## A. M. Butlerov, "A Russian or only an Imperial Academy of Sciences in St. Petersburg?" (1882), in *Сочинения*, vol. 3 (1958), 118-138 (abridged).

[The immediate context: in 1880 the chemist Dmitrii Mendeleev was nominated by fellow chemist Butlerov to membership in the Imperial Academy of Sciences, but a majority of members voted against the nomination, despite the fame Mendeleev already enjoyed for proposing the periodic table of elements. Butlerov eventually went public with his grievances.]

When I first entered the Imperial Academy of Sciences in 1870, I was still a fresh-faced newcomer to St. Petersburg [Butlerov had been a professor in Kazan] and I was not able bring my own definite independent opinions about the prevailing trends in the Academy, nor any sympathy or antipathy toward the majority in the Academy who, along with their leaders, set and continue to set its tone and image to this day. I will note now that when I speak of a majority, I mean Division 1 (physics and mathematics [all natural sciences]) and Division 3 (history and philology). Division 2 (Russian language and literature) remains peripheral; it has its traditions and views; it has the good fortune of being able to live an independent life. In those instances where Division 2 had to speak out on substantive general Academy problems, it usually turned out to share the convictions of the minority of the other two divisions of the Academy.

I should acknowledge that despite the absence of personal views, I had reasons from the very beginning to treat the actions of the Academy majority with some caution. I was moved to this by the dissatisfaction with the state of the Academy setting as expressed to me by several members long known to me, men I hold in genuine esteem. For example, academician N. N. Zinin, as it happens my now-deceased teacher, was one such member. Nor was the conspicuous predominance of foreign names, not only among the two divisions of the Academy itself, but also in those institutions that adjoin them, conducive to credulity. I found myself forced to ask whether the original principles about which Lomonosov once complained so bitterly in his time continued to prevail now?

In my own scientific development, I owe a great deal to western European science, and I am accustomed to treating it with due respect. On the other hand, our Academy's past is associated with such brilliant names, names that sound alien to our ears, but native to Russia by dint of the great services performed, that we cannot but bow to them with full respect. I was thus extremely far from any hasty conclusions based on appearances, and, relying on the facts, I could resolve to reach a conclusion about the setting around me. These facts soon started to present themselves and, as they accumulated bit by bit, not only did they dispel my initial doubts, but they revealed the unsuitability of the Academy atmosphere to such a degree that that it became difficult, almost impossible, to breathe. It is no wonder if a choking man wrests himself toward fresh air with all his strength and resorts to heroic measures in order to beat a path to it. Putting this in print now seems to me such a measure.

I encountered the first fact already in the very year of my entry into the Academy. [Butlerov became a full member in 1874.] At the suggestion of academician Zinin and myself, the Lomonosov Prize was awarded, but then as a result of several nonscientific considerations doubts were raised about awarding it. Whereupon one of the oldest academicians permitted himself to address me with the question: "Did he really deserve the prize?" I assured him that I am generally accustomed to being guided in my opinions and actions by genuinely strong conviction. The impression I took away from this brief conversation was profound: I could

not get away from the thought that in judgments about others, people are usually guided by their experience. During my previous long university career in Kazan I more than once had differences of opinion with my fellow scholars, and more than once I even hit a rough patch in relations with some of them due to these differences. But not once did I have the integrity of my principles and intentions unceremoniously put under suspicion. The Academy gave me my first experience in this regard, and this first experience, to my great regret, was far from the last. The reader will see this from the story that follows. I felt how the ground gradually slipped out from under my feet, how inadequate my usual rules became for maintaining the same relations in the Academy which I have heretofore encountered everywhere in the majority of my [university] corporation fellows. As always, I was guided here by the rule: fais ce que dois, advienne que pourra [do what you must, come what may], but as a result I ran into hostility and doubt not only in the correctness of my opinions, but in the integrity of my motives. By old habit I strove to put substance above all else, but soon I had to arrive at the conviction that it was not this, but only submissive agreement with the majority that could obtain the right to an evaluation of my work that was undiminished—and even elevated.

More recently my cup has been running over. At a meeting of the division of physics and mathematics on 29 January 1882, about which I will speak in greater detail later, the same academician I just mentioned announced to me directly that they (the majority) *did not trust me*, and another eminent member of the division expressed the conviction that I had violated not only the tranquility but also the honor of the Academy. The violation of the Academy's honor took the form of interference in the entry into the Academy of Mr. [Oskar] Backlund [(1846-1916), Swedish-Russian astronomer and eventual director of the Pulkovo Observatory] on my part and that of several other members. Gladly conceding the possibility of errors in my opinions and actions, I am simultaneously conscious of the complete rectitude of my motives. Although I depart sharply from the Academy majority, I will nonetheless dare to change the grounds for my actions only when they are judged by a more dispassionate majority—a majority of Russian scientists and Russian enlightened people generally.

Last year, during the newspaper storm regarding the non-selection of Professor Mendeleev, censure was declared at the division meeting, without entry in the official protocol, of those members who violate the secrecy of its gatherings. Since I didn't publish anything last winter, but did not conceal my dissatisfaction from anyone, and since I fundamentally regard confidentiality [mauncmeenhocmb] of Academy procedures as improper, I declared to the division that a portion of the announced censure must fall to my account, but that I would not deprive myself of the right to speak in print about Academy affairs, signing my name, if I count it necessary. I now regard myself as forced to seek recourse in print. The declarations of the academicians noted above have stripped me of the opportunity to remain silent, and if I take this resolve in the 32<sup>nd</sup> year of my scientific and service career, a not entirely normal step, then everyone will understand how strong are the reasons that have motivated me to do this.

In order to demonstrate how I have arrived at this viewpoint regarding the facts narrated below, I must clarify my view of the significance and duties of the Academy, in my opinion stemming from both its Statute as well as from the very substance of the matter.

According to the Statute (§1), "the Academy of Sciences is the premier scholarly estate in the Russian Empire"; it (§2) "strives to expand the bounds of all kinds of knowledge useful to humankind, perfecting and enriching them by new discoveries"; according to §3, "the Academy is meant to transform its works directly to the service [literally: utility] of Russia";

in §30 "the Academy is provided the right of selection of open positions of academicians and adjuncts" [subsequently: corresponding members], while the Statute adds: "when the accomplishments are equivalent, a Russian scholar is to be preferred over a foreigner"; in §71 the same notion is promoted in the words: "the degree of adjunct is to be awarded to young scholars, native ones in particular."

Having looked around the Academy and gotten acquainted with the requirements of the Statute and the existing methods of the Academy, I was led to the conclusion that reality corresponded in no way with the intentions of the lawgiver [Peter the Great]. It would seem the Academy ought so far as possible to bring together in itself all the scientific powers that prevail in Russia. It should (in the words of one of my esteemed fellow members) serve as a mirror reflecting the state of Russian scholarship in its highest development. Striving, according to the Statute, "to enrich human knowledge by new discoveries" and aiming to foster Russian science, the Academy should, if possible, diligently fill its ranks with worthy workers. The Statute even directly prescribes (§74) appointing, when adjunct vacancies open, "a competition announced in the official press, so that any of the Russian scholars who feels capable will submit proof of his knowledge or a printed book or dissertation written by him." Indeed, the more workers, the more useful results, and only a shortage of worthy scholars could, it seems, excuse the existence of vacancies in the Academy, and by the way I have constantly seen vacancies go unfilled, and Russian naturalists with full rights to fill those spots have been left aside. The opinion of the majority of Russian scholars outside the Academy fully acknowledges the rights of these naturalists; these rights could easily be demonstrated by printed commentaries of scholars from other countries, but the Academy has kept silent, as if it did not notice what it is supposed to see, know, and acknowledge in keeping with the very essence of its duties. Not recognizing scholars of Russian strengths as "the premiere scholarly estate of Russia" seems all the more strange to me when §34 of the Statute even gives the Academy the right to elect to its ranks outstanding scholars "even if there are no vacancies"; this paragraph permits it to join to itself famous scholars in sciences not explicitly mentioned in the Statute...

[Then he expounds on an 1872 Academy award that many felt should rightly have gone to zoologist Ilya Mechnikov (1845-1916), much later a Nobel Prizewinner after emigrating to Paris. The bad guy here is Johann Friedrich Brandt (1802-1879), a Saxon zoologist who had made his career in the Russian Empire and had been a member of the Academy for four decades by this time.]

[The struggle to get botanist Andrei Famintsyn (1835-1918) elected to the Academy.]

[Butlerov then returns to the case of Mendeleev in greater detail. The machinations of the Permanent Secretary (not a scientist, but a member of the history and philology division) play a major role here. With the death of Zinin in 1880, it seemed that Mendeleev's moment had finally come, and Butlerov joins with mathematician Chebyshev, geologist Koksharov, and physiologist Ovsiannikov to advance his nomination.]

... The balloting carried out by the division of physics and mathematics gave a negative result, proving once again that the division's majority is capable of not recognizing the merits of Russian scientists, even if it means ignoring the opinion not only of Russians, but also of specialists abroad; for this majority the issue apparently consisted not at all in the scientific merits of the candidate... [ellipses Butlerov's (or the editor's)]

I don't need to remind you in greater detail how the balloting against Mendeleev was met by Russian scientists. From all directions, from individuals and from entire faculties, declarations were sent, and elections of Mendeleev to honorary memberships began. Via telegrams and letters Russian chemists nearly unanimously declared their admiration for his high merits and expressed sharp condemnation of the Academy majority or, better to say, of the system that holds so consistently in its actions in relation to Russian natural science. Even the Viennese newspaper Neue Freie Presse reacted disapprovingly to the vote against Mendeleev. I'll share only what fourteen members of the science faculty of Moscow University wrote to Mendeleev: "For people who follow the actions of the institution that according to its Statute is supposed to be "the premiere scholarly estate" of Russia, such news was not entirely unexpected. The history of many Academy elections has shown with clarity that in the setting of this institution the voice of people of science is subjected to the opposition of dark forces which jealously close the doors of the Academy before Russian talents. We have heard and ready many times about such shameful manifestations in the Academy setting and said to ourselves: "quousque tandem?" [Quoting Cicero, "How much longer?"] But the time has come to speak directly, to call ignominious what is ignominious. In the name of science, in the name of national feeling, in the name of justice, we regard it as our duty to express our condemnation of action incompatible with the dignity of the scholarly corporation and shameful for Russian society."

[More quotations from dissatisfied colleagues. Backlund is subsequently elected at the expense of another more senior astronomer, Moscow University's Fedor Bredikhin (1831-1904). What Butlerov fails to mention is that this may also have been a Moscow-St. Petersburg dynamic.]

[Some academicians still do not speak Russian well enough to interact at official meetings. They owe it to the nation they serve to improve their skills.]

And why be surprised after the words of one of the academicians last year who found it odd that the Academy is regarded as *Russian*, when it is officially called *Imperial*, without adding the epithet "all-Russian" [rossiiskaia in the imperial rather than ethnic sense].

[More procedural considerations. Butlerov's party is blocked at every turn. Eventually the "majority" press to elect another chemist, Fedor (Friedrich) Beilstein (1838-1906), son of a German emigrant, born and raised in St. Petersburg. A productive chemist—the handbook he originated is still in use today—Beilstein was not judged a peer of Mendeleev by Butlerov. He raises further procedural objections.]

If the Division 1 majority really stands on the ground of the true scientific interests of the Academy (and it does try to assure us as much), then why not turn directly to Russian chemists just like the Academy turns to Russian specialists when deciding how to award the Uvarov Prizes? Why fuss about observing chamber secrets, and why keep the transcripts out of print and under wraps? After all, truth and proper motivations do not fear light and transparency. What is more, by turning to Russian chemists, the Division would set bounds to the objections of its vexatious fellow member, i.e., to my objections: I would not begin to seek appeals against this Areopagus....

What happened next? The unbiased reader likely expects that the Division (according to §98 of the Statute) would postpone adjudication to the following meeting. Not at all: the Division, without further debate, immediately set about voting [in favor of Beilstein]...

People ask me, of course, what is the very possibility of the existence of cases like those I have related based on? The reasons are many: old rituals rooted in the origins of the Academy, human frailty in the face of earthly goods and personal tranquility and so forth and so on, but the most important thing is the Statute. The spirit that the lawgiver tried to introduce in it has obviously been mortified by the letter. That's without the anachronisms like, for example, the existence of adjuncts and permission to enlist members of the Academy from abroad, but in general the influence of the Academy's conference on the fate of the Academy has been reduced to almost nothing. The lawgiver thought to give academicians the opportunity to utilize their powers entirely for scientific works: he resolved (§97) that "a meeting should not be distracted from scientific studies by topics related to administration"; in fact the scholarly element turned out to be given away to the hands of the administrative and chancellery element. The lawgiver lost sight of the fact that for successful studies of science one needs peace of mind and an absence of anxieties, which can only be maintained during the normal course of academic affairs, and this only if the Academy member did not wave his hand [dismissively?] at the fate of Russian science, placing his personal tranquility above everything else....

The consequences of the current Academy situation are obvious: interest in the affairs of the Academy and sympathy toward it have completely disappeared in Russian society, the initiative in scientific enterprises belongs to the Academy only comparatively rarely, and it is focused for the most part in various societies. Not infrequently it is not academicians who appear as representatives of Russian science at international scientific congresses, but scientists who do not belong to the Academy. Academy publications pass over the works of Russian scientists, which reach the world by other means. Finally, one might even be able to ask: Is the Academy useful or harmful for Russian science in its present state and form?

From everything I have related it is apparent with sufficient persuasiveness that the attempts to raise any questions in the setting of the Academy itself have not had the least chance of success. The need to speak out has been felt for a long time, and not just by me. Having gotten to the point that I could not maintain silence any further, I am now taking this step in the hope that my voice will be heard and taken into consideration by those to whom the fate and dignity of Russian science is precious and close to their hearts.

Translation: KH