

**Józef Majer, “The relation of the Cracow Scientific Society toward science and the country” (Cracow, 1868), 17-39 (excerpts).**

The statute of our Society obliges us to give a public account of the activities performed each year. We considered this act a solemn moment, like any reckoning of conscience. However, the significance of today’s celebration is greater than usual; for the Society, having completed fully fifty years of existence, does not take the stage today with a single year’s yield, but sees the need to look back at this entire considerable stretch of time, to regard itself as if in a mirror, and to acknowledge whether the manifestation of its life so far has been suited to its purpose. Is its purpose in accord with real needs and with its reason for existence?

If it falls to me to take such a view of one of the most important national institutions in Cracow like our Society, my attention is turned with an incomparable chain of thoughts toward the strange and wonderful economy of nature. Strange indeed! Because two elements that are completely opposed to each other are set in motion: on the one hand, as it were, the unbridled passions of man, one creature lying in wait for the other, making the weaker the prey of the stronger, destroying with one hand what the other has brought into being; on the other hand, as it were, a motherly love that knows no bounds, awakening in its creations a protective drive, and providing the necessary conditions for existence.

Where else than in Cracow could these contradictory currents and twists of fate be seen? There was no disaster that could bypass this city. Accidents and ill will fell into competition with each other! And yet it survived these sad twists and turns, and when a grave shroud covered the lands of the Republic, from its mossy walls rose anew, like a phoenix from the ashes, the inextinguishable spirit of the nation, reminding the world of its immortality! This spirit of the nation, enchanted in its monuments, tombs, and temples, was able to speak to it in a mysterious language and become for it that protective drive that always gave it perseverance and in the most difficult moments did not allow it to give in to doubt. With this mysterious power Providence guarded this city and from here, as our historian expressed it, “it blessed all of Poland, and the messengers who came to Cracow with news of victories could not, it seemed, reach Warsaw.”

It is indeed a noble obligation that descends from this character of Cracow upon its inhabitants—the duty to guard this old tradition. It is thus not surprising that everything that stands in their way in this work fills them with bitterness, it fills them with fear and horror. For amidst mounting difficulties this task is truly not easy, and in the face of the nation’s conscience it is no small responsibility! Cracow must not idly forget its history; but all the more must it not endanger its historical future with a burst of thoughtless madness. Let the action of its institutions be like its walls, inconspicuous but strong; let each of them, in the love of the common good, persevere in peaceful work on the path that has fallen to her lot, and step by step advance in the direction she has set, paying little attention to the fact that her progress initially escapes the attention of the public, as long as it results from work conscientiously planned, carried out with manly strength and uninterrupted effort to obtain for the country a more prosperous future, requiring champions as different as the various professions of public life.

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Our task closely touches upon the tasks of other associations directly or indirectly concerned with educational matters. However, affinity is not identity; institutions coming into contact in one general task may differ greatly in their more precisely defined specific goals; and whoever would judge the activities of one by the measure appropriate to the other would be like someone who would like to measure weight in cubits and length in pounds. Is there a lack of such measurers in the world?

I drew attention to the difference, which should be considered here above all, twenty years ago, when, as President of this Society, I justified the transformation and expansion of the activities that were taking place in it at that time. This difference consists in the nature of this twofold direction: the cultivation of the sciences and the expansion of education.

The object of the person cultivating science is science itself, it is the acquisition of new knowledge for it, the progress made by every new discovery, new observation, new thought that reaches closer to the dwelling place of truth. Such a person does not care whether his work is accessible to the public, in whose favor the acquired truth must ultimately turn, he only seeks workers equal to himself, because in them he finds proper judges and aids in his efforts.

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Which of these tasks is more attractive, more accessible, and more easily winning the applause and recognition of the public, is not difficult to judge. However, it is more difficult to say which of them is more important. Education in our country is not a little backward, social relations are strained because of this, and they truly require urgent aid. However, having this truth in mind, it is not right to forget that, under pain of eternal neglect and contempt, we must not be a dead link in the intellectual society of nations, having a common right to the fruits that the cultivation of sciences yields anywhere. As far as the boundaries of civilization reach, there is no longer a country in Europe that has not been deeply affected by the feeling of this truth; there is no city of note from Paris to Zagreb which has not incorporated this idea either into academies of science or into more modest scientific societies. Are we ourselves to be the only exception? The sad vicissitudes of our fatherland certainly justify much; but it would be a crime to justify the moral abdication of the nation with them. No, indeed! We must not submit to this humiliating idea without betraying the past and betraying the future; and all the more so, since, not omitting this spiritual work, we do not leave the rest fallow, when on the contrary, we see with consolation the ever-increasing groups of workers spreading education.

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This applies above all to research on history, archaeology, literature, language, and social relations, in which every detail newly discovered or reasoned out has become material for the further development of the corresponding science [*nauka*], but at the same time it has been material taken from national relations, and it has therefore served primarily to clarify them. It will be more appropriate to consider it when examining the question of how the Society has taken national needs into account in its scientific work.

The situation is different with the very extensive branch of mathematical, natural, and medical sciences. There is certainly no lack of those among them which enrich science [*nauka*] precisely by the study of national subjects; however, for the most part, work in these sciences [*nauki*] has no local significance, its character is purely cosmopolitan, progress is equally useful everywhere, wherever the science [*umiejętność*] has its adherents.

In this field the work of the Society has developed very splendidly and has served science in many ways. I mention this with a sense of a certain proper national pride; for it was these works, because of their purely scientific general significance, having attracted the attention of outsiders, that have often won us recognition; for with this kind of recognition must decline the prejudice that would like to see in our nation and tribe intellectual parasites, incapable of reaching for the crown of independence of the research spirit, and therefore condemned as eternal slaves of foreign intellectual dominance.

In order to properly appreciate the contributions that our work has brought to these sciences, we must stand at their summit. And since it is impossible to demand this of everyone, referring experts to the writings published by us, I mention here only a few details rather by way of example than by way of exhaustion. These are: from the mathematical sciences: the solution of numerous tasks that have entered or will have to enter the lectures of this science, such as the recently performed calculation of the potential for homogeneous polyhedra. Here belongs the calculation of the planets and a whole series of astronomical observations, which do not allow us to forget that here was the cradle of the science of the famous Copernicus for all ages. From the field of physics and chemistry: the idea of a self-recording thermometer, new optometers, the use of pycnometers for chemical analyses, numerous analyses of mineral springs, important events from the chemical-pathological laboratory, and the currently recurring dispute within the Society concerning the chemical theory developed here, about which I can only temporarily say that, although in reaching the extreme, it gave free rein to imagination and went beyond the boundary that may not be crossed in the exact sciences, it nevertheless led to the first attempt to bridge the gap that had hitherto separated organic from inorganic chemistry. From the field of natural history: anatomical studies of infusoria with the identification of many of their species, discovery of the previously doubtful separate sexes of the canary (*apus cancriformis*), studies of the marmot and the sedge, descriptions of many previously unknown types of insects, information on the geography of Galician plants, a review of mosses and lichens, examination of the papery coating [cellulose deposition??] after the Dniester flood, discovery of some new plant species, numerous geological studies belonging to national physiography. From the medical sciences: studies of the capacity of heart cells, the structure of the thoracic duct in humans and animals, the discovery of lymphatic vessels in sweat formations, the study of the cause of blood clotting, the first attempt at a method of determining the amount of blood in a living person, the method of determining the number of corpuscles in the blood, experiments on the velocity of the nerve current, on the digestion of flour, on the influence of the vagus nerve on the heart, against the theories that have been popular in this regard so far, the theory of assessing size by sight, experiments on the daily fluctuation of body temperature in health and illness, the study of blood stains with clues to distinguish between fresh and old ones, experiments on the effects of green hellebore in pneumonia, the invention of products from medicinal waters [spas], experiments with quinine, the recognition and explanation of many complicated cases of illness, the first information about dwarfs or cretins from the Tatra Mountains, the first

observations of the mobile [shifting?] spleen and kidney, and the theory of their confinement, more appropriate concepts of the so-called tangle, galvanocaustic tests, cutting the larynx to extract polyps, improving and inventing new surgical instruments, ophthalmological, dermatological, and gynecological examinations, which the place and time do not permit me to mention.

As for the Society's works that have been applied in the field of science directly to national needs, the obligation to develop activities in this direction results, as I have mentioned, from the provisions of the statute. As proof how strongly the Society felt about this may serve as proof that all its work in the field of the so-called moral sciences, with a very small exception, drew its thread from national relations; that, in addition, other scientific departments, as far as their basis permitted, revolved mainly around this axis. It was grateful work, because it had its motive in both the mind and the heart.

First of all, I should like to draw attention to the cultivation of the native language, that messenger of our thoughts, that ark of the covenant between the past and the present, that intellectual link in the physically broken fraternal chain. The safeguarding of this national treasure was already united with the very existence of our Society. For when there was no shelter for Polish science in the whole wide world, it was still the only palladium for it. All the various works carried out in the field of the intellect constantly enrich and supplement the resources of the native language. However, if the benefits resulting from this for the language were only a side effect of the Society's activities, there was no lack of others to which its efforts were headed directly. Here belongs partly theoretical research, such as the work on the etymology of the Polish language, partly works of a more practical nature. In this respect, it is worth mentioning with satisfaction that our group gave rise to nomenclatures which our compatriots who practice science use in more than one subject. Our work is the current medical terminology, from this group came the beginning of the supplementation of botanical and zoological, namely entomological, terminology, here the newer chemical terminology was developed, from here came the vocabulary appropriate to the new position of universal and comparative geography, here the expanded astronomical dictionary only awaits publication, here the completed and published systematic exposition of philosophy convinced how much a well-used ready resource of language explains this science more bravely than the repulsive because rarely successful neologisms, here also work is currently being done on the aesthetic-artistic vocabulary. What can I say about the legal-administrative dictionary? When, as a result of the regulations, the national language was given certain rights in courts and offices, it found in the hearts of the inhabitants a feeling of due gratitude, but in the offices it found for the most part people unprepared for it, so it happened that even the most willing officials, in the face of the difficulty experienced, were less willing to carry out the regulation, which was important for the country, but inconvenient for them. Our Society undertook the difficult task of meeting this need, and from its position it met it by publishing the dictionary mentioned above. Finally, I cannot omit this, that the Society became an official advocate for the cause of the Polish language, which was impaired in schools; and although it is difficult to assess how much its intervention influenced the achievement of at least a partial success in this respect, it is certain that when the Polish language acquired certain rights in the University of Cracow, the president of the Cracow Scientific Society was also summoned to the meetings that were subsequently held in Vienna. In this way, the Society wished to fulfill its duty to guard the native language.

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If the works mentioned so far brought moral benefits to the country, then the application of natural sciences must have resulted in the study of its physical properties, in the demonstration of the sources of its wealth, and in general in the provision of a scientific solution to its material needs. The Society devoted three complementary but separate Commissions to this work: balneological, physiographic, and editing a medical journal.

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The Physiographical Commission has not yet been able to achieve such brilliant results; for its existence is still very short, and its task is as extensive as it is difficult. It concerns here the exact and comprehensive knowledge of the natural properties of the native country, as a condition of raising its wealth and returning to it the benefits to which foreign industry has hitherto seemed to have the exclusive privilege. In the field of this research everything requires supplementation. We possess neither a finished orography, nor geology, nor an exhaustive flora and fauna of the country; for climatology only a part of the material has been adapted, chemical studies of the soil are only fragmentary, and a completed measurement of the country has not yet been made available for general use. Nor could it have been otherwise; for the exhaustion of this kind of knowledge in a country so vast and presenting such variety requires the combined work of many years, according to a certain plan devised in advance. This is precisely what our Physiographic Commission is dealing with, honored by the trust of the National Sejm and supported by a permanent but modest fund. What plan has it outlined for its activities? Has it contributed to the publication of physiographic literature on the Polish land? How much necessary material has it collected and published in a short period of time? How helpful it has been in recognizing emerging harmful insects? We can gather information from the reports published so far in two extensive volumes. There was also no lack of public recognition from experts, who presented it as proof of how much zeal guided by thorough science can achieve with small means, and who saw in it the beginning of a new era for physiography in Galicia.

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Here is a faithful yet general outline of the position our Society has taken towards science and the country. Conscious only of the best intentions, yet modest in assessing our own strengths and abilities, we do not overestimate the effects of our work, nor do we allow ourselves to be dazzled by the evidence of the recognition and sympathy we have gained so far in the country; we do want, however, that the harvest so far be not so much a testimony to the end of our efforts as a harbinger of further development; not so much a payment of past obligations as a down payment for the future.

Certainly, the future is all in the hands of Providence! But man is here her instrument; from her gift faith is a torch for him, the heart a motive, reason a guide, the will an executor, the conscience a judge and avenger; its verdict: "work and I will help you." He who has not fallen so low that the voice of conscience is silenced in his breast will not waste the gifts of Providence in selfish prospects or in idle abandonment to the twists of fate, but will use them for the common work for the future, which needs, as I have said, advocates in various professions.

Guided by this thought, we enter the second half of the century of our existence, not without a certain encouragement of perseverance in the chosen profession; for it is awakened by the blessed conviction that our Society has uninterruptedly followed the path of progress, which therefore promises its further development along a natural track.

The conviction that we stand on the path of real progress, resulting from an impartial assessment of the facts, we can boldly express here; and if it also becomes the conviction of the country, then we could not wish for a reward dearer to our hearts, nor a more honorable crowning of today's celebration!

Translation: KH