# VI. Education and the Sciences

While scholarship and science have become increasingly supranational during the past century, their importance for individual nations would be difficult to contest. The number of Nobel prize winners or the reputation of the best universities complement the achievements of industrial, medical and biological laboratories in any given country as indicators of the country's advancement and prestige. In all respects, science brings pride — and money. The diffusion of knowledge and the instigation to pursue it further are the tasks of education.

As has been mentioned, Hungarians cherished their unique language as the cornerstone of national identity. They have also been eager to cultivate knowledge. Often disadvantaged by the turns of history, they regarded the intensive development of education as a further means of national survival.

This is the central thesis of the Transylvanian educator János Apáczai Csere who, having travelled a great deal in Europe and thus having become acquainted with the universities of several countries, spelled out the national priority of higher education. Dominating the suggested curriculum are the applied sciences, and studies like rhetorics or ethics that contribute to statesmanship and a political career. Also notable is the eminent place that Apáczai Csere assigned to economics.

## Document 1. JÁNOS APÁCZAI CSERE on the importance of education

Why are there so many public affairs incompetently dealt with? The reason is that we, Hungarians, have not a single academy; therefore, we have no place to teach and at the same time advocate moral philosophy, which curbs sins; economics, which manages the life of families; medicine, which preserves health; mathematics, which creates

cities, streets, churches, palaces and towers; and finally philosophy, which is the root of all sciences. [...] If thus we are deprived of such necessary support (I do not even mention the pressing lack of books and printing shops), do we dare to expect the fortunate development of our affairs, the radiant light of scientific knowledge? [...]

The role of an academy or college in a country can be compared to the role of the eyes in the body. And the role of the human mind can be compared to the role that scientists play in any country. A body without eyes reminds us of darkness itself, whereas man without his mind is but a brute. [...] Academies, and academies alone, or at the least colleges, can save us, and not idle talk, conceited ideas, or blind emotion, which always flatters itself excessively. We will perish unless we recognize our real situation.

"Academies, and academies alone..." Apáczai brought to public attention a concept that was probably inspired, in his case, by the glorious French Academy. Wishing to put the theory into practice, he urged the creation of centres for the advancement of national scholarship. This, again, belonged into an even wider, more ambitious framework: the need for the institutionalization of national culture.

The idea of a Hungarian Academy was raised again and again by outstanding thinkers and writers. Yet, some one hundred and seventy years passed since Apáczai had made his plea, before count Széchenyi took energetic and eventually successful steps to establish such an institution. In 1825 this patriotic aristocrat offered one year's income of his sizeable estates to the creation of an academy, and the parliament proclaimed the goal a national cause. In a subsequent pamphlet, Széchenyi explained his ideas about the tasks of the planned institution.

The primary aim of the Hungarian Academy was the cultivation of language and, through this activity, the advancement of the sciences which, given the Hungarian definition, also included the humanities. Széchenyi refers to the fact that language is the foundation of society: imprecision in communication can cause misunderstanding and discord. As the excerpts explain, however, knowledge is also communicated with language. Are Széchenyi's ideas on this issue still relevant in our time? When we think of such often heard pedestrian pragmatism as the idea that knowledge and education should be "practical"; or, that the improvement of lower-level education should take priority over that of higher education; or, that the quantity (of, say, the registered students) is more important than the quality of education - when we think of all these pseudo-

democratic attacks on scholarship, Széchenyi's thought-provoking ideas seem anything but outdated.

## Document 2. ISTVÁN SZÉCHENYI on the Hungarian Academy

In 1825, when the idea of the Academy was renewed, [...] many people could not comprehend why the establishment of a purely philological institution was singled out as most important from a long list of tasks — a project that demanded much hard work, time, and money. [...]

What good could an institution do — thus they reasoned — an institution that only produces words, refines sentences, and joints paragraphs, operating among four walls, thus locked away from society and the rest of the world? Perhaps it perfects language this way, but it will be of little use in securing and exalting our national identity. Until our native language will be spoken by people from all walks of life, our problems won't be solved. Therefore, we should rather have built schools to spread our language, instead of forming a philological society.<sup>1</sup>

We should have trained teachers to disseminate Hungarian among those inhabitants who speak other languages, instead of establishing an institution which only unites scholars and pays them for producing words.

Undoubtedly, these are weighty observations, and very tempting ones, too. They are tempting because Hungary is indeed lagging very much behind in any branch of crafts, arts, and science that one can think of. This backwardness was hardly a matter of general concern until very recently, but now it is widely recognized. Many people, maybe also some of those who contributed to the establishment of the Academy, may ask doubtfully, whether it would have been better and more expedient to join forces for the establishment of something more practical (a polytechnical school, for instance) rather than waste so much energy on setting up a purely philological association. [...]

"We should have invested our united power in something more practical that could be useful in our everyday life as opposed to something that manufactures only words." Indeed! However, I ask, what produces the most confusion and misery among people? Maybe the fact that they are heartless and evil? Surely not. Most mischief is due to the simple fact that people do not understand each other. Not even in ten out of a hundred cases can we find purposeful villainy at

the root of misery. The cause of most human suffering is misunderstanding followed by a heated argument, then revenge which kindles hatred and malice.

Why cannot people understand each other? Mostly because human language — not excepting any spoken tongue — is so insufficiently defined and so non-specific that often just one ambiguous word can turn even the best of friends into bitter enemies. Now, if it is true that first we have to terminate confusion that causes misery in all circles of society in order to insure public good, and, if it is also true that most confusion, and the misery that it creates, originates from misunderstandings, then it should appear that there is no nation so advanced that it could afford not to invest in the development of its mother tongue. A major project, such as the construction of the bridge over the Danube,<sup>2</sup> can be carried out smoothly and without delay only after successful preliminary planning. Likewise, we can fully elucidate truth, and thereby convince others and win, only after preliminary, precise definitions of what we intend to say in our general arguments. For this reason, no nation has a more urgent and serious task to accomplish than to make its language approximate scientific precision. Only with such language can a nation act most efficiently and quickly to advance its interests. [...]

However, one who has lived without dignity for so long and just now is starting to gain it back is more protective of this valuable asset than the one who never experienced such moral agony. Often he becomes quarrelsome and ready for bloody revenge if he believes to have been offended ever so little. This applies to the Hungarian language and nation as well. Where other nations simply see an honest competition, Hungarians (especially nowadays when their passions are regularly and systematically stirred) perceive oppression, hindrance, and intolerable grievance. While other nations — like normal human beings who are not overly concerned about their food and the manner of their clothing — consider only the desirability of things, not where they come from and how, Hungarians are very suspicious of even the smallest things that they are not familiar with. While people of other nations pray to the Almighty for wealth, power, virtue or wisdom, many zealous Hungarians pray on their knees for the general use of their mother tongue. [...]

"Teachers' colleges should have been established, in order to diffuse the language directly, instead of elevating its value, prestige, and thereby making it the greatest treasure of our nation." In response, let us answer the simple question around which, it seems to me, the disappointment is centred: "If somebody knows Hungarian, does it

logically follow that he also must have become a Hungarian thereby?" If the answer is yes, let us not hesitate to spare our last penny to hire "language teachers," nay, let us all become teachers, "so that the whole world learn to converse in Hungarian." Will it save, will it extol our nation? I don't believe that language and national characteristics could be maintained in such a convenient way, not to mention strengthening and expanding them. Let us remember: the spoken word is not the same as the unspoken emotion; language is not the same as heartfelt feeling. A speaker of Hungarian, even a great orator, is not necessarily Hungarian himself. [...]

They suppose that the greater number is blissful. Indeed! As if 30 million barbarians would have greater attraction and more assimilating power than a small but highly civilized nation! The greater number may determine a fight between two mobs equipped with fists and clubs. Otherwise, not even in war does numerical superiority always matter, and it matters even less in contests of intellectual talents, especially in our century when violence sooner or later will dig its own grave. No-one denies that under even circumstances, the greater number has the greater power. However, do we think that it is possible just to apply nationality onto someone who is in our hands like we apply paint onto the walls, or glaze onto a pot? Do we believe that an order is enough to make someone cast off his own national characteristics? [...]

Let us take an imaginary nation that embraces only one million individuals but contains abundant intelligence, civic virtue, beautiful manners, attractive taste, advanced knowledge, wisdom, practical sense, and other eminent qualities. This culture would be able to offer support, guidance, wise advice, perfect products, and a good feeling for everyone willing to adopt it. [...] Let us imagine such an ideal culture. Wouldn't we have to admit that such a culture would have far more attraction for people to assimilate into than some other that is made up of forty or fifty million unsophisticated and uneducated people who speak the same language? Accordingly, every nation, including the Hungarian one, is more vulnerable to be assimilated into another nation that is at a higher level of culture, than to be absorbed into one that is simply larger. This latter may devastate, ravage, and kill part of the population, but it is not able to assimilate or destroy native culture. It is also clear then that every nation, including the Hungarian one, can integrate others not because of its numbers but because of its quality. [...]

Not all those who speak our language may consider themselves Hungarians. Someone who was born in Hungary is not necessarily a virtuous man, and the one who boasts with his patriotism may not be a true patriot. Indeed, there are many of these pretenders working on the destruction of our country. Since they don't have any other qualities but blind passion, they question the patriotism of those who honestly and altruistically work for their homeland. This is the main reason why Hungarian patriotism meets with little appreciation in the world. This is why even the most glorious Hungarian virtue is unable to gain sympathy and raise positive public opinion outside our country.

As an example of the many tasks expected from the academy, the great mathematician Farkas Bolyai's letters make informative reading. The academy started its activity in 1830, but its impact could not be felt immediately everywhere — especially not in Transylvania, a historical part of Hungary which the government in Vienna arbitrarily decided to govern as if it had not been an organic region of the country. Insufficient standards of higher education, low status of the sciences, lack of adequate scientific terminology: these were just a few shortcomings that Bolyai complained about, and that the new Hungarian Academy set forth to remedy.

#### Document 3. FARKAS BOLYAI: Two letters to K.F. Gauss

[October 3, 1836] Nobody has a desire here to learn mathematics. Among my students, only a few have a genuine sense for it. I use my book<sup>3</sup> for scrap paper, wrapping paper, and such purposes. [...]

Here is an example that shows what our status is with regard to mathematics. A certain work recently published in Hungarian about the basics of arithmetics and algebra won the prize of the Scientific Society: two hundred gold pieces. This work does not have any other merit than the fact that it was printed nicely and correctly in Vienna. It lacks even a trace of originality or acumen, does not clarify anything, has no sign of conciseness, and its content is shallow. It is not only mediocre, but also bad. I would not like it if a prospective mathematician learned of it, since it does not contain one single correct technical term; it is but a servile translation. Nevertheless, I am still glad that this volume has come out, because with this we have climbed the first step. In another century we may be ascending on the thousandth one.

[January 18, 1848] Several years ago I published yet another essay in Hungarian, in which I supplied terms for each concept, but neither the terms nor the concepts have been accepted, because people slavishly insist on the old ones. [...] Most people don't have a sense for thoroughness, for which reason the quality of teaching diminishes to the point where it becomes dull and ordinary. I have even been contemplating that I should quit. Mathematics does not yet grow in this climate.

The Hungarian Academy of Sciences was just one institution established to cultivate the national language. There was also the language revival movement, a wide-spread ambition of literati and publishers to develop a modern, flexible vocabulary. Another trend was the drive to establish a national theatre.

Those who assumed leading roles in this movement praised the theatre as a cultural institution that spread eloquent speech and enriched, unified, and propagated the national language — all these were urgent tasks after the influx of ethnic settlers of various languages and little education during the 18th century.

Ferenc Kölcsey was a poet and politician, an outstanding figure of the early 19th-century reform movement who made the cause of the national theatre one of his numerous ambitions. As if addressing Parliament, whose member he was at the time, in a pseudo-rhetorical form he enumerated the many advantages of the theatre and praised each.

## Document 4. FERENC KÖLCSEY: The Theatre in Hungary

Honourable Members! Even if theatre were not the measure of the cultural development of every refined European nation, even if it were not connected with any other notable consideration than language, on this single point all our attention, efforts and sacrifices would still have to be focused. As far as all peoples are concerned, if they do not wish to be cast out from among the respected nations, they must consider language and nation to be of the same rank. National life without a national language is unthinkable. Alas for the nation that has been deprived of its homeland! And alas for that nation which has been deprived of its ancient tongue! Our ancestors were wanderers, but they were held together by their language, and were thereby able to gain a homeland with their blood, and they Hungarianized this strange land. As for us, what should become of us in our own land if we were to

lose our language? And did this loss not threaten us inescapably once before? [...]

The theatre exists not in a particular area, but in many places, within several big nations, not as an ephemeral pastime but as beauty to last through centuries. Men, shining with prowess and learning and action, gladly participated in the theatre's pleasures; they watched with joy the magical recreation of tales of antiquity and the antics of the present made farcical. What did the great European nations lose, having built theatres for themselves and given to their excellent actors as their share respect and a good living? And what have we gained, having left our actors to wander without shelter or support to this day, closing our eyes and ears to their performances, and denying any compassion regarding their fates? [...]

Only the participation of the nation can create a national theatre for us, a theatre whose distinctive symbol would not be the national coat of arms painted on a lifeless stone wall, but that pride with which every Hungarian will step across its threshold; that enthusiasm which elevates the actor, who regained his self-confidence through the appreciation of the public, above everyday life; that noble patriotism by which the poet, confident in his nation, conjoins his own sentiments to the ones that reign among the people of that nation, and by this, the only possible means, he achieves a bond with his compatriots. In this way will the nation ennoble the theatre and, in turn, the theatre ennoble the nation. If we let ourselves become enthusiastic, our national character may shine again in a new light. We shall lend the features of this character to the theatre; we shall engrave them into the soul of the poet; we shall encourage him to seek a new, glorious path and guide our theatre to this path, upon which the theatre will not copy foreign nations, nor will it propagate foreign corruption, but will rather express the national feeling and will nourish national courage. Here shall be the strengthening roadstead for our persecuted language; here shall be its home where it shall rest having hitherto been ostracized. Here will be the centre from which it can finally burgeon forth to take its place, as befits its amazing qualities, among the other languages of Europe.

But what does it mean, Honourable Members, this bemused smile I see on certain faces? I wish to know what is amusing in this matter. [...]

Surely the smile arises because the theatre is not so significant as to be regarded as a public concern. How differently did the nobility of Pest County think,<sup>4</sup> those generous and foresighted patriots whose efforts were deserving of gratitude, not coldness and mockery.

How differently did the banished French think, who on the prairies of America built French theatre before homes for themselves! Let us laugh at them, if we dare, lest beside them we blush, embarrassed because of our pettiness! Let us ridicule these enthusiastic refugees who in their hearts carried their home across the ocean and set it down again on the hitherto uninhabited plains of the New World. Let us ridicule this blessed patriotism which still burns inextinguishably in a few heroes even amid danger and pursuit, away from the homeland, in spite of the foreign climate. [...]

Our forefathers gained and left for us a country and freedom; it is fitting that we also bequeath something to our descendants. In the present circumstances what else can we leave, what better thing can we leave, than just what our brothers of Pest County have brought to our attention?

Was Kölcsey too zealous in praising the virtues of the stage? The drive for a national theatre had been going on for decades by the time he wrote his address. It took another decade before the plan came to realization. At that time, in 1837, most residents of the twin cities of Pest and Buda spoke only German. In just over a generation (i.e. in thirty years), the newly united capital city of Budapest had only Hungarian stages, and the last German theatre closed its doors.

In culture and education, however, there are always new challenges. Such was the increasing awareness of the place of women in modern society. True enough, initially this cause was represented overwhelmingly by women; however, this was also the case elsewhere. Two educators of the time had such penetrating views on the necessity of assigning a new role to women that, as we may assume, their program and theoretical writings were, in some respects, probably pioneering also internationally.

The first of these far-sighted women was the countess Blanka Teleki (an ancestor of Pál Teleki, the 20th-century politician), who established an educational institution for young women. Far before sociologists proclaimed the same for society, Teleki found that "the nation is composed of families [whose] soul and centre [...] is the mother." Education for motherhood means an education for the betterment of the nation. Thus Teleki's project was part of the national revival that the country went through in the first half of the past century. Yet, her plan for the upbringing of girls had elements which set new directions for the educational ideals of her time. Noticeable, among others, are the emphasis

on the humanities and arts, and the distinguished place of physical education. Teleki's "Proclamation" and "Plan" show how one aspect of the modern world which is currently regarded exclusively from a social and legal angle can have other dimensions, in this case the service of national interest.

# Document 5. BLANKA TELEKI'S PLANS FOR THE EDUCATION OF YOUNG WOMEN.

#### Proclamation

Guided by the principle that contributing to the advancement of public good in accordance with one's ability is everyone's duty, I have decided to devote my efforts to the cause whose importance we realize in our country more and more, meaning the upbringing of women.

The nation is composed of families. The soul and centre of the family is the mother. Through her quiet but persistent influence she sets directions for the growing generation. Just as much as the physical fitness of the child can be attributed to the mother's careful and devoted fostering, the mother is also the one who develops the first lasting foundation of her child's character. It is proven by history and daily experience that men with solid and outstanding character were born to mothers of spiritual strength and noble feelings.

It is everybody's strict duty to consciously consider the education of women.

In our country, almost exclusively foreigners were entrusted with the education of women. Because of this, despite of all of the diligence devoted to the education of our daughters, when they grew up and had their own family, deficiencies became evident that cast a shadow on our whole national existence. Our women were not brought up to become patriotic Hungarians. Nobody planted in them the spark of a holy fire whose flame melts the individual citizens of the nation into a vast and wholesome unity. Our women became strangers in their own land.

Learning from our past, it can be stated now that the education of women, like other issues, shall rest on a national foundation. One can hear from everywhere the wish to establish educational institutions for women that could satisfy the needs of higher learning without sacrificing patriotism. Until the higher authorities approve the creation of an impressive national institution to educate women, individual initiatives are needed on a smaller scale. Therefore, address-

ing those parents who feel the deficiencies of the present educational system and honour me with their trust, I announce my readiness to take on the education of their daughters under certain conditions, and to carry it out with the assistance of the best educators under my personal auspice. My established key goal is furthering my students' intellectual, moral, and aesthetic education while keeping up patriotism and devotion towards our nation.

## Basic educational plan

Eight to twelve-year-old girls are to be admitted for education.

One female educator and several teachers would offer the following subjects: world history, Hungarian history, general and Hungarian geography, natural sciences, physics, geometry and algebra, mythology, penmanship, Hungarian grammar, spelling, French and German grammar and conversation, essay composition in all three languages, literature, religion taught by priests of the respective denominations, drawing, dancing and handicrafts. If parents would desire so, also piano, singing, Italian language, and so on, can be offered for an extra fee.

The sciences will be taught in Hungarian, since this is the only way that a student would acquire the native language. The teaching of foreign languages will be intense, covering not only grammar but also communication.

Dry and boring educational methods will be avoided, and knowledge will be applied through the use of demonstrations and the like.

To avoid educational progress becoming a mere formality, there won't be ceremonious exams and distribution of awards. Instead, there will be informal tests on the last day of every second month and every semester, which parents and relatives can attend without invitation. I prefer this arrangement since such modest but real examinations neutralize the stimulus of vanity and accustom the student to account to herself about the progress that she made in a certain time period.

As to the arrangement of external essentials, clothing, furniture etc., neatness, order and simplicity should serve as principles. The physical education of the student will be the subject of careful attention. Affectation and compulsion create abnormality in intellectual education; likewise, the body develops in full health only if it is not hindered in its natural functions. Simply prepared healthy food, fresh air, exercise, clothing that does not restrict the body, the well-planned

schedule of classes and the lively days of youth, full of enthusiasm and joy, will assure the physical and emotional welfare of the pupils.

Even more detailed and, from the point of view of our time, more contemporary are the writings of Mrs. Pál Veres. Like most young girls of the nobility, she too was taught at home, by foreign governesses. Once married to the main administrator of one of the counties (which were important administrative districts, similar to the provinces and states in North America, and unlike the North American counties), she was alarmed to discover that her proficiency in her native language was not satisfactory to carry on conversations in her husband's social circles. She perfected her Hungarian in order to teach it to her own children as their mother tongue. She made education in the national language a basic thesis of her pedagogical principles.

Mrs. Veres realized, however, that the education of women was but a part of a much wider social issue. She was the first Hungarian feminist to stir society in defense of women's rights, and to use her social influence to work for reforms, including parliamentary decisions. She was in touch with the international women's movement and corresponded even with American feminists. Her descriptions of contemporary women's lot not only betray considerable literary skill and psychological empathy but also, probably, record some personal experiences gained in her (basically happy) marriage.

Her "Two Letters" beg for a comment. The addressee, Imre Madách (1823-1864), was an outstanding writer: his play *The Tragedy of Man* (1862) is a classic of world drama. As it happens, great Hungarian philosophical and social thoughts usually appear in *belles letters* instead of philosophical or social treatises, in which genres Hungary produced hardly any prominent authors. Madách provided an intriguing and captivating picture of womanhood in his drama; however, when the academy elected him among its members, his inaugural speech titled "An Aesthetic Outlook on Women" (1864) contained several controversial statements, some open to misreading, others clearly misogynous. Mrs. Veres and Madách admired each other and were on friendly terms. So much more painful it was for her to read the great writer's rambling essay. She wrote two indignant letters to Madách. Always a gentleman, Madách apologized. One can only wonder how their friendship would have developed had Madách not died just months later.

## Document 6. MRS. PÁL VERES: Two letters to Imre Madách

#### Letter 1.

The other day I read your inaugural speech in the journal Koszorú.

I don't have the opportunity to express to you in person my pain for your directing your scholarly prowess and your humour against the oppressed part of humanity. On a smaller scale, this had the same effect on me as the American Civil War, in which the southern states do not want to free the poor Blacks, although the master of creation - the male - is included there, because otherwise nobody would perform the big and tiring job so cheaply, and, consequently, certain people would not be able to get so immensely rich in such an easy way. Therefore, the human race must be oppressed as long as possible in order to make it work like a beast, deprived as it is from any chance of intellectual development. It is not given any opportunity to make progress with diligent education. [...]

It would be a pity to see support rendered to those here in Hungary who would like to force womankind to work in around-the-clock, monotonous jobs, for instance as salesladies, so that men's energy could be reserved for intellectual professions. The only shops in which those who think this way would like to find men are pharmacies, where a little intellect is also needed.

You state that it is not a convention but her sexual conditions that make woman the creator of the family and preserver of the home circle. However, for this very reason, the woman's family name should be the one inherited by the descendants. Nature herself justifies this, so, why does not she stand up for this truth? In order to show that she can also be fair, not only selfish.

Oh, what a nice thing that we men give our name to the family! How could we surrender this privilege to women?

[Apropos of the American Civil War:] By association I recall what a great role Harriet Stowe played through her book in the abolition of slavery. You seem to forget this, however, or just left it unmentioned intentionally.

#### Letter 2.

The woman learns some practical knowledge before the age of fifteen, or sixteen at the most. She studies aesthetics, a bit of poetry, very little physics, and just as much chemistry and astronomy that she would have a faint idea of what those sciences are about. Even this little she can only learn among favourable circumstances, in a family where both mother and father are interested in the sciences, and where the father does not fulminate: "I don't want to raise my daughter to be a professor!" At the age of sixteen, she is removed from her studies and introduced in social gatherings. At these events, men notice her only if she is pretty and tastefully dressed. This makes the girl observe that she may be neglected because her dress is not as pretty as others'. Therefore she would have to turn her dress more beautiful and more fashionable, which takes quite a long time. How happy men should be that custom does not force them to dress in as colourful and varied way as women must. Very often, girls get married at the age of eighteen, or even earlier. The duties of housekeeping weigh heavily on their young shoulders, since a good housewife who wishes to please her husband and family must focus all her attention on the household. It takes a lot of time to arrange everything well, and she has to acquire skill in it. Later on, in the nursery she has to pay attention to the careful tending of her little ones all day long; even later she has to listen to their childish chatter the whole day, with full attention at that, because it is her solemn duty, since a young individual's soul must be developed early in life so that it would not degenerate. The mother, therefore, sacrifices her most valuable treasure — her time — for her children and family, depriving herself of self-education. Even if she does not get married so early in life, in her younger years she does not like to try the hardships of study at all. There is nothing to encourage her to gain more knowledge, as no laurel, no golden award tempt her, no material reward or opportunity to secure a position for herself, making a living as a politician, lawyer, priest or teacher. She does not have a social circle in which she could carry on a congenial conversation with kindred souls about the results of her studies, and the recognition they led her to. Nor can she present her poetic attempts in such circles in order to be praised and encouraged for these. On the contrary: the girl who would spend her valuable time on scientific experiments would be ridiculed. [...] Should her yearning soul like to gain clear knowledge of various things, she may find that men (even her husband) to whom she turns for information answer her willy-nilly, hardly deeming her worthy of learning something new, since it is not necessary for a woman to know about such things.

The man studies until the age of twenty-two and, if he has the inclination to expand his knowledge, all academies, libraries, and scientific societies are open before him. He can go to other countries, visit scholars of every field; they will willingly inform him about every new discovery. He can inspect everything, make comparisons, and think about what he learned, because he is praised, encouraged and rewarded for this. As a matter of fact, I am surprised that in spite of all these advantages, the number of highly educated men is relatively small. [...]

It is true, after all, that a thousand-year-old custom and a law created by men shoves women away from every political, intellectual, and other serious field. Women themselves can see that their freedom is restricted indeed. They are always troubled with meticulous problems if they want to fulfil their duty; therefore, they play no part in the course of the world, and have contributed in no respect to the advancement of the arts and the sciences. I admit that we haven't achieved any great scientific results, but let us be fair: the reason for this can be found in the entirely different scheme of our intellectual development.

I fully believe, however, that even if the opportunity were granted for women to compete with men in the functioning and designing of the world, or, for scholarly distinction, they would voluntarily resign from such opportunity, not because they do not have what it takes in intellectual capabilities, but because one party has to sacrifice her time to dealing with the petty problems of this imperfect life. [...] For sure, there would be a few who would revolt, but a good woman sacrifices her time and freedom for the fallible humanity, voluntarily and out of love.

#### MRS. VERES' Call to Women: the First Conference, 1867

Woman is not the opposite, but the half, of universal humankind. The destiny that God has set for us humans is perfection. Knowledge is a torch illuminating the path that leads to perfection. Public involvement in and effort toward a more practical organization and operation of schools is, therefore, natural. Also the establishment of scholarly societies and scientific associations is necessary for the improvement of men's intellectual capacities.

Women are left out of all this. I see God's hint in this fact, which encourages us to take action and awaken to our consciousness.
[...]

First of all, we have to find a way to increase the intellectual growth of women. Second, we must improve the subsistence of the resourceless, mature, lonely ladies.

We have to strive for women to continue their studies past their elementary education in language skills, aesthetics, logic, physics, applied chemistry, and hygienics. Further, we have to make sure that they get an education in every field of home economics and child rearing, both physical and intellectual. Furthermore, we also have to provide opportunity for the impecunious to learn commerce and bookkeeping. We have to train first-rate female educators, since in this respect, unfortunately, we still depend on foreign countries. This is one of the reasons why the cultivation of the national language often becomes neglected in the upbringing of women. Finally, we should find the way to have experienced, qualified female physicians trained by the royal university. We need this particularly because thousands of women are forced to repress their sense of shame for the sake of their health, since only male doctors exist.

It is relatively seldom that scientists of high esteem share their philosophy with the wider public. Considering their devotion to research, it is generally assumed that they have no time for philosophizing. An example of numerous Hungarian scientists who were also outstanding educators and administrators was baron Loránd Eötvös, President of the Hungarian Academy of Sciences and scion of a long row of patriots, statesmen, and writers.

The national bias is also evident in Eötvös's writings; however, like Széchenyi, he tended to emphasize the international character of science. This emphasis was partly due to the changing times. Having achieved a maximal degree of independence in a dual monarchy with Austria, Hungary aspired to be ranked, as it was centuries before, among the continent's leading nations. This is why Eötvös spelled out the advantages of an international higher education. There are just too many questions that Eötvös discusses, most of them still under debate. The relationship between education and personality, the definition of scholarship, the tasks of the university, the difference between mental creation and routine activity, science as fad and as dedication — all ring familiar to modern readers as well. One particular aspect of education on which Eötvös would be most vehemently contested nowadays as being "politi-

cally incorrect" is his thesis that university education is a luxury: whoever does not have the means to afford it should not enter it. The democratic North American model of open university entrance and subsequent gradual weeding out, by now also adopted in Europe, has been a challenge to the classical elitist model of university education. Does Eötvös's aristocratic upbringing shine through this idea? One may argue that North American graduate studies, which approximate the standard of European universities a century ago, do remind us of the elite education that Eötvös advocated. One may also add that the present university system is increasingly becoming a burden which will be eventually unbearable financially for even the advanced, rich countries, just as much as the overly generous, free-spending welfare system is. Eötvös's seemingly elitist warnings may well be guiding principles for tomorrow's universities.

# Document 7. LORÁND EÖTVÖS

### About university education: selections from two statements

I have been working as a professor at the University of Budapest for fifteen years. I chose this profession with enthusiasm because I was convinced that there was no job in which I could do more for the good of my country, and because I was enticed by the laurels which grow quite high along the side of the path; thus they can be picked only by the really outstanding ones.

In my first years as a teacher, when I held lectures on purely theoretical subjects to a small group of students, in my youthful pride I believed that I was strong enough to succeed alone. If the whole responsibility falls upon me, only mine will be the credit. At this time I cared little about educational rules, since I lived in the belief that a good teacher can reap success no matter what these rules are.

Later on, after I started so-called mandatory courses and thus the number of my students grew large, I had the opportunity to check the effect of my teaching on them, and my belief in the exclusive sufficiency of my capacity became weaker year by year. Every new academic year brought new students to my lectures, and every year I commenced my lectures with renewed strength and hope. Nevertheless, I had to witness again and again the students' diligence and their interest in the subject gradually declining from the beginning of the year until its end.

How depressing this experience is for a teacher, how much it paralyzes his energy, is something that only those can conceive of who profess that a conscientious professor lives entirely for teaching, and therefore he is preoccupied by his lectures during the entire academic year. Thus, at the end of the year, when it becomes obvious that his students did not follow his lectures, he has to admit bitterly that once again he squandered a year of his life to no avail.

The most bitter disappointment, however, awaits the professor at the examinations. After the carefully structured and scientifically reasoned lectures he is compelled to reduce his questions to the secondary school level, unless he wants to be absurdly consistent and fail ninety-nine percent of those being examined.

These troubles annoy not only me: I share them with a large part of my colleagues. By relating my problem confidentially, I believe to present to the Right Honourable Minister<sup>5</sup> the common concerns of many people. I know well that among my colleagues there are far more experienced ones than I. Because of their long teaching experience and keen insight, they are better qualified than I am to recognize the roots of the trouble and find remedy. Nevertheless, I dare to speak up in this matter, since I hope that my humble message will, at the least, bring to the Right Honourable Minister's attention the need to act in one way or another. While it is true that good regulations cannot produce a good school without good professors, it is also certain that bad regulations can paralyze the work of even the most outstanding professors. I feel that our university regulations concerning teaching exemplify the latter case to some extent. They were based on foreign models and thus reflected foreign circumstances. The experiences of the last decades provide sufficient proof that we can reform these regulations to suit our particular circumstances and requirements. Allow me to briefly present my views pertaining to certain aspects of this reform.

The task of the university is the education of youth who have been suitably prepared by secondary school for higher studies. At the university they will be trained by means of lectures and practical experience to become ready for the service of the church, the state and the society. This task is closely related to the university's duty to advance the sciences by educating scholars who will be professors themselves and thus will perpetuate the institution. For this reason, only research experience and independent thinking can qualify one for the professorial position.

We witness a fundamental principle of European culture when we see that the state does not recognize any other privilege than that which higher education provides. Those who are preparing to serve the state as officials, lawyers, or physicians, have to attend the school of scholars, and are required to base the practice of their profession on scientific knowledge. No matter how important an academic education is, however, for a great variety of careers, there are still many people who do not comprehend the

true meaning of such education. How many are there who cannot distinguish between one who knows much and another who is methodically educated: between the pedant and the scholar. I have heard about so-called scholars who could recite impeccably long rows of statutes or historical dates. Usually, however, such wondrous people are of little use for society, since they are not even worth as much as the booklet that they memorized, because its printed and repeatedly verified information gives more certainty than that noted in memory. [...] For these, but only for these pseudo-scholars does the oft-heard saying hold true that they are "scholars, but brainless," because brainlessness is not compatible with real scholarly education, which is the most perfect and most complete improvement of intellectual powers.

Contrary to bookish knowledge, we can call someone a man of scholarly education only if he trained his brain for thinking through the intensive study of one or another field, and also acquired a wide scope of knowledge, so that he can solve the tasks that he faces both in scholarship and in life, even if only after long deliberation and with the help of various research tools. Not he is the good judge or lawyer who can promptly quote some article pertinent to the legal case presented to him; not he is the good physician who only casts a glance at his patient and immediately decides which fashionable treatment method he will apply. The disorders which occur either in the state of our finances or our health are in many cases complicated to such an extent that it is absurd to believe that one can remedy them according to ready-made formulas and prescriptions. In judging such cases, independence of thought is necessary, and the abundance of practical regulations cannot provide this, only experience in those disciplines which produced these practical regulations. For this reason, if we expect the university to educate young people to the advantage of their homeland, we must jealously guard the scholarly character of university education, and remove every obstacle which stands in the way of reaching this goal.

One who walks through the lecture halls of the university of Budapest, which were built to accommodate a great number of students, and sees how few students are actually present and in what manner they follow the lectures, has to ask: Is it possible to educate students for the sciences if a large portion of them do not even attend classes? Is our academic freedom appropriate? Or, let us address the question more properly, without touching on the fashionable question of the freedom of principles, in this manner: Should it not be necessary to make it the university's task to offer not only lectures to the students, but also strictly supervised guidance to teach them how to utilize the lectures in their studies?

If we look around in Europe, we find schools of higher education which achieve the desired goals with total academic freedom, and others that attain equally good results with mandatory rules. German universities are witnesses to the former, while the specialized academic institutions of France are evidence of the latter. Where generally good teachers lecture to good students, and especially where the necessity of science is a principle that everybody shares, even a bad educational system will serve the desired result. We, however, have not yet risen to such a level of advancement that we could hope to see the flaws of the system compensated by the positive interaction of educators and students.

Our university is based upon the German model, almost completely disregarding our own conditions. Therefore we adopted, as a complement to the idea of freedom, the principle of so-called academic freedom. As a result of this, now the student has absolute freedom not to learn anything from the lectures if he does not wish to. The majority of students do actually exercise this right.

But, then, why is it that the same educational system works in Germany but not in our country? I can answer this question based on my own experiences.

Approximately twenty years ago, I spent three years at what at the time was a first-class university in Heidelberg, Germany. They say that circumstances have turned for the worse there also, but since I wish to bring to light the necessary components of success, allow me to refer to the perhaps more favourable past circumstances.

I will never forget the moment when the train arrived at the station of Heidelberg in the Neckar valley. I was happy, even for the simple fact that I could breathe the same air as those great scholars whose reputation lured me there. I am not ashamed to refer to my personal feelings, and I do not care if some will view this as ridiculous sentimentalism, because it is my conviction that the student's respect and love for the great scholars is the primary and strongest guarantee that he will indeed use his educational freedom for learning.

Most of my colleagues at Heidelberg thought and felt the same way. We didn't care about approaching exams, we didn't calculate the types of advantages that we could gain through studying. Our only goal was to come as close as possible to our teachers on the plane of knowledge.

And who were my colleagues? Sons of state officials, physicians, industrialists and landowners — generally, the children of wealthy and educated people. Among them were a sparse few of more humble origins, who felt themselves strong enough to advance from a lower social status to a higher one through education. The philosophy of life which manifests itself in the German proverb Schuster bleib beim Leisten [the cobbler must

stick to his last] and exorbitant tuition fees from which there was no escape in Heidelberg, prevented the masses of financially, and often educationally, deprived students from swamping the university. Consequently, a German student was normally free of concerns regarding sustenance; thus, he did not have to spend most of his time clerking and tutoring. He had his heated room in which he could study undisturbed, and had the books necessary for studying. [...]

The question pertaining to the university is, above all, a personal one. Beside it, questions pertaining to the organization and regulations of the university are of secondary importance. Abroad, this personal side of the question stands in the foreground indeed. It is the personality of the professors that determines the reputation of the university and the increase or decrease of student numbers. In our country, it is not yet customary to attribute the deserved importance to the personal value of university teachers.

We are normally quite satisfied with simply maintaining the established university chairs, sometimes perhaps even establishing new chairs. We do not do anything, however, for the kind of scholar who starts his career when all university positions have been filled already, or, who is cultivating a field which is regarded as one of little importance. This is not enough. If we seriously want the Hungarian university to be a school of the highest education, we have to do more for Hungarian scientists.

The essential requirement for science, like for art, is luxury. In one, like the other, only that which stands above the rest is truly worth something. It is not possible, nor should it be allowed, to estimate the needs [of the most eminent scholars and artists] according to the standards of a frugal state economy.

I am not saying that the cultivation and teaching of science are more worthwhile preoccupations than the proper settlement of official matters, only that it is an entirely different activity. It is possible to accurately calculate how many clerks need to be employed for how many hours so that an office can process certain heaps of files. I hold it to be an insoluble task, however, to determine how many scientists and how many of their working hours one nation needs in order to benefit from their knowledge.

As long as cultivators of certain fields of science can only count on three or four positions in our homeland to ensure some material and professional well-being, scientific life can't flourish and thus science will, in fact, remain a foreign force among us. Can we expect young people of outstanding talent to pursue the teaching profession without worry, when the chances of succeeding are about as slim as winning the lottery?

One does not have to think long about the solution to this big misfortune. We should increase, perhaps even double, the number of teaching positions. By this, I don't mean establishing new university chairs. Neither is it necessary to find specialists for the already established chairs. We should rather establish the chair if there is a deserving scholar to fill it. If, for example, Hungary has or will have ten excellent scholars of Romance languages or ten excellent physicists (and this is not many), then we have to see to it that these ten Romance scholars or ten physicists not only survive, but that they are able to live in circumstances that make their undisturbed pursuit of the scientific and teaching profession possible.

The scholar's home is the whole wide world, we used to say; but let's not forget that Hungary is also part of this world. Let's not delude ourselves into thinking that now that we have two universities, a technical university, and an academy, we have already done enough for the cultivation of science. If we want science to have not only a temporary residence here but also a real home in which it can freely develop, enrich and strengthen the nation, we still have to make big sacrifices which even surpass the foregoing ones.

# About the goals of the Academy

On this day we celebrate our Academy, and at the same time report about our annual activities. We can step before the interested patrons, friends, and the whole Hungarian public with the conviction that we have once again faithfully fulfilled our obligations.

Perhaps this is not enough yet for a joyful celebration. We would like to hear for once the trumpets of triumph which proclaim and praise the world-wide importance of Hungarian scholarship. Instead, we can still play only the *tárogató's*<sup>7</sup> modest keys, because we are the last ones who can afford to slip into self-delusion which has become so common a fault.

No doubt, our nation has not yet occupied that position in the scholarly world which is befitting our numbers and our political importance. If, however, we were to set to the task with considerable effort and with our multitude of skills, we could certainly achieve, in a short time, a more prestigious place.

There is one difficult obstacle which stands in our way: a particular self-isolation from the scholarship of the world in which we live. What is more dangerous is our smug self-satisfaction with this isolation. Especially these days, our nation's biased definition of our duties has almost become a matter of popular public opinion.

There is no nation in this world that the reproach of strangers would hurt more; no nation that would be more proud of her sons who waved the flag, for the whole world to see, whether it bore the symbol of

military glory or those of scholarship and the arts. There is no nation which desires more fervently than ours to rise amongst the "number ones." And still, instead of diminishing, rather increasing seems to be the number of those who, though they desire triumph, reject the means to achieve our goals due to their antipathy toward foreigners. At the same time, they delude themselves in their contented, soniferous belief that in the world there is only one language, one literature and one culture: the Hungarian, and, above the Hungarian there is only one authorized judge: the Hungarian himself.

These people will certainly not conquer the world for us.

Those who always look at their image in the mirror may only beautify themselves, but they won't develop their capacity for action. Those who are preparing for a struggle in which they wish to triumph must acquaint themselves with all weapons of their competitors and must endeavour to establish a secure position on the battlefield. In the scholarly world this battlefield is not situated in one country, but is every nation's shared territory; consequently, the winning decision will favour those whose achievements better this world in which we live. Our annual celebration will be a truly triumphant ceremony when the whole world recognizes the progress of Hungarian scholarship and records this as its own achievement. We can approach this noble and patriotic ideal only if we learn and adjust to our way of thinking all that we can possibly learn from other nations. On the other hand, we have to publicize and submit to the world's judgment that which we have created.

A nation does not humiliate itself when it desires to learn from other nations. The proud Frenchmen are not embarrassed to show off their foreign masters of knowledge whom they were lucky enough to win over to the French Academy when it was first established. Similarly, the German scholars' laurels are not disgraced by the awareness that the trees on which these laurels grow were planted by Frenchmen invited to Berlin by Frederick the Great.

We have not been this fortunate. Our hardships throughout the past centuries have not allowed us to achieve such successful ends. [...]

If only the desire to get acquainted with the scholarly treasures of the world would inspire more people to travel and enrich our nation with their experience upon their return! On the other hand, if only those who cannot afford to travel could learn foreign languages and make the world's scientific publications available for us! Yet, it is true that gathering knowledge does not in itself further knowledge. Any nation would deserve belittling if they were content with such compilation. Only those can contribute to the building of science, only those will hoist the flag above the new floor, who are familiar with its foundation and design. The ones who

lack such knowledge will only patch together adobe huts whose rickety straw roofs they may show off with a flying flag, yet this will be a butt for ridicule rather than a sign of glory. Our nation must strive to build a palace as opposed to a hut for its scholarship.

Beside adopting international scholarship to advance our own, it is equally important, as I have already indicated, to make the results of our endeavours public. This scholarly publicity serves not only to present our achievements, but also to encourage the scholarly activities that produced these results. In the absence of acknowledgment, stimulation and serious criticism, our scholars who have devoted all their strength to the advancement of science become dispirited, dismayed and indifferent — for, from what else can they expect gratification? Without publicity there is no progression in science. The idea of preservation rather than progress made certain peoples of antiquity keep their knowledge secret, and enclosed science among the thick walls of monasteries in the Middle Ages.

Real progress began with the discovery of the importance of the press for science as much as for other aspects of culture. When I mention the press, I do not mean journalism that feeds the masses all sorts of information, entertains them with titbits, and expresses public opinion (which it often creates, thereby becoming a power that influences every aspect of social life). In short, I am not talking about newspapers that suddenly raise people high, then equally suddenly drop them. Rather, I mean that press which works slowly and with circumspection, although maybe more cumbrously, producing scholarly periodicals and books. Such publications are not snapped up by the masses; instead, they form stepping stones to a higher level of knowledge, and are therefore welcome by scholarly communities in every country and any age.

I admit that the newspaper press has served and can serve science when it directs the attention of the masses toward knowledge, thus recruiting friends and patrons for this cause. I must caution, however, every serious scholar not to seek glory in the newspaper columns which can unjustly turn on one. Their opinion reflects the present moment, is created by suddenly changing, temporary concerns, and makes no mention of things which will prove to be both interesting and valuable in the future. It is typical that newspapers make much mention of people like Edison, but keep quiet about others, such as Faraday. The scholar, on the other hand, pays more tribute to those who planted and nourished the tree of knowledge than to those who merely picked the fruit.

The only authorized public tribunal which the real scholar must account to stands amidst the perennial rows of bound volumes of strictly scholarly periodicals and publications in which the knowledge gained from research has been recorded for centuries. In any case, there is more glory

for a scholar to have his name appear, if just once, in these works than ever so often mentioned in the daily newspapers.

Besides the glory promised by the daily press, there are other temptations facing today's scholar. The popularizing associations, societies organizing public lectures, exhibitions, and the now almost annually recurring conferences in every larger city, serve as allurements to an academic publicity which would take him to some sort of a pantheon faster and more conveniently than the long and tiresome efforts of true scholarship.

The merit that one deserves because he studied hard does not exempt anybody from his social obligations. Thus, even the most knowledgeable person acts wisely, and is therefore worthy of thanks, if he descends from the high academy to offer edification and enjoyment to the masses with his carefully thought-out advice or delightful lecture. He should be on guard though not to regard the recognition that this type of service elicits sufficient to satisfy his scholarly ambitions, because this momentary splendour will soon disappear.

One of the tasks of the Academy is to select among the many manifestations of intellectual life those which are enduring and most worthy to be accentuated in public, and which really represent progress for scholarship. In-so-far as this publicity reaches the whole world, the duty of a national institution remains not only to cultivate and disperse knowledge within its country, but also to represent it to the outside world. Our Academy has not cut itself off from fulfilling this duty: it supports more than one enterprise whose goal is to represent our scholarly achievements before the tribunal of international scholarship. In the world of knowledge it is not the quantity of our troops which matters, but the individual heroes who bring victory. We Magyars are in need of such heroes to conquer the scholarly world for us.

We are preparing for our millennium<sup>8</sup> and at this celebration we will introduce ourselves to the world in the splendour of our past. I believe the compliments will be many, but let us not rest until the great cornerstone nations of culture consider us equal constituents in the process of solving the great intellectual tasks of mankind.

That is when we will truly celebrate victory!

Many of our readings have touched on the question of national existence, even those that deal with seemingly general subjects such as economics or science and education. As we have also seen, real traumas (such as the truncation of Hungary in the post-World War I Treaty of Trianon and the destruction thereby of her organic unity) and exaggerated, partly imagined experiences (such as the "otherness" of the language), can explain the preoccupation with collective, "national" characteristics. In

fact, it can also develop a whole thematic field unusual in post-nationalist countries: a preoccupation with an assumedly specific Hungarian character, both individual and cultural. The extensiveness of this intellectual tradition warrants the grouping of such writings together in a separate chapter, as a curious outgrowth of interdisciplinary studies in Hungary.