal kind.

Harmony between achievement and external acknowledgement is therefore very important, and this applies as well to the concurrence of internal and external evaluation. The echo undoubtedly increases the joy of the creators, nevertheless it is not loud acknowledgement of success, but principally the warmth of a sure level of understanding.

Doesn't success diminish work discipline? All in all, what is your opinion about discipline?

I consider discipline to be a very important pedagogical factor. I am neither in favor of iron discipline nor too much freedom. I ask for rational and self-directed discipline, whether in a child or an adult. I have learned much related to this from Janos Selye: "I like a natural moderate way of living - I permit myself every comfort in the office, laboratory, and at home that increases the ability to do research and at the same time live and enjoy a life that makes sense to me and has a goal. But no more. A true scientist lives a monastic life, separate from the affairs of the world, dedicating himself completely to his work. He needs self-willed iron discipline, to concentrate all his capabilities on tasks, experiments or manuscripts, which demands continuing and undivided attention. If we ramble along through time, our minds will merely progress at walking speed." I completely refuse blind discipline, because this does not come from the inside. I achieve discipline by means of interest in and liking of the goal, not by coercion. But according to Comenius, discipline is also needed: "Instruction without discipline is like a watermill without water."

The essence of being disciplined is, of course, not merely an external framework, but an internal psychological ability. Education with discipline generally develops one's abilities, as it simultaneously trains persistence, willpower, and attentiveness.

According to an interesting insight of Lono Bolin, "The intensity of a child's attention is not only not less, but even greater than that of an adult."

From this also flows your pedagogical concept, different from that of current pedagogy, about the role of early childhood.

In my pedagogical system early childhood occupies a central place. In my concept, early childhood, that is, the period between 3 and 6 years, the preschool years, are more important and principally much more in need of utilization than thought of in the current specialist literature that realizes practice.

In my opinion, early childhood is entirely not early from the viewpoint of learning, even as it concerns specialization. R. Rose, a specialist in cerebral biochemistry, shows that in early childhood, with the growth of cells in the brain, the development of new cellular processes, and new neural interconnections, new contacts are created. But when the brain is fully developed, it suddenly, remarkably, loses this capability. This is the reason that people learn less easily with the passing of years.

B. Bluhm, a professor at the University of Chicago, explains in his book *Consistency and Change in the Human Personality* that 50% of a person's intellect is formed during the first four years of life, and a child's extraordinary ability to understand, typical until four years of age, little by little decreases with the passage of time. A disadvantageous environment causes in the first 4 - 5 years - according to him - more damage than later impoverished development during the next 10 - 12 years.

Summarizing the results of the research of the World Health Organization, Barnet determines that the first five years of life are most important in forming a person's behavior. In Turchenko's opinion, concerning a child's spiritual development, it is difficult, almost impossible, to compensate for deprivation in early childhood. The most difficult problems in education would be for the most part solved, if one could begin instruction soon enough.

People often object to the idea of early instruction, asserting that this works contrary to the development of the human organism. In fact, this assertion cannot be more correct than its opposite. A US scientist writes that it is still not yet clear how much effect the external environment has on the structure of the brain. For timely and correct instruction for children, we need to know the details of the development of the human nervous system. But at this time we still cannot definitively answer the question of what happens in the nerve centers if we begin instruction early, or inversely, if much later.

What can one easily impart in early childhood?

Firstly, foreign languages. This does not hinder the child in the development of thinking; it does not spoil the parental language; on the contrary, it even enriches the personality. Currently all over the world people are already researching the possibility of language instruction in preschool age. The Soviet Union, Bulgaria, Romania, Czechoslovakia, the German Democratic

Republic, France, Japan, the US, the Federal Republic of Germany, Sweden, etc. all are running successful language instruction experiments in kindergarten. In multilingual regions children of very young ages can already speak multiple languages with full fluency and without mixing them. According to Frantisek Marek, "Learning foreign languages in early childhood is very important, because without that a person cannot later express themselves spontaneously, rapidly, and appropriately."

According to Miklos Deak, at the age of 4 - 6, a child's vocal apparatus is still developing, is elastic and flexible, and is only fixed after the tenth year of life. The developmental capability of the vocal organs of kindergarteners is very advantageous for perfect assimilation of foreign languages. The closer a child is to the murmuring and babbling stage, the more easily they switch to any other voice. As a curiosity I mention that children often develop a better pronunciation than their teachers, if they often listen to sound recordings or can interact with children for whom the language in question is native.

What experience do you have in this context?

I can give my daughters as examples. I sent them to a Russian-language kindergarten, and at the age of five all of them fluently spoke Russian as well as Hungarian.

In a word, you have experienced that one can begin "serious work" much earlier than is done currently.

Yes. I usually say, about the prejudice that children are not sufficiently mature to learn until the age of six, that most adults (parents or teachers) are not sufficiently mature or qualified to teach children. If we want to satisfy the demands of the future, we must begin with children at the earliest possible age. By my didactic principle, one should begin instruction, which is in my concept nothing other than a serious game, at the age of 4 - 5.

Does this not deprive the child of what we call childhood; does this not reduce a child's childhood?

Childhood is not reduced, only the image of childhood that predominates in public opinion and the specialist literature. This is not worth worrying about. In my opinion the predominant image of childhood is not based on reality.

Psychological literature often describes the essence of childhood existence as careless or carefree. People interpret that to mean that children live for the moment. But in fact adults also like to live for the moment, and many adults only live thus. But a child is objectively a being oriented to the future. To the essence of my didactic principle, to consistent genius-raising, belongs also the idea that one must give perspective to the child. If a child does not see a perspective, see a goal, they can do nothing without parental help. A child is also a self-developed being, although a child's autonomy is not in place at birth, but is a step in its development. How much a child is capable of educating themselves is dependent on their level of

development, and is therefore a result of pedagogical work. In fact, we must educate a child from the first moment, enabling their certain autonomy.

What is the role of play in the life of a child? If I say “child,” one immediately thinks of play.

The image of childhood in my concept also differs in this respect from the traditional one. Perhaps this often causes people to misunderstand me and my daughters. In fact, I think of play as a very important phenomenon, perhaps more important than do many of those psychologists who put it on a pedestal.

But play is not the opposite of work. Play is very important for a child, but in play there is an element of work. One should not separate these two factors in a child's value system; if for example a child hears at an impressionable age, “Play, son, don't work!” this can later result in him feeling that work is alien. On the contrary, it is my opinion that a child does not like only play: for them it is also enjoyable to acquire information and solve problems. A child's work can also be enjoyable; so can learning, if it is sufficiently motivating, and if it means a constant supply of problems to solve that are appropriate for the level of the child's needs.

I think that one can learn by playing, and the acquisition of valuable information can be embedded in play. Everyday conceptions rigidly differentiate between a child's play and learning, that is, their work. The Hungarian Encyclopedic Dictionary exemplifies this tendency, this is its example for “play”: “He does not like learning, only play.”

A child does not need play separate from work, but meaningful action. Children already enjoy doing meaningful things in infancy. They like solving problems during play, even pleasurable play. The more meaningful and information-rich the problems they solve during their activities, the greater is their enjoyment and sense of success. In the end it is most important at this age to awaken enjoyment and good feelings in them.

Regarding my daughters, it is my experience that learning presents them with more enjoyment than a sterile game. I have the feeling that play deprived of information often plays only a surrogate role, of surrogate action, of surrogate satisfaction.

This is proven also by the fact that when we examine the biographies of exceptionally capable children, we find that they played much less than their peers. The profound and lengthy research of L. M. Turman in California in 1920 uncovered many differences between the play of unusually capable children and their peers. As expected, play that demanded mental action was much more interesting to the talented children. They played alone somewhat more often, compared to the control group. Susanna Millar writes in her book *Psychology of Play* that sometimes unusually capable children who lack peers at the same intellectual level can have difficulties in play with others.

Thus I generally do not rigidly separate learning from play, or work from hobbies at an adult level.

I support doing work that one likes, which is thus an enjoyable occupation. But this can come about only when, in choosing, we come to passionately enjoy it. And for this childhood is more

appropriate. On the other hand, play does not exist without discipline, and vice versa: we can find play-like aspects in work. In childhood we must correctly form these satisfying factors. Because of this I call preschool serious play, and later play I call enjoyable or hobby-like work.

This leads us to the logical question: how much of a workload can a child carry in early childhood?

The workload interrelates with the complexity of the personality; we should use, rather than the idea of under- or over-loading, the notion of a good or a bad workload. A good workload is that which corresponds to a state of health, with the physical and spiritual state and development of the child. A bad workload could be either an under or over load.

What is the precondition for a good workload?

To awaken the child's interest. The child should like what they are occupied with, that is, be interested in it. One must little by little accustom them to the work and create in them the unification of work and play.

It is important as well that the child become accustomed to learning and working. Particular training is necessary for the workload. I call well-organized and age-appropriate work *active rest*. A child's workload should be such that they experience it as active rest. Students, for example, who must attend lectures which they then enjoy, feel more rested afterwards than before. And if the speaker lectures inexpertly, they almost fall asleep from boredom and fatigue after half an hour.

Could students carry a significantly higher workload than in current practice, if these conditions existed?

From my point of view, workloads could be measurably increased by appropriate methods. I agree with the pedagogical tendency to ask for *intensive instruction*. The essence of intensive instruction lies really in using goal-directed workloads, age-appropriateness, the holding of interest, and the lived experience of achievement and success.

The American G Doman thinks the same. In his analogy: as the different muscles of the body can be developed and strengthened only by regular training, so also the capabilities of the brain can only grow by means of daily training. The lack of structured logical thought and learning causes a decrease in intelligence, just as un-exercised body parts atrophy. Doman knows, on the basis of three decades of practical experience, that the brain grows most rapidly between the ages of 1 and 6, and it almost "effortlessly" assimilates knowledge. The ability to learn by play decreases after 6 years of age, when assimilation of information becomes more difficult mental work.

In my opinion, we should disseminate the idea of intensive learning in every field. My daughters, for example, learned each language using intensive methods. Of course they did so with chess as well. And table tennis.

Again I'll ask: does an early workload damage the development of a child's personality?

In the current state of science this problem has not been fully clarified. The traditional way, of unburdened early childhood years, can be as damaging as the way I propose. I think that the latter is more useful.

Have you performed research on work and fatigue in children in natural conditions?

Yes. My daughters, for example, twice took part, in 1985 and 1986, in so-called 24-hour chess marathons in Dresden. (In 1985 only Zsuzsa and in 1986 also her two younger sisters played in the tournament, Zsuzsa was 15, Zsofi was 9 and a half, and Judit 8). According to the rules, they had to play 100 matches in 24 hours, so they had to keep attentive with great effort, practically without rest. (There were only three short 20-minute pauses for food). Added to this, they had to sit at the chess table after a 16-hour train journey.

Now Zsuzsa won both competitions with a large advantage of 10 points, before international male masters as well, and both her sisters achieved top places. (90% of the participants were 25-30-year-old men). In 1985 Zsuzsa achieved as many points in the first fifty matches as in the second, against the same partners. In 1986 Zsuzsa and Zsofi collected as many points in the first fifty matches as in the second. Judit had a few more points in the second half as in the first. Zsofi and Judit achieved more points in the last 40 matches than in the first 40. This proves the workload capability of children (they do not tire more than adults, even...) and that extended effortful attention can increase for a definite goal.

Not only the results show that my daughters could handle the workload (in 1986 Zsuzsa collected 91.5 points in 100 games, Judit 68.5, and Zsofi 66 points), but also the photos taken of them at different stages of the 24-hour contest.

3. Genius: treasure or burden?

“We perceive only that which we wish to see, and we listen only to that which we wish to hear.” -

A. Szent-Gyorgyi

“Besides protecting talents, many understand that one must protect oneself from the talented.” -

Gy Juhasz

“People deny their prophets and slaughter them, but love their martyrs and pay homage to those put to death.” - F. M. Dostoyevskiy

The nucleus of your pedagogical system is, like the libido for Freud, and the emotions for Wallon, the notion of genius.

The notion of genius and the related theoretical and experimental work. Of course, I do not intend to found an ideology of genius rule or genius power, nor do I think that the sole purpose of all pedagogy is to raise geniuses. No. I am opposed to all aristocracy, so I am also against “geniocracy.” I am opposed to all pedagogical autocracy, and thus also opposed to transplanting my method as a template everywhere.

How much does the notion of genius that you use differ from the concept in popular opinion or of specialists?

Current public opinion widely disseminates, on the one hand, the ancient idea that a genius is peculiar, diverging from the norm, an extraordinarily bizarre phenomenon, half insane, and that a genius hardly differs from an insane person. On the other hand, one often identifies a genius with those at the peak of their fields, with film stars, or celebrities. Of course, I do not accept either concept from public opinion; not only that which characterizes geniuses as half insane, but also that which sees a genius in every film star, celebrity or famous person.

The situation has not been clarified even in pedagogy. I myself have asked several researchers how they define the notion of genius, and most responded that they had never even considered the matter.

This state characterizes pedagogy in the first place. The situation in psychology is a little better, although even psychology does not treat the matter with its due significance, despite the fact that it has already passed beyond the concept of the Italian physician and criminalist Cesare Lombroso (1835-1909) regarding “genius and insanity.” For example, some psychologists tried to discover the secret of Einstein, so they analyzed him anatomically (weight, volume, and folding of the brain), but they found nothing different from the average. After the death of Lenin a brain research institute in Moscow wondered the same, if it was possible to discover some difference in his brain structure, but this research also demonstrated nothing concrete.

If the notion of genius is this uncertain in public opinion and specialist circles, why do you insist on it? Do you have certain presuppositions about the idea?

To explain my thinking I could of course use a different notion. Every researcher is allowed to do this. But I consciously insist on the notion of genius - used of course according to my definition - to recover its status, and bringing it back to the world, democratize it. I insist on the notion:

- because I want to convince people that genius is not of some other world, but is an entity of this world, a goal attainable by means of education,
- because I want to prove that it has nothing in common with insanity, but the inverse: every healthy person has the capacity from birth for it, and genius is a normal result of the development of this potential;
- because I feel that it is a general category that can serve as a complete characterization of all particular manifestations: artist, scientist, organizer, laborer, athlete, politician, pedagogue, etc.
- everyone can be a genius: the quality of “genius” describes being outstanding with the same validity in all these fields;
- because (and I use this category principally because of this) I see a potential genius in each individual born healthy. I link genius neither to class or race. For me genius is a democratic idea. The task and duty of pedagogical work is to lead people in this direction. On the other hand it is the right of every genius to consider themselves as such without shame. I use this idea for - acknowledging the existence of the outstanding - promoting this quality, and so that genius (quality, outstandingness) would not be an object of shame in our society, but of pride.

Genius then is for you not merely an idea, but a full complex concept.

First, I distinguish potential genius from that which has been realized. In my concept every child born healthy is a potential genius, but whether they become so or not depends on circumstances, on education, and on themselves. The fact that in the 20th century - because of societal need, among other things - many more geniuses were “realized” than, for example, in the 18th and 19th centuries, proves this. The journey from potential genius to actual genius is a battle for liberation, a process of freeing the genius. Future society will very likely be composed of evolved, self-realized, free individuals, and genius will be considered a normal, everyday existence, and not as an individual “extravagance.”

But today we are still far from that. Currently most of the population is of average capability, and only a few, although many more than we imagine, rise to the level of outstanding (in other words, geniuses).

Explain this thought in more detail! It has seemed to me until now that a genius was a random coincidence of social environment and innate gifts.

Einstein does not assert without reason that an erudite mind was favoured by good luck, but only the erudite will become so. I interpret this to mean that genius = work + favorable circumstances (I include the social environment in favorable circumstances).

Every healthy child may be led to the summit. The fact that the majority of children a language between the ages of 1 and 2 proves this. Think about it, isn't this an achievement of genius? If they continue, at the age of 10 they can speak 5 or 6 languages. Thus genius results firstly from education and self-education. The opinion of world-famous geniuses also confirms this assertion. Let me cite some examples:

T.A. Edison: "Genius is 1% inspiration and 99% perspiration."

Ch. Chaplin: "Talent is nothing; discipline is everything."

C. Cuvier: "Genius is firstly attention."

M. Gorkiy: "Talent is the love of work."

J.S. Bach: "Anyone can achieve my level, if he is as diligent as I have been my entire life."

J.W. Goethe: "Genius? Probably merely diligence."

H. de Balzac: "Every human talent consists of two parts: patience and time."

Currently, outstanding psychologists researching creativity relate to the problem similarly. According to the Soviet expert on the subject B. Nikitin, every physically and spiritually healthy newborn possesses an enormous potential for developing their capabilities, and the earlier we use them, the better. "[Children] before kindergarten age already have an enormous capacity to learn, and one can use it much more intensively." (He reached this conclusion using the experience of his own children. At the age of 2 years and 8 months to 3 years and 4 months they could already read, at 3 and a half they possessed the knowledge of arithmetic, writing and reading required in their first class, etc.)

According to the American psychologist Maya Pines, millions of children are irreparably damaged because during the crucial age - from birth to the 6th year - one did not sufficiently promote the evolution of their intellects. According to the French author G. Duhamel, "Until the fifth year every child is a genius."

Glenn Doman, one of the most well known scientists who study genius, has a similar opinion: according to him every child before the age of 3 can be raised to be a genius, and "Every infant should be programmed as an outstanding genius." He responds to his critics, according to whom he wants to "breed" elite geniuses, thus: "Indeed, yes, we are raising an elite. But do you know how many children should be a part of this elite? A billion. Currently there are about that many children in the world." I suppose that in the global population:

80% are potential geniuses in the first year of their lives,

60% are potential geniuses in the third year,

50% are potential geniuses in the fifth year,

40% are potential geniuses in the twelfth year,
 30% are potential geniuses in the sixteenth year,
 20% are potential geniuses in the eighteenth year, and
 only 5% are potential geniuses in the twentieth year.

How does this relative social stasis stand if we project it to the age of 22-35?

At that age it is for the most part established how many geniuses are realized: about 0.1 to 0.01 percent of the population.

A fully realized genius is the same, in my opinion, as an outstanding person. An outstanding person differs on the one hand quantitatively from the average (they know much more than the average person), and on the other hand they realize in society a more valuable, more original creativity. Being outstanding comes in different stages. I distinguish three:

1. Candidates or pre-geniuses (1-5% of every domain)
2. Geniuses (0.2-0.5% of every domain)
3. Super-genius (1 in every domain)

Thus follows:

- The handicapped:
 - Idiots: very retarded mentally
 - Imbeciles: moderately mentally retarded
 - Feeble minded: a little mentally retarded
- The normal:
 - Adequate people: minor capability
 - Average people: natural
 - Capable people: more capability
- The outstanding (geniuses):
 - Unusually capable: candidate or pre-geniuses
 - Super-capable: geniuses
 - Extraordinarily capable: super-geniuses

Of course, these divisions are only relative. Obviously every concrete person can move from one category to another.

Please give examples to illustrate your classification.

Obviously one knows best one's own area of specialization. I take my examples from chess. If - let us suppose - a capable chess player attains 2350-2450 Elo points, then the following results characterize an outstanding person, that is, a genius. An unusually capable person, that is, a candidate or pre-genius would be between 2450 and 2550. A genius, a super-capable person, could achieve 2550-2650, and those above 2650 I call super-geniuses.

In chess at a global level (among adults), we find:

- Super-geniuses (above 2650): 2-4 persons
- Geniuses (2550-2650): 50-60 persons
- Candidate geniuses (2450-2550): 300-400 persons

In Hungary:

- There are no super-geniuses
- Geniuses: 4-5 persons
- Candidate-geniuses: around 15 persons
- Highly capable: around 70 persons

Where are the Polgar daughters?

Zsuzsa is in the super-genius category in her age group; among adults she is in the pre-genius category. But Zsofia achieved a result in the March 1989 competition in Rome clearly characteristic of an adult super-genius. Generally her results put her in the pre-genius category at an adult level; in her age group she is in the super-genius category. Judit (who received an Oscar prize for her results in 1988) is an indisputable super-genius; that is, in her age group she is in the super-genius category, being at #1. At an adult level she is in the pre-genius category (at the age of only 12!!!).

Congratulations! But there is another question to pose in this area: the time factor. History knows many examples of child prodigies, but not all of them became adult prodigies. How can this be clarified?

A child is a genius if they are ahead of their peers at 5-7. I am convinced that if child prodigies do not become “adult prodigies,” conditions were not favorable for healthy and structured work. In good conditions every child prodigy becomes an adult prodigy. Some say that there exist early or late developers. In my interpretation, conditions do not favor everyone for the ascent. In the case of good conditions, the ascent will succeed early (work and luck have an important role here). In less favorable conditions, success will be later. And there exist areas where one can also become a genius in old age (philosophers, authors).

The newspaper Der Spiegel - maybe a bit maliciously - remarked that you explain the matter this way: “Genius exists in every person to the extent that society has not ruined them.” But if we differentiate geniuses merely quantitatively from the average, then we can also speak of negative types, “criminal geniuses,” or “genius war criminals,” for example. Does this definition of genius trouble you?

Indeed it troubles me. But I indeed do not conceive of it like that. In my opinion genius is a notion about preserving values. I only consider those who realize socially useful actions to be geniuses. So genius is a unification of quantity and quality.

But if this is true, why does the word “genius” worry many people currently?

One could discuss this for a long time. Jacques Barzun writes, “A new truth inevitably sounds like insanity; the greater the truth, the greater the insanity.” People do not easily tolerate what diverges from the average. The more someone differs from a typical average person, the less people tolerate them. This is characteristic not only of lay people, but also specialists. Even among scientists we find examples of this. Even Einstein was not understood by his colleagues; there were physicists in German universities who declared the theory of relativity a dead end. It is not public opinion alone that carps at my daughters. Even specialists and fellow game players often attack them.

So the life of a genius is not easy. Andre Malraux says, “Talent is not a well-made foundation, talent is a plague of nature, a trap for the character, a curse, a crossing of a burning, falling bridge, a burden around the neck, and a sprint up a mountain.” As you see it, should the life of a genius be considered a blessing or a curse? And how would they themselves judge their lives?

Some of them - a very small part - consider their state to be a curse, others a blessing. Most feel joy fountaining from structured creativity, the experience of beauty and success. This is a state of blessing. But the life of a genius can be weighed down almost like a curse if they do not achieve their established goals. Their disillusionment can become great depending on the demands they place on themselves. Much can also depend on their sense of realism and their self-development.

The true curse, however, comes from the outside. It causes enormous damage if one evaluates poorly what a genius does, if one does not judge them by their merits, if they do not receive moral and material support for their work. Also unmerited criticism can be terrible. All this makes the lives of geniuses much less easy. Janos Selye determined that “Today the situation is in many ways less favorable than in the middle ages, since by means of the rich capability of mass media a single demagogue can poison the thinking of the public in a few months, and drive the mob into savage fury against the most outstanding representative of the national culture.”

This brings a new question: Is genius a treasure or a burden?

In every way, singularly and objectively, a treasure. In our time, when international contacts are rapidly developing, the interchange of material and spiritual creations between the various populations is accelerating, and international competition in the economic, scientific, technological, cultural and athletic areas is similarly intensifying - geniuses always play more important roles. It is in no way immaterial how many geniuses live in any country. Raising geniuses is one of the preconditions for social progress, and any society can be guided out of economic difficulty for the most part only by education and instruction.

Professor Hans Eysenck, one of the most outstanding of those who plead for raising geniuses, asserts that international evolution will be very retarded without an artificial spiritual elite. The

inventions and ideas of the above-average talented create pride in the whole society, and their patents establish new industrial branches, and thus new work opportunities.

It is not by chance that, recognizing this, the directors of the largest international corporations support pioneering the education of geniuses, and among the patrons of the Doman Institute mentioned above are both the US Steel Corporation and the Japanese Sony.

If so, then why does it happen that geniuses are often find themselves in disadvantageous situations?

It is a different matter that the environment does not always treat geniuses favorably. But of course we should not only blame society. Understand well: it is not easy to make average people inclined to accept geniuses. Even in school talented children are often excluded from their classmates. Teachers do not succeed in making the class like the talented student. Many times even the teacher does not recognize the talent, and even hinders its development. In adulthood this can happen more explicitly.

Doesn't this have to do with geniuses being nonconformists and too sensitive, so they take a more sharply critical attitude?

This is not certain. It is not certain that they have a greater sense of criticism in every direction. A genius has a truly different way of thinking than an average person, but they do not always reveal this in interpersonal relations, that is, a genius often offends no one. On the contrary, usually people offend them. It is not their conduct that evokes offense, but their achievements. Why would a genius painter, a genius musician, a genius chess player, offend people? Because they are outstanding in their specialty?

Maybe because they break the mold. Other thinking in itself does not equal offense. At worst this merely troubles or irritates people. If this is the case, then geniuses should accept this and form their personalities in accordance with this.

I agree. I do not want to claim that no genius has a malformed personality. They can have, and thus must take great care not to become so. One should establish multifaceted development of their personality and the formation of humanistic qualities as a goal for them. They themselves should contribute to this, that is, their self-education should work in this direction. I always very much tried to evolve in my children a positive human existence. This of course is useful also in their work, in the continual realization of greater achievements.

There are outstanding chess masters who have malformed personalities. Florian Tibor, an international grandmaster and master teacher, who knows the Polgar sisters and many other young chess players, said, "It is wonderful how psychologically healthy these children are. Even extraordinary achievements have not marred them, unlike their colleagues, whose characters success has distorted more than once." In order for the relationship between society and geniuses stay relatively healthy, both sides must work in this direction.

But society must act first. I agree with Janos Selye, who wrote, "Science flowers only if it is rooted in a society that respects knowledge. Many people of science have in the past forsaken their homelands to find a more suitable atmosphere." Think for example of the Hungarians!

I generally accept the ethical standpoint that if two sides are debating, the stronger, more numerous side always bears more responsibility. Nevertheless, as much as the minority, the geniuses, are not allowed to do anything, it is not possible to liberate them from the duty of tolerance. They also must possess moral qualities enabling healthy contacts with society.

This is true. Geniuses should not be as capricious as movie starlets. They should not consider themselves gods and others simpletons. This very easily leads to devaluing others and neglecting the work of others. Geniuses should not be puffed up, or self-aggrandizing, or avaricious. They should not want to rule. Moreover, geniuses do not want to be directed even by geniuses. Naturally, society needs to be guided by geniuses. Geniuses should become accustomed to the idea that they should serve and, if necessary, direct - in science or in other useful fields.

I agree with this, and this makes more evident the duty of society to consider geniuses as treasures, not burdens.

A would add: consider them benchmarks. We should treat them as standards worthy of attainment. The kind of value system a society has is not irrelevant; whether it establishes a goal to provide everyone a summer cabin, or luxury goods, etc., or if it considers creativity a value and is oriented to quality and eminence. If it ranks true human achievements highly, it will increase the rank of work.

The nurture and care of talent, the appropriate evaluation of genius, is thus one of the conditions for the progress of society.

That society will attain a higher level, which will make it more perfectly effective. The call to "raise geniuses!" does not only mean a pedagogical task. It should also become a social goal.

"Everything that we see realized in this world is nothing more than the external result, the practical realization, the embodiment of thoughts that lived in eminent people throughout the world; the soul of the full story of the world is - we may assert - their history." - writes T. Carlyle, the Scots-English historian and historian of literature.

4. Should children be made outstanding?

“The greatest of all miracles is that actual miracles can be natural; indeed, they must be.” - G. E. Lessing

“Do not let the sun set without doing something.” - Latin Proverb

“We must believe that we are talented in some area, and that we must absolutely attain it.” - M. Curie

I imagine a family that waits with unbounded joy for their first child, nurtures them with unending love, and can set them on the unknown road to genius, that could also lead to failure...

In Hungary there truly does not exist experience related to this, but we do have critical knowledge of how joy-destroying contemporary schools are. But from our reading we know that many eminent individuals in a framework of family pedagogy, as private learners. Naturally, I never considered this way to be the only appropriate one. Time and again I emphasize that I am a partisan of pedagogical pluralism. I do not reproach parents or teachers who do not travel my road (more or less good, but other); I do not reject pedagogical experiments that are different from mine, and I do not wish to explosively change the entire Hungarian school system. I believe in pedagogical variety, my own method of course included.

However you are now publishing your experiment, known in detail only to a circle of friends, and the basic principles of your pedagogical system, and thus you are handing it over to the international specialist public.

Yes, because my family pedagogical experiment has reached a stage when the road travelled up to now can be generalized to a theory, and the results prove the correctness of my ideas. And on the other hand, the specialist world is at least turning to us with curiosity.

I think that those who are trying to introduce various reforms into the framework of the current schools, and are experimenting with so-called gifted education to nurture the talented are on the right path. But this path, although better than the former one, is not enough. In my opinion we can now transition to the organized instruction (with intentional and institutional frameworks) of truly unusually capable children, whom I call geniuses. Because in this area there has not been much done to pass on my experiences, I am first aiming at this field.

In what form do you foresee the education of geniuses?

I consider two forms of organized genius education realizable (with several variations):

1. One of them is the family pedagogical, or in other words, home-schooled form. One can work in this way with one's own or adopted children (or both). In the latter case, several

families can even work together to complete the educational cycle for children in other families.

2. The other form is the specialized genius-educating school. One variant could be:
 - a. Boarding school, where children live continuously
 - b. The other, a boarding school in a family context

Family pedagogy (in other words, a system of homeschooling) is quite ancient in history. When I was exploring this problem and collecting materials, I encountered a great many cases of this. I give only a few examples. In a book about the Mendelssohn family one can read that without his father, the son Felix Mendelssohn could never have become what he did. His father felt that he would not have fulfilled his filial duty even if he had hired the most eminent teachers for his son. His educational method was extraordinarily rigorous. His basic principle sounded like this: every achievement represented only one step in one's evolution; every good thing could become even better. The message of his pedagogy is that the education of a child is never finished, and parents, while they live, should never stop counselling and "directing" their children.

About Yehudi Menuhin I read that for his parents, the birth of a son and the development of his talent meant that it was self-evidently natural that their lives would be subordinate to the career of their son. His father left his well-developing pedagogical career in 1928 so that the family could live together and he could organize Yehudi's concerts.

It seems to me that this situation was almost perfectly repeated with you... Ten years ago you and your wife left your teaching positions.

I did not mention by accident that I had studied the specialist literature and found myself under its influence before the birth of my daughters. Even independent of this I represented the standpoint that one should strengthen the role of the family in society and promote its activity in the sphere of education. One should not hand over all its functions to the schools. Moreover, if a mature, educationally capable family were found prepared to make the effort, one should promote and support this kind of family pedagogy, working with either one's own or adopted children. Namely, the family creates and maintains the first field of activity for a child. Family members become the first models for a child. A child's concept of identity (self-awareness) is delineated within the framework of the family.

The evolution of exceptionally capable children is greatly favored if the ambition of the parents is directed towards raising them as outstanding people. In all those cases when we encounter a very early revelation of exceptional capability, we are able to determine that either the parents or other people (most often teachers or tutors) made an effort to directly develop these capabilities. According to the renowned German pedagogue Hermann Noth, the basis for education of exceptionally capable children is, "the passion of the mature person in relation to the developing person - in favour of the latter." At the start the relationship is so intimate that the soul is determined to imitate the model and complete the tasks.

In addition, the soul is very important. The anecdote about Socrates is well known, when once the master sent back to his father a youth who had been registered to study with him. Asked why he did this, Socrates answered, "Because he did not love me enough."

If I understand your thinking well, the starting task for education does not consist of parents uncovering talents that are hidden in children like an underground stream, but that they direct and orient them by means of good methods towards the chosen specialty.

Yes, according to my principle one should not try to find talents, but choose an appropriate pedagogical method for developing the talents.

The first characteristic of genius education - I could say the most important novelty distinguishing it from contemporary instruction - and its necessary precondition, is early specialization directed at one concrete field. It is indeed true what Homer said, "A person cannot be experienced or first in everything." Because of this parents should choose a specific field at their discretion. It is only important that by the age of 3-4 some physical or mental field should be chosen, and the child can set out on their voyage.

How would you summarize the essence of specialized education?

Intensive instruction in the chosen field of specialized activity. My daughters, for example, arrived at the field of chess, which means that starting from 4-5 they played chess 5 or 6 hours a day.

What other fields can one also choose, in your opinion?

Anything. If someone wants to become a musician, they should spend 5 or 6 hours doing music, if physics, then doing physics, if linguistics, then with languages. In conditions of intensive instruction a child will soon feel knowledgeable, perceive independence, achieve success, and shortly become capable of independently applying their knowledge. Let us take an example from language learning. Let us suppose that someone visits a class for interpreters at a school for geniuses, where they are occupied for 5-6 hours with a first foreign language, Esperanto if possible. (Why precisely with this language I will clarify below.) After some months they are already corresponding with children in other countries, they participate in meetings in and outside of their country - and longer-lasting - where they experience serious successes, and they converse fluently in the language they have learned by then. Is this a nice feeling for a child? Yes, it is nice. Is it useful for the child? Yes, it is useful. Is it useful for society? It is useful. In the following year one can do the same with another foreign language - let us say English - and in the year after that another.

The same is valid for any field of life. In this way a child really enjoys what they are doing, and they see that it makes sense. In contemporary schools students do not understand why they are learning. But in genius-education schools the children know that after a few months they will speak Esperanto, in the following year English, in the following year German, etc. Or in the field

of chess; in the first year they play at level 3, after the third year at level 1, after five years as a master candidate, after 6-7 years as a master, after 8-10 years as an international master, and after the 15th year as a grandmaster. So the child sees the goal and meaning of their work.

Of course the necessary condition here is that the pedagogue is intensively occupied with the child.

In genius education it is necessary that the pedagogue (whether the parents or professional teachers or tutors) stay in direct, constant and intensive contact with the child. Because of this we imagine groups of only 10-15 members. In practice an intensive collaborative contact between the child and an adult must be formed, in which the child does not feel “subordinate.” Think how advantageous it would be if the child already understands at the age of 10 that they know a great deal, that they are a person of the same value as an adult, and that in their life there is at least one field they master as well or better than adults.

So do children have an advantageous position in genius education?

Yes. According to the American social psychologist Kurt Lewin, one can observe a causal feedback loop between capabilities and the environment. For talented children not a few advantages originate in those specially favorable conditions in the surroundings, that they themselves fight out of for their future. For example, if some patron covers the costs of instruction, travel, or purchase of specialist literature. To this are added psychological advantages.

There are people who think that by specializing early you are promoting some kind of narrow specialist barbarism.

Totally not. Psychology and pedagogy are both familiar with the phenomenon of “transfer.” The formation of capabilities in any field has such a general value that it easily makes a person suitable to assimilate other areas. Transfer means that children learn how to learn - they assimilate the capability to learn.

Specialization of course is only relative; being multifaceted generally accompanies it. If, for example, one prepares for computer programming, they must learn mathematics, computing, foreign languages, and as well they will certainly travel the world, encounter eminent people in the public sphere, do sports, do cultural activities, etc. How is this narrow? Zsuzsa speaks 7 or 8 foreign languages, travels overseas, writes articles and books, analyzes chess matches, plays table tennis, swims, etc.

Moreover, one should interpret development in one direction correctly. Although being directed in one direction means going both deeper and higher, it does not, however, cause the whole personality to become single-faceted. It is true that genius education makes a child specialize in one field, but this does not mean abandoning all other fields. A single direction is not the same as being single-faceted, and vice versa, multidirectionality does not in itself equal being

multi-faceted. Single-directionality can combine with being multi-faceted, while multi-directionality can also mean being zero-faceted, or mere hypocrisy behind which hides a lack of knowledge. Multi-directionality can also mean being competent at no speciality at all, or snobbish “competency.” As Seneca says, “Who is everywhere is nowhere.”

One can easily be convinced that my system brings people closer to being as multifaceted as possible than current schools, which lead mostly to grey mediocrity.

Thus the specialization you promote contains the basic multifacetedness of our times, the complexity of personality.

Yes. One should link genius education to the complex education of the personality, and within this the formation of emotional and moral values. In genius education this task is as important as early specialization. While contemporary schools cannot fulfil their task of education for the greater number of students and subjects, while for them education is merely a slogan, for genius education the formation of a complex personality is a valid requirement, a basic precondition. The reason for this, among others, is that the working relationship between pedagogue and student is very intimate. This “closeness” is itself spontaneously educational, but it is completed by a goal-conscious planned program. One should prepare oneself for educating children as consciously as for specialist instruction.

This is probably an even more difficult field.

Yes, and in this field pedagogical tradition is poorer, and the task itself is unmeasurably more complex. There is no more complex, multifaceted entity than the human personality. Among the goals of education I and my wife consider of first importance the formation of the following traits: belief, courage, strength, persistence, enthusiasm, the objective evaluation of persons and objects, standing up to failure and also the temptations of success, insistent striving for goals, patience, inventiveness, tolerance of criticism even if false, being able to let go of stresses, enduring conflicts (a higher level of tolerance for frustration), discipline, planning, the need for challenging work, establishing realistic goals, conscious management of rest, freedom from conventions, searching for new paths, keeping oneself in an appropriate state of humor (good humor, calm and aggressive at the same time).

In addition we also aim for these kinds of values, world views and moral standards, like the love of siblings, parents and teachers, respect for elders and the aged, realistic evaluation of peers and adults, and that children not prefer the pleasure of physical life, the symbols of the social status of creative work, etc. Linked with this I also want to speak about positive vanity. We told our daughters that they should work diligently, because they could thus become capable of great achievements. We made them aware that there could only be one world champion at a time, so they should establish a goal to become good chess players, sportsmanlike honest people. They should be aware of their capabilities and fight for what belonged to them, never hurt other people. (Unfortunately, they have received enough blows and hurts from life to understand this.)

They should have self-respect, know their own capabilities, but they should not desire to be stars.

An important function of genius education is instilling the capability for self-education. It starts with establishing in the child independent interests. Little by little we can instill in them self-education, independence, and creative work. The pedagogical co-worker cannot always stay at their side. So one of the most important educational tasks is to teach self-education. The latter contributes to, among other things, the child liking what they do, and in their life work is not separate from hobbies.

What, in your opinion, should be the relationship between children and their peer group?

The contemporary psychological and pedagogical literature emphasizes in one sense the importance of the peer group. But in my pedagogical concept it receives a slightly different emphasis. According to me, it is not primarily important for a child to have suitable companions of the same age, but preferably to have spiritually (mentally) appropriate partners, friends worthy of the level of their intellectual capabilities. If the social relationships of a child are exclusively or for the most part limited to groups of the same age, this will slow the progress of an exceptionally capable child.

One often requires that children not stay too long among adults.

This is disadvantageous only if the intellectual level is too different, and if the relationship between child and adult is not suitable, for example, if the adult imposes everything on the child so they take away their independence and initiative. But if they try to correctly develop these traits in the child, it is not damaging, but on the contrary is useful. About this I do not want to say that a child should always be in the company of adults. One must find the right proportion of being with adults and peers. I believe that passing their time in the company of those who have a similar level of intellect and similar interests and sense this well in these interactions is decisive.

Zsuzsa is a concrete example: if at the age of 13 she had played chess only with 13-year-olds, who were weaker than her in many categories, this would have been less than useful for her. And for her opponents it would not have been nice to be “knocked out” in every match. Zsuzsa herself would not have profited, because she needed playing partners at a similar level, and those were found only among adults.

However, this was not a cause for concern, as the age difference itself did not prevent friendly relationships with others, and having good friends and colleagues at the same time. And friendship often flowed from work relationships. Thus one’s work is at the same time a hobby.

You raised all three of your daughters to be chess geniuses. Why? Were they inclined in that direction, or did you guide them in that direction?

As I said, intellectual capability is in principle educable in any direction; by appropriate methods a genius can be formed in any field. From the viewpoint of the pedagogical experiment it would

obviously be a stronger hand if I had raised them in three different fields (mathematics, chess, and music, for example), declared beforehand. This would certainly have been successful. But my financial situation then and my free time did not permit this. If the three children had needed three instructor-tutors, we would have had to go with them to three different places, we would have had to buy a piano, and books about music, chess and mathematics, etc. So in our system, learning was more easily solvable as the children formed one team, and what is most important, the family could be together more. I attribute a central role to the family, and I enjoy it very much if the family is together a great deal.

Is it not disadvantageous that all three children specialized in the same field?

The disadvantages are almost trivial beside the advantages. It is true that some psychologists do not promote this way, thinking that the children will jealous, envious - later even hostile. But this does not occur with correct education.

Can you describe how you imagine a day in genius school?

Probably thus:

- 4 hours of specialist study (for us, chess)
- 1 hour of a foreign language. Esperanto in the first year, English in the second, and another chosen at will in the third. At the stage of beginning, that is, intensive language instruction, it is necessary to increase the study hours to 3 - in place of the specialist study - for 3 months. In summer, study trips to other countries.
- 1 hour of general study (native language, natural science and social studies)
- 1 hour of computing
- 1 hour of moral, psychological, and pedagogical studies (humor lessons as well, with 20 minutes every hour for joke telling)
- 1 hour of gymnastics, freely chosen, which can be accomplished individually outside school. The division of study hours can of course be treated elastically.

Would you accept a job in a genius-educating school like this?

If you are asking if I believe in its success - then yes. But if I were to endeavor to do something like this in practice, that would depend on the conditions, whether I received sufficient social support. It is not only for this that I have been wearied by the many battles up to now, but also because it is very important for pedagogical participants in genius education to have tranquility and trust. Without this the work will not progress. If one must endlessly dispute with the press, with various authorities and poseurs - incapable of acting - pedagogues and psychologists, defend oneself against them, this damages the work. For me a single battle like this is sufficient. On the other hand, I will still have to concentrate for several years on the further development of my daughters.

You have done pioneering work, with its risks and burdens. You have taken on not only a pioneering war, but a guerilla war.

Maybe. Despite this, I think that the method of genius education I sketch is not too complicated a structure. So one should not fear it as much as people do now, however fearsome it seems now.

5. Esperanto: The first stage of foreign language learning

“Over all the earth there was one language and one speech.” - Genesis 11

“A hundred of the grandest ideas would not make as great and beneficial a revolution in the lives of humanity as the introduction of an international language will.” - L. L. Zamenhof

“No privilege for any nation, or any language...” - V. I. Lenin

Before further presenting your pedagogical system, permit me to digress a little. I know that your whole family speaks Esperanto. Did you choose this at random? Or does this function as an aid to chess playing? A necessary part of your pedagogical system?

All of these. But you have not mentioned the most important. Esperanto is for me a humanistic value, which besides being a weapon against racial, tribal and national discrimination, also plays a role as a remedy for linguistic inequality. It has been made to be one of the possible ways to fight for equality and equal rights of the population.

But if it is so obvious, why has this language not spread more widely?

The reason is - besides prejudice - principally economic. Humanity must fight for a long time for every progressive idea. The need to emancipate women is obvious, just as is the necessity to achieve racial equality, despite neither of these being easily effected. For me, genius education is also completely self-evident, but many people nevertheless hold prejudices about it. The same is true of Esperanto. A part of people well feels in circumstances of “divine wrath.” The confusion of Babel means a pleasant living environment for them. There are also those who by intense labor learn 2-3-4 foreign languages and unwillingly give up their acquired position. On another plane, the economically and politically dominant nations also want to dominate linguistically - in current circumstances this relates to English - and obviously would not vote for Esperanto. A monopoly on one or another historical national language means at the same time discrimination against peoples and languages. In contrast, a neutral language, linked to no nation, would manifest the linguistic equality of the peoples. Because of this I consider it a humanistic battle to endeavor to introduce Esperanto. In my concept the languages of every nation are of equal value from the viewpoint of quality, so there should not be a hierarchy of languages among them.

Do you think that historical languages will disappear more or less soon?

No! I think just the opposite: if the languages of every nation are of equal value, then everyone can use their own for their first language. But as a second language, a complement, there should be an independent neutral language that can act as a bridge between the various nations. “Human speech needs two languages,” says the eminent Hungarian author Frigyes Karinthy, “one for nation, family, art, and self-expression, and one to serve the community, humanity, the world, and communication.”

Everyone accepts that there needs to be one or more common languages. But why should this be an artificial language, Esperanto; why not English, Russian or Chinese?

English is undoubtedly the most internationally widespread language, and I recommend that everyone learn it. Next Esperanto! Today this would be natural. Because in most countries English is spoken only by a narrow stratum of people, and generally imperfectly even by them. Its study requires a great deal of time and energy, so it can hardly become a world language for a great number, for the simple uneducated masses. It presents an unacceptable disadvantage for those who live outside of English-speaking regions, and it would overshadow non-English-speaking cultures.

Why Esperanto should rightly be chosen as a world language is easy to prove theoretically. From a pedagogical and sociological viewpoint, Esperanto is a consciously planned created language. It has become a living language which will have, and already has now, its own traditions. It has a past, present and future. Among existing planned languages it has proved without a doubt to be the best, the most conformed to its goal. Logical, easily learned, and capable of expressing every nuance, it can function as a tool for communication in the international community, and is suitable for mass distribution. It can become a common second language for the masses. Lev Tolstoy wrote that Esperanto “completely fulfils the requirements for an international language. I will endeavor to spread this language and, which is paramount, convince everyone of its necessity.”

Why do you argue so unambiguously for Esperanto?

Because Zamenhof (1859-1917)’s planned language is perfect from a logical and linguistic perspective; its grammar is clear, transparent, without exceptions, and at the same time capable of expressing anything. Its syntax is easy. Zamenhof, who knew Russian, Yiddish, German, Polish, Hebrew, French, English, Latin and Greek well, created it not from an artificial, invented vocabulary, but from the living word-stock of the Romance, Germanic and Slavic language families and international vocabulary. Thus its vocabulary seems “known” to many speakers of other languages. From time to time, arguing for Esperanto, I give a decisive and sufficient proof: “Now I will say a few phrases to you, and you will certainly understand them.” And this has truly happened.

Say a few of these phrases!

“Esperanto estas internacia, simpla kaj logika lingvo. La ŝako estas ludo, scienco, arto, kaj sporto. Zamenhof estis genia homo. La nova libro estas interesa.”¹ It is probably not necessary to translate these. Learning this language is also important because it is like a logic puzzle, an

¹ “Esperanto is an international, simple and logical language. Chess is a game, a science, an art and a sport. Zamenhof was a person of genius. The new book is interesting.”

exercise in logic. It was not by chance that the French Academy of Science determined in 1924 that Esperanto is a masterpiece of logic and simplicity.

Thanks to this it is advantageous from a pedagogical perspective?

Yes. Its vocabulary is easily learnable, its grammar is rapidly assimilated. Its orthography is phonetic and its pronunciation melodic. It is learnable almost ten times faster than other languages, and it also serves as a foundation on which other languages can be constructed.

Related to this, the research of the American psychologist and pedagogue Thorndike, who carried out a lengthy and massive experiment in various schools, is worth mentioning. First Esperanto was taught in various school periods at various levels, and then French was introduced in similar conditions. Thorndike emphasised the great pedagogical significance of Esperanto in the results of the experiment: learning Esperanto proved to be 15 times easier than other foreign languages, that is, its instruction was that much more effective.

And it has been proved that time dedicated to Esperanto is abundantly repaid when learning following foreign languages. It is generally known that possessing one foreign language makes assimilating a second one easier. While for solidly learning a foreign national language (English, for example), around 2000 hours are needed, for learning Esperanto only 200 are needed. If the knowledge of Esperanto shortens the time needed to learn English only 20% (and current experience confirms this), then for the two languages together we need $200 + 1600 = 1800$ hours, so less time than if we learned only English.

I propose to effect this principally now, when we are transitioning from Russian, up to now required in Hungarian school instruction, to other languages. Here is a chance for the government and the leaders of educational institutions to restore what they abandoned, and introduce the choice of Esperanto - of course, they should produce the propaganda necessary for this goal. This would also be useful for teachers; it could be an obvious and rapid solution for training current Russian teachers in a new language area.

Permit me to mention one pedagogical perspective again. The relatively rapid success of learning Esperanto can contribute to avoiding the feeling of inferiority caused by students' supposing that they are not capable of learning languages, and the growth of linguistic inhibition. Esperanto brings the child a rapid sense of success in the field of language learning. If Esperanto could play a role in school merely as a logic game, it would still be worth introducing it as a compulsory subject.

What is the character of Esperanto as a cultural movement?

Esperanto is not only a language, but a symbol of the fight for linguistic equality, and also a movement with a very wide network of international organizations, conventions, and gatherings. Even children's conferences are arranged. Almost every significant specialist area has its own global organization, as does chess.

Esperanto is at the same time also a spontaneous community movement. For example, the subscribers to the "Passport Service" make overnight lodgings available free of charge in 50 countries of the world. Esperanto is a language of both scientists and tourists.

It is undoubtedly a multi-faceted language, but it has not so far leaped over the obstacles mentioned above. Is it possibly not suitable for literature?

It is certainly suitable! One can express any nuance, any feeling, in the language. Many works of world literature have already been translated into Esperanto, and it even has its own literature. Permit me to list only a few statistics. Esperanto textbooks appear in about 100 languages. There are over 100 Esperanto specialist dictionaries. Radio programs in Esperanto are produced in many countries. There are more than 10,000 Esperanto-language books, and there exist thousands of original Esperanto works. Around 100 magazines appear monthly in Esperanto. I have also published pedagogical papers in Esperanto, and these have been translated into many national languages.

How are Esperanto and chess related?

By function, of course, they are not related. But the fact that they are both based on pure logic and artistic life creates a similarity between them; also, they both bring people and nations closer to one another. Moreover, a few chess problems were published in 1892 in the magazine "The Esperantist." Since the 20s, chess books have been regularly published in Esperanto. At the Budapest conference of the International Chess Association (FIDE) in 1926, Esperanto was proposed as a language for organizational matters. This proposal was not accepted, but the association took the point of view that although Esperanto would not become an official language, it would nevertheless be ready to work together with the movement. Since then the contact has stayed close. For example, I almost never attend foreign competitions without encountering Esperantists among the organizers, competitors or the public. I can add that not only chess players but other athletes support Esperanto. In 1965 a group of Hungarian athletes - among such people as Laszlo Papp, Gyorgy Karpati, Andras Balczo, Ferenc Sido, Gyorgy Szepesi, Dezso Gyarmati, Gyula Zsivotzki, and others, the most outstanding Hungarian Olympians, petitioned that Esperanto be made an official language of the Olympic Games.

You are completely enthusiastic, speaking about this. Obviously this is about something more than merely logic or rationality. I know that you are a strong pillar and organizer of the "Talent" foundation supporting Esperanto culture and scholarship.

Yes, and of course I willingly donate my writings, expertise and ideas to an institution whose charter contains, among other things, the following:

- The development of children's talents to a high level.
- The dissemination of the Esperanto language, and the distribution of its related way of thinking and culture.

- The protection of the environment, and practical realization of environmental education according to the principle “Think globally, act locally.”

III. Chess

1. Why chess?

“Who thinks it merely an art is a bad chess player. Who thinks it merely a sport is also a bad chess player. In the end there can be those for whom chess is a science. Those are no less bad chess players.” - M Najdorf

“Mental activity is possibly the greatest pleasure in life; and chess is one kind of mental activity.”
- S. Tarrasch

“Chess is for me the whole world, but the world consists not only of chess.” - A Karpov

Why did you and your wife choose just chess as the object of your experiment?

When we began the practical foundation of our genius-educating theory, at first we planned to experiment with mathematics, chess and foreign languages. Influenced by several factors, we decided in the end in favor of chess. The following factors mainly motivated me:

- We desired to prove our theory in the field of mental creativity, because such experiments had happened neither in Hungary or elsewhere.
- In this we chose chess because we became convinced that - compared with other fields - one could attain measurable results more rapidly, and principally because here the system of evaluation is more delineated, more established, and thus more objective and precise. This allows proving the success or failure of the experiment more singularly. We decided correctly, for then we did not even imagine how many difficulties we would have to surmount during our work. If we ourselves, and even the girls, had not been able to show and prove the results, the attacks would have been much more inhibiting for our work. It is much easier to objectively prove who is better and stronger in the competition at the chess board.
- In our preconceptions, chess is a complex cultural phenomenon, specializing in which brings fewer dangers. It is an activity that can be done not only at a young age - anyone can actively compete from infancy to old age - and it can develop the kinds of versatile capabilities in a person that one can use well in other areas, in other specialties, spending one's life at a high level, even after a sudden change, if for example one tires of the game of chess or for another reason abandons it. Therefore specialization in this field does not make a child's future uncertain on the occasion of eventual failure or fatigue.
- The fact that after our first child a daughter was also born gave a further motive for the decision. In addition, we could establish a goal to prove the similarity of the intellectual capability of boys and girls - and what was most important, in the field which until then had been cited as proof of the opposite.
- In the end, we decided that chess in itself is a complex, very valuable, and beautiful activity: a game, a science, an art, a sport, and a psychology simultaneously. Tarrasch

says wittily, “I pity people who do not know how to play chess as I pity those who are not able to love. Chess can make people as happy as love.”

I have heard from many people, “Well, yes, those Polgars have become famous people, but chess is not really a very complicated affair. If Polgar might prove the same in another field, let us say linguistics, mathematics, or music...!”

I am certain that I could fulfil this work in other fields as well; this follows directly from the essence of my theory.

Is chess not very complicated? I think that doing anything at a high level in any field is difficult. Chess is neither easier nor more complicated than other spheres of activity. (Although in it one can hardly cheat!) Those who know and appreciate the game of chess all say that it has the same cultural value as any branch of science or art.

Can the game of chess be compared to science or art? Is it that multi-faceted?

The secret of chess lies in its complexity. In that it is simultaneously a science, an art, a sport, and a game. Behind these four traits many others are queued that even today I verbalize with difficulty. Something like that chess is at once these four, that it is complex. The fifth trait is complexity.

How much is it a science?

In as much as it is not chance that produces the final result (as in card games). Chess has a continuing framework, an internal logic, and it is recognizable, analyzable and unhideable for everyone. We can learn its rules by analysis, synthesis, and intuition, and apply them with great creativity. It is thus like other sciences. For example, it is like mathematics, where we have a task to solve, for which we must find a formula or some way of solving. The same applies to chess. We have a position in which we must find the objectively best possible move, we must invent a plan, that is, a way which on the basis of the knowledge of the objective rules leads to the best result. Each phase has its theory: there is a theory of openings, mid- and end-games. Various strategies and tactics have been formed, etc.

Science is that whose results have been shown to be useful for humanity...

Chess is also useful because it satisfies some societal need of the person; it is a spiritual entertainment, a sport, a game, an art. Chess satisfies these needs - with scientific demands.

On this basis we could speak in the same way about the theory of sport in general, about football or swimming, in concrete terms. Or does the theory of chess mean more than these?

Definitely more, because those are physical sports, and although they also have theories, a footballer does not need to learn the theory of football to play well, does not need to study a library's worth of literature.

This is true, but specialists, trainers, and researchers who want to write about it must become acquainted with the theory.

In the final account, yes, but in chess it is not only about this; those who accomplish the activity (chess players) must assimilate the science, and competition itself acts to create the theory.

If you play a variation in chess and it proves bad, you lose, and you must correct it. If you fail again, you must try another time, and while you do not assimilate the right way to solve things at a scientific level, you will not become a successful player. It is not sufficient to know the theory of chess, one must always creatively reinvent it. The player must be a discoverer, and without this no one can achieve success in competition today. To create a new idea in chess today almost demands a scientific team.

I agree with this. I see that you have a database of 4,000 volumes and 200,000 matches, and to develop possible variants the girls did typical laboratory work. But how far can this research work be taken? Are there no signs of exhaustion?

Although chess is a relatively closed system, I claim that it has not been completely discovered. A single person will certainly never be able to completely discover it. Human capability and knowledge always have limits, obstacles, and imperfections. Do not forget that chess is also a sport. Its exhaustion has been feared many times, but the more scientific it has become, the more that has been learned, the more new problems and tasks to solve have been found in it.

Is it also an art?

Yes, chess is also structured by the rules of beauty. A tactically and strategically consistent match is not only logically impressive, but also emotionally and aesthetically, and the discovery of an unknown technique (eventually a combination) gives not only knowledge but also an artistic experience. Because of this there exist prizes for beautiful matches; they give pleasure not only to those who create them, but also those who watch or later play through them. The same as in other branches of art: for the creator and the receiver, that is, "re-creator," the same aesthetic experience, the same emotional effect, is given, that can lead to an internal purification. Chess is a "miracle." Chess compositions, problems, or analyses of chess are artistic works.

How does one choose matches that are worthy of prizes for beauty?

There are two kinds of matches worthy of prizes for beauty. One is a game without errors, played with logical precision (one could say with scientific foresight); the other is a victory constructed on an original progression, or a surprising trick.

Have your daughters ever had games worthy of prizes for beauty?

Of course, but not only games that win prizes can be beautiful, like superb works of art; prizes for beauty are only given in a few competitions, and it is not required to give them. Most of the most beautiful matches never receive a prize for beauty.

How much is chess a sport? The public understands sports most often to be activities with physical effort.

First let me speak of a matter that is not sufficiently known to the public. Chess as well demands a strong physical state. It is not by chance that every prominent chess player also practices some physical sport as a supplementary activity. My daughters play table tennis or swim 1.5 to 3 hours a day.

What kinds of sporting values can we talk about in chess?

The same as in other sports. Sport is a regulated competitive activity with fixed rules and judged by the results achieved. These characteristics apply also to chess. It is similarly a competitive game realized with fixed rules, ranking the players on the basis of their achievements (currently mostly by Elo points and competition results); and chess requires regular preparation and participation. Chess is one of the most popular so-called great branches of sport, like football, ice hockey, basketball, or tennis. There are both amateur and professional competitions. It has spectators and participants including legitimate professional competitors.

Chess develops characteristics like those of athletes: willpower, competitiveness, the drive to win, a strong physical state, a competitive routine, etc. It includes rules of sportsmanship and consequences for violating them. And in chess the result is decided in competition, and a better or worse place follows one's current state of preparation or tuning. Aside from many joys, the game can cause some sorrows, because one's current achievements are always measured in competitions, and one can be at the same time a good chess player and a bad competitor.

And chess has its rules of justice, and there are forms of conduct that do not conform to these. Some unsporting things are whispering by kibitzers or timers, or the use of tricks off the board (for example, if one blows cigarette smoke in the opponent's face, nibbles something, or kicks the table or even the legs of the opponent, etc.). In the same category is psychological warfare: slander of others, unfounded gossip, unjust press campaigns, and the like.

My standpoint on this question is rigorous, and coincides with the opinion of, among others, the Soviet grandmaster D. Bronstein: every technical trick, feint, or ruse is permitted on the

chessboard, but off-board psychological or physical deceptions influencing the personality of the opponent are damaging and, morally, must be refused.

By means of chess I also want to form the personalities of my daughters. I always say to them that it is more important that they are people - virtuous, honest people. From this it follows that my daughters always play fairly. This means that they do not cede even half a point to one another. For example once Zsuzsa had the chance to win a competition with a monetary prize, but Judit, in the penultimate stage of the competition, did not cede the half point necessary for this.

So your daughters PLAY chess?

Of course, the game of chess is by its nature, and not just etymologically, a game. It is a practical activity not merely in competition. There do exist professional and amateur competitions, but chess also has an entertaining form. People play it in cafes, in plazas, on beaches, among friends, at family tables - at beginner and the highest levels. Something interesting: it is enjoyable at every level! The game as a game is also a part of high-level competitions. A superb quality of the game - compared to sport or work - is that it is not a required activity, but a freely chosen hobby. Chess as a game is a creative and self-improving occupation, and thus it gives a pleasant and enjoyable feeling. My daughters like playing chess, so for them it is in one sense also a game.

I am inclined to believe this, because I once asked some second-grade elementary students, where I teach chess, if they felt sorry for the Polgar sisters, because they played chess 5-6 hours a day. They answered, No, why would we feel sorry for someone who played so much?!

We see that children often understand better, or sense things better than adults. Many times people have asked us, full of concern: are we not damaging our daughters, are we not depriving them of their childhoods, do they play enough? These questioners do not understand that our daughters like chess, and for them it is also a game.

So chess is not only a serious job, but also a game with cultural value?

Yes. High level activity can transform the one into the other. Scientific work also has an artistic character, high-level art is founded on science, and highly-evolved sport is based on scientific foundations, and also presents artistic elements, and we find a bit of play in all of them. And even a game can have its science. And again: the fact that chess can also function as a method of communication establishes direct interpersonal contacts.

This is probably the last taste of honey in the jar, thanks to which many pedagogues think that one should include chess as a required subject in elementary school instruction. (The renowned Soviet pedagogue Sukhomlinsky says this also, as does the developer of a new type of educational system in Hungary, Jozsef Zsolnai, who wants to integrate it in his system.)

I agree with this, but one should be careful not to take it for a traditional required subject, and thus making the children afraid of it. It would be right to introduce it in general instruction, and not only from the specialist viewpoint of sport, but also for pedagogical reasons. We know, for example, that it is difficult to teach a child who is sitting for a long time in the same place. By means of chess one can get them to sit this way. Because of the game-like nature of chess, one can easily teach the children how to concentrate. With the help of the game they would learn to develop their persistence and capability to concentrate. Chess makes one accustomed to structured problem-solving.

I do not claim that one should prefer chess to drawing or music in school. But if there were, for example, six first-grade classes in some school, then one should require a choice between drawing, music, chess or even bridge eventually. I do not know why one or the other should have a higher priority. One can learn and also educate children by means of chess.

In my opinion, aside from school instruction, one can apply chess in several other fields. For example, Dr. Tamas Bartha claims it can apply in training managers, as specialists in management. Indeed, managers often face similar dilemmas in practical life to chess players. Clearly this also applies in several other fields. We can truly rejoice that this game or sport currently enjoys a growing popularity. Do you have a proposal for how one could grow its popularity as a sport even more?

Of course. One can introduce varied novel forms of competition and games. For example, a pair could play against another pair, alternating moves. Chess players call this a game for four hands. In this game variation one could form homogenous or mixed pairs (women and men) and the length of games would be decreased.

One could arrange so-called blind competitions (not for blind people or the visually handicapped), in the same way as decreased time limits. One should popularize competitions with 5- and 30-minute matches. One could organize telephone, fax, radio and television matches more often. A great disadvantage of chess competitions with traditional time limits (for the competitors as well) is, that they drag on for a long time, sometimes for several weeks, always causing greater and greater stress. They require long absences from one's family. In addition, the organizers must spend more, and eventually the spectators do not have the time to observe the games. Slow games are boring for lay people.

In the practice of qualifications, it would be worth considering introducing three steps of grandmasters for active competitors: super-grandmaster above 2650 points, grandmaster above 2550, and candidate grandmaster above 2450.

Chess should be accepted for the Summer Olympics. One should organize a yearly individual and team world championship competition with several game time limits (5-minutes,

30-minutes, standard time). All this would increase peoples' interest and attract more recruits, athletes and amateurs around the chessboard.

2. How did the Polgar sisters learn to play chess?

“In chess a partner is as essential as in love.” - S. Zweig

“Chess is preparation for life.” - B. Franklin

“One cannot play chess while the house burns.” - Italian proverb

Public opinion considers you a chess teacher, and believes that this is the field where you can certainly add something. Some people are even convinced that you are hiding a secret.

So I will reveal it: I have applied my general pedagogical concepts in a specialist field. I could apply them to others as well. I am certain the results would be similar. There is no magic even in chess instruction, so I want to “warn” those who are expecting to discover miracles. The main pedagogical method and explanations of basic psychological ideas can be found naturally in pedagogical, psychological and technical chess textbooks.

There is at least one aspect of your method that astonishes everyone: namely your results in the field of chess pedagogy. How did your daughters learn to play chess at the age of 4 or 5? How can one achieve disciplined and continuous work in infants?

One thing is certain: one can never achieve serious pedagogical results, especially at a high level, through coercion. One can teach chess only by means of love and the love of the game. If I may advise: one should make sure that before everything the father or mother should not diminish the child’s habit of chess playing by too much severity. We should make sure not to always win against the child; we should let them win sometimes so that they feel that they also are capable of thinking. In this way we should bring them to a feeling of success.

How would you formulate the essence of your instructional methodology? What lies in it that makes you so successful?

I think that there is nothing astonishing in it, nothing secret: I try to apply my psychological and pedagogical knowledge to chess instruction. Of course I supplement this with my own ideas, and try as a consequence to realize it in practice. Self-evidently I always look for suitable co-workers who are prepared to help me.

At the start it is most important to awake interest. We should make the child aware that who learns this knows this. And chess is learnable. If we educate the child such that they can be a partner, can accept, create, and initiate, then we can always entrust them with more independent tasks. We should get the child to love what they do - to such a degree that they do it almost obsessively. The Hungarian psychologist Tamas Vekerdy warns of the same thing, that infants more easily master things that awake and draw their interest, their attention. And even at the beginning, the child should feel joy. We should not be angry, if they jump around here and there during a chess game; indeed, it is a known fact in psychology that even though a child

might frolic aimlessly because of their age-appropriate character, their thoughts can still stay on the task. We should not tell them everything; we should try to get the child themselves to say something! We should not ourselves make all the moves; we should try to get the child themselves to make the moves! This is the so-called Socratic method, and the essence of instruction in problem-solving - projected onto chess.

Of course great success is not achievable without motivation. At the age of 5-6, if the activity is sufficiently interesting, success can also function as a strong incentive. Stimulation, encouragement, and instilling passion and trust are very important. If the parents and tutors tell the child that they are foolish and bad, the child will probably truly believe this. But the opposite also applies: if we say that they are clever and skillful, they will believe that as well. They often truly believe that, and try harder to actually become so. I consider it a basic principle that success is extraordinarily important. When I began the experiment, I thought that although I would not let my daughters avoid failure, they would nevertheless need to grow up accompanied by success. The proportion of failure to success should be 1 to 10.

Should one apply all this according to the nature of early childhood?

Of course, one should make everything appropriate to the stage! With regard to the content of instructional materials and also the duration of instruction, one should start from the traits of the age of the child, and tailor the tasks for the optimum ability of the child. At first we should only play chess for half an hour; after some time a bit more. After a week we can extend the duration. At first we should solve only simple problems, and with the passing of time we should always progress to more complicated ones. One should get the child to play a great deal, but always with suitable partners, who have a generally similar playing ability. On some occasions they can be weaker, on some stronger, so that the child experiences what winning and losing are like. But one must certainly find the right proportion. In childhood they should play rapidly, so they should play many blitz matches and those with a short time limit.

I know that you possess a large library and card file system with 200 thousand records. How did you use this at the start, and how are you able to use it now?

We have a library with 4-5 thousand volumes that greatly helped with the children's instruction and learning. It is well organized and provided with several different catalogues. We organized the card file system (which we have just supplemented with a computer database) by the names of players, variants of openings and types of middlegames. The girls knew how to use it from a young age, and if they need anything, they can find it in seconds. The chess books serve us as manuals.

We use the card files for openings as a first step in inventing new openings. For a single variant we look through 50-100 matches, to choose - mainly for comparison - the most appropriate, but my daughters themselves are capable of inventing novelties. And because this catalog contains complete games, they can on those occasions study the middlegames of those matches. The database is similarly suitable for writing articles and analyzing matches.

We use the catalog by names to prepare for opponents. We developed the catalog of middlegames for two purposes: one is strategy, the other is the tactics of middlegames. A section of middlegame strategy contains 40-50 types. For example, an isolated pawn, castling long, occupying open lines, etc. In a section of tactics, for example: gambits for major pieces in squares f7, g7, h7, g6, h6, f6, d5, c3, or intuitive pawn and major piece gambits, etc. If I want the children to look over some type, for example, they research 50-100 examples of it, and after this study they become informed enough to be certain of the legalities and induce generalizations. We do not have an organized collection of end-games in the form of card files, but we have enough related books. The encyclopedia of endgames published in Yugoslavia, and the collection of pawn and rook endgames, etc., are very good material. They substitute for the most part for the card file.

Children at an early age like mate combinations of two or three moves very much. These are not too difficult, but aesthetically very beautiful and entertaining and help the children master the mate, develop their combination ability, and enjoy the game of chess. We have already released two books about two-move mate combinations, and we still have a lot of material in manuscript form.

Doesn't problem-solving in repetitious topics contradict the idea of independent creative work?

Of course not, because we do not do the problem exercises only in the form of topical problem-solving. The children have worked through a great many of these kinds of books, where the problem topics are mixed, or where they are not arranged by topic.

And competition means the exercise of independent creative work; as does the analysis of their own competition matches (and often their publication in the press). With regard to competition, it is very important that the child take part in competitions that have a suitable level for their ability. In a too strong competition an onerous failure might occur for the child, and in a too easy competition they do not develop their skills, nor do they experience success. If the child loses in competition, we should never reproach them: losing is sufficiently painful for them. Rather we should console them and encourage them to further work. We should help them discover the reasons, shortcomings or errors and correct them. We should be attentive to not only enduring and mitigating failure, but also to having too much self-confidence, for this is as unrealistic as a lack of self-confidence.

What do you think about blindfold games? I know that all your daughters play well with their backs to the chessboard.

The development of chess memory is very important. In competitive chess one plays for a fixed time, so a good memory capacity helps save time. In contrast to science, here we may not use manuals, so rightly or wrongly we must memorize the concrete information. We also may not move the pieces to work out variations. We must analyze and plan in memory, and it is not irrelevant how many moves we can calculate beforehand, think through in memory. For a good

blindfold player this happens more easily, better and more precisely. Blindfold games develop spatial visualization skills, thinking about the whole board.

How can one develop their blindfold playing?

First by visualizing matches. Later, by developing positions (that is, continuing a game from a given situation) from diagrams, analyzing board positions without moving the pieces. Finally, of course, by playing many matches with one's back to the opponent and the board. Memory exercises also give information, enlarge and develop the imagination.

What do you think about blitz matches, where the players only have 5 minutes each?

Many fear that this makes the game superficial, and hinders profundity and concentration. I think that these kinds of games are not generally damaging: they are obviously even useful. A chess player must very rapidly - precisely and well - look over the chessboard on many occasions. Let us think about time pressure during a match. During a competition game it is not irrelevant what kind of first idea comes into our head, and also during analysis or at school how rapidly we progress should not be neglected. By means of blitz games we can exercise ourselves very well in opening variants. It is natural that we experience the utility of blitz exercises most in blitz competitions.

You mentioned that the girls regularly write specialist articles for foreign periodicals. Why is this important?

If one writes an article, one considers a matter more deeply than without a goal, thinking alone or speaking with someone about it. One of the best methods for developing one's ability is to write articles, essays, and books. This requires conscious preparation and active analytical work.

Do you consider foreign languages as tools for helping to work in chess?

Yes, they are doubly necessary tools for working. On the one hand, it is necessary to study the (foreign) literature, on the other a chess player is a world traveler, so they need to interact with companions in the sport and others. Thus I attribute a great significance to foreign language instruction. But right now I think that for Zsuzsa fewer languages would be sufficient. The two younger girls first learned English and Russian, and I will encourage them further to learn Esperanto more deeply. (Zsuzsa has learned 7-8 languages, and this has clearly slowed her development in chess.)

To which should we attribute greater significance, in your opinion: the theory of openings, of middlegames or the theory of endgames?

It is very important to find the right proportion. When teaching children, one often neglects learning endgames, and later vice versa, one over-estimates their significance. I always claim that a chess player, in every stage of their development, should spend more or less equal time studying these three parts of the game. Later they can devote less time to the endgame, which one uses less often; openings and middlegames are in every game, but not every game develops to an endgame. This does not mean that I underestimate the importance of studying the endgame.

How do those who neglect opening theory instruction in infancy argue?

They claim that one should start with the endgame, because in it there are fewer pieces on the board, so the child can more easily look over the situation. They are incorrect. An endgame can be very easy, but also very difficult. It is not the number of pieces that determines the difficulty of a problem. A middlegame combination can also be easy, interesting and simple; even some variations of openings. In my opinion, one should teach all three areas at the start as equally important, so that the child's problem-solving can develop in all areas. For a successful competition game one must open the match well, orient oneself in the middlegame, and successfully close the match in the endgame. If one begins with a bad opening, things will be difficult from the beginning of the match, possibly irreparably, and this will soon result in the end of the game. The argument that for learning the repertory of openings it takes 2-3 years also supports the idea of studying openings early. One must assimilate endgame theory not by mechanistic grinding study, of course, but principally by analysis, discovery, and creation of novel variations...

You have mentioned several times that many people at many times have posed obstacles to your daughters' development, instead of supporting them. Does this influence their style, or decelerate their development?

This self-evidently influences their style. Zsuzsa, who has received the most "blows to the cheek," has become the most careful player. It is easier for her sisters, as they can face the "powers-that-be," representing the authorities, three at a time; thus the negative effect of decelerating forces affects their futures less. But if their development had not been decelerated they would certainly have progressed even faster.

Representatives of political organizations caused the greatest damage; power is in their hands. The responsibility for this falls even on the "highest" leadership, because people advised or referred to him in situations that discriminated against us. Sandor Szerenyi, the ex-president of the Hungarian Chess Association (he resigned in 1989) even now, in a just-released interview said, "I always acted in line with what I agreed with Janos Kadar [chief secretary of the communist party], Istvan Buda [minister of sports], or with other comrades occupied with sporting affairs."

For what do you blame the leadership of the Hungarian Chess Association?

They did not help with our specialist work. For example, for many years they did not send my daughters to youth world championships, although my daughters were the best in the country. They wished to remove Zsuzsa from the top of the women's world rankings. This effort led to Zsuzsa in fact being removed (to the second place); Chiburdanidze went ahead of her - unjustly - because she received a "gift" of 100 points to her score.

Not just then, but only after several years, they presented her to the International Chess Association (FIDE) for the title of women's grandmaster. They misled public opinion in the press. They did not send Zsuzsa to the men's competition, although she had qualified for it in the Hungarian men's championship. For several years she was not allowed to travel to foreign competitions - whether in capitalist or socialist countries. (The Ministry for Internal Affairs refused our written request for a passport completely until the middle of the 80's, declaring that "your extraterritorial travel is harmful to public order.") They did not trust our daughters, did not establish a tranquil atmosphere around us, and I could go on endlessly...

Even now we are pressured by concerns about a lack of tutors. Our daughters stand in vain at the top of the world rankings, they were first in the Olympic Games in vain, they won gold medals in world championships for their ages, and Judit received an Oscar prize in vain. Zsuzsa has not had a tutor or training partner for several years. The situation of the younger girls is not much better. Although with Zsuzsa they form a small team, a specialist work group, this in itself is very little. Only now can we expect a minor step forward in this area - we will soon receive help from other countries. A Dutch patron is now altruistically paying for a training partner for the girls, and he has similarly bought a personal computer for them that is useful as a work tool. A German journalist provided us with a database program. He also taught the girls how to operate the machine.

Does the Hungarian press influence your work?

It does, and very unfavorably. We would have progressed more if there had not appeared many years of attacks, malicious articles that falsified the facts. We also had lawsuits with the press. Although we won all of these, we nevertheless have no wish to be endlessly fighting legal battles; for us relatively tranquil preparation and good work is more important.

What kind of press response have you had in other countries?

People write about us, whether in specialist, psychological or pedagogical matters, with the greatest acclaim. This recognition increases our belief in the work and our persistence, and signifies a clear success for us. Naturally this brings recognition for Hungarian chess and Hungarian pedagogy and psychology as well. Almost 40 thousand articles have appeared about us up to now.

Now a specialist question: do your daughters play a game of combinations or position?

The younger ones prefer combinations, while Zsuzsa prefers positions. A truly great player must alloy both styles. Unfortunately, Zsuzsa has had many tutors who represented the positional school, and thus after some time she took it on. Now she finds herself at a stage where she is recreating her style. V. Korchnoi has convincingly warned how one can change styles: "I did not know how, and did not like, to attack; defense was my milieu. My opponents often used this one-sided strategy: they intentionally threw away a pawn, because they were certain I would capture it. And often severe consequences followed. I came to understand that I must vary my style, and that I needed to know attacking and fighting for initiative." And Zsuzsa attacks well and knows well how to combine; she merely needs to "take back" her caution a little. The outstanding Hungarian chess player Geza Maroczy said, "Whoever sits at a chess board without wanting to win, and needing to win, who only hopes that an eventual inattention of their opponent will help them to an unexpected lucky point, and who considers their opponent stronger, can never achieve success. For the cowardly chess player there is no joy in a competitive game, but pain, torment, and psychic stress."

What do the children think of themselves?

Ask them!

I asked them. They unanimously said that Zsuzsa is a thoughtful positional player, Zsofia prefers risks, and Judit - although she is closer to Zsuzsa - tries to alloy the two styles. Related to this, I am interested in what makes, in your opinion, a good training partner?

They should like their work as a tutor and training partner. They should be honest, have experience in training and competition; it is useful if they also compete (old achievements in themselves are not sufficient, mainly if they are accompanied by pathological vanity). The personality is important. They should be ready for collaborative work, intimate reciprocal communal activity. The young competitor should not be able to always do everything with them. They should be self-critical, and the development of the student should be important to them. They should take care that their disciple not always be attached to them. If they have a great reputation in the field, they should criticise very carefully; this can have a very great effect.

They should respect the young competitor, trust in them, and strive to create a tranquil atmosphere around them. It is not sufficient for them to only oversee and direct; they should encourage and influence the development of the disciple, but take care not to paralyze them.

They should know how to treat the young person fairly. They should encourage attempts at original competition research. They should be capable of expressing recognition, they should know how to praise the worker and the successes of other. They should avoid indifference, be enthusiastic ("Enthusiasm is something infectious" - wrote Selye), and they should be suitable for raising this ability higher in others.

You are a father, a tutor, and a manager in one person. How do you balance these functions?

These three functions were interwoven in fact only at the beginning. Today my daughters are so superior to me that I cannot be their tutor. I only organize the training team. I am their father-manager, and I will say sincerely that I only play even these two roles with difficulty.

It would be easier to only be a manager without a fatherly role, or a father without managerial functions. The biggest problem is that a father can only with difficulty demand that the child complete these difficult training tasks, which - well, let us say - children do not do willingly.

I believe this; it is indeed known that fathers - out of "love" - often do not even demand a minimum of discipline from their daughters.

This is not only a question of love. A tutor who is not a father to his student may dismiss one who does not complete the tasks according to his demands. But with one's own child, he cannot do that. The trainer father of our European table tennis champion Csilla Batorfi says the same: "It is hard for a father to demand something that is tedious for a child, they may even dislike him for that."

However, we should not make too much of this problem. It also has an advantage: if the child loves me, they will complete everything more easily.

The three girls together possess around 40 Guinness World Records. It is obvious that they beat each other's records. But let us switch to another topic! How does the press evaluate the chess achievements of your daughters now?

The press of the last year has responded very positively. I will cite several opinions as specimens. I must say that in past years no one believed that women could also - at least almost as well - play chess as well as the most skilled men. One must compare this with current statements!

M. Gurevich (one of the strongest grandmasters in the world) writes in *Actuell Schachmagazin* (July 1988) about Judit: "...this girl is a giant. It is completely certain that no one has shown this kind of result at 12, including world champions Fischer and Kasparov. In which Bible is it written that the world champion of the 2000s must be a man?"

Grandmaster Keen (*Chess*, 1988-08-08): "If Judit can sustain the admirable arc of her success, then it seems completely probable that around the turn of the millennium she will be able to take on the role of a challenger in the world championships. At the age of 12 neither Fischer nor Kasparov, nor Nigel Short had walked at such a high level of success."

In the *New York Post* (1988-09-10), grandmaster A. Soltis directed the following question to the ex-world champion Tal: "Who has the greatest chance among current chess players to step in the place of Kasparov?" Tal: "Ivanchuk and Judit Polgar."

Under the title "The Wonderful Polgars" the *Spectator* (London, 1988-10-29) writes: "Judit is the most extraordinary phenomenon in the history of chess... At such a young age no one - even

Kasparov - was as good... nor Bobby Fischer... Go anywhere and bet that at the end of the century the world champion will be a woman."

Daniel Molnar (*Reform*, Budapest, December 1988): "When I asked Kasparov if he considered it possible that in a few years they would be opponents [speaking of Judit Polgar] for the title of the 'men's' world champion, first he explained a bit about the difference between the male and female brain, and later with a sudden 'Although God knows!' he ended the interaction. Grandmaster Speelman (a candidate for world champion) declared with English phlegm, 'I do not understand how anyone believes this impossible'."

On the title page of the chess journal *New in Chess* (February 1989), under the photo of Zsofia one read "Super-Sofia." In *Inside Chess* (7/1989) we find, "Zsofia conquers Rome! This result was willingly accepted by even Kasparov and Karpov."

In his article "Judit is better than me this time," which appeared in *Reform* (1988-04-05), Tamas Harle puts the following question to Karpov: "What do you think about the Olympic achievements of the Hungarian girls?" Karpov: "If they sat at the chess board again, I would give a greater chance to the Hungarian women." Harle: "How much do you think the Polgar daughters will achieve?" Karpov: "Zsuzsa is extraordinarily strong, but Judit... At that age neither I nor Kasparov played like Judit does now."

In the Hungarian magazine *Szabad Fold* (December 1988), Tibor Florian wrote, "Zsuzsa's game is multi-faceted. She has enormous knowledge about openings at her disposal, she even knows openings that she never uses. In the middlegame she evaluates the position objectively, realistically, and thus she can handle positions of any type. She is persistent and prudent in defense - she loses very little - rich in ideas and elan on the attack... And she does not lack what is most important in the endgame - patience."

Judit's game is also characterized by a good foundation in opening theory, a childlike unprejudiced evaluation of positions, and a good endgame technique. In many ways she is similar to Zsuzsa, but her game maybe contains more dynamism, initiative, and sometimes an 'urchin defiance'. Zsofia is in fact a 'socially handicapped' child: there exist 'best' and 'worst' daughters, but there are no 'middlest'. She also knows and sees much on the chessboard, but she might lack courage to do much. She likes artistic, aesthetic solutions. All three daughters are modest and charming. Zsofia smiles the most. While one often sees child chess players who are morose and closed, the Polgar daughters have stayed open, merry children. This is clearly attributable to the prevailing ethos in their family."

3. How do we get our children to like chess?

“There are two kinds of people: some conform to circumstances and play cards; others want to change their circumstances and play chess.” - M. Collins

“If you play your opponent into the ground at the chessboard, this does not prove that you played the best.” - English proverb

“It is easy to lose one’s way on the chessboard; all the squares look the same.” - J. Szekely

Let us continue the chess lesson. There certainly are parents who would be interested in how to teach 4-5-year-olds how to play chess.

I will tell you some of my tricks. I took two pieces of graph paper, one for me, the other for the child. We marked out 8x8 squares. First we began to learn the name of the squares. I named a square, she found it and marked it with an X. Later she named one, and I marked it with a dot. (This could be done as well with different colored pens.) At the end of the game we checked the results of the task, and counted how many each one had done. For the next step we learned the colors (white and black) of the squares. We named a square, and without looking at the board, we had to say the color of the square in question. (For this one could use the method of a square net.) This activity is somewhat similar to the well-known game of Battleship.

When should one use diagrams?

In this case age-appropriateness is also very important. First one should learn the movements of the king. We practiced this for several days, and later we play “king against king.” The task is this: one king must reach the opponent’s baseline, that is, one must go to the other side of the board. Whoever does this first wins. If some king can stand next the other, then the game ends without a decision. When we had learned this well, we added the next piece, the pawn. In this game the goal was the same: to get to the other side. After several days we added the rook, then the knight.

After 3-4 weeks we arrived at the queen. Understanding the queen’s mate followed later. Possessing this knowledge, we played great pawn battles during the following weeks. That is, only the pawns and the two kings were on the board. After a pawn changed to a queen we played until mate. The children really liked this. During this we started learning the knight’s moves. This is most difficult for children, but not truly a problem, although one must carefully practice this.

Later we became acquainted with the simplest mating moves. First I collected around 1,000 one-move mate diagrams; later I found two-, three-, and four-move mate diagrams and posed them as problems. Only after this did we begin playing real chess. The time we spent getting there lasted about 3-4 months. We should not begrudge the time for this! In this way we assimilate (very deeply and solidly) not only rudimentary knowledge, but the children become

accustomed to the carefully considered and foundational game, work. Possessing solid knowledge, they simply and easily learned the later tasks. They possessed resolution, and self-confidence, and arrived at success. They experienced the knowledge and enjoyment of its use.

After the start, the following step is combinations. We solved many combinations, for example: I sacrifice one or two major pieces, and in the end the weaker force wins against the stronger, so the small beats the big. Of course in this case one should be careful: give only easy combinations at the beginning. The child cannot solve very difficult ones. It is valuable to play many miniature matches, as these (less than twenty moves) contain many combinational elements. These also interest the children, and because of the flashiness and shortness of the matches the child's attention does not waver.

When the children began to play well, we switched to memory exercises (to widen our knowledge as well), for example we played several miniature matches in our heads.

This is a hard problem for adults. Do children do this easily?

Yes. More easily than memorizing a poem. When a five-year-old child learns verses, they do not always understand the logical interrelationships. But in chess they know that one move follows another, and they are able to get through the steps.

One should then almost teach the children to "play" like a game. Do you have more advice?

One should have great patience. We should let the child arrive at a sense of success, but we should not handicap ourselves (we should not give up major pieces or an advantage in pawns), because in that case the structure of the game changes. Preferably the parents or teachers should provide a temporal handicap, or weave intentional mistakes into the game, so that the child can use them for themselves. During the game the tutor should organize their position on the board intentionally as is appropriate for the student and the development of the child at their age.

I ask about a small practical matter. Should one also teach the use of chess timers, or is this superfluous as some claim?

Chess timers can make the game especially interesting for a child. (And their use can enliven and make other kinds of games and studies enjoyable.)

Can one teach children using similar methods in the framework of school instruction?

Yes, but at a more rapid pace, since this applied to older children. The essence is always the same: both at home and at school one must teach each part carefully, and everything always solidly. Half efforts make no sense, since the next stages will lack a foundation on which to construct the material to be assimilated. In addition it seems to me that one of the deficits of Hungarian teaching is that one does not construct knowledge upon other knowledge. I consider

it a further error that - mainly because of the lack of intensive instruction - after three weeks the child forgets what they learned earlier.

Do you have proposals for how to inspire students during school hours? Should one give grades?

If the instruction is good, one has no need of giving grades. In addition, this truly makes no sense in chess. I would rather arrange various in- and inter-class contests. It is worth sending children to foreign competitions only if we feel that they will do well there. Competition only makes sense when it is evident that it will develop those who are capable of it, and can inspire greater accomplishments on the basis of the results. We should never drive students to failure.

But there are some who develop in leaps.

These kinds of children should be switched to higher classes or compete with them. For competition there are also various adult contests possible. The current school organizations are not suitable, because one is not occupied with the children where one should on the basis of their innate capacities. It is useless to try to make a child jump 120 cm if they are capable of only 80. But it is as useless to make them jump 120 if they are already capable of 180. They will not develop by this.

How do you explain that you also organized your daughters' chess instruction in the framework of home schooling? Is there no organized chess instruction in Hungary?

Unfortunately this problem has not been solved. Aside from a few sporadic local initiatives (sometimes in the city of Tapolca, for example) there is a lack of systematic chess instruction - despite that the world is taking a great step forward in this field as well.

There are no clubs in Hungary with regular daily chess instruction. Even the youth tutor of the Hungarian Chess Association does not direct regular training. This is strange, because in no branch of sport do the youth have such a deficit of training. There are no chess tutors, or if they can nevertheless be found, they do not even make a half-hearted effort. The best chess players mostly only compete, and do not pass on their expertise. Although one should be aware: successful education is not possible without a great deal of work. Education only bears fruit after 10-20 years. But if we begin it only ten years from now, we will have results after only 20-30 years.

In which country are there good chess schools?

There are many in the Soviet Union. The Soviets begin chess instruction very early. There are nursery schools that focus on chess, and there are elementary schools (boarding schools) where the students only go home on Sunday afternoons. However, it surprises me that these schools do not function with sufficient efficiency, as though they had been bungled... It seems to me that

they count on a few eminent chess players certainly growing somehow or other out of so many children. But also in England, the Netherlands, France, and the Federal Republic of Germany, they are doing a great deal to educate young people in this direction.

By what instructional techniques can one contribute to children liking chess and to its more successful instruction?

The two most important instructional techniques are the television and the video player. In the US they have produced video cassettes for chess instruction. In one of these, for example, Seirawan lectures about chess topics. We need many like this. I believe that I do not need to detail the advantages of television, but in Hungary, for example, there are almost no television chess programs. In the Soviet Union and the FRG there are many like this: interviews, broadcasts of competitions, complete presentations of matches, etc. But maybe the most needed instructional tool is the computer, because:

- Personal computers primarily fulfil the role of databases.
- Chess computers can serve as good partners, especially for children, beginners, and amateur chess players (my daughters play blindfold games with computers).
- With chess problems one uses them to check for errors.
- Powerful computers are usable primarily for precise analysis of endgames with few pieces.

If this depended on you, would you found a chess school? What method would you introduce there?

I cannot respond to the first question, but if I were to establish something like that, I would primarily implement those ideas I have proven and successfully applied with my daughters.

Is it possible to suppose that if it were to implement these kinds of schools, Hungary would stay at the pinnacle of the contest of nations for a long time?

The question would be answered by asking if others also did the same or not. If one worked with similar methods in twenty other countries, one would attain similar results there, as I could promise.

4. Chess in psychology, psychology in chess

“The game of chess, like scientific research work, is primarily a passion.” - A. Szentgyorgyi

“A good player deceives their opponent; while a bad player deceives themself.” - J. Szekely

“I avoid struggling, on the contrary, I’m always thinking about winning.” - R. J. Fischer

Your genius-education system is constructed on a strict unification of pedagogy, chess theory, and psychology. However, in my opinion it is worth separately examining how they are interlinked. Let us first examine the psychological side!

Chess and pedagogy are woven together by many threads. Chess has its own place in psychological research, and psychology is also present in competitive chess playing.

Competitors expect and can receive help from psychologists. Competitive chess playing demands a specific state of mind, whose conscious influence - and theoretical foundation - can contribute to a successful competition.

Psychological knowledge can strongly aid in understanding one’s own personality. What are my weaknesses? What are my virtues? How am I progressing in self-instruction? In which direction should I be going? Which style is most appropriate for me? One can pose many questions to oneself. If it is true that without a certain degree of self-knowledge one can succeed in no area of life, this relates even more to competitions of every kind.

Psychologically founded competition can seriously help in the development of personality traits: it forms the will and emotions, increases persistence, self-discipline, competitiveness, etc. Botvinnik, for example, emphasizes that a competitor must reach a state of maximum capability during a competition, and he thinks that the development of an appropriate mental state and humor are also very important. By means of special training he has mastered fighting his negative emotional manifestations. He has also developed his ability to concentrate on himself to a maximum. He has successfully alloyed in himself tranquility and aggression. Currently psychology functions as a supplementary science for every outstanding competitor...

... used to understand the opponent ...

Naturally chess is also a mirror for the soul. Certain of the opponent’s psychic traits are well reflected in their play. Studying them can deliver a great deal of information about the temperament and character of the chess player, so partners can prepare themselves for each other. This is also important because chess training occurs without the psychic atmosphere of the struggles of competition. One can also analyze past matches before the competition to determine what the opponent is like and choose the most appropriate tactics. If I know their weaknesses, I endeavor to choose the variations of play and style that will be psychically uncomfortable for them. If I know that they do not like surprises, I must surprise them with an

opening or combination. If I know they have an aggressive temperament, I endeavor to direct the game to a calm flow, etc.

Emanuel Lasker is just that chess player who regards the personality of the person highly, hiding behind the “life” of the chess figures. For example, he has many times made not the positionally optimum move, but that which he considers most unpleasant for his opponent. He even risks a worse move merely to annoy an opponent. This will not disequilibrate a good chess player today.

If things work like that, one can evidently misuse psychological knowledge...

One can, of course, as one can on certain occasions misuse any knowledge. Thus for honest competition the ethical standard and correct moral bearing I mentioned above are necessary.

What are the abilities whose development you consider specially important?

I will list several which Dyakov, Petrovski, and Rudyik (they performed an interesting experiment on grandmasters in 1925) describe in their works, as well as Lasker, Krogus, Fine, Kotov, Hartson, etc. Above all it is necessary to achieve and maintain a good physical state, health, and state of nerves. A chess player must sit at the chessboard with a sufficient reserve of physical strength and good nervous system that they can resist unpleasant and annoying provocations. This requires serious physical hardiness: these effects touch the very “soul” (attacks by the press, for example, can significantly decrease one’s powers of accomplishment).

Persistence, as well as physical, mental, and soulish stability are worth the same, as they are in physical branches of sport, where they are called hardiness, but in fact there also they mean conserving the ability to work in spite of sustained and repeated burdens.

I would put in this category the ability to handle monotony, the capability to sustain interest and persistent attention. Their lack can cause significant oversights, chess blindness, errors made in winning positions, or overlooked combinations, for example. Maybe the most important component of stability is whether the player can concentrate in the “main direction,” holding themselves apart from distractions, annoying factors, that is, how much they can “apply” their knowledge and character.

Further: discipline and self-control. It is not possible to achieve good results without conscious discipline and self-discipline. During a game mental factors intrude one after another: after-effects of earlier defeats, stress about possible variants of the match, the sex, age and psychological tactics of the opponent, and random or intentional changes in the surroundings.

One factor that must be noted is the capability to educate oneself on the basis of realistic self-knowledge, which manifests as constant self-criticism and readiness for self-correction. While it is possible to have healthy self-confidence, self-deception certainly leads to failure in chess.

It is very important to develop several intellectual capabilities, among which are a good memory, preparation in combinations, a capability for pure logic and an appropriate intuition. For example, a good memory serves to easily visualize the moves and combinations of pieces in the

match. Preparation in combinations enables goal-directed assembly of thoughts and ideas, as well as imagining the pieces during movement and in different situations.

Apart from everything the development of a healthy capacity for conflict is specially important - primarily, of course, for competitive players, but it can be useful for anyone. The conflict happens simultaneously in various fields:

- the struggle to rise above oneself (current results, one's own obstacles),
- the struggle to acquire a definite position in the group or community,
- the struggle with the opponent,
- the struggle to attain or get near to some "extra-competition" goal or value.

Of course it is true that sport - aside from being many other things - functions as one of the possible methods to promote and distinguish oneself. The latter should never be directed against others or in a fashion damaging to others. This is a basic premise of the athletic life. The conflict presupposes the knowledge of the opponent, the evaluation of their strength, the knowledge of their style and their victories. In Hungary, Geza Revesz has focused on the psychology of chess players in order to use it in the developing of talents. I can continue the examples. Experiments performed in the Soviet Union in 1925 aimed at founding a new branch of psychology: chess psychology. The Soviet chess grandmaster and chess psychologist N. Krogus created something worth attention in this field.

Lasker as well claims that chess style is a projection of certain aspects of the personality. In his opinion, one can also infer the chess player's characteristics from their game, and this is correct. Because of this psychology can conceive of chess as a test in which aspects of the person are mirrored. Obviously this test, like others, can be accepted only as one part of a complex investigation.

What is your opinion of scientific research on specific abilities, and all in all regarding the evaluation of others' capabilities?

Unfortunately one often performs this evaluation without having sufficient information; even some specialists do this although knowledge of the personality, and within it, the realistic evaluation of abilities is very significant both from a theoretical and practical viewpoint.

Many make the error of trying to derive information on exceptional abilities on the basis of intelligence tests. In the literature, for example, Margit Varro researched extraordinarily musically talented children, and found with them that intelligence tests are insufficient. Geza Revesz, a renowned specialist in talent research, came to a similar conclusion. He observed in testing exceptionally talented children that their intelligence was hardly greater than solidly middling-intelligent children. According to him, the result of the test also did not characterize the "extraordinary intellect, comprehensive ability and mental level of the children" well. Many researchers in other countries, many chess psychologist among them, concluded the same on the basis of their research.

One of the most important methods for recognizing creative capacity is also the research of biographies. One can recognize, learn, and evaluate this merely on the basis of actual actions.

Every attempt to define capabilities outside the particular sphere of action leads to logically erroneous findings.

A very important aspect is comparing the results (competition results and inventions) of exceptionally capable people. The principles of researching child creativity are not different in that sense from those principles which guide us in analyzing adult inventions. But because it is about currently developing children, one should not neglect the nature of the developmental stage in evaluating creativity! To analyze the endowments of exceptionally capable children, and to have a picture of their expected development, one must collect inventions and competition results from various periods of development, and compare them on the one hand with themselves, and on the other with childhood inventions of other exceptionally capable children.

Family archives are very useful for this: photos, newspaper clippings, specialist reports, correspondence, chess matches, etc.

Can one also use chess in medical psychology?

Yes, both in diagnostics and psychotherapy. For example, therapy direction can be helped by chess, when it brings a patient success (or otherwise). To completely simplify: if I sit with a patient and see that they should strengthen their self-confidence, I let them win; if I see that they have too much self-confidence, and it should be decreased a bit, I do not concede the game. One must, of course, sense the proportions correctly. Aside from this, chess is a therapeutic method also in the sense that it is capable of activating the personality of a sick person, and stimulating their dull spirits. On certain occasions one can use it to strengthen results already attained.

Does this property also apply to psychopedagogy?

Definitely. It is very applicable, for example, with antisocial, neurotic, emotional and aspirationally defective children. By it a child's attention can be captured, and the game can bring at the right time the experience of success. Again I simplify: if someone plays chess a lot, they have less time to do drugs. Deviant acts are generally performed by those who do not have a compass, perspective, who do not experience success in other fields.

Do chess teachers utilize the results of psychological research?

Although this is certainly useful for them, in my experience they rarely do this. Generally they merely instinctively use scientifically proven expertise. I should give an example: many people pass examinations in logic, but how many people consciously apply logical theorems? Well, the matter is similar with chess psychology as well. Unfortunately.

Let me verbalize a question of many parents. By which psychological-pedagogical method can I recognize chess talent in my child? Namely, many say: I would willingly raise my child to be a chess player, but I am not able to recognize whether they have a talent for this or not.

I believe that every child is potentially talented in chess. Specific capabilities are not people's endowments from birth, but one must make them manifest through education. So the ability to recognize chess talent is not really a problem. The question should rather sound like this: whether the parents are ready or not, whether they have sufficient self-confidence and courage for the education. I can educate every healthy child to be a chess master. Parents should be interested in how chess masters are made to be chess masters, and be able to study how to create similar psychological and topical conditions for their child. They should not worry about whether the child has talent or not!

5. On the emancipation of women

“Only an equal measure! Allow to women what is allowed to men, or do not allow to men what is not allowed to women.” - B. Bartok

“Among every woman know to me, Mme. Curie is the only one whom success has not corrupted.” - A. Einstein

“Teaching girls is needed as well as youths; they are as useful to the country as these.” K. Mikes

At this time both nationally and internationally, great attention is turning to the struggle of your daughters for equal rights for women. Do you all think that there will come a time when the “men’s” chess world champion is a woman?

You express yourself incorrectly. A woman will never become a men’s chess world champion because the title “men’s chess world champion” does not exist. A world chess champion can be a man or woman. Kasparov’s title is not “men’s champion,” but simply chess world champion. For a long time the game of chess has been such a men’s activity that the creators of its rules did not even expect it to be called a “men’s” competition. So there is no such thing as a men’s chess competition.

So women are allowed to compete in men’s competitions without a sex test?

Our daughters are allowed to play in men’s competitions any time: this is not contrary to the rules. But in women’s competitions, Olympics, and world championships, only women are allowed to compete, which means that the women’s accomplishments are not equal to the men’s, and these competitions are merely “second-class.”

You are in the first rank of the struggle for equal rights. In the words of the philosopher Gyorgy Andras Szabo, “You have become an early revolutionary” in the battle. It is true that several women have now entered men’s competitions, but you are the only ones who have lately not played in women’s competitions (aside from the Olympics). You have done this to prove that women have not lagged behind men. How did this goal appear in your experiment?

I believe that this is the sole point that was formed incidentally, during the work. I generally planned the whole of my pedagogical system before the birth of my first child. I did not anticipate that only daughters would be born, and when they were born, I encountered a particular problem: discrimination against women.

How did this affect you all?

When I wanted to guide my first daughter Zsuzsa to the summit, in the spirit of my pedagogical concept, many tried to hinder us in this. She was not permitted to compete among boys; she was

forced to participate only in girls' competitions. Of course, my primary goal remained to prove the correctness of genius education, but I supplemented it incidentally with the goal of demonstrating that biologically there exists no essential, decisive difference between the intellectual endowments of men and women, and arguing by this that one has no right to support the "subjugation" and shoving aside of women.

People did not let you develop this ambition of yours?

The experts communicated to me that Zsuzsa could only practically be raised as a mere women's competitor; women were simply not capable of results equal to men, etc., etc. On the one hand this old song was heard; on the other hand discriminatory regulations rained down on me.

Was it then you decided to turn against this idea?

Yes. First I studied the literature and saw that girls could start out brilliantly in this field. In the first elementary grade they show similar or better capabilities than boys, and they progress similarly until they take on and play the womanly roles demanded and destined for them by society. These roles later act negatively on the development of their capabilities. For example, the fact that girls are introduced early to house cleaning, washing, and cooking, educated to follow fashion, pay attention to details of clothing, etc., or that they are prepared for life so that they are married as soon as possible, contributes to the formation of these disadvantageous roles. So one expects essentially different things from them than boys. Do not misunderstand, I do not wish to say that women should not take certain feminine roles that are good and necessary. It is important that they are married, are mothers, raise children, etc. But they can also do this together with the husband, and so raise children together, take on familial burdens and advantages together. Maybe men will storm at me for this opinion, but I believe that I must declare it in the interests of societal justice and emancipation.

So for you it is evident that girls develop similarly to boys in school, and you concluded from this that women can attain the same results in chess as well, and on the basis of this you created a special strategy.

Yes. Its essence is that for women one should create approximately the same psychological and (chess) specialized conditions, and then they will attain the same results as men.

I tried to arrange this for my daughters. But I could not solve the problem of others, both chess friends and society, believing in them. Few tutors were inclined to accept this theory, but there were many who explicitly disapproved of and opposed it.

What did you base your hopes on? If we look at current competitions, we find a considerably large difference between men and women.

Current results are not scientifically trustworthy, for as the psychologist Sandor Klein determined, we know only that current adult women are weaker in chess than adult men. But what causes that, whether biological endowments or only education, we cannot determine from the fact itself. Experience proves that in other mental fields like mathematics or language learning, girls keep up with boys one hundred percent during the whole period of school studies, not only in elementary school but also in middle school. The differences appear to be drawn only later. So the facts let us infer in favor of equality.

According to Gabriella Rasko, "A great many experiments have been performed throughout the world regarding intelligence, including memory, logic, abstraction and combinatory abilities. The results clearly prove that the average intelligence quotient of women essentially compares to those of comparable populations of men, at least in civilized countries. When evaluating logic tasks separately, the widely disseminated assertion that women's capability for logic is less worthy is found to be baseless."

Endre Czeizel interprets one of the tendencies of modern genetics thus: "Various research methods have long since proven that, for example, in the area of spoken communication and spacial orientation measureable differences between the sexes can be shown. Women's spoken communication is significantly better than that of men, who for their part have a better capability of spatial orientation. Somewhat humorously, one could say, "Women sacrificed spatial orientation for increased speaking capability."

I nevertheless stand by the opinion that research up to now has only examined completed products: youths and adults, and has not sufficiently explored growing children without discrimination.

Moreover, as G. W. Allport, an American socio-psychologist writes, "We have made too much of primary and secondary sexual characteristics, and fluffed up these differences according to the imaginary theory one uses to justify discrimination against women to their disadvantage."

One should also research the genetic results in a population that lacks social differences! In the name of freedom of research, I demand that we cast doubt upon the starting points above, as not necessarily proven. This is why I adopt, as a logical consequence of my system, equal rights for women.

Nevertheless, tell us which arguments are still launched currently against women's equality.

For example, the weight difference of the female brain, or that female blood has fewer erythrocytes, etc. According to neurophysiology, these factors do not signify a disadvantage for women. Or that women menstruate, and this hinders them in competition. About this it is my opinion that on the one hand it does not cause difficulty for all women, and on the other that today the timing of menstruation can be altered. (And, among other things, anti-cramping pills

exist.) The argument is often heard that (alluding to the properties of the female psyche) women are generally attached to old and customary things, that they fear novelty, are not sufficiently courageous, lack initiative, cannot be aggressive, are too mild and weak, are not oriented to completeness or success. But the research of the world-famous scientists Mead, Allport, Maccoby, and others proves and demonstrates that on the contrary these hallmarks of psychological nature are without exception socially determined. And I agree completely with this.

If this is so, why do teachers (and mainly the chess association) not hear these facts?

Well, this is a more complicated question. This has several causes. First, because the current system is convenient for women themselves, since female chess players can stand among the women's elite with much less effort, and those who stand there would not willingly give up their positions. This is the reason why the greatest enemies of my daughters can be found among their "own kind," women: the latter fight them tooth and nail. According to the current women's world champion, Maya Chiburdanidze, it is not possible for women to achieve the knowledge that men can. And if she considers herself unsuitable for that, she will certainly not say that she knows those - my daughters, for example - who with suitable support might be able to do so.

Someone said ironically, "The Hungarian Chess Association is needed to 'check' the Polgar girls."

Yes, their "blessings" we have received abundantly. Slander, contempt, discrimination, press campaigns. They also say that we lack patriotic feeling.

This is obviously myopic; the Polgar girls often appear on the title pages of the world press beside or even before Boris Becker, Steffi Graf or Italian footballers. Judit Polgar was awarded a chess Oscar, and in my country there has never been a chess Oscar prize even among men. Provincial Hungarian viewpoint!

A provincial and selfishly male point of view. One of the main causes of discrimination against us is that men wish to prove their superiority to women on the basis of differences in this field. I do not claim that men and women are equal in current society, but that indeed the cause of this inequality is not biological but social. And I begin the proof for this in a field that serves as the last and greatest argument for "manocrats," the game of chess. Those who promote the idea of intellectual differences between men and women always end up using chess as an argument. But maybe my daughters' results will unmask the flimsiness of their arguments.

So what is the essence of such great opposition?

Modern genetics has already accepted the similarity in IQ of men and women, but it theorizes about the diversity of dispositions between the sexes. This as well I do not believe. This is formed similarly under the effects of societal education; the game of chess is taught to very few

girls (why?!), and mathematics is also not considered a “sport” for girls. But if female competitors wish to achieve similar results to the chess world champions Karpov and Kasparov, they must learn in similar conditions, and must compete in similar conditions. Anyone who prepares herself to be a mere woman competitor faces different demands from the environment, expects different things of herself, and experiences success and failure in a different way. Female competitors are at a very low level, and if we wish to change this situation, we must make women compete among men, and absolutely only among men.

In my experience, whoever competes among men attains better results than someone who plays with both men and women, and of course immeasurably better than someone who enters only among women. This draws the following figure:

<u>Female Competitors</u>		
Who play in women's competitions	Who play in both women's and men's competitions	Who play with women in similar conditions as men
1	2	3
A mountain analogy: the most direct route to the summit leads up a steep slope.		
2700	2700	2700
2400		2500
Only a winding path upwards	A winding path combined with a steep slope	Only a steep slope

From this viewpoint chess is in no way different from other intellectual areas of study or specialties. In study competitions no one thinks of demanding that someone first prove their worth among girls and only later enter among boys. It would be more than strange if Rozsa Peter, the outstanding Hungarian mathematician could not receive her doctorate in mathematical science if she did not prove that she is the best mathematician among women. Today mathematics competitions are not organized separately for boys and girls, and if someone tried to do this, they would immediately be advised to resign their post. Why then should one separate the sexes in chess?

Because we consider chess a sport.

Are mathematics competitions not a sport, then? They also have Olympics! And are there separate Nobel prizes for women and men?! Absolutely not! Among intellectual activities it is only chess.

Do you think that in current circumstances one could end separate competitions for men and women?

They should be ended at all levels, because this is the reason women cannot develop further. And because women say, If I am a star at the female level, why become so at the male level? It is very strange that at the conference in Dubai in 1986 a discriminatory rule was voted in according to which a women would not be allowed to play in a “male” team in global competitions in the future. The grandmasters’ advisors are rightly occupied with the plan to petition the International Chess Association to end this kind of discrimination against women, even to initiate the complete end of women’s chess.

Did you intend to have your daughters compete with men from the beginning? Did you not fear that this was the kind of level that would lead to failure?

I did not fear, because I assumed that men and women have equal capabilities at their disposal. I agree with Janos Selye, “Women can also become eminent scientists.” I started from this, that although it was not yet proven in one sense that women can attain the same results as men, as long as the opposite was not proven, there was no right to exclude women. But up to now my experiment has confirmed only a part of the correctness of my hypothesis, since I have proved only that it is true for this age group. If my daughters do not further prove it in later times, it still does not follow that it is not possible. Errors can hide even in my educational principles. But it greatly hinders my daughters that few believe that they can achieve results. So aside from my methods, there are also external effects, circumstances independent of us, that strongly influence the development of this “match.”

Many people consider you a curious bird, even those who feel liking for you, whether in or outside your country. They say, What would happen if the girls also entered in women’s competitions? Even on the worst occasion they would not lose, although they might not seem extravagant. A colleague of mine, a university professor and renowned chess player from Baku, Yasha Abasov, declared, for example: “For a certain time I have also thought that Soviet women’s chess is so superior that it is not worth being occupied seriously with competition. Relatedly, I considered the fact that the Polgar sisters only play against men to be a typical female caprice... But after the Olympics in 1988 we had to revisit everything.”

Understand well, the matter is not as simple as that! The personality is a very complicated system. I will give a seemingly unproblematic example: My daughters took part in the Olympics for the first time in 1988, and immediately became champions. What did this result in? They gained more self-confidence, became more famous, narrowed the circle of those who bet against them, they did not need to fear crude discrimination any longer, they received more encouragement, etc., and all this worked well. But they possibly became too self-confident, and experienced success not in a realistic measure, and this had a negative psychological effect: I observed that they played more and worked less. The idea seized them: If we are at the summit,

why work any more than now? I fear that from the viewpoint of the final goal, the men's world championship competition, these Olympics worked disadvantageously.

I have a provocative question: your younger daughter was awarded an Oscar prize this year. Will you suggest that she accept it, or dissuade her on the basis that it will help in the battle against discrimination against women not to accept a prize for women?

Of course I will not dissuade her, for several reasons. On the one hand, I myself helped her to decide to participate in the women's chess Olympics; on the other hand she has in fact achieved the best result in this global competition. In 1988 as well, she won another competition much harder than the Olympics, she stands at the summit of the women's global rankings, etc., so she deserves the prize. I am only against discrimination against women.

So you are not a militant feminist.

Of course not. I have raised my daughters to be true women. I have not only not hindered their feminization, among other things, but on the contrary: I very much expect that their psychosexual development is also normal and healthy. I work towards their being regarded as true, attractive, attention-getting women. I endeavor for them to fulfil suitable so-called "necessary womanly requirements." Among them I disapprove only those things that could be harmful to their intellectual development.

If it were necessary, I could also confirm that the girls are indeed truly joyful, frolicsome, and sympathetic. Friends, specialists, and intimate acquaintances claim the same. The famous female psychologist Judit Meszaros, who lives with you in the same house, said to me, "These girls are charming and womanly. Although they dress a bit more simply than their peers, they are as attractive as them."

And this logically leads me to the idea of love. Love that could lead the girls down new paths. What will happen if "He" shows up? Richard Muenzert, the notable West German psychologist, a supporter of the Polgar family, introduced the theme: "The time will come when these charming and pleasant girls will burden the heads of boys not only with chess combinations; they will also turn their heads."

This is a very important and decisive question, and I myself do not know how to give a definitive answer to it. In any case, I am raising my daughters so they get married, have children, but always remember that they have the kind of life program, and stand on such summits, that they should not give it up. I hope that they will have two loves, their careers and the ones they care for. And that they "cheat" neither of those. Furthermore, they are also responsible for one another. They form such a strong team now that they should preserve it; they must, if necessary, also sacrifice, principally if they are recompensed with joy. I hope that they will also solve this great task of life well. A good example of this for them is the Curie couple. One thing is certain:

getting married in itself has risks, but one must also accept risks. But this belongs to the second and third acts of the psychological-pedagogical experiment.

But how does it relate to those concerned that they are flag-bearers for the emancipation of women?

Ask them!

I have already asked all three. Zsuzsa answered reasonably that this is an emotional feeling; she often thinks about the idea and she is proud that she competes at the chess board also for equal rights for women. Zsofi answered flippantly, "Of course we willingly participate in the experiment, and happily we prove - if we win (and we like winning) - the skillfulness of the female sex." Judit, the youngest, had the shortest answer: "I don't care about that."

IV. The Meaning of the Whole Thing

1. The family as a value

“Do not spit in a well, for it may happen that, thirsty, you may come to drink from it.” - I. A. Krilov

“Other people are among the most elementary needs of the person.” - K. Marx

“It is not possible to find a substitute as good as a good father.” - V. A. Sukhomlinsky

Many consider the most important result not the achievements of your daughters, but the familial ethos in which you live. “In this family,” writes the West German Reinhard Muenzert, “harmony and love reign. This is possibly the greatest success of the Polgars.” Do you agree?

Of course it gladdens me to hear that even foreigners observe what we hold together and kindle internally. Which one considers the greatest result depends on the viewpoint. I would choose the happiness of our family. “Harmony and love reigning” in our home, although important, is not the only factor in our happiness. I can declare one thing with definite certainty: without a good family background and loving family relationships my daughters’ successes would never have happened.

I can imagine that you stood with a fully elaborated family model even before the official registered your marriage.

Yes, of course. I planned our life in my imagination. I thought that everyone must do this. Considered communication beforehand is a precondition for a healthy marriage. It is important that both adults clarify for themselves whether they want to entirely live in a marriage, and if yes, what they expect from it. Who will have which function in it? Later they should endeavor to manager their lives so that they in fact follow this mutual agreement or - for the happiness of both - they should change it together.

I do not think that spouses inevitably become strangers to one another after several years; I even confess the opposite: with the passing of time they can keep loving each other more. Reciprocity in work done for the partner, the place of mutual life experience, raising children, good habits, etc., all contribute to this. Although it is fashionable nowadays to tire of one’s partner as early as possible, to emphasize the unfavorable aspects of marriage and the disadvantages of mutual compromise. I think that one should not make too much of mistakes, and one should look for that which is pleasing in one’s partner. This is not too difficult, as the good side of a person is generally stronger than the bad side. A basic need of children is to feel secure, but they will hardly receive this in a family where one conflict follows another. One should try to make quarrels mild and rare. In our home the principle applies that we should end the day only in love and peace. Naturally I do not wish to say about this that if the situation becomes very bad one

should not divorce; this would possibly even be good for the children just in interrupting a life lived together burdened with conflict.

The success of genius education would indeed be doubtful in either case. What, in your opinion, would a healthy family model be like?

I think that two people link themselves together by marriage so that both their lives become more complete (and diverse) and happier. On the other hand, in order to have children, at least three if possible, to whom they give everything necessary to also become happy. We planned for six children, but circumstances prevented us. One should not consider raising children to be a necessary evil, make it instead joyful and creative.

But it should also be specialist work!

It can also be specialist work, but preferably a calling, or an additional calling. Obviously not everyone can leave their job and stay at home to raise children, but it would be desirable for one of the parents to do so. I consider it totally possible for men to stay at home and raise children. One thing is certain: education also needs much more educated parents. One should devote more time to the children. I propose that the state should establish, alongside marriage counseling, "parent counseling," and even child-raising classes for parents.

What do you think about open marriage?

I am not a convert. I even think it dangerous. Naturally I have nothing against it in theory, if one can achieve a normal education for the children. In these kinds of cases, both adults organize their lives as they please. If they can arrange them so they are also good for the children, then I say: OK! If not, then it is irresponsible.

The danger is hidden in this, that open marriage often lends a sporting character to human relationships, and the sex life - in my opinion - is not appropriate for sport. If these relations are without emotions, I disapprove of them, and if they are based on love, they have another risk, that the feelings of the two partners will cool at different times; one still loves while the other does no longer, and this emotional "winter" hurts the one who still loves. I do not believe that anyone has the right to cause hurt, often very bitter hurt, to their partner, and eventually provoking by this even suicide.

But let us speak of the conditions for specialist education! I do not believe that someone can do careful and outstanding work, if they often change partners. Think of a scientist who sits in a library in the morning, and maybe stays there until evening. I did this for a long time. When I went home, I continued the work. So I ask how one can do with with changing partners? And mainly, it is not irrelevant - let us return to education - whether I love the women with whom I have children, and whether she loves me! It is not irrelevant whether we together love the children. Finally, it is not irrelevant what the child sees in the home.

Do geniuses need siblings?

Yes, a good brother or sister is of great value, but who becomes a good sibling depends a great deal on the parents and the education. But a good friend is more valuable than a bad sibling. I am very happy that our children our good sisters, good friends, good colleagues, and they love each other very much. And this is a matter of education: one must establish a healthy competition among them, but to raise them to help each other at the same time. Many believe that human contacts become better on their own. However, one must always be doing something for them, to improve them unceasingly, to form these contacts. This demands much energy, but it certainly pays.

They say that someone who has three children is a hero in current circumstances.

I do not accept this qualification. I have observed that in many families that have three children, life generally flows very peacefully, the parents are more balanced and the children develop normally. Their experience is that they can always count on one another.

Are three children not too much of a burden?

It is difficult to answer this. If the problem of lodging is solved, it is not too much trouble in a family of a medium financial level. For example, I have never dressed fashionably. And I have raised the children to prefer clean, sporty, simple clothing. Similarly I do not much care about cuisine. One must learn to rationally manage money. And one should teach the children about this independent of whether one lives richly or poorly.

Did you spend time preparing yourself for fatherhood?

Of course. Before marriage. Before planning this experiment, I read through a long series of specialist books on fatherhood. And I had to set myself to this “work” emotionally as well.

How much should parents intervene in the future of their children? Should they influence the choice of profession, partner or politics?

Let us begin with the choice of profession. I will speak only about parents who seriously endeavor to smooth the way for their children. Among them there are two types. Some say that a child should be many-faceted, “taste” everything, and in adulthood or close to it they should decide for themselves what they will do. I can also understand this standpoint. However, if the parents wish the children to achieve genius results, then - in my opinion - the parents’ decision should not be put off, and one should decide the direction of their specialization even in infancy.

But is the knowledge and capability of the parents sufficient to guide a child along the chosen route? What will happen if by some tragic event they can no longer help.

Let us examine the first question to start. Are parents capable of the task or not? I believe that if they are decisive and have a suitable viewpoint, and are also in the habit of reading some of the literature, and are not ashamed to ask help from others, they are definitely capable of this kind of work.

In the other matter: if an unfortunate accident intervenes. This can happen. But if something intervenes, the people involved do not even then lose much more than if they had been traveling a different road. A child can become a good specialist, a good teacher, a good economist, etc., without being a genius. Even if one raises a child from a different viewpoint and with different methods, a tragic event could still intervene, could it not?

Both ways of instruction, multi-faceted and specialist, can create healthy, happy children, and a good family ethos. But one must consciously choose either system, and implement it consciously. Freedom of education is as much a fundamental human right whether one educates by my method or some other.

Let us switch to the choice of life partner. What role do parents have here?

Two extreme tendencies are drawn out in history. One extremes is when parents themselves choose a life companion for their child. The other extreme, to which by my belief we have now swung, is what we now experience, when parents are almost completely excluded from the choice of partner. In my opinion the ideal would be a combination of the two tendencies, some kind of middle way, where the parents' opinion is also important, so the children also hear their opinion. This is important, because it surely can be supposed that parents wish good for their child, and they are more experienced, and they are not blinded by feelings (young love), so they can decide and anticipate more objectively. Further, as it applies to a healthy family, then to a certain degree, directly or indirectly, the generations will live together and work together to raise the following generation.

Thus in my opinion a good decision is made communally, of course the young people should have the last word.

Should the parents have the right to a veto in your conception?

This is about independent adults, so here a veto should not exist. Today parents have only practically a 5-10% "vote." In my opinion 40% would be more ideal, and the young people could still decide 60%, so in the end they would choose. In our case 50% was parental influence and 50% our own decision. I am very happy that I obeyed my mother, because I have a wonderful marriage. If I had married the woman I originally wished to, my educational experiment and happy marriage would have dissolved away.

How much can the family influence a child's choice of faction, or the development of worldview, world conception, or political orientation?

I always smile to myself when someone says: now I am raising the child to be a believer (or an atheist), and later in adulthood they should choose their world view for themselves. It is indeed decisive what kinds of influences reach a child in their family, what kind of example they see, in which direction they are raised - not only in what subject, but in what world view. I consider it a completely natural matter that parents will hand down their own world view: for indeed they can give nothing else. It is therefore absurd if someone - being religious - says to their child: you should be an atheist.

At the same time I believe that one should hand down in childhood fundamental moral values, which are generally human, so one does not need to restrict them, in the traditional sense, to any particular world view or political party.

What role does the family and parents have in preparing the child for a life of sport?

Sport is one of the best educational methods that parents have, because they hardly have to make an effort; in almost every child there is a desire to move, to actively compete. At the same time the practice of sports makes one used to observing certain rules, and contributes to right conduct, a regulated way of life, and discipline. Plus it is very useful if the members of the family play sports together, if they do anything together. If the family plays sports, they pass more time together, and this is incomparably beneficial. But if this is not possible, the child should visit a club, and train for one or two hours a day, even if they do not want to become an athlete. But if they want to become a competitor, then it is obvious that the parents and tutors should have a plan and follow it.

In Hungary, people still have reservations about experiments (not only in chess, but in other areas as well) in which the parents are partly or completely tutors for their children. There is the Batorfi family (table tennis players), Temesvari (tennis), and Mizser (pentathlon). But you are the first where an independent family "enterprise" has been formed.

The official institutions completely disapproved of this enterprise then, and even now they do not appreciate it on its merits. The attitude of the press is also strange. When the Capital Council gave my wife and me a medal "For the Sport of Budapest," some "competent" journalist indignantly and demagogically wrote that other parents also deserved it, because other parents also care for their children. He is definitely right about the latter. But he forgot to add that we are different from other parents in that we, forsaking our jobs, through long years of 15-hour days - directly or indirectly - made a huge effort for the development of our daughters in the area of chess. We bought neither a summer cottage nor a car, nor anything like that; we only paid for tutors and a chess library. Sometimes we slept only a few hours in two days, because we were preparing a sample from 200,000 matches for our children. We studied the literature nightly. We had to fight for the possibility of our daughters' development in extraordinary ways. This article appeared in the beginning of February 1989 in the magazine *Esti Hírlap*. I will not name

the journalist, as I agree with the author Gabor Goda: "Debate means raising the other - despite the difference in viewpoints - to a certain spiritual rank. Take good care with whom you begin a debate, lest you raise a bunch of meritless people to a spiritual rank!"

The press and sports organizers also do not like parents to follow the sports careers of their children with special care. Ironically, they call these "hockey moms" or "tennis dads." Some of the mass media even now treats these kinds of parents dismissively.

This kind of conduct is damaging because it causes a child's trust in their parents to falter. It is easy indeed to make children uncertain. On the other hand this kind of rough influence can awaken family conflicts, which could be "avoided." I support the family in relation to this also. One must protect and shelter peace and respect in the family.

Another question: who wears the hat in your family?

In general my wife does the housework, but when she accompanies one of the girls out of the country - and this happens often - I take care of the household. But during our marriage she has been able to continue her education: she learned languages (she speaks 7 or 8), acquired three degrees, traveled throughout the whole world, and practiced languages, collected a great deal of knowledge, saw many beautiful things in nature, architecture, and museums, so her life has been full, despite fulfilling "womanly" tasks at the same time.

In addition, she participates in the pedagogical experiment, in which she also works together creatively, because we do and are a little communal pedagogical group experiment. I wanted to have the housework or part of it done by someone else, if our material circumstances enabled this, because then she could better dedicate herself to her specialty, her profession, but during our work together for the development of our daughters' capabilities she was practically in a somewhat disadvantageous situation. But my family structure would be against my principles if she only cared for the household or the uncreative part of child raising.

From the tone of your discussion I feel that you have a crisis of conscience.

I myself also confess the clarification from the ancient Jewish literature, according to which the command of Holy Scripture, "Love your neighbor as yourself," does not apply to your father, your mother, your children or your wife; you must love them more than you love yourself. I sincerely confess that I have a bit of a crisis of conscience, but I do not accept the opinion that I am realizing an orthodox family model.

What do you think about your wife?

I believe that our results are a product of our common activity. But rather ask her!

An example from Mrs. Klara Polgar: A thread goes where the needle pulls it

I have already spent several days with you, Mrs. Polgar, and I see that you spend the whole day working silently and intensely. The house shines with order, dinner is ready on time, and I can assert with a clean conscience that it tastes good. Was this kind of work destined for you?

Yes and no. At the center of my life, along with my family, is chess. I do everything that contributes to the preparation of my daughters. The world revolves around them, and I believe I have the task of being their manager. If they need textbooks, I bring them; if they need translations, I do them; I correspond with foreigners; if necessary I drive the girls; sometimes I give interviews; other times I clean the house. I make dinner and wash the clothes. So I believe that I have so vast a “repertoire” that in the end I am not bored. If there were only housework for me I would surely find it boring.

If I could compare your family to a great tree, your husband would be the roots and the thick part of the trunk, and you would be the triple top of the trunk that supports and links together the three bright, healthy child branches with the trunk. Do I have a good view of this?

The initiator of the big idea was Laszlo, but I have always participated in its implementation. Tireless work from both of us is necessary for the girls to achieve success. But instead of the comparison with the trunk and roots, I prefer quoting the proverb, “A thread goes where the needle pulls it.” The thread is me. He thinks of things, and I try to implement them in practice, as I am able.

If you like, consider my next question a provocation. You are participating in an experiment one of whose goals is to prove that there is equality between men and women, at least regarding the intellect. In your family - as you have said - one fulfils the function of the needle and the other that of the thread, so it follows that nevertheless there are differences between men and women.

An occasional visitor might be inclined to believe that in our home the physical work is separate from the mental, and that mental work belongs to Laszlo and everything else to me. But in fact the matter is otherwise, because I very often drive to chess competitions with Zsuzsa, Judit or Zsofia, and then Laszlo stays by the hearth and does all the tasks at home. But of course there is also a certain level of “discrimination” with us, as there unfortunately is in every family. The time is still far off when this kind of discrimination will cease. Of course ideals always diverge from reality, because the latter also depends on the given conditions, and the conditions still do not enable the full implementation of the ideals.

Did you plan your pedagogical program together?

In fact, it was Laszlo's dream. When I first met him, in 1965 in Budapest, I only listened and listened to him. Sometimes I had the feeling that he was a fantasist who was full of ideas one could only half believe. I went home with the thought that I had made the acquaintance of a very interesting person, but I did not believe that I could ever become his wife.

Afterwards we corresponded a great deal. It is unfortunate that these letters were not preserved, because we sent each other wonderful letters. At the start they were not much about love; we exchanged opinions about pedagogical ideas.

Do you remember anything you did not believe about him?

I did not believe that in 24 hours one could get through as many matters as - according to him - were bottled up in him... Where to start? He said that he had been occupied by psychology, pedagogy, philosophy, and art, that mathematics also interested him, and as well he was an educator, a teacher, took part in the youth movement, visited libraries, swam, etc. He listed so many things that I did not believe him. Time passed, and we corresponded...

And his pedagogical concepts?

At first I doubted that one could begin serious work with children so early. Zsuzsa was three and a half when he began her specialization.

What did you think about at first, when you began the experiment?

We knew that we wanted to manifest something significant in the children, but at first it was not totally clear which specialist field we would choose. Zsuzsa progressed very well in mathematics. She had already learned all the material from the first four grades by the age of four. Then she saw some chess pieces by chance, which was later shown to be a "happy accident." She found a chess set in a drawer and began to play with it. At that time Laszlo was often with her, and one fine day coming from work I saw that they were playing chess. I was very surprised.

So the beginning was an accident. Not a planned choice?

Speaking for myself it was not planned for the child to become a chess player. Zsuzsa first learned Russian in a Russian kindergarten, then German, and chess followed, which was a new game for her, and which she seemed to find very interesting.

Did Laszlo know how to play chess?

He knew how and loved to play; I remember that one time he asked me to play with him, but I did not even know the moves. I said that it was very boring for me, and did not interest me.

Unfortunately this was the truth, but when Zsuzsa began playing chess I was ashamed that a child was capable of mastering something that I still did not know how to play.

Aside from this accident, what motivated staying with chess?

We could have chosen something else; we could have continued the mathematics or foreign languages; nevertheless we decided on chess - in my opinion because we felt that Zsuzsa was very happy at the chessboard. And because this was the first success, and we thought: if someone wins on 64 squares, that is already proof. Although the grandparents and neighbors often shook their heads: a girl at the chessboard? What a thing!

So many found the choice strange. Obviously it is not an accident that in public opinion this kind of activity makes children's lives joyless and unhappy. Did you hear those kinds of opinions?

Unfortunately we had to face them. It is true that chess is not traditionally a children's game. People don't hear about girls playing chess; people think it is a game for boys. Many asked me: what kind of mother are you? Why do you let your husband play chess with Zsuzsa? I had to struggle with myself, and had to reconsider if I was doing this well and rightly, if I agreed. But looking back to the past, I now believe that my motherly "greatness" really consisted in letting us follow this road.

You are best able to answer: are the children closed up in themselves, turned away from the world, or do they truly live happily?

I believe that my daughters live at least as happily as any of their peers. But I might claim that they live even more happily. In my opinion they are balanced and have very rich internal lives. Many doubt that they had and have real childhoods. I feel that they have not only real childhoods, but also those that prepare them for all of life and are foundational for their happiness. A person is truly happy when they do what they are willingly occupied with. They have found themselves, and are also respected for it. They have been doing from infancy things that are close to them, about which they are self-confident, and doing which they feel good about themselves.

Were there any methods during the girls' educations that you threw out or modified or changed?

I would not speak the complete truth if I claimed that we raised all three in the same way. But of effort, love, care, and provision we gave the same level; indeed we loved all of them equally strongly. Of course circumstances differed with Zsuzsa, Zsofi and Judit. I gave the most languages to Zsuzsa. Unfortunately I made an error with Zsofi. She was not diligent enough, and

maybe also for lack of time left language lessons behind, although both Zsofi and Judit learned English and Russian and basic Esperanto.

How many languages do you speak?

I have assimilated 7-8 languages: I am a teacher of Russian, German and Esperanto, and I know English and Ukrainian, and I know a bit of Bulgarian and Spanish.

Are the children healthy?

Yes, luckily. Aside from colds, (and sometimes ear infections for Zsuzsa), they are never sick.

Do you have, or have you had, an ideal for families? Have you succeeded in realizing it?

I always wanted to live a beautiful, peaceful family life, and to make my children good, honest people, who achieved at a high level. I believe that we have accomplished this. As a mother and a wife I am very happy and balanced. I believe that if reciprocal love and respect reigns in a family, one has what is most important.

What do you think about open marriage?

I condemn it. In this area I am conservative; I insist on the traditional role of the family. In the current uncertain world this small community is maybe the only refuge where one can feel oneself truly well, where one is completely free. I believe that I also need it very much.

Have you raised your daughters in a religious spirit?

No, completely not.

Are you also not religious?

No. My parents were not as well, and I was also educated thus. I do not need religion.

Have you taught your daughters about so-called women's roles? For example, do they know how to cook as well as you?

If they are capable of solving extraordinarily serious chess problems, which demand a great deal of energy, inventiveness and skill, why could they not also master cooking, if necessary? They have certainly learned, but at this time I do not tire them with this kind of work. And I did not know how to cook when I was married.

What plans or ambitions do you have?

Plans, dreams? I want to continue what we have begun, for the girls to achieve a higher level, and my work certainly contributes to that. Of course as a mother I want them to marry, have children, make me a happy grandmother, and enjoy the fruits of my labor as a pensioner.

You wanted to raise geniuses. Have the girls really become so? Do you also think your husband is a genius?

I think he is the greatest genius. In our family there is no lack of genius, but he is most truly so. It is his idea that we are implementing. When I first told a journalist that he was a genius, he marveled and did not believe me. That the girls have become so is owed to very serious, stressful, balanced, responsible work, which has been and is being implemented under his guidance.

Moreover, in this matter Klara Kasparova (the wife of the world champion) said: "... Without clenching one's teeth, without visible and lasting work, it is not possible to achieve the end goal. For us the idea of 'tranquil' does not exist. From the age of 9 [for Gary] not even a day passes without serious intentional work. We are constantly working. It is very difficult to reach the summit." (From the work of Reinhard Muenzert: *Die Familie Polgar und ihre Bedeutung für die Anlage-Umwelt-Kontroverse-Deutsche Schachblätter*. 1989 pp. 32-35).

How do you see yourself?

I believe that I am an adaptable type. I have adapted to this great idea. I have submitted myself to chess, and this adaptation is my "genius."

And if Laszlo establishes a school, to educate exceptionally capable children?

I will also take part in the work. I would teach languages, and endeavor to help with everything so the school would function well.

2. In the minority

“Learning is a Jewish sport.” - Saying

“What do Jews learn better than non-Jews? How to hate and persecute Jews.” - The Talmud

“I cannot be a Jew to the bones, the less I can completely not be a Jew.” - G. E. Lessing

It seems to me that your Jewishness is something other than a simple link link to a community. It is at the same time an important source of your pedagogical concept. Is my opinion correct?

Yes. The consciousness of my identity undoubtedly attached me from birth to the Jewish community; I am primarily in this sense attached to the Jewish people. One of the veins of my pedagogical system incontestably originates there, but the analysis of my state of existence also hides philosophical relationships.

It is generally known that Jews have achieved outstanding results in the field of mental activities. This poses the theoretical question: does this have a biological genetic cause, or is this socially determined?

The fact is that today a newborn baby, being Jewish, has a much greater chance, by the statistics of Nobel prizes, at this prize, than if they are born in a non-Jewish family. This seems to many to be genetically determined.

I have a completely different opinion. I conclude that social “heredity” and the response to one’s own Jewishness causes this phenomenon. I accept - this is indeed a fact - what Endre Czeizel also mentioned on Hungarian Radio (1989-05-23), that the proportion of Jews among Nobel prize-winners is 30%..., and if one is born Jewish, they have a hundred times greater chance of a Nobel prize than an average non-Jew. And most of the Hungarian Nobel prize-winners were Jews. Among chess world champions their proportion reaches - to my knowledge - more than 50%: Lasker, Steinitz, Tal, Botvinnik, Smyslov, Kasparov and Fischer are half Jewish. However, I claim that this is also socially determined.

More precisely?

To mention a few factors: The first essential point is that Jewish families - partly because of strong traditions - are relatively stable, and they are always very concerned with education. Another reason comes from the minority status of Jews and from the frequent persecutions throughout their history. How do these factors contribute to the development of the mind? From a negative side in this way, that because of the always disadvantageous situation of the Jews they always had to appear in almost everything doubly more capable than others. Because of the frequent persecution they knew that at any time they might have to leave their homes, dwellings, and even homelands, and begin lives elsewhere. So what is fixed in Jewish tradition? “Learn, my son, because (1) only thus can you succeed in life, and (2) if you must flee, no one can take

knowledge away from you, so you can take it with you anywhere.” Jews could not take their houses with them, so they customarily preferred to buy no houses or unportable things, but gold and diamonds and trinkets, so that during persecutions they could pocket them and run away. And their knowledge bore fruit everywhere.

On the other hand, Jews are always on the periphery, and this awakens stresses in them; they become “eternal adolescents.” Adolescents do not know whether they are children or adults, and their uncertainty comes from this. Similarly, Jews most often do not know to what degree they are - for example - Hungarian, or Jewish, or both. This situation is difficult to clarify to themselves. Because of it they constantly live with internal conflict. This makes them develop with open minds, a habit of problem-solving, and also develops their adaptability. (This can also cause certain negative qualities, for example over-sensitivity, loudness, aggression, extremism, being critical of oneself and others, a very strong ambition for accomplishments, over-driven activity, etc.)

If these traits are a constant of history, do they not become hereditary?

No. Mental capabilities or acquired qualities of a person are not hereditary. I accept, of course, that certain diseases are more frequent in this or other peoples. But the causes of disease should be searched for primarily in the life circumstances and way of life. Thus there exist, for example, typical Jewish diseases. But mental traits are unambiguously socially determined.

So in your opinion, with regard to intellectual gifts and moral traits every people is equal in potential?

At birth every person is equal. After birth a person takes on so-called ethnic-psychological characteristics, adapting to cultural traditions and educational demands. This means that throughout history the so-called Jewish qualities are always changing. For a long time people have falsely accused Jews of not being capable of creative physical work, of always being cowardly, which, even if partly true, followed from the education and imposition of the environment. But today one cannot find these qualities in the Jews living in Israel or elsewhere. Today the soldiers of the Israeli army are the best warriors in the world; Mossad is one of the most effective secret services in the world. The Jewish settlers also surprised the world with their oases growing from the desert of the Holy Land. So today it is no longer valid to say they are only occupied with mental work.

What characterizes the Jewish pedagogical tradition?

The Jewish religion stipulates that parents should teach their children from early childhood. The Talmud stipulates that parents should be the first teachers of a child, because they are emotionally close to and love them. It is important that a child senses what a parent expects of them; this strongly influences the level of their needs, and later also that of their accomplishments. In a Jewish family children are raised to love knowledge, like books, and

respect each other. One does not begrudge material sacrifices for the development of a child's capabilities. One is brave enough to challenge them early and teach them intensively.

How much did your Jewishness contribute to the development of your system? Did you consider the tasks prescribed in the Jewish literature as personal duties, and teach your daughters because of that?

Probably not. I accepted those stipulations, because I found them to be well-founded and rational. Of course my family had something in common with my system, because my parents were already quite occupied with me in kindergarten. They taught me much, for example, translating from Hebrew to Hungarian and similar things. My great-grandfather was a pedagogue and taught languages in his school in intensive form to 4-5-year-olds. All of his students became exceptionally talented people. For example, the world-famous author, poet, and translator Jozsef Patai attended his school. In one of his works he remembers my great-grandfather with pleasant feelings.

What does Jewishness mean to your family. A religion, a culture, an identity, an ethnicity, or pedagogy?

Pedagogy definitely, this is certain. In a larger sense I accept my Jewishness as an ethnicity, in the same way as my Hungarian-ness. Of course I have been affected by good Hungarian culture, and good Jewish culture, and good European culture in general.

Jews can feel in their own flesh what it means if people act toward them like Nazis or chauvinists. So Jews endeavor to cast away all prejudice, and represent equal rights and equality for all people. Not understanding this, people often accuse them of cosmopolitanism.

Or of being world citizens?

I confess sincerely that I accept even this. Although I am a Jew and a Hungarian, in practice I primarily respect in a person human values and not nationality. I also accept being citizens of the world. I consider both Hungary and the Earth my homeland. I say the same thing as Bela Bartok: we must assimilate only good and valuable culture, whatever nation it belongs to...

What still links you to the Jewish people?

That 600,000 Hungarian and 6 million European Jews were exterminated in the Second World War, so I wish to be a living memorial. And another matter still: I am a Jew not because I accept it, I would also be a Jew if I did not accept it, because the fact that others consider me a Jew inevitably determines my situation.

What does Jewishness mean in your life from the viewpoint of a religious world view?

I was born into a religious Jewish family. My father is still a Jewish believer. After my parents' divorce, my stepfather was the chief rabbi of the city of Gyongyos, and a teacher of the Talmud in a rabbinical seminary. Until around the age of 13 I was not very religious; at 12-13 I led youth religious services. I prepared several children for their "Bar-Mitzvah," the initiation rite into manhood. But at the age of 14 I encountered a teacher of biology and physiology who guided me to materialism. Primarily he guided me to freedom from the Jewish high school and orphanage, and now I am an atheist.

For a Jew there are two possibilities: assimilation or integration. At that time I drifted unequivocally toward assimilation. I felt that I had almost nothing in common with the Jewish people. I grew up primarily in Hungarian culture, and I believed that I could assimilate. But experience made me recognize very early that Hungarian anti-Semitism (more precisely: not Hungarian anti-Semitism in general, but that of some Hungarians) would not allow that. At 23 I recognized that the road of assimilation was in practice not possible. Because of the lack of acceptance of society. Because of the definite condemnation of Jewishness by non-Jews. Now it is my opinion that the task is to integrate. Integrate, in other words, to conform in such a way that we openly accept our Jewishness.

Do you still experience unpleasantness because of your Jewishness? Do you encounter anti-Semitism nowadays?

I have experienced a great deal of unpleasantness both in childhood (and my parents as well), and as an adult; even now it is abundant. We often receive foul, hateful letters and telephone calls, for example, "Disappear from here, your place is in Auschwitz," and the like.

What do you see as the cause of the still living and loud anti-Semitism?

There has always been anti-Semitism in Hungary, but now, partly because of the stresses that accumulated during the dictatorship, partly because of the economic difficulties, its voice is becoming louder. In an unfavorable economic situation people usually look for a scapegoat, and they find one most often in Jews. In addition, people see that some Jews are spiritually and materially rich, and this evokes more hatred.

What can be done to counter anti-Semitism?

Anti-Semitism fears only opposition. Only organization and organizations can fight against it. I have never understood those Jews who are ashamed of their Jewishness, and are self-hating or hurtful to other Jews, to prove to those around that they have nothing in common with such things. If someone strikes another person, and that one does not strike back, later they will regularly and even for pleasure beat them. But if the one does fight back, the other will think twice the next time, whether to strike.

It is my firm conviction that only groups or organizations (Jewish organizations among them) can successfully fight against anti-Semitism, and for that reason I find it the foundation of democratic Jewish associations in Hungary very praiseworthy. In addition, it is psychologically beneficial that Jews can live and in fact experience group life in these associations, because this “filters” or dulls anti-Semitism to some degree. It is advantageous if a group restrains the unfavorable effects, so an individual need not suffer them alone. In this way stress is lessened, and commonality gives strength, initiative, and support. Jewish organizations are needed which take upon themselves the responsibility to fight against anti-Semitism. Without this how could we expect non-Jewish organizations and their members to fight against it?

Of course, one should not make too much of anti-Semitism, but in my opinion it is as much an error to trivialize it. We should think of Jews unfortunately marching to Auschwitz, underestimating the significance of being forced there, believing that they were only going to suffer at hard labor while the war lasted...

In your opinion, is it possible to fight against prejudice by means of information?

Mere information and debate cannot successfully fight against anti-Semitism and prejudice. However: one must speak about it often, openly and honestly. If besides debate various well-intentioned social effects are strengthened, then it is to be expected that anti-Semitism will retreat. For this a long time and patient, persistent work are needed. Looking at the whole world, I am also optimistic about this question.

3. Chief witness for genius education: the happy children

“A person is happy if they have work and are able to love.” S. Freud

“There does not exist such a modest happiness that it can avoid the teeth of malice.” - V. Maximus

“A person lives to be happy and pass on that happiness to others.” - A. V. Lunacharsky

It is my experience that everyday people would be uncertain if you said to them, “You as well can raise a genius.” They observe from afar, but in general do not let that thought near, which they find bizarre. They fear it a little. I have asked several young people if they would raise geniuses. They answered: if they could know that the child would be happy, maybe yes, but if there were no guarantee of that, and the risk were too great, then no.

I believe that that answer is permissible and sympathetic - I also hesitated. The future of our children is on my heart, and my chief aspiration is to make them happy. But is not enough to merely desire the happiness of our children; we must create and develop in them the capability to be happy. Many ways lead to happiness, although not all with the same certainty, but among them the most certain and guaranteed is - in my opinion - that of genius education. Because of this I chose that way.

According to contemporary opinion, the contrary is true, that is, that the life of a genius is difficult: it is more dangerous to follow that way than a traditional, average way of life.

Again a wrong opinion. It is incontestable that a genius's future can also be difficult, but that does not mean that a difficult human life cannot be happy, and it mainly does not mean that people with easy lives are happier. Among non-geniuses, there are proportionally more unhappy people, like alcoholics, drug addicts, lonely, neurotic, irritable, monotonous, aimless people, etc.

Even if I accept this claim, it does not follow from it that geniuses will arrive at happiness. One reads of many cases in newspapers where, for example, an Olympic champion leaves their sport and declares that they will never take an oar in their hand again, or stand at the tennis table, or leap into the water, etc. They have become weary, cheated of their hopes, over-sated.

I do not doubt that there are bits of truth in those stories. People can also be found who are bored of their present occupations. There are those who are fed up and who make sudden unthinking declarations. But we should not judge too quickly, or derive theoretical conclusions from those stories.

Firstly, sports journalists are thirsty for sensational stories, and blow everything out of proportion; they make unthinking declarations seem like definitive decisions. Secondly, I am acquainted with many athletes who, after leaving the sport, continue their activity in the same field as trainers, club leaders, referees, or managers. Finally, why is it bad if someone modifies

their career or changes their specialty? I do not understand this disapproval. Why is this bad? This simply demonstrates adaptability. To change one's career one must have several diverse kinds of capabilities. I really see this as an advantage of geniuses. The abilities of geniuses can be converted more effectively than those of others. Changing careers truly proves the vast sphere of freedom for a genius's life, and not their deficit. However, I must remark that the situation of stars of physical sports is more disadvantageous; they can become aged in youth as a result of their sport.

How can it be proved that genius and happiness belong together?

This is also provable theoretically, but I can confirm it with the example of my daughters - in practice. In theory genius and happiness are more interlinked than the opposite state. As I have already mentioned: *genius = work + luck*.

Happiness is a complex phenomenon (a process and a state), which also contains components of genius. It consists of several elements: enjoyment of work, honesty, health, wisdom, material conditions, cheerfulness, love, optimism, courage, tranquility, lack of worry, fulfilment of duties, the satisfaction of spiritual and material needs, a sense of joy, satisfaction, perspective, a correct view of life, a full experience of love, rest after work done well, creativity, success, establishing goals, high-level needs, and I could continue for a long time... To summarize and categorize these components, we can describe happiness with the following formula: *happiness = work + love + freedom + luck*.

I categorize under profession: work, accomplishments, creativity; under love: feelings given to others and reciprocated; under a state of freedom: the potential and capability of a person to become an independent, autonomous, and creative individual; and under luck: the union of random external (recognition, peace, family environment, etc.) and internal (health, strength, physiological endowments, spiritual and material goods, etc.) factors.

Happiness is a complex phenomenon in this sense. From the formula it is possible to sense that it does not exclude, but indeed includes the components of a genius's life.

I agree that happiness and adult genius are interrelated, but the answer to the question of how this relates to the happiness of genius children does not directly follow from this. Many think that a genius child equals a robbed childhood, and a child prodigy equals the wonder: "a child?"

You have verbalized a very important question, although a bit ironically. Firstly, childhood is not so uncloudy as average people remember nostalgically. As a teacher I saw that very often not many people had a happy childhood. Others also confirm my impression. A few days ago I read in the philosopher Eva Ancsel, "Observe a child's face at length, and you will see: if fate exists, it begins very early."

Parents do much for the happiness of their children, but they do not all raise them well, or do not succeed in what they wish. They do not prepare children well for the future; often the

“suitcase” the parents give them for their life is not sufficient. And they do not always take precautions materially. They buy the children gifts, high-fidelity sound systems, cars, and similar things, but they begrudge the money for language instruction. Later they shove the responsibility onto school - which generally lack the necessary conditions - and to the circle of bad friends.

Of course I do not only blame parents for this situation. Society also does not give the necessary support. For example, it happens that people frighten parents who wish to fully develop their children’s capabilities away by the argument that they are too ambitious. They say that they are pushing their children to achieve in that way what they themselves never succeeded in achieving. I personally know a person who wanted to walk with their child along the same way as ours, but when the press and radio opened a full frontal assault on them, the parents’ nerves almost collapsed, and they gave up working on the matter.

Can you prove, despite all this, that your daughters are happy?

Yes, I firmly claim this, and among my educational successes I consider this the most important. I am doubly joyful about this! First, because it is true, and second, because the value, sense and utility of my pedagogical method of genius education has been proved in practice by this.

But how can you attest to your claim?

Primarily by the reality. Look at my daughters, and if you have a bit of psychological sense, you can determine much from their appearance, and how they carry themselves, their laughter, unworriedness, their movement. It is not by chance that I proposed publishing many photos in the book, so that others could also see this.

I know that you never boast about your way of life, but if others doubt the happiness of your daughters, you must illustrate how colorful and varied their lives are.

They have already met many famous people: prime ministers, ambassadors, and Princess Diana; they have taken part in society receptions with millionaires, and mayors; they have played chess with UN delegates in the UN headquarters. They have connected with world-famous artists, Olympians, and world champions; they have participated in a counter-narcotics campaign in Canada; they have been in special direct TV program; they have given TV, radio, and newspaper interviews throughout the whole world. A little while ago they took part in the reception given by the US President Bush in Budapest.

In the Strait of Magellan, close to the South Pole, they played with penguins; in Australia with kangaroos and koalas, and in the Negev desert with a camel. In Iceland they sunned themselves in a meter of snow, threw snowballs in bathing suits, and saw the famous white night. In New York they flew in a private helicopter between skyscrapers. They have hiked in the Mesoamerican old-growth forest, and glided on parachutes into the Gulf of Mexico.

They have played chess in interesting places, like the center of the Common Market in Brussels, and the World Trade Center in New York, one of the tallest buildings in the world. They have visited such amusement parks as Disneyland, the Tivoli in Copenhagen, the Prater in Vienna, and the most famous botanical gardens and zoos in the world. They have played in the casino of San Juan, swum in the Atlantic and Pacific oceans, the Mediterranean, Dead, Caribbean, and Black seas. It has happened that when it was gloomy winter in Europe, they summered in Australia or Mexico. (In summer, if we are home, they sun themselves most often on the panoramic terrace on the roof.)

They have visited and continue to visit the most famous museums of the world: the Louvre in Paris, the British Museum in London, the Vatican Museum, etc. Wonderful airports welcome them, in Singapore and Dubai, for example. They stay at the most famous luxury hotels. They have seen wonderful fireworks in Paris and Biel in Switzerland. They have walked around and seen the sights in cities like New York, Vienna, Reykjavik, Zurich, Paris, Cannes, Varna, Sofia, Montreal, Ottawa, Vancouver, Sydney, Melbourne, Copenhagen, Brussels, Buenos Aires, San Juan, Moscow, Munich, Cologne, Hamburg, Berlin, Dresden, Athens, Salonica, Rome, Madrid, London, Mexico City, Prague, Jerusalem, Amsterdam, Monte Carlo, Las Vegas, Baden-Baden, Bucharest, and Belgrade. I could continue for a long time.

They regularly participate in Esperanto gatherings. If they want to and have time, they take pictures and videos, they listen to music, they collect chess books, chess-related stamps, chess-themed pictures, and chess sets. They have a large collection of records and cassettes.

They have many friends in various parts of the world with whom they correspond, contact personally or telephone. The house - if they are home - always stands open to guests.

Thus for the “color” of their lives. But I am sure - and this truly gives me strength - that this nevertheless is not the most important thing for them, besides their family, their sisters, their successes, and their communal joy.

I can add that I have never visited you without coming across a guest, several guests actually, friends, chess colleagues. But what do the girls say about their own lives? Do they feel that they are happy?

Ask them!

I do not want to ask them directly, as I fear that they will mock me like another journalist asking similar questions.

So I will speak myself. For example, yesterday my oldest daughter Zsuzsa, who is at the age to be thinking of marriage, said to me, “Papa, how happy I would be if I had a daughter like me.”

This is a very spirited response to the question. Not less striking is her response to my interest in whether she would raise her son or daughter as you raised her. She said first, "I don't know." But after further insistence she answered, "I feel uncertain that there is in me the same amount of sacrifice and selflessness as in my parents." For me this is a convincing argument, a "QED." Those who know them well think the same. Your neighbor, the clear-sighted psychologist Judit Meszaros, decidedly answered yes to my question whether the girls are happy. "Certainly, although maybe in other ways than other girls. But happiness does not wear a uniform."

I quote several statements of psychologists who know your family well. For example, an article by Jochen Harberg appeared this year in the West German magazine Stern entitled "Genius is Plannable." Having heard the girls' laughter, the author closes the article with the words, "... this signals that these girls are happy."

Reinhard Muenzert, the renowned psychologist (his book entitled Schachpsychologie appeared last year in the FRG) writes the following: "In the end has the experiment truly succeeded? Should one not say that although the girls have achieved good results, are they also happy people? Have they not been educated too narrowly, deprived of a carefree childhood? I was able to observe the Polgar family... and what I saw absolutely convinced me: I saw three totally natural, friendly, charming, sensible, and frolicsome girls. They are often joyful. One can clearly see that they are happy."

In this category belongs the article by the psychologist and international chess master Leon Pliester with the title "Prodigies," which he wrote for the periodical "Dutch Chess Player" (1986), whose contents he personally confirmed a little while ago when he visited the family, "Of course when I visited Budapest in September, I wanted to use the occasion to become acquainted with the girls. I was interested in not only their chess abilities; I wanted to experience for myself what kind of prodigies they are, where the secret of their strength in the game is hidden, and what kind of education they received. I was agreeably surprised when I met two warm-hearted parents in the company of three charming, untroubled children. I must acknowledge that this family impressed me deeply: I highly admire their way of life."

Permit me to also mention an evaluation in Hungary. Not long ago Mrs. Laszlone Dudas, who wrote a successful thesis at the Pedagogical University of Eger regarding my educational system, visited me. According to her, "It is clearly evident that the children are happy. I could not find even one element in their life that could make one suppose that they were less happy than their peers."

These opinions, citations, and instances cannot separately be considered scientifically valid proof of the happiness of the three girls, and they are also not enough to refute opinions that the girls are joyless, tedious "chess machines." But all this information together can be considered a sort of proof. In addition, I can also personally attest that all of your daughters are healthy - both physically and mentally. For 4-5 months, when I was visiting you, they were not sick even once. I spoke to their doctor, and even he did not remember when they were ever ill. During this period they participated in many competitions, bringing outstanding successes

and also relatively weak achievements. From a psychological viewpoint the latter case interests me: how do they justify losses to themselves? I did not hear them even once attribute a lesser accomplishment to external factors. They never cast the blame on their surroundings, or the weather, not once did they excuse themselves by a cold or a toothache, as I have become "accustomed" to hearing from competitors in other branches of sport.

I was once present for a "miracle": I overheard a telephone call informing you of an outstanding victory by Judit in England. Zsafia took it at home with a wide smile and signs of unclouded happiness on her face, proudly she snapped her fingers - without the smallest shadow of jealousy.

Another time I became a witness to Zsuzsa's linguistic juggling, when in a circle of foreign guests she smoothly interpreted from German to English, from English to Russian, and from all of them to Hungarian, completely accurately. The reader should think about what it would be like for one's most important problem - this is about Judit - to be whether or not to train a bit more in table tennis, to become a player of international rank, or not to take on any more and so damage her uninterrupted high-arching chess playing career. To all who would wish to become happy, I desire only these kinds of worries.

We must also discuss a theoretical question concerning this idea. Can one intentionally educate for happiness, or should we leave it to create itself? According to Freud, "The plan of Creation does not contain the intention of making people happy."

I am a pedagogue, so I am concerned "ex officio" with the goals of education, and it is natural that one of the goals of education, happiness, must have its place in my system. Can one intentionally educate for happiness? I think that yes, even if not with the same certainty as for concrete language understanding or skill in physical sports. The first and essential condition for becoming happy is for one to want happiness. Many people want to make their children happy, want to see them thus, but they do not do enough, or even very little. They let themselves be guided by accidents of education. I, on the contrary, have the principle that one should approach and perform education very intentionally for happiness.

The specialist pedagogical literature ought to research this.

The literature does not even place the basis of the theory of education on happiness. But my genius education concept can serve as a contribution to the development of a theory on happiness.

What can be considered a goal and what a method in your pedagogical system?

The all-encompassing goal is undoubtedly happiness, and in relation to this genius education can be considered a method, but also it is about a dialectical process: in real life one grows through the other, that is, they prepare and strengthen each other reciprocally. Achievements lead to feelings of happiness, and happiness gives new motivational strength for higher achievements. Thus the method is formed from the goal and the goal from the method.

Nevertheless, what would happen if genius education contradicted the happiness of your daughters sometime?

This is not acceptable. But if there were some breakdown in my system, then undoubtedly the goal has the higher rank, and in its interest I would abandon bad methods.

Now, luckily, there is not even a shadow of danger. So you have proved that it is possible to raise geniuses. This is all very well, but what does this serve? Does it validate the effort?

I answer with a unequivocal and decisive “yes.” It validates it, because this leads individually to happiness, but it is about more than just that: genius education is desirable and beneficial in a social sense as well.

I see that you do not understand the question, so I will try to express it again. Is genius education a completely positive goal? Do we need a so-called hierarchy of values? Gasping, we climb to the summit. But for what? This can be neither an individual goal nor a social program.

What to say? I do not claim that at the bottom or middle of the pyramid an individual cannot be happy, although let us not make the bottom level a societal goal! Humanity progresses, and the history of our country needs as many and as good specialists as possible, and always more creative geniuses. Without this progress will be gone. If society does not strive for the summit, it cannot progress.

If it is true that education determines our intellectual development in a decisive way, it could easily happen that less ethically developed geniuses could be more damaging than medium-capable ethically developed people.

The history of humanity shows that primarily the less capable or middling capable (thus not geniuses) and the morally undeveloped are dangerous for society, especially if they gain power (like Hitler). Of course, it is also dangerous if a very talented person in some specific field, but immoral, is in charge. For example, Napoleon was undoubtedly an extremely talented organizer and leader, although he used these abilities to endlessly make war and subjugate peoples.

Genius education - according to my definition - aims for the development of personality, happy people, and the development of socially and morally progressive individuals. Therefore I say: genius education, education for happiness, and humanism are unified things; one does not develop one without the others. In addition, whoever intends to raise their children as outstandingly capable people would certainly not wish them to become ethically undeveloped, dishonest people. In history geniuses represent more good than bad.

It is true that one can turn most of the elements of my educational method - as tools - in any direction. But the same is true for any tool, even a stone. With a stone one can break a nut, and

also a human head - but the stone is not the guilty one. Although I am not responsible for how one applies my concepts and methods, it is nevertheless my duty to warn about the possible dangers of incorrect, damaging application. So it is not permissible to apply only part of my methods - namely those related to intensive training in some narrow specialty - while neglecting my standpoint on moral education. It is necessary to raise exceptionally talented specialists so that they present extraordinary qualities not only in their specialty, but also in morality.

People often claim that scientists are not responsible if others use scientific achievements for immoral goals. This is only partly true: today it is generally not possible to use scientific results without the active collaboration of scientists. The more educated and the more talented someone is, the greater is their social responsibility. My wife and I endeavor to live conforming with this principle, and we have raised our daughters according to it as well.

Education has two "M"s: miracles and mistakes. You have proved the one, but it also has risks. Sandor Klein thinks as follows: "I must say that when I did not know about the Polgar phenomenon, I did not believe that it was possible to raise geniuses. But if one could successfully achieve this, why couldn't another? If people are truly this educable, the greatest risk lies in the extremely large responsibility on the parents. But if we do not utilize this method, then our responsibility will be enormous: we have at our disposal a wonderful thing, and we do not use it."

4. Your life should be an ethical model

“Guilt does not worry a mis-educated person.” - The Talmud

“What is humanism? The love of people, nothing else, and by this to rebel against that which dirties and shames the human person.” - T. Mann

“Pleasure does not go along with virtue, but virtue goes along with pleasure.” - Aristotle

Leafing through the preceding chapters, I observe now that to my questions requiring rational answers, you always reacted by revealing emotional “colors” and moral values. I feel a bit like I did when reading Kant, who wrote, even about the purest logic and cold consequentialism, always with high pathos, if it had to do with morality. What is the reason for this?

Whoever wishes to live in peace with themselves and others, who wish to have a clean conscience, who is occupied with promoting pedagogy, who loves their family, who wishes to live in harmony with their social environment, cannot leave out ethics. Without moral values one lacks a compass for life. The task of people on this Earth is to conduct themselves and others toward perfection.

During our interactions the thought always kept coming back to me: why are you, who have been hit by so many blows, misunderstandings and traps, and yet not closed yourself off or retreated or been offended, now publishing your thoughts, methods, and experiences, when the fruits of your labor have matured, your chosen road been shown to be correct, and when you have no more need of insisting there is evidence?

For me it is an internal law to do good. In my whole life I have endeavored to realize high moral values; I have always believed in moral ideas, and as a pedagogue and a father I have always disseminated them. I could not live otherwise than what I profess. Striving for harmony between words and actions, needing to put ideas into practice, is an integral part of my moral concept and practice. Because of this every kind of small-souled reaction, vengeance, or trickery is far from me - for me openness is an internal command. Although I know that this book will “incite” many to attack, I know that people will criticize and offend me, and I have exposed myself to hostile action, but nevertheless I am taking this step - not following the counsel of the wise king Solomon: “Do not be too virtuous, and do not reason too much: why must you confuse yourself?”

Many who know you more closely claim that your primary interest is not chess, that your pedagogical theory is not most important, but it is the moral model that you have implemented in your life. They say that you are a hero of our time: you have endured a difficult trial, during which you have succeeded. You have not let yourself be diverted from your way, have not changed your skin, and have stayed simple and modest. They praise you for throwing a stone

in the deadly water of the world of chess since the 70s, because you have invented a new family model, because your individual example has become a socially and morally applicable model.

This is too much, in a certain sense. I did what I had to do, and now I am doing the same with this book. I am passing on my experiences, as the Talmud says: "Who knows something beautiful and does not pass it on is as guilty as one who knows something ugly and does pass it on."

The book is about the education of geniuses. Do moral geniuses exist?

Let us approach the idea from several sides! If we understand the notion of "genius" to be activity in an avant-garde level of the current epoch, and social maturity or "perfection," then a moral genius is one who stands at that level of moral "perfection." Extraordinary people always appear in extraordinary situations (Mahatma Gandhi, Martin Luther King, Tivadar Herzl, Raoul Wallenberg, Ignaz Semmelweis, Albert Schweitzer, etc.), who we must definitely call moral geniuses. But people can become moral geniuses not only in extraordinary circumstances.

Permit me to relate to this the thought of Bertolt Brecht: "One must pity the people who need heroes."

I agree with this, that one should pity the people who need heroes, but I would add that one needs to pity even more the people who - when they need some - do not have heroes. Moral education must not suggest: "Be a hero!" It must pass on values which in times of need can lift a person to be a hero. A moral genius is an example - both in extreme situations and stable periods. An example always finds followers.

I have also spoken with the master trainer Janos Gyimesi, who responded to my question whether there were geniuses in the sport of basketball as follows: "If five players train themselves in basketball, I say that a fivesome is at work, but if there appears among them a Larry Bird [an American professional basketball player], then six geniuses are now playing on the court." Indeed, a genius has an emanation, an aura. From which qualities do you choose, when you "plan" a moral genius?

I see before me a person who is sacrificial, honest, and courageous; a good friend and family member, not cynical, not egotistical, but empathetic and good-hearted, who feels responsibility, is attentive, and is capable of keeping secrets, who does not misuse their power, does not gossip, and can master their ambition, who is just, demands quality, an internationalist and not envious, who generally behaves in a friendly way and does not judge others easily, who is persistent, has initiative, conscious of duty, critical, self-critical and conscientious, who relates well to learning or ignorance, and who is capable of self-education (self-perfection), who has self-control, who is sincere and strives for freedom for themselves and others, whose ethics are at a similarly high level, who is modest, able to love others, who has solidarity, tolerance and

politeness, has a healthy competitiveness, is helpful, peaceful, and well-intentioned, who shows respect to those who merit it, etc. This kind of person is definitely an exemplary moral authority. Whoever has in themselves all of the qualities above to a high level is a moral genius, even if they never become a hero, and even if those around them never consider them to be one.

How should we raise moral people?

A person is not born morally ready, does not bring moral values along from the womb, a maximum capability to become a moral being. But how they become, a loving family member or a hateful one, an altruist or an egoist, a humanist or a fascist - is not genetically fixed, but depends primarily on education and surroundings. As with all abilities, the moral ones can be and must be learned.

It is true that here childhood influences are most important. But an adult is also formable in the same way. Democracy can transform into fascism or fascism into democracy. It can also happen that someone leaving prison can arrive in a good society and become an honest person.

Here also we cannot let ourselves be led spontaneously: one must structure morality intentionally. In our century ethics is a very neglected field of instruction education. One could certainly do much more in this regard, than society has done until now. Not only family and school education can have an enormous role, but also a scientific direction for society and the use of mass media. Information itself of course is not enough, although it is better than nothing. One must create the conditions for the practice of morality.

What do you think about the so-called decalogue of moral values?

I feel that this code is superfluous. The moral life of a person is so complicated, complex, and wide, that it cannot be contained in 6 or 12 or 128 points or commands. Moreover, this kind of rigid and closed system I think radiates from a dogmatic way of living. Of course this does not mean one cannot, from the viewpoint of education, formulate some changeable, modern decalogue.

Try nevertheless! What kinds of principles do you think are important for you?

I will do as you desire, and list ten principles without more thought. This means that tomorrow I might insert other values (preserving the originals) between the following ten:

1. Be an example: live such that others follow you!
2. Learn and work hard, be demanding on yourself and others!
3. Be willing to love, give and receive love!
4. Live with yourself and others in peace, live a healthy and moderate life!
5. Strive for happiness and endeavor to make other people happy!
6. Have humanistic ideas and fight against prejudice!
7. Preserve peace and tranquility in the family, raise your children as perfectly as possible!
8. Be honest, respect your and others' freedom!

9. Trust the development of people, nurture small and large communities!
10. And finally, the wild card, that is, everything that you think moral and current, but which is not in the other nine points.

If you could state one “command,” what would it be?

I will quote Hillel from the Talmud: “Do not do to your brother human what is unloveable for yourself - this is the whole law, the rest is mere details.”

From the values above comes a humanistic, puritan concept. I think that you truly live according to it in a simple manner, while many consider you really contradictory: a careerist and lover of money.

I am neither an ascetic nor a puritan. However, there come times when one must reduce one's needs. Thus it was at the beginning, when almost in misery - feeding ourselves on bread and butter - I began the work with my wife and daughters. But I do not consider myself an ascetic. I refuse asceticism in the same way as the other extreme, hedonism.

I do not claim that I do not require that which is owed to me. For example, this year when we signed a contract with the sports club MTK, the press published that we receive 600,00 forints a year. In past years this sum was much less. It seems a large sum of money, but one should not forget that it pays for us five, and it is no more than 10,000 forints net per month. (= Monthly salary, competition fees, financing for training, and other fees together.) Is that a lot?

Do not misunderstand me: I am not saying that someone should give their worth without pay. We also wish to charge the price that other professional competitors do, because we are really worth it. According to our competition and advertising value. I also require money for hosting guests, but this is a different matter, which we spend on not luxuries, but books, tutors, language learning, and the like.

Mate Gaspar, international chess master, who often visits you, says regarding this: “These children are not pampered. I have seen pampered children, but these are not like that. Regarding the classical dilemma, ‘a villa or a child,’ people generally vote for material goods. Not the Polgars. One can see what kinds of circumstances they live in, and what kinds of material difficulties they also have. So I consider their way of life and the fact that even now they have not changed their original habits not only a pedagogical model but a moral one. As people, they seem too normal to me.”

In my opinion my life is normal, not extraordinary. I am convinced that other people can do the same, and there are times when a possible example can indeed become a model.

“The example of the Polgar father is decisive for the future,” wrote Andras Mezei, “because the future of the Hungarian people depends on whether it is capable of recognizing, culturing, and increasing spiritual perfection.” Is the pedagogical experiment we have been speaking about in harmony with the moral values explained above, including whether one has the right to experiment with people?

The object of a pedagogical experiment can be nothing other than a person, and for their good one not only has the right, but even the duty of performing pedagogical experiments. In fact, all parents, even if not consciously, “experiment” with their children. An intentional, humanistically organized experiment is much more likely to succeed. Experiments are one of the methods of scientific discovery, by which we rigorously and organizedly establish some phenomenon, condition, or cause. During an experiment we can observe the supposed effects and modify them as desired. I agree with the academician Pal Tetenyi, who differentiates between, on the one hand, experiments in closed and open systems, and on the other - from the viewpoint of their effects - those dangerous or safe for people. The specificity of our experiment consists in it being performed in a closed system, and its danger is zero.

Our program has been repeated many times throughout history. Similar life paths are known of many exceptionally capable and accomplished people. We merely did it intentionally, and by this raised it to the status of a theory. Our experiment is, in an absolute sense, humanism. The experiment is not contrary to moral values, as it is useful and gives happiness to its participants. It does not hinder specialist and moral progress, harmonious development of personality; it even has the opposite effect. By decreasing failures, lack of success, and unhappiness, the formation of a way of living and the realization of life principles are effected in ideal circumstances.

Of course one must perform the experiment with great responsibility and optimism. But for this society must be more tolerant. This kind of complex experiment lasts for 15-25 years, and can be disturbed by external factors in many ways, like a lack of understanding by official authorities, the press, and public opinion. Traditional educational methods can be either damaging or beneficial. Our way - in our experience of the experiment until now - has proved to be primarily good and beneficial. In my opinion it is an example that others can repeat in creative ways.

Today you have many admirers; although some people still try to shove you aside, they cannot erase you any more; your results are woven today into the fabric of Hungarian society. You are not now merely an object of sensation or discussion: you have a valuable social influence. Primarily because you have implemented your pedagogical theory in practice on yourselves. In pedagogy you have created a model worthy of following because you have unified theory and practice.

But maybe I am speaking too much. Maybe my extended laudatory sentences only weaken the power of proof of the fact, as in the words of Albert Szentgyorgi, “One honors a creative artist best not with words of praise, but with understanding and appreciating their work.”

So: who is this book speaking to? Who are you addressing?

It is addressed to my colleagues, of course, to specialists, to psychologists, pedagogues, to those who are interested in chess, but primarily to parents, grandparents, future fathers, mothers, teachers. They should think about this way of life and the fact that one can in this way raise a happy person.

I do not give a prescription, only a way of life, and I wish to persuade no one to raise geniuses. I merely wish to show that it is possible to raise geniuses. I invoke no one, and instigate nothing; everyone must decide for themselves what they wish to do. I am only passing on my pedagogical system, and guiding everyone along the road that I have also traveled, with the certainty that it is possible and necessary to raise geniuses, because geniuses become happy people.

Budapest, June 3, 2004

Biography of Laszlo Polgar

He was born on May 11, 1946 in Gyongyos. His first degree was in philosophy; his second in psycho-pedagogical education. He had a 15-year successful career as a teacher, and later managed the training, competition, and promotion for his daughters. He acquired his PhD with a dissertation on the development of capabilities. He is a master teacher (this is the highest level of teaching recognition in Hungary).

His daughters have won 12 Olympic gold medals, and several world championship titles. Since 1984 they lead the women's world rankings. They have been awarded Oscar prizes several times.

Specialist books, graduate degree work and doctoral dissertations have analyzed and recognized his pedagogical activity.

Around 20 books have appeared by him. The first "Raise a Genius!" appeared in 1989 in Hungarian.

The Polgar Girls' Latest Competition Results

Zsuzsa:

- The first woman to receive, after fulfilling the standards, the title of "Men's Grandmaster."
- World champion in speed chess.
- World champion in blitz chess.
- World champion in chess with traditional time limits.
- Olympic champion several times.
- Oscar prize several times.
- Beat by a large margin the world champions Chiburdanidze and Xie.
- Won the separate men's blitz chess championship.
- Even match with Anatoly Karpov 3:3 in 2004.
- Even match with Anatoly Karpov 3:3 in 2005.
- First in the world rankings in 1984, 1985, and 1986, later second after her sister Judit.
- Winner of very many international competitions.
- In 2004, when Judit had her child, she switched back to first place in the women's rankings.
- Gained a university degree, mother of two sons.

Zsafia:

- Olympic champion several times.
- Silver medal, after her sister Zsuzsa, in the speed chess world championship.
- Her competition result in Rome is a Guinness world record: out of 9 she received 8.5 points, ahead by two points of world-famous men's candidates for world champion. This result is the 5th best result in the history of chess (after Fischer, Karpov, Kasparov, and Alekhin. Judit is the 6th per her Madrid result).
- An Oscar prize.
- World champion in speed chess in men's under-20.
- Silver medal in the world championship of traditional chess for men under 20.
- Winner of very many international competitions.
- Finished high school, mother of two children.

Judit:

- Olympic champion several times.
- US Open #1: 8 points out of a possible 9.
- First ahead of men's world champions in Benidorm.
- The youngest grandmaster in the world at the age of 15, breaking the record of Robert Fischer (at the fulfilment of the first standard she was no more than 13).

- At 15 won the Hungarian men's super-championship.
- Several Oscar prizes.
- Beat in an even match at 5:3 the men's world champion Anatoly Karpov.
- Beat the former men's world champion Boris Spassky at 4 $\frac{1}{2}$:3 $\frac{1}{2}$.
- In the match of the globally chosen team against Russia, beat the world champion Gary Kasparov.
- By a vote of - the most important publication - Sakk-Informator (regarding the best and most beautiful match) finished 7 times in 1st, 2nd or 3rd place.
- Since January 1988 has led - without interruption - the women's world rankings, and 7th in the men's world rankings.
- Winner of many international competitions.

The Polgar girls have 15 Olympic gold medals.

Elo Ratings

Judit: 2735

Zsuzsa: 2567

Zsofia: 2500

Age	A. Karpov	Zsuza	Zsofia	Judit
Learned chess	4	4		
3rd category	7	7		
2nd category	9	8		
1st category	9	10		
Candidate master	11	11		
Master	15	13	12	10
International master	18	13	14	11
Grandmaster	19	19/20	14(1)	13/15

(1) GM standard + 1.5 points