Stalinist Science

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rhetoric and rituals to the new party sentiments, scientists managed to turn a campaign designed to strengthen party control into a means of eluding such control and maintaining their own authority over their enterprise. They employed the very machine of the Stalinist system, created to strictly control their activities, to advance their own individual and institutional goals. The interplay of these political, cultural, and institutional factors created a complex pattern of interaction between the party-state and the scientific community, which, though varied in different disciplines and institutions, reflected the general principles of operation of the Stalinist science system.

CHAPTER 7

Talking the Talk: Ritual and Rhetoric

> "Your logic is impeccable," the worried Director had said, "but I have learnt from fifteen years of experience that discussions tend to degenerate into games of blind man's bluff. That is why I prefer a well-organized circus, where everyone performs his act amidst polite applause."
>
> —Arthur Koestler, *The Call-Girls*

THE AUGUST 1948 VASKhNIL meeting demonstrated the intention of party agencies to establish complete control over the scientific community and to affirm the status of the Central Committee of the Communist Party as the supreme authority in scientific questions. The scientific community understood perfectly well the lesson of the VASKhNIL meeting and hastened to display its compliance with the new "politically correct" line. During autumn 1948, the Michurinist campaign quickly spread to engulf almost all research and educational institutions in every field. Opened in late August by a gathering in the USSR Academy of Sciences, the cascade of meetings "to discuss decisions of the VASKhNIL meeting" swept through all Soviet academies during September and October.

Those who have written on the VASKhNIL meeting, it seems to me, have generally missed the forest for the trees. Transfixed by the so-called death of genetics, they have largely ignored similar gatherings in other scientific institutions. By focusing on the monopoly established by Lysenko and his allies in Soviet genetics as a result of the events of August 1948, they have mostly neglected the fact that, during the Michurinist campaign, scientific collectives in fields sometimes quite distant from genetics—including medical science, physics, technology, and linguistics—gathered to discuss the reorganization of their work "in light of decisions of the VASKhNIL meeting"; some even staged such sessions several times.[1] Clearly, these meetings had some purpose other than "to make the Michurinist trend completely dominant in Soviet biological science,"[2] as was ordered by the Central Committee.

It has often been assumed that Lysenko's group was the driving force behind the Michurinist campaign of late 1948. The Lysenkoists, however, had already achieved their major goals by the end of August, before this broad campaign began. They had already replaced their opponents in all important administrative positions and had already seized all key posts in biological

research and education.[3] Furthermore, they had no interest or ambition whatever in such fields as technology, medicine, physics, history, and linguistics, where this new wave of "Michurinist" meetings took place.

As it turns out, this Michurinist campaign was led and organized not by Lysenkoists, but by the scientific leadership. The Central Committee, to be sure, issued concrete directives to the scientific community—to remove certain scientists and to close certain institutions—but these were mostly limited to biology. The scientific leaders in academy presidiums and institute directorates greatly exceeded any instructions from above, expanding the Michurinist campaign far beyond genetics and even biology.

The history of these meetings, then, contradicts a stereotype about Stalinist science that sees everything as orchestrated from above and views the scientific community as a passive monolith victimized by party control and manipulation. Unlike the previous patriotic campaign associated with the KR affair, when meetings were organized according to strict guidelines set by the Central Committee, the meetings of the Michurinist campaign were largely initiated, orchestrated, and fine-tuned by the leadership of the scientific community itself.[4]

These meetings followed a set pattern. Scientific administrators enacted a standard ritual garnished with a standard rhetoric, reproducing the scenario of the August VASKhNIL meeting in miniature. The gigantic propaganda campaign in the press, together with the feverish activity of party agencies, clearly demonstrated to the scientific community that the Michurinist campaign was not only the party line, but also a top priority. Scientific administrators expressed their "obedience and devotion" to the new party line, giving their symbolic assent to the new role of the party apparatus in science. They employed Michurinist rhetoric to assure the party apparatus of their conformity and loyalty, their "political correctness," and their embrace of the new model of science "approved by the Central Committee."

This standardized pattern, however, was expressed differently in different institutions. Although these variations may appear insignificant to the casual observer, a careful comparative analysis of them demonstrates a remarkable fact: although scientific leaders followed the letter of the new "law," they utterly contradicted its spirit. Despite their ritualistic rhetorical obeisance to the new party control of the content of science, they in fact sought to *counteract* the party's seizure of control and to reassert their own hegemony over their disciplines.

The Rites of Autumn

In biology, medicine, pedagogy, psychology, and linguistics, scientific leaders sought to protect their existing intellectual and institutional agendas by sanctifying them as quintessentially Michurinist—and hence "preapproved"

TABLE 7-1
Decisions of the Central Committee on Michurinist Biology in August and September 1948

August 6	Secretariat assigns commission "to prepare proposals for strengthening biology departments in higher educational institutions."
9	Orgburo issues resolution "On Measures for the Reorganization of the Work of Scientific Institutions, Departments, Publishing Houses, and Periodicals in the Field of Biology and for Strengthening Them with Qualified Michurinist Personnel," and orders Agitprop "within three days to present to the Central Committee measures for the improvement of the Biology Division and biological research institutes of the USSR Academy of Sciences."
11	Orgburo summons the leaders of the Academy of Sciences, the Ministry of Higher Education, and the Ministry of Agriculture for a special session at the Kremlin; approves resolution "On the Teaching of Biology."
16	Orgburo issues resolutions "On the Situation in the Teaching of Biological Sciences and Measures for Strengthening Biology Departments in Higher Educational Institutions" and "On Measures for Improvement of Biology Institutions of the Academy of Sciences."
17	Orgburo issues resolution "On Publishing Biology Literature."
20	Orgburo orders the Ministry of Public Health to present a report and to prepare proposals for the "improvement of educational and scientific work in biology" within ten days.
September 10	Secretariat discusses the situation in the "scientific institutions subordinate to the Ministry of Public Health."
20	Orgburo issues resolutions "On the Teaching of Biology in Secondary Schools," and "On the Teaching of Biological Disciplines in Medical Educational Institutes."

by the Central Committee. Meetings staged at the three largest central academies—the USSR Academy of Sciences, the Russian Academy of Pedagogical Sciences, and the USSR Academy of Medical Sciences—show this tactic in action.

For Michurinist Biology: The USSR Academy of Sciences

The campaign "for Michurinist biology" was opened by a special meeting of the Academy of Sciences on August 24–26.

The Central Committee had directly endorsed the reorganization of the Academy of Sciences' biology institutions "according to the progressive Michurinist trend" (see table 7–1). As early as August 9—two days after Lysenko's final declaration at the VASKhNIL session—the Orgburo ordered

Agitprop "within three days to present to the Central Committee measures for the improvement of the Biology Division and biological research institutes of the USSR Academy of Sciences."[5] The next day, Shepilov presented a long memorandum entitled "On the Activity of the Biology Division of the USSR Academy of Sciences and Measures for Strengthening Biology Institutes." He severely criticized the leadership of the Biology Division for its patronage of Mendelist-Morganists and suppression of Michurinists. He also attached to the memorandum a draft of a resolution, "On the Guidance of Biology Institutions of the USSR Academy of Sciences."[6]

The next day, August 11, the Central Committee Secretariat summoned the leaders of the Academy of Sciences to the Kremlin. There Sergei Vavilov (the academy president), Vasilii Nikitin (its acting academician-secretary), and Leon Orbeli (academician-secretary of the Biology Division) attended a meeting of the Orgburo chaired by Malenkov. Vavilov and Orbeli reported on the work of the Biology Division. Malenkov severely criticized the academy's work and observed that the Biology Division "suffers from grave shortcomings and at the same time has passed over in silence such a great event as the meeting of the Lenin Academy of Agricultural Sciences": "The enemies of the Michurinist trend use the silence of the Biology Division for their own benefit, so [you] must not be silent, but must speak at the top of your voice."[7] The Orgburo appointed a commission "to draft an appropriate resolution."[8]

On August 16, the Orgburo adopted a resolution, "On Measures for Improvement of Biology Institutions of the Academy of Sciences." The resolution in particular ordered the academy

> To revise the research plans of biology institutions of the Academy of Sciences; to remove from the plans pseudoscientific Weismannist topics and replace them with pressing problems that correspond to the tasks of socialist construction . . .
>
> To strengthen the Bureau of the Biology Division and important biology institutions with Michurinist biologists . . .
>
> To liquidate Dubinin's cytogenetics laboratory in the Institute of Cytology, Histology, and Embryology . . .
>
> To revise the plan of publications in the field of biology; to strengthen the editorial boards of biology periodicals with Michurinists . . .
>
> To revise the syllabi and curricula for graduate studies in the institutions of the Biology Division . . .[9]

The Orgburo resolution discharged Lysenko's main opponents in the academy, Shmal'gauzen and Dubinin, from their administrative posts.

The decision to hold a special "enlarged meeting of the academy presidium on the questions raised by the August VASKhNIL meeting," however, was made not by party officials, but by the academicians themselves. As early as August 14, Vavilov and Nikitin approved a preliminary plan for this gathering. Vavilov initially planned to hold a one-day meeting on August 21. A few days later, a more wide-ranging action was contemplated, and it was decided

to hold a three-day meeting on August 24–26. The party cell of the academy and the bureaucratic apparatus of the presidium (namely, its own Secretariat and the Department of Special Works)[10] did most of the preparation. The head of the Department of Special Works, Viktor Kovda, served as an intermediary between the academy and the Central Committee. Nikitin was the main coordinator of these feverish preparations.

On August 18, Nikitin convened a small organizing committee to prepare the meeting. Fifteen persons were included: Kovda, Nikitin, Norair Sisakian, Nikolai Nuzhdin, Ivan Glushchenko, Mark Mitin, Grigorii Khrushchov, Khilia Kushner, Rakhil Dozortseva, Anatolii Nichiporovich, Aleksandr Studitskii, Khachatur Koshtoiants, Iakov Rautenshtein, Mariia Komarovich, and Iurii Vasil'ev. All were party members; most were known as disciples and allies of Lysenko; all except Nikitin and Mitin were nonacademicians who worked in the bureaucratic and party apparatus. Top officials of the presidium's apparatus participated in the committee: Kovda and Vasil'ev represented the Department of Special Works; Komarovich, the Secretariat of the presidium. The main task of the committee was to work out technical details of the forthcoming meeting: the list of participants and speakers, the text of the final resolution, the distribution of invitations, and so forth.

Nikitin informed the committee about the Orgburo's orders and Malenkov's critique of the academy. The main item on the agenda was the list and order of reports for the meeting. A leitmotif of the committee's first sitting was the forthcoming report by Orbeli: as academician-secretary of the Biology Division, he was slated to present a main address. Clearly, for the meeting's organizers, this question was the most complicated. Orbeli was the most influential figure in postwar Soviet biology. He was a member of three academies, the academician-secretary of the Academy of Sciences' Biology Division, the director of several research institutes, the head of the Military-Medical Academy (his military rank was colonel general), the chief editor of several periodicals, and a member of numerous governmental commissions and committees. Those who were preparing the meeting had to take into account his vast influence and connections.

All members of the committee agreed that Orbeli's address would not satisfy the demands of the Central Committee—he was known as a supporter of genetics and geneticists. It was even proposed that the text of his report be written by the secretary of the division's party cell, Koshtoiants.[11] But as Dozortseva, the scientific secretary of the division, informed the committee, Orbeli would never consent to this. Koshtoiants also objected to the idea. Orbeli would not take anyone's advice or instruction in preparing his report for the meeting. (The committee's expectations proved correct—his report would provoke a furious attack by Lysenkoists.)

The next day, August 19, the committee was summoned again, and this time Orbeli was present. They discussed the resolution prepared by the party cell of the Biology Division and the Department of Special Works.[12] The

essence of this resolution corresponded to the Central Committee's resolution of August 16: it also listed "Mendelists" to be dismissed and "Mendelist" institutions to be reorganized. The draft was sent "for correction and consideration" to five people: "A. Deborin—did not answer; G. Aleksandrov—made minor comments; M. Mitin—made remarks and wrote two new paragraphs; D. Shepilov and [F.] Novikov[13]—made corrections."[14] The first three of these persons were philosophers and members of the academy; the last two were party officials.

The remarks made by the members of Nikitin's committee were mainly editorial and concerned only the introductory part of the resolution; they could not change the decisive formulations that repeated the Central Committee's resolution of August 16 almost word for word. In the process of further polishing and editing, however, the first paragraph was revised. The first draft (from August 18) stated: "To strengthen the leadership of the Biology Division. To include academician Lysenko in the Bureau of the Division."[15] By August 21, the following had been added: "To satisfy academician Orbeli's request to resign from his duties as academician-secretary of the Biology Division. To appoint academician Oparin to the post of academician-secretary of the Biology Division."[16] The next variant, marked "penultimate," is longer: "To discharge academician L. A. Orbeli from his duties as academician-secretary of the Biology Division. To appoint temporarily (until the election in a General Meeting [of the Academy]) academician A. I. Oparin to the post of academician-secretary of the Biology Division."[17] In the next version, marked "The last. August 24, 11:00 AM," the first sentence returned to its August 21 version ("To satisfy . . ."),[18] This version, however, was not the last. Those who were preparing the resolution clearly had to move with caution in dealing with such a powerful figure as Orbeli. This is probably why its first paragraph regarding Orbeli was revised so many times.

The difference between "to satisfy Orbeli's request to resign" and "to discharge" was very significant. According to the Academy of Sciences' statutes, the post of academician-secretary of a division was elective; but in practice, appointment to this post (as to any other post in the presidium and the bureaus of divisions) fell within the *nomenklatura* of the Central Committee. So only the Central Committee could determine Orbeli's fate. Apparently, while the meeting was already in progress, the first sentence of the resolution was again corrected to "To discharge . . ."[19] On the reverse side of this final version is a handwritten note: "corrected pages from the copy of Novikov and D. Shepilov." The strong formulation (discharging Orbeli) was probably intended to demonstrate that even such a powerful figure would not be allowed simply to resign from his post, but instead would be punished for his patronage of "Mendelists."

The Central Committee apparatus closely monitored these preparations, and the academy's apparatus carefully planned the forthcoming meeting and prepared decisions to satisfy the demands of the party apparatus. But despite these long and careful preparations, the meeting did not go as planned.

A stenographic report published in the academy's official journal, together with newly available archival materials, allows us to reconstruct the events of August 24–26. The first two days were taken up by reports and speeches, and the third was devoted to adopting the resolution. The audience was composed almost entirely of biologists. Twenty-two speakers took the floor (among them the academy's president and academician-secretary, and three ministers). "Because of a shortage of time for discussion," eight other persons submitted written reports to the presidium, and academician Nikolai Tsitsin sent a letter to the presidium that was read by the president. Almost all the members of Nikitin's committee delivered reports, but no Mendelists spoke at the meeting.

Curiously, the victory of Michurinism in the academy was staged without the main victor: although he was a member of the academy's presidium and was being newly appointed to the bureau of the Biology Division, Lysenko himself was absent.[20] Also absent were his main opponents, Shmal'gauzen and Dubinin.

The meeting began at noon on August 24. It was chaired by Vavilov, who delivered a short opening address admitting the mistakes of the academy's leadership and calling for the adoption of concrete decisions. "This [meeting] is not a discussion," he emphasized. "It is important to express our principled attitude to the problems [raised by the VASKhNIL meeting]."[21]

The first to "express his principled attitude" was Orbeli, who delivered a special report on behalf of the Biology Division. As members of Nikitin's committee had anticipated, his report was a polemic against Lysenko's address at the VASKhNIL meeting, but he did not even mention Lysenko's address or its approval by the Central Committee. Instead, he set about disproving Lysenko's accusations against Soviet *biology*, describing in detail the practical significance of research conducted in the institutions of the division. He enumerated a great variety of important problems studied by biologists and insisted that biology was not merely "the basis of agronomy," as Lysenko had declared. Orbeli said: "It seems to many people that the Biology Division is obliged only to work in one field. In fact, biologists have been called upon from all directions."[22] He then detailed the many ways academy biologists had been useful, mentioning physiologists' work on various military-related problems and zoologists' research in parasitology and epidemiology. Orbeli was clearly trying to narrow Lysenko's authority: Lysenko's report concerned only genetics and could not be properly entitled "On the Situation in *Biological* Science."

Only then did Orbeli address the situation in genetics. He admitted the existence in *genetics* of two trends—"formal" and "Michurinist"—but he reduced the controversy between them to "purely biological debates" and to "careerist struggles to seize institutions."[23] Admitting that "formal genetics includes some *elements* of metaphysics, *elements* of idealism," he confessed that "he had underestimated the ideological struggle that was *partially* hidden behind it."[24]

Among Lysenko's opponents, Orbeli named only Dubinin and Zhebrak, without mentioning the other geneticists and biologists that Lysenko had criticized (for example, Shmal'gauzen, who had been the main target of Lysenkoist attacks at the VASKhNIL meeting). Moreover, although the Lysenkoists referred to Nikolai Kol'tsov (who had died in 1940) only as a "fascist" and "reactionary," Orbeli termed him a "prominent biologist." Orbeli also tried to save two geneticists, Mark L. Bel'govskii and Aleksandra A. Prokof'eva-Bel'govskaia: listing them together with Nuzhdin, Lysenko's deputy in the Institute of Genetics, Orbeli declared that, since they worked in Lysenko's institute, they could not be "formal" geneticists. In conclusion, Orbeli uttered several formulaic phrases admitting his mistakes, including his "liberal attitude toward Mendelism." He also acknowledged Michurinists' victory over formal genetics, but he insisted that "the principal approach of our Biology Division should be the unrestricted study of biological problems coupled with broad-ranging analysis."[25]

Anticipating the content of Orbeli's report, Nikitin's committee had instructed another speaker, Aleksandr Oparin, to report on behalf of the Biology Division. Oparin had already been elevated to the post of academician-secretary by party order. Unlike Orbeli, he toed the Lysenkoist line. He began by repeating a main thesis of Lysenko's report: "Biology was always the main bridgehead for the struggle between two uncompromising philosophical lines—materialism and idealism." "The Michurinist view on living nature," he continued, "reflects completely the dialectical materialist viewpoint."[26] Oparin devoted most of his report to a demonstration that he himself "supported and supports to the utmost the Michurinist point of view."[27] He concluded by enumerating the main tasks of the academy in eliminating the Biology Division's mistakes. He largely recapitulated a draft of the presidium's forthcoming resolution, but included only general phrases about changing research plans and training Michurinist personnel.

Next to speak on behalf of the Biology Division was academician Vladimir Sukachev, director of the Institute of Forestry and one of Lysenko's main opponents at the earlier discussion on the struggle for existence. Like Oparin, he talked at length about "the Michurinist trend" of his own research and that of his institute. A member of the division's bureau, he admitted that the division had mistakenly "permitted research along Morganist lines." Sukachev did not name any academy workers as Mendelists. Instead, he simply proposed that there should be conferences to discuss plans and publications "for the development of Michurinist biology."[28]

Nikitin's committee had scheduled the next speaker to be one of Lysenko's main theorists, Ivan Glushchenko, who was to present a Lysenkoist vision "on the situation in the Biology Division of the Academy of Sciences." But instead, the minister of higher education, Sergei Kaftanov, took the floor. Understanding very well what Orbeli, Sukachev, and even to some extent Oparin were trying to do, Kaftanov declared that previous speakers had ignored "the

colossal significance of the VASKhNIL meeting." The main target of his speech was Orbeli. During the first minutes of the speech, he used the word "must" six times, enumerating subjects Orbeli had neglected. He refuted Orbeli's report point by point: Lysenko's struggle against formal genetics was inspired "not by personal interests, but by those of science," and Orbeli had falsely attempted "to tear the ideological side of the struggle away from the scientific one." Kaftanov was the first speaker at the session to remind participants that Lysenko's report had been "approved by the Central Committee" and that the struggle against Mendelism had a *political* meaning. He several times repeated that "enemies of the Soviet Union," such as Dobzhansky and Timofeeff-Ressovsky,[29] "struggled against Soviet science, against Soviet progressive Michurinist biology" and that native "troubadours of Mendelism-Morganism" had joined in. Kaftanov ticked off the most "guilty" academic institutions and the Morganists working there—Zhebrak, Dubinin, Navashin, Shmal'gauzen, Sabinin, Davidenkov—devoting special attention to Zhebrak's and Dubinin's "sins." He criticized Orbeli for his patronage of and connivance with Mendelism and for his attempt to defend Mendelists "even now, after the publication of the VASKhNIL meeting materials and Lysenko's report that crushed Mendelism-Morganism completely." Contradicting Orbeli, Kaftanov declared that the results of the VASKhNIL meeting were very important not only for genetics, but for all biological disciplines and for science as a whole. He castigated the "absolute deficiencies and gigantic defects in the work of academic biology institutions" and called upon academicians to develop criticism and self-criticism, repeating phrases from the Central Committee's resolution that "Michurinist biology must occupy a dominant position in the Academy of Sciences" and insisting that this required "subordination of all important areas of biological science, especially the institutions of the Academy of Sciences, to Michurinists."[30]

After Kaftanov's speech, almost all reports glorified Michurinist biology. They followed a general pattern. Speakers began with the "historical meaning of the VASKhNIL meeting" and especially that of Lysenko's report. Almost all referred to "the Central Committee's approval" and assured the audience that they themselves were long-standing and true Michurinists who had always struggled against Mendelism at home and abroad. Every speech targeted some Soviet or foreign Mendelist for having attacked "Lysenko and his teachings." Homegrown Mendelists were denounced for "their slavishness and servility to foreign science." Speakers also criticized the leadership of the academy for its bias in favor of Mendelism. Those who occupied high-level administrative posts criticized their subordinates and confessed their own mistakes: tolerance of Mendelism (and foreign science in general), insufficient attention to criticism and self-criticism, neglecting the *partiinost'* principle in science. Those speakers who did not occupy high administrative positions criticized the leadership of their own institutions. These critics of Mendelism used essentially the same arguments earlier employed by Lysenko

and other participants at the VASKhNIL meeting (arguments therefore approved by the Central Committee): the alienation of genetics from the needs of the people and socialist construction; and the reactionary character of genetics and its relations to fascism, eugenics, and idealism. Particularly critical were speeches by "outsiders" such as the minister of agriculture, Ivan Benediktov, and the minister of state farms, Nikolai Skvortsov, who blamed the academy for not paying much attention to agriculture.[31]

To these ritual themes, a new motif was added in the speeches of two philosophers, Mark Mitin and Georgii Aleksandrov. Both insisted that "conclusions from the VASKhNIL meeting should be applied to all disciplines" and that the meeting's results demonstrated defects in the ideological stance of Soviet scientists. In Aleksandrov's view, "it is necessary to organize the fundamental learning of Marxist-Leninist philosophy by our scientists much more seriously than was ever done before." He reminded participants that the academy graduate school (*aspirantura*) "is the only one in the entire country where a course in Marxist-Leninist philosophy is not required" and demanded that "this abnormal situation be corrected immediately."[32]

At the Academy of Sciences' session, in contrast to the VASKhNIL meeting, no Mendelists were allowed to speak. Indeed, they were not even allowed to attend. The organizers of the session apparently did not even want to give them an opportunity to "confess," perhaps fearing that they would use the opportunity to propagate their "noxious" theory (as had occurred at the VASKhNIL meeting). There was good reason for their apprehension.

I found in the academy's archive a letter from Shmal'gauzen dated August 19, 1948, and addressed to its presidium. Shmal'gauzen informed the presidium that he would be unable to attend the meeting because of illness[33] and therefore wanted to make a written declaration. Its conclusion was subservient: "I always gave all my strength to benefit Soviet science and in the future I will use all my knowledge to march together with Soviet progressive biology and its avant-garde—the Michurinist trend."[34] The entire preceding text of the three-page letter, however, was a complete refutation of the accusations raised against him at the VASKhNIL meeting. In particular, he demonstrated that his works had been inaccurately cited and that his opponents had attributed to him statements he had never made. Further, he insisted that his Institute of Evolutionary Morphology had always conducted research necessary to the country and that the investigations castigated at the VASKhNIL meeting as "distant from the people" were in fact "a direct continuation of A. Severtsov's phylogenetic research" and "had been successfully introduced into practice." Clearly, Vavilov knew about the existence of this letter, but, unlike Tsitsin's, it was not read at the meeting. Perhaps Vavilov wanted to carefully control the session in order to prevent an already difficult situation from deteriorating.

The last day of the meeting was devoted to adopting the resolution, which participants accomplished with little discussion. The resolution almost literally repeated the Orgburo's resolution of August 16. Academy "Mendelists"

who had been named by the Orgburo, such as Shmal'gauzen, Dubinin, and Navashin, were removed from their posts. Genetics laboratories in the Institute of Evolutionary Morphology and the Institute of Cytology, Histology, and Embryology mentioned by the Orgburo were closed. The presidium ordered the bureau of the Biology Division to revise its plans for research, graduate studies, and publications in order "to develop Michurinist teaching and to subordinate research in the Division's institutions to the economic needs of the country." The resolution also ordered that a conference "concerning the problems of the further development of Michurinist biological science" be held in October with the participation of VASKhNIL, all republic academies, and all branches and bases of the Academy of Sciences.[35] The meeting ended with "applause from the entire audience" and unanimous approval of a letter "To Comrade J. V. Stalin."

The next day, *Pravda*'s front page contained an editorial entitled "For the Flourishing of Our Advanced Science," the resolution of the Academy of Sciences presidium, and the letter to Stalin. The summary of speeches delivered at the meeting occupied the entire second page of the issue. All central and republic newspapers reprinted the information from the front page of *Pravda*.

The main goal of the Academy of Sciences' session was, clearly, to display the obedience of its administrative apex to the party apparatus. Following precise instructions, the meeting legitimated the Central Committee's decisions to crush Lysenko's opposition in the biology institutions of the academy. Michurinist biology was declared the only allowable doctrine in Soviet biology.

The dynamics of the meeting, however, suggest that the academy leadership, in displaying its obedience to the party line, strove to preserve and reassert its own control over its institution. Although Nikitin's committee prepared technical details of the meeting, its general directions and flow were carefully orchestrated by academy leaders—Vavilov and Orbeli. They regularly conferred with each other during the preparations and during the meeting itself, adjusting their scenario to emerging factors and events. They cautiously but persistently opposed the attacks launched by such powerful figures as ministers Kaftanov, Benediktov, and Skvortsov. Orbeli's concluding remarks at the last session on August 25 and Vavilov's concluding speech on August 26 clearly suggest that the academicians sought to prevent the interference of outsiders, even if they were party or state officials, in their "internal" policies.

Orbeli formally admitted that his report was "unsuccessful" (*neudachnym*) and thanked his critics for pointing out his "mistakes." After that, however, he began to reject point by point the concrete accusations made by his critics. Furthermore, he once again repeated the general argument of his opening report: academy biologists worked on a number of subjects with extremely important military and medical applications.[36] Similarly, Vavilov remarked that the academy could not substitute for all other scientific institutions subordinate to various ministries.[37] Both took a nasty swipe at their ministerial critics,

Benediktov and Skvortsov: after all, agriculture was their field and VASKhNIL was under their purview; if Soviet agricultural science was not developed as it should be, the scientists hinted transparently, it was their fault, not the fault of the Academy of Sciences, and they would do better to stop their slanders and mind their own business more attentively. Thus, while praising Michurinist biology and formally admitting the new model of Stalinist science it embodied—the complete subordination of science to party guidance—the academy leaders maneuvered to minimize its effects on their institution.

During the meeting in the Academy of Sciences, however, a new note was clearly sounded—the "broadening" of the meaning and significance of VASKhNIL's decisions. At an early session of Nikitin's committee, one of the participants had remarked: "The report of academician Lysenko and the questions discussed by the meeting of the Lenin Academy [of Agricultural Sciences] concern not only biological disciplines, but natural sciences in the widest sense of the word. . . . To construe the problem as concerning only biological disciplines would narrow the issues that were raised by academician T. D. Lysenko and which have great significance for all natural sciences."[38] During these preliminary planning sessions, however, this idea did not find support.

A broadening of "the questions raised by Lysenko" into other disciplines began only during the meeting itself and reached its peak in the following months, when various groups within and without the scientific community grasped the unexpected opportunities such a "broadening" provided.

For Michurinist Pedagogy: The Academy of Pedagogical Sciences

One of the first efforts to expand the Michurinist campaign into nonbiological disciplines came at a meeting of the Academy of Pedagogical Sciences on September 4, 1948.

This institution occupied a special place in the Soviet scientific community. The academy was subordinate to the Ministry of Enlightenment, and its purpose was to provide scientific advice and support to secondary schools. The academy prepared syllabi, manuals, textbooks, and school supplies for various disciplines as required by the curricula of secondary and higher pedagogical schools. Several institutes carried out this mission: the Institute of the Theory and History of Pedagogy, the Institute of Teaching Methods, and the Institute of Pedagogical Education. The academy also included a number of institutes that conducted research in biology, hygiene, psychology, physiology, and pedagogy itself (for example, the Institute of Psychology and the Lesgaft Institute of Natural Sciences). This dual mission—education and research—explains the nature of the events that transpired there in 1948.

Unlike the meeting in the Academy of Sciences, the gathering in the pedagogical academy did not result from direct party criticism or instructions. During the Central Committee's many August sessions, the Academy of Pedagogical Sciences was not mentioned even once. I was unable to find any Central Committee documents concerning the "situation in the Academy of Pedagogical Sciences." Apparently, the enlarged meeting of its presidium devoted to the "results of the VASKhNIL meeting" was initiated by the top officials of the academy themselves. Despite the absence of direct party instructions, however, the broad press campaign against genetics made the task of the academy explicit—to remove genetics from biology education in secondary schools.

The session was organized in much the same way as that of the Academy of Sciences. Konstantin Kornilov, academy vice-president and academician-secretary of its Psychology Division, presided over the meeting. President Ivan Kairov delivered the principal address, "On the Results of the VASKhNIL Meeting and the Tasks of the Academy of Pedagogical Sciences." There followed speeches from representatives of various academic institutions.

The presidential report was built upon the example of the Academy of Sciences meeting. Kairov opened his report with the sacral phrase about "the party's approval" of Lysenko's report and declared that "the VASKhNIL meeting and its decisions are directly addressed to the Academy of Pedagogical Sciences and, most of all, to the teaching of biology in secondary and higher schools."[39] He bitterly criticized researchers in academic institutions for Morganism-Mendelism-Weismannism and threatened to take severe measures: "We are setting the task of examining all scientific workers in academic institutions and ascertaining their ideological positions regarding questions of natural sciences. We have already unmasked a group of biologists who held fallacious Weismannist positions. We have discharged a number of persons, scientific advisers, because these advisers took wrong positions and we could not permit them to advise on scientific work in the future." Kairov criticized with special vigor the authors of textbooks for secondary and higher pedagogical schools. He "unmasked" the influence of "idealist biology" in almost all biology textbooks and proposed that new programs, textbooks, and manuals for teachers be written as soon as possible in a Michurinist spirit. In the meantime, he suggested "a special instructive letter explaining [to teachers] how they have to teach natural sciences in secondary schools now."[40]

This presidential speech, however, reached well beyond the teaching of biology. Kairov explained that "the VASKhNIL meeting should be a new stimulus to sort out a whole number of theoretical and practical problems in pedagogical science." He called upon his colleagues "to pay special attention in the teaching of pedagogy to questions of the influence of heredity, environment, and upbringing on the development and shaping of human beings."[41] In order to do this, he suggested that the research plans of the academy's institutes be changed to conform to the "practice of Communist upbringing and education." Criticizing the "slavishness and servility of certain workers of the

academy to foreign science," Kairov underlined the important heritage bequeathed by such native pedagogical authorities as Nadezhda Krupskaia and Anton Makarenko to Soviet pedagogical research. He also called on pedagogues to develop criticism and self-criticism.

Responding to this call, subsequent speakers unanimously criticized Weismannism-Morganism and vowed "to crush it completely." Every researcher, textbook author, instructor, or teacher who employed "non-Michurinist" materials was labeled a Mendelist. Almost every speaker named the most "malicious" Mendelists working in his or her institution and urged that they be ousted.

The name of Boris Raikov—a member of the academy, the author of the best manual for biology teachers, and the editor of the academy journal *Natural Sciences in School*—was raised most often.[42] Raikov had never been a geneticist; his specialty was the methodology of biology teaching. His main offense was a complimentary article about one of the founders of Soviet genetics, Iurii Filipchenko, published shortly before the VASKhNIL meeting. Almost every other speaker mentioned Raikov's name together with appropriate epithets. For example, Mikhail Mel'nikov, the author of a textbook on Darwinism for secondary schools, characterized Raikov's work in the following terms: "It is our duty today, in light of decisions of the VASKhNIL meeting, not only to totally unmask all the defective bases of this [Raikov's] direction in the methodology of teaching, but to crush it totally and not to discuss it anymore, because the discussion has wasted very much time and strength, and we know from party experience that at important moments the party never permitted such discussions."[43] Every speaker adapted Kairov's report to his or her own situation: a member of an editorial board "struggled against the Morganism" of the editor-in-chief; textbook authors criticized rival textbooks for their "idealist content" (and sometimes, like Mel'nikov, they even criticized their own coauthors); researchers noted the "anti-Michurinist tendencies" or the "servility to the West" of their colleagues; and so forth.

Unlike the leadership of the Academy of Sciences, the pedagogical officials apparently decided that the "confessional" speeches of branded Mendelists were allowable and even desirable. For instance, the author of the first genetics textbook for pedagogical institutes, Vladimir Natali, who was repeatedly criticized during the meeting, was permitted a long speech that concluded as follows: "I am fully admitting and again underlining the deficiencies of my position. . . . I want to devote all my energy (while I have it) to . . . the propaganda of Michurinist teaching, to the reorganization of all biology on a Michurinist basis."[44] Raikov took the floor twice, assuring the meeting that he had never been a Morganist and promising "to correct my mistakes and in the future to work in a strictly Michurinist direction."[45]

Speakers did not restrict themselves to questions of biology. Almost all called for the reorganization of their disciplines on a "Michurinist basis." For instance, the director of the Institute of Psychology, A. Smirnov, urged that all

psychological works be reassessed from a Michurinist perspective. Nikolai Semashko, head of Narkomzdrav in the 1920s and now director of the Institute of Physical Training and School Hygiene, strove to convince the audience that Lysenko's report and the results of the VASKhNIL meeting were extremely important for solving problems in school hygiene. He explained: "Not without reason did academician Lysenko enunciate the expression: 'to bring up [*vospityvat'*] plants and animals by external influences on them.' Of course, it is necessary to adjust this for human beings, but we are also occupied with bringing up a growing generation. And here we have all the possibilities presented by the Soviet system for bringing up the next generation."[46] After similar speeches by twenty-three persons, ending only late at night, the enlarged presidium finished its work by unanimously adopting the resolution that had been prepared by its governing body.

Unlike the widely advertised meetings in VASKhNIL and the Academy of Sciences, the gathering in the pedagogical academy did not occasion a great press campaign. Pedagogical periodicals, however, publicized the meeting.[47] *Teachers' Gazette* provided brief information.[48] The official journal of the academy, *Soviet Pedagogy*, published a laudatory editorial, "The Triumph of Advanced Michurinist Science and the Tasks of Soviet Pedagogy."[49] The next issue of the journal published a shortened version of Kairov's opening address and concluding remarks, plus summaries of selected speeches, which occupied only about twenty pages[50] (compared with the six-hundred-page stenographic report of the VASKhNIL meeting). Surprisingly, the resolution adopted at the meeting was published neither in the newspaper nor in the journal, but in a specialized information bulletin that was printed in an edition of only two thousand copies.[51]

Despite such limited publicity, during the autumn of 1948 all institutions of the Academy of Pedagogical Sciences held Michurinist meetings. At these meetings psychologists and hygienists, pedagogues and specialists in physical education all loudly proclaimed their Michurinist convictions.

For Michurinist Medicine: The Academy of Medical Sciences

A further broadening of the Michurinist campaign occurred five days later at a meeting of the USSR Academy of Medical Sciences, on September 9–10, 1948.

Like their colleagues in the Academy of Pedagogical Sciences, medical officials did not wait for party orders. "The situation in educational and scientific work" in medical institutions was first mentioned at the Central Committee's sitting of August 20[52] in relation to Kaftanov's memorandum on "serious deficiencies in the teaching of biological disciplines in medical [educational] institutes."[53] As early as August 16, however, the bureau of the academy's presidium held its first session to discuss a plan of action. Petr Anokhin,[54] a presidium member and head of its planning commission, delivered a report.

The main item on the agenda was determining which academic institutions were "infected by Morganism" and who among the academy's workers had adhered to this "obnoxious doctrine." At this session, however, there was already a tendency to discuss the results of the VASKhNIL meeting in a very broad sense and to organize purges, not only of "Morganist-Mendelist-Weismannists," but also of "idealists."[55]

Ten days later, on August 26, the bureau discussed a plan for "removal of reactionary idealist biological concepts from medical science."[56] It assigned Ivan Razenkov,[57] academician-secretary of the Biomedical Division, to prepare and deliver the principal report to an enlarged meeting of the presidium. It was decided, however, to first rehearse the report at a rump session on September 6. The chair of this meeting, academician-secretary of the academy Semen Sarkisov, underlined the great importance of the questions they discussed: "The question is not just a reorganization [*perestroika*] of our Academy; the question is a radical reorganization of our science and medical work. . . . We must develop our medical science alongside the point of view of Michurinist doctrine."[58] He informed the audience that after the meeting Razenkov would have to report to the minister of public health, Efim Smirnov. He asked members of the presidium "to be very attentive and to discuss thoroughly" the proposed texts of the report and resolution.

The members were indeed very careful, correcting and polishing the documents for more than three hours. According to the stenographic report of a session of the bureau of the Biomedical Division held the next day, the minister approved Razenkov's report with only a few corrections. He emphasized that the mistakes of idealist subordinates were in fact the fault of the institute directors who had permitted them to work.[59] The bureau took the corrections into account and made corresponding changes in Razenkov's report. The administrators of the medical academy, then, carefully planned the scenario of the forthcoming meeting. Unlike their colleagues in the Academy of Sciences and the pedagogical academy, they even made certain that "the Michurin of our day," Trofim Lysenko, attended their gathering.

Finally, on September 9, the academy president, Nikolai Anichkov, opened the enlarged meeting of the presidium with a short introduction. Razenkov then read his carefully prepared report to an audience of almost five hundred.[60] He began with ritual phrases about "the great historical meaning of the VASKhNIL meeting and of Lysenko's address approved by the Central Committee." He declared that deficiencies in medical science resulted from the activity of homegrown Weismannist-Morganists and from the laxness of the academic leaders who permitted them to work. He emphasized that Weismannist-Morganist concepts had influenced medicine no less than agriculture, and formulated the meeting's goals: "The school of Michurin-Lysenko has accomplished the ideological rout of Weismannism-Morganism in biology. Our urgent task is, through concrete analysis, to lance and remove all elements of

idealist biology in specific areas of biomedical specialties. Such criticism and such analysis must be accompanied by appropriate measures dealing with the structure and personnel of some academic institutions and with further planning of the academy's scientific work in general."[61] Assuming, correctly, that most of his audience had never even heard about Michurinist biology before August 1948, Razenkov reviewed the essence of Lysenko's views on heredity, contrasting them with "the opposite, good-for-nothing views of Morganism." He also tried to connect Lysenkoist ideas to problems of medical research. Then he moved to the "concrete analysis" of mistakes made by various institutes and scientists.

First on the list of "criminals" was the Institute of Experimental Biology.[62] Razenkov targeted its director, Aleksandr Gurvich,[63] and the head of a laboratory, Leonid Bliakher, for their "obviously idealist and Weismannist positions."[64] Moreover, he said, "their works stand outside of the problems that our socialist economy has set for science." Razenkov demanded that "the institute be completely reorganized on the basis of the progressive Soviet Michurinist trend in biology."[65]

Next came the Institute of the Evolutionary Physiology and Pathology of Higher Nervous Activity, directed by Orbeli. Razenkov's critique began with a member of the academy, Sergei Davidenkov, who until 1941 had been a genetics consultant in the institute. A prominent psychiatrist and neurologist who had advised Pavlov on genetic problems of higher nervous activity, Davidenkov had already been mentioned during the meeting in the Academy of Sciences. His worst offense was a monograph, *Evolutionary Genetic Problems in Neuropathology*, published in 1947 with Orbeli's enthusiastic foreword.[66] According to Razenkov, Davidenkov's main fault was an attempt "to justify autogenetic perversions by references to the authority of I. Pavlov and his school."[67] Razenkov continued by criticizing the institute itself for conducting Mendelist instead of Pavlovian research: "It is inadmissible," he declared, "that researchers of the Morganist trend . . . continue to work in the Institute of Evolutionary Physiology."[68]

His next target was the Division of Clinical Medicine, where researchers paid too much attention to the autonomy of the human organism and too little to environmental influences on the development of diseases. For Razenkov, Michurinism demanded an environmental approach, yet (for example), "there is not a single topic in the plan of the Institute of Therapy where a question of the external factors contributing to high blood pressure (hypertension) or stomach ulcer has even been touched upon."[69] He also noted deficiencies and the "influence of the corrupting ideas of Weismannism" in oncology and clinical psychiatry.

Nor, Razenkov continued, had the Michurinist doctrine been used in the institutes of the Division of Hygiene, Microbiology, and Epidemiology. Instead, much research had been conducted "in the spirit of Weismannism-

Morganism." He particularly criticized investigations in the Laboratory of Antibiotics, headed by Georgii Gauze, for supporting and developing Shmal'gauzen's ideas. Microbiological research would surely have benefited, he said, "if Weismannist-Morganists had been banished in time from some institutions of the Academy."[70]

In his conclusion, Razenkov identified a familiar litany of causes for the unsatisfactory situation in the academy's institutions: neglect of Bolshevik criticism and self-criticism, servility to foreign science, insufficient attention to the ideological and political upbringing (*vospitanie*) of personnel, alienation of medical institutions from practice, lack of the *partiinost'* principle in medical science. He called on medical scientists to correct the situation and to reorganize the academy in accordance with Michurinism. He briefly summarized the proposed resolution and finished his speech by glorifying the Great Teacher, Joseph Stalin.

In the course of the two-day meeting, about fifty persons expressed their attitudes toward "idealist biology and medicine." Their speeches combined certain typical features—for example, rejection of Morganism and praise for Michurinism—with some new motifs appropriate to the special circumstances of the medical academy. Unlike the Academy of Sciences and the Academy of Pedagogical Sciences, the Academy of Medical Sciences had no specific task and received no specific orders from the party. Furthermore, the task assigned to the first two academies—banishment of genetics from research and teaching—had already been largely accomplished in medical research with the liquidation of Solomon Levit's Medical-Genetic Institute in the late 1930s. Those few institutions where genetics studies were still conducted (such as the Laboratory for the Genetics of Higher Nervous Activity in Orbeli's institute) provided material too scanty for a broad campaign. Besides, such material could not be used by *all* speakers, most of whom had no connection with genetics whatever. In these circumstances, Morganism was replaced by *idealism* as the bête noire.

Somehow, an analog of Mendelism had to be found or constructed in medicine. Physicians tried to find a worthy opponent for "Soviet progressive materialist medical science." Many speakers named *virkhovianstvo* (a doctrine based on Rudolf Virchow's cell theory) as the analog.[71] Most, however, settled upon "homegrown idealists." As one speaker put it: "We have our own Shmal'gauzens, Dubinins, and Zhebraks in our academy."[72] Each speaker nominated leading specialists in his or her own field as candidates for the roles of Zhebrak and Dubinin, usually accusing their nominees of idealism. For example, a number of speakers denounced the research of academician Lina Shtern on the blood-brain barrier as idealist.[73]

Lysenko's theories were virtually unknown to physicians, and a direct use of his theories in medical practice and research was rather difficult. As Lysenko himself declared at the meeting: "There is no direct connection between

Michurinist teaching and medical science."[74] To imbue the campaign with "scientific" meaning, it was necessary to find a "materialist" theory that could substitute in medicine for the role of Michurinism. Razenkov had already proposed one—Pavlovism. This explains why so many speakers criticized the research of the well-known opponents of Pavlov's doctrine Ivan Beritashvili and Nikolai Bernshtein,[75] and why Pavlov's pupils who attended the meeting criticized each other for ignoring Pavlov's heritage.[76]

Olga Lepeshinskaia proposed an alternative: her own concept of "the origination of cells from noncellular matter." Her speech was emotional: "What happiness! At last, the dialectical materialists have triumphed, the idealists are paralyzed and are being liquidated as the kulaks were once liquidated. To prevent their obstruction of the forward motion of science and their propaganda of idealism . . . it is necessary to remove them from all leading posts and to exercise a special vigilance toward repentants, because, perhaps, among the sincere repentants there are some wolves in sheep's clothing, trying to save themselves from liquidation."[77] Praising herself as a "materialist and innovator," she characterized her opponents—almost all the country's leading cytologists, histologists, and morphologists—as "idealists and reactionaries."[78] But her gambit was rebuffed. Lepeshinskaia's opponents did not "confess," but instead criticized her views.[79] All, however, attempted to allay suspicions of their idealism by talking at length about the materialist character of their research.

As at the pedagogical meeting, those branded as "idealists" were allowed to speak. Davidenkov, Bliakher, and Gauze repented and promised to reorganize their work in accordance with Michurinist thinking. Not all "idealists" did so. For example, Shtern insisted that the accusations against her were baseless: "I am not the sort of person who, immediately after something has changed, begins to confess and say: 'I am not me, and my horse is not mine.' . . . Understanding, however, that we are living now in a period of cold war, I am taking into account all the political significance of what is going on at the biological front."[80] Gurvich refused to say anything at all at the meeting. He sent the presidium a letter in which instead of admitting mistakes he declared his "irreversible decision to quit my work in the academy" and requested that he "not be listed as a worker in the Institute of Experimental Biology."[81] Orbeli admitted that his foreword to Davidenkov's book was a mistake, but completely denied all accusations of misrepresenting Pavlov's line and did everything he could to defend the workers of his institute; he took all the blame for their "mistakes" upon himself and tried to remove the names of his subordinates from the resolution of the presidium.[82]

Following the standard ritual, the enlarged meeting of the Academy of Medical Sciences presidium ended with the unanimous adoption of a resolution and a letter "To Comrade J. V. Stalin." Information about the academy meeting and the letter to Stalin was widely published in the central and local press and, of course, in all medical periodicals.

TABLE 7-2
Chronology of Michurinist Meetings in 1948

August	
July 31–Aug. 7	VASKhNIL meeting
17	Meeting of the presidium of the All-Union Society for the Dissemination of Political and Scientific Knowledge
24–26	Enlarged meeting of the presidium of the USSR Academy of Sciences
26–27	Meeting of workers of higher educational institutions in Moscow
26–28	Joint meeting of the divisions of biological and agricultural sciences of the Armenian Academy of Sciences
30–Sept. 2	Meeting of workers of Ukrainian biological, agricultural, medical scientific, and public institutions
September	
2	General assembly of the Latvian Academy of Sciences
3–4	Enlarged meeting of the presidium of the Belorussian Academy of Sciences
4	Enlarged meeting of the presidium of the RSFSR Academy of Pedagogical Sciences
6–7	Meeting of workers of biological science in Leningrad
7–8	Enlarged general assembly of the Latvian Academy of Sciences
9–10	Enlarged meeting of the presidium of the USSR Academy of Medical Sciences
11	Enlarged meeting of the presidium of the Kazakhstan Branch of VASKhNIL
13–15	Meeting of biology teachers of the Ukraine
14–16	Enlarged meeting of the presidium of the Uzbekistan Academy of Sciences
16–20	Joint meeting of the Division of Hygiene, Microbiology, and Epidemiology of the USSR Academy of Medical Sciences and VASKhNIL
17	Open meeting of the party organization of the Georgian Academy of Sciences
18–19	Meeting of workers of biological science in Tbilisi (Georgia)
20–22	Enlarged meeting of the presidium of the Lithuanian Academy of Sciences
24–25	Meeting of natural-sciences teachers of secondary schools, pedagogical colleges, and higher educational institutions of the Georgian Ministry of Enlightenment

The Ritual Spreads

During the following months, the campaign for "Michurinist" science quickly expanded throughout the Stalinist science system. Meetings were held in the academies of sciences of the Ukraine, Kazakhstan, Uzbekistan, Latvia, Armenia, Azerbaidzhan, Georgia, Estonia, and Belorussia, as well as in numerous

TABLE 7-2
(*Continued*)

September	
26	Scientific conference of biology teachers of Estonia
28–29	Enlarged meeting of the presidium of the Kazakhstan Academy of Sciences
29	Meeting of the scientific councils of medical institutions of Alma-Ata (Kazakhstan)
29–Oct. 2	Meeting of the administrative, scientific, and practical workers of public health of the USSR in Moscow
October	
4–6	Enlarged meeting of the presidium of the Ukrainian Academy of Sciences
5–7	Scientific meeting of the Kirgizstan Branch of the USSR Academy of Sciences
11–12	Joint meeting of the divisions of natural, medical, and agricultural sciences of the Latvian Academy of Sciences, the Latvian State University, and the Latvian Agricultural Academy
13–14	Meeting of agricultural workers of Armenia
16–17	Meeting of members, corresponding members, and scientific workers of the Leningrad Union of the institutes of the USSR Academy of Medical Sciences
18–19	General assembly of the Azerbaidzhan Academy of Sciences
18–23	Meeting of heads of biology departments of pedagogical and teachers' institutes of the Russian Federation
19–21	Meeting of the Technology Division of the USSR Academy of Sciences
20–21	Scientific meeting of the Estonian Academy of Sciences
23	Scientific conference of the Moldavian Base of the USSR Academy of Sciences
26–29	Meeting of the Biology Division of the USSR Academy of Sciences
November	
5	Meeting of workers of the Armenian Ministry of Public Health
December	
3–4	Meeting of agricultural specialists of the Far East in Vladivostok
10	Scientific meeting of the Division of Medical Sciences of the Estonian Academy of Sciences
26	Meeting of scientists, agricultural specialists, and party advisers of Kazakhstan

regional branches and bases (see table 7–2). The hierarchical structure of scientific institutions was an important factor in spreading the campaign. The meetings of presidiums were followed by meetings of subordinate divisions, which in turn were followed by meetings of the scientific councils of subordinate research institutes. Subordinate institutions followed the example and orders of their presidiums.[83] State agencies, such as the Ministry of Public Health, the

Ministry of Higher Education, the Ministry of Enlightenment, and the Ministry of Agriculture, also organized meetings in their subordinate scientific and educational institutions in Moscow, Leningrad, and republic capitals.

The campaign for "the complete domination of Michurinist biology," then, having begun in biology, was quickly expanded far beyond biology institutions. Meetings to discuss "the reorganization of work in light of decisions of the VASKhNIL meeting" took place in psychological and technical, historical and linguistic, physical and geological institutions. All these meetings aimed to demonstrate that the scientific community understood and adopted the new "politically correct" line announced at the VASKhNIL meeting.

All the meetings were built upon the same model and followed the same pattern. Even the titles of the principal reports copied that of Lysenko's address to VASKhNIL. For example, at the meeting in the Institute of Language and Thought, director Ivan Meshchaninov delivered a report entitled "On the Situation in Linguistic Science." His deputy, Fedor Filin, titled his report "On Two Trends in Linguistics."[84] The president of the Belorussian Academy of Sciences, Nikolai Grashchenkov, copied not only the title, but even the subtitles from Lysenko's address.[85]

The formal, routine scenario of these Michurinist meetings embodied a standardized ritual. Every meeting began with a declaration on "the historical meaning of the VASKhNIL meeting" and "the Central Committee's approval of Lysenko's address." Every meeting opened with a task-setting speech by a top official of the specific institution or discipline. The principal speech set the tone and rhetoric of the meeting, and named the accused and their mistakes. Speeches by other officials followed, developing one or another rhetorical theme. As a rule, the representatives of ministries and party committees also spoke. For example, at the meeting in Tbilisi, the Georgian minister of agriculture presented the opening address and a secretary of the Central Committee of the Georgian Communist Party delivered the concluding report. At the conference in Alma-Ata, a secretary of the Central Committee of the Kazakhstan Communist Party gave the main report. Smirnov, the minister of public health, was the main speaker at the Moscow meeting of public-health workers. Kaftanov, the minister of higher education, delivered the principal report at the meeting of workers in education. At the meeting in the Ukraine, two ministers, three deputy ministers, and a deputy head of the Ukrainian Council of Ministers delivered speeches. At the conference in Tallinn, it was a secretary of the Estonian Central Committee.[86]

Top administrators of scientific institutions admitted their mistakes and criticized their subordinates, who in turn criticized their leaders. At every meeting, Mendelism was damned and Michurinist biology glorified. In institutions remote from biology, scientists constructed their own analogs for the "sacred" and the "damned." For example, at the meeting in the Institute of Language and Thought, participants found their own villains—their "Mendels" and their "formal genetics"—in the works of Wilhelm Humboldt and

Ferdinand de Saussure, and praised the concept of Nikolai Marr as the materialist analog of Michurinist doctrine in linguistics.[87] As a rule, known representatives of sacral doctrine delivered speeches showing the relations between their doctrine and the institution's research. Those branded as representatives of the condemned doctrine were allowed to deliver repentant speeches. Local "anti-Michurinists" confessed and were sometimes removed from their administrative positions.

Every meeting adopted a resolution formulating the main tasks of the institution "in light of decisions of the VASKhNIL meeting." At the meetings of the highest institutions (academies and ministries), letters to Stalin were adopted and published.[88] Republic academies also sent analogous letters to local party leaders. For example, the Ukrainian Academy of Sciences sent a letter to the first secretary of the Ukrainian Central Committee, Nikita Khrushchev.[89] The Armenian Academy of Sciences sent letters not only to Stalin and the first secretary of the Armenian Central Committee, but also to Lysenko.[90] Reports about the meetings (sometimes even a stenographic record of the proceedings) were widely published in the central and local press, as well as in academic journals. This scenario, with few variations, was followed at every single meeting held in the autumn of 1948.

The similarity of all the Michurinist meetings suggests that they had a ritualistic function. The various groups within the scientific community employed the very same techniques, copying the model that had been "approved by the Central Committee"—the VASKhNIL meeting. Top administrators deliberately chose this particular form, "public meetings," in order to publicize their own actions and to demonstrate to the party apparatus that the scientific community had learned the lesson of the VASKhNIL meeting: the ultimate authority in scientific questions belonged to the Central Committee. Through this ritual, they strove to display the scientific community's loyalty and obedience to the current party line and the ongoing ideological campaign. Like rain dances performed by a shaman in the desert, the "dances" performed by the scientific community aimed to call forth a golden rain from above and to avoid "the punishing hand" of angry gods. The Michurinist meetings were intended to demonstrate that "the necessary conclusions of the VASKhNIL meeting" had been drawn in every discipline and every institution; that the scientific administrators had indeed spoken, as Malenkov had suggested, "at the top of their voices"; and that Soviet scientists had fully adopted the new "political correctness."

"Politically Correct" Science

It is still unclear, however, how it became possible to use Michurinist *biology* for organizing ritual gatherings in pedagogy, medicine, and linguistics. What were the "necessary conclusions" to be drawn from the VASKhNIL meeting,

for example, by the Technology Division of the Academy of Sciences? What did the "light of the VASKhNIL meeting" actually illuminate in physics or psychology?

Like rituals, rhetoric had played a crucial role in the interactions of the scientific community and the party-state control apparatus from the very birth of the Stalinist science system. To defend and advance their own interests, scientists adopted and mastered the lexicon of their patron and partner, incorporating every word of party pronouncements in their own language. Three sets of universal rhetorical assertions—*partiinost'*, Marxism, and practicality—embodied the Bolshevik image of science, an image that originated within the "Communist" science of the 1920s and developed through the political campaigns of the 1930s. They became the obligatory attributes of "Soviet" science and the "Soviet" scientist, which the scientific community routinely exploited in its self-portrayal and self-representation in its dealings with the party-state bureaucracy. The Nazi attack on the Soviet Union had temporarily displaced this rhetoric: "Everything for the front, everything for victory!" had become the main slogan of Soviet science. Subsequently, the escalating Cold War revived the 1930s rhetoric of *partiinost'*, Marxism, and practicality.

As we have seen, the party's approval of Michurinist biology signified not only approval of the content of Lysenko's doctrines, but also its affirmation of the particular model of "Soviet" science embodied in Michurinist biology. It was precisely this model that was employed to draw "necessary conclusions" at the Michurinist meetings held in various institutions. Scientists in all fields sought to demonstrate their own "Michurinism," and thus to affirm the model of a distinct "Soviet" science within their own specialties, using the same universal rhetorical assertions that Lysenkoists had used to portray Michurinist biology. As Vavilov emphasized in his concluding address to the Michurinist meeting at the Academy of Sciences, "our science, the science of the socialist country, is separated from bourgeois science by the gap of an entirely different ideology, the gap of an entirely different task that stands before us—the task of wholeheartedly serving the people, their wants, their practice, and their needs."[91] Not surprisingly, then, participants in all Michurinist meetings reaffirmed *partiinost'*, Marxism, and practicality as the characteristic features of the Michurinist trend of their own disciplines and institutions.

The "*partiinost'* of science"—that is, its subservience to party objectives and the subordination of the scientific community to "party guidance"—became the universal slogan of the Michurinist campaign. During the VASKhNIL meeting, very few speakers mentioned the *partiinost'* of science, and they did so only in passing. The concluding chord of the meeting, however, with Lysenko's declaration of the party's approval of his doctrine, had an enormous resonance; and during all subsequent meetings *partiinost'* became the major defining trait of Michurinist trends in all disciplines.

Almost every Michurinist meeting opened with a reference to the fact that Lysenko's VASKhNIL address had been "approved by the Central Committee." This phrase became a "nomadic quotation" of the Michurinist campaign. The principle of "*partiinost'* of science" in this context clearly meant that science must, first of all, serve as an instrument of the party. "Workers at the pedagogical front must never forget the main Marxist thesis about the *klassovost'* [class character] of science, about the *partiinost'* of science," declared an editorial published in *Soviet Pedagogy*.[92] One can speculate that the regular references to the *partiinost'* principle in the late 1940s were intended to verify the scientific community's recognition of party authority in scientific questions. Constant references to statements of party leaders—Lenin, Stalin, and Zhdanov (at local meetings to local party leaders, such as Nikita Khrushchev in the Ukraine)—and to various party decisions on scientific questions were used to acknowledge the leading role of the party in science policy and the submission of the scientific community to party agencies.

Adherence to Marxism became another major characteristic of the model of science embodied in Michurinist biology. "The results of the VASKhNIL meeting have shown once more that only the constant and creative usage of the principles of dialectical materialism in a concrete science can transform this science into a truly progressive one," declared one psychologist.[93] Analogous statements rung out at every meeting and in every publication of 1948. This explains the frequent use of the adjective "idealist" to portray alleged analogs of Mendelism in every discipline. "Idealist perversions" were "unmasked" in biology and medicine, physics and geography, psychology and mathematics.[94] The meeting of the Academy of Pedagogical Sciences, for example, resolved that only "materialist science" should be taught to students. As was explained in an article entitled "Upbringing [*vospitanie*] in the Marxist-Leninist Worldview": "Michurinist biology must be taught in school because it is the only [one] that scientifically explains the evolution of the organic world and arms us with the scientific methods of radically improving existing kinds of domestic plants and animals."[95] It is especially instructive that the author of this statement was not a biologist, as one might expect, but rather the head of a pedagogical department in the Institute of Foreign Languages. In this context, "Michurinist biology" was not a kind of *biology*, but rather a particular model of science—so that everyone familiar with that model was thereby qualified to instruct biologists.[96]

In the course of the Michurinist campaign, the incorporation of Marxism into the discourse of various disciplines, particularly the humanities, became obligatory. As was declared at the meeting of the Academy of Pedagogical Sciences: "One must never forget that the main content, the main foundation of Soviet pedagogy is the doctrine of Marx, Engels, Lenin, and Stalin about Communist upbringing."[97] The substitution of sacral Marxism for scientific research became a characteristic feature of every Michurinist trend, whether in biology, physics, psychology, or linguistics. In their letter to the Central Committee "On Organization of the All-Union Meeting of Heads of Physics Departments," Kaftanov and Vavilov wrote: "The physics course in many educa-

tional institutes is taught with the complete neglect of dialectical materialism. Lenin's brilliant work *Materialism and Empiriocriticism* has not been sufficiently used by professors of physics in their teaching."[98] The alleged idealism of physicists was a major pretext to organize a discussion of "the situation in physics in light of the VASKhNIL meeting."[99]

The notion of the practicality of research also became a distinct feature of "Soviet" science endorsed by the Michurinist campaign. Lysenkoists frequently exploited the rhetoric of practicality to distinguish Michurinist biology from its opposite, Mendelism. In like manner, all other disciplines affirmed practicality as a distinctive feature of their own Michurinist trends. Such practicality was obligatory.[100] "The main lesson to be taken from the August VASKhNIL meeting is that the development of progressive science demands its subordination to the tasks of progressive socialist practice. It is impossible to create any progressive scientific theory without connections with wide practice," declared an article entitled "The Most Important Tasks of Soviet Psychology in Light of the Results of the VASKhNIL Meeting."[101] The same lesson was absorbed by all other disciplines.

The references to practicality also served to demonstrate the subordinate position of the scientific community in relation to the party-state bureaucracy, for it was the bureaucracy that defined what was "practical" and "useful" or, on the other hand, "impractical" and "useless." This was clearly reflected in the speeches of the numerous state officials who participated in all Michurinist meetings. Ministers and their deputies criticized scientists for insufficient attention to practical problems in agriculture, medicine, education, and industry.[102]

Soviet scientists skillfully employed the resources of their professional culture to show the party bureaucrats an image they wanted to see. To assert their *partiinost'*, Marxism, and practicality, they deployed three major rhetorical techniques developed and tested during the 1930s: the juxtaposition of "us" and "them," the use of "criticism and self-criticism," and the invocation of "founding fathers."

"Two Camps"

The rhetoric of "two camps"—"us" versus "them"—thoroughly permeated the professional culture of Stalinist science from its very birth to its final form in the late 1940s. The particular identities of the two scientific camps, however, constantly changed, reflecting the changing domestic and international policies of the party-state. In the 1920s, it was "proletarian and materialist" science versus "bourgeois and idealist" science. In the 1930s, it was "socialist, innovative, progressive, and collectivist" science versus "imperialist, conservative, reactionary, and individualist" science. During the war, it was "world" science versus "fascist" science. The beginning of the Cold War in 1946–47 drew the dividing line between "native" (*otechestvennaia*) and "foreign" sciences; and the escalation of the Cold War in 1948 firmly established the dichotomy between "Soviet" and "Western" science.

The juxtaposition of "our," "native," "Soviet," "socialist" science and "their," "foreign," "Western," "imperialist" science became a central motif of the Michurinist campaign. Thus, every meeting heard a speech "On Two Trends in [name of science]." As one of the participants said at the Academy of Sciences meeting: "There is no science where the struggle of two worlds, two ideologies is not reflected."[103]

In every discipline, analogs for Mendelism and Michurinist biology were found and employed to organize corresponding campaigns. Patriotic rhetoric based on this juxtaposition was used to stamp scientists as "anti-Michurinists." "Slavishness and servility" to Western science, publications in Western periodicals, quotations from and references to foreign research, and following Western (usually, "the worst Western") models became the characteristic criteria defining "Mendelists" in every discipline. One speaker at the Academy of Sciences meeting stated: "There is no place in Soviet science for those who, under the slogan of 'a single world science,' openly or secretly try to hamper the development of our science. . . . They are unworthy to bear the exalted title of Soviet scientist."[104]

The struggle "against foreign science" was especially clear in the "expulsion" of two prominent foreign biologists from the Academy of Sciences. In early autumn 1948, both Hermann J. Muller, a Nobel-prize winning geneticist who had worked in Russia from 1933 to 1937, and Henry Dale, a past president of the Royal Society, resigned as foreign members of the academy. In their letters, both expressed their disagreement with the condemnation of genetics embodied in the academy's resolution of August 26. Although never published in the Soviet press, these letters were used in propaganda juxtaposing "Soviet" and "foreign" science.[105]

In early October 1948, the academy presidium informed the Central Committee about the letters of resignation. The academy's officials proposed to publish responses and to expel Muller and Dale from the academy "at the next General Assembly."[106] During the following months, the academy, in close collaboration with the Central Committee apparatus, polished and revised its replies. Finally, in December, *Pravda* and *Izvestiia* published the responses, which were then reprinted in almost every Soviet newspaper and academic journal.[107] In its response to Muller, the academy presidium emphasized that "in defining his position in scientific questions, professor Muller is guided not by the interests of science, not by the interests of truth," and that "having spoken against the Soviet Union and its science, Muller got the applause and recognition of all reactionary forces of the United States."[108] In early January 1949, a General Assembly of the academy formally "expelled H. J. Muller and H. Dale from the academy's membership." The campaign, however, was not limited to biology: a Norwegian philologist, Olaf Broke, also was expelled under the same pretext and at the same meeting. The "crime" of the Western

scientists was so "unforgivable" that their names were expunged from the academy's rolls.[109] Furthermore, the academy ceased electing foreign members at all.[110]

Western critiques of Lysenko and other Soviet scientists were regularly used at Michurinist meetings to reaffirm the correctness and priority of Soviet science. For instance, Pavlov's pupils regularly referred to Charles Sherrington's critique of Pavlov's concept of conditioned reflexes as proof of the superiority of Soviet science. On the other hand, any Western praise for a Soviet scientist's work was used against the scientist as proof of "anti-Michurinism." For example, Julian Huxley's article "Science in the USSR: Evolutionary Biology and Related Subjects" became the basis for dismissing almost every biologist he mentioned.[111]

"Criticism and Self-Criticism"

"Criticism and self-criticism" was a part of party etiquette appropriated by the scientific community in the late 1920s. It required everyone to take part in an ongoing campaign as either a "critic" or a "repentant sinner," or both, demonstrating adherence to the latest party line announced by the campaign. It became an indispensable part of "public discussions" and a major instrument of institutional struggles within the scientific community. During the war, criticism and self-criticism practically vanished; Soviet scientists and party bureaucrats were united and preoccupied by one common goal—victory over fascism. The 1947 patriotic campaign revived public discussions and public repentances in the culture of the community. Predictably, the slogan "develop criticism and self-criticism" became a motto of the Michurinist campaign and resounded at every Michurinist meeting.

Criticism plays an important role in the life of every scientific community, fixing its values and orientations through an open discussion of particular concepts and facts. The Michurinist campaign manifested criticism of a very special kind. At almost every meeting, speakers noted that "this is not a discussion," "we are not here to discuss," "the discussion is over," and so forth. The actual content of scientific concepts or the concrete material of investigations was usually not at issue. Nobody referred to methodological deficiencies or errors in calculation. Nobody proposed experimental tests of opposing views—indeed, at one Michurinist meeting it was declared that "Soviet Michurinist biology does not need any additional new data to prove its correctness. It is the only correct, scientifically substantiated doctrine."[112]

The main goal of "Soviet criticism" was to reaffirm the basic characteristics of "Soviet" science embodied in Michurinist biology—*partiinost'*, Marxism, patriotism, and practicality. Criticism and self-criticism, as deployed in the Michurinist campaign, was strictly limited to reaffirming the politically correct Soviet virtues: the criticism was to refer only to the defects identified in stigmatized "isms." When scholars attempted instead to analyze actual scientific facts and hypotheses, they were immediately accused of "objectivism." It

is instructive that the highest value in scientific methodology—objectivity, that is, the opportunity and necessity to control, repeat, and verify data independently—was rejected by Soviet critics as the "bourgeois objectivism" of "world science." In characterizing objectivity, speakers used such epithets as "apolitical," "nonideological," and "unprincipled." At the meeting of the Academy of Sciences, for example, one of Lysenko's supporters, describing the presidium's attitude to the struggle between Michurinists and Mendelists, declared: "The Presidium and the Bureau of the Biology Division discussed this question as objectivists; [they] did not see behind the struggle of the two trends in biology the struggle between progressive and reactionary, the struggle between dialectical materialism and idealism."[113] In this rhetorical world, then, "objective" meant "objectivist" and was a damning pejorative.

"Soviet criticism" reaffirmed the primacy of political and ideological values of research over traditional scientific ones. "Michurinists" typically neglected controlled experiments and statistics and disregarded independent studies that undermined their data (to say nothing of their theoretical conclusions). Traditional scientific arguments lost their importance in public discussions among Soviet scientists and were completely replaced by rhetoric. It became possible, then, to praise Olga Lepeshinskaia's doctrine on "noncellular living matter" or Gevork Bosh'ian's concept of "the origin of viruses and microbes from noncellular living matter" as great achievements of Soviet science, despite numerous experiments refuting their speculations.[114]

An essential characteristic of this Soviet critical style was a special kind of name-calling. The names of scientists were transformed into "isms," each defining a whole ideological position or category. These were then applied as shortcut labels that completely defined the positions of opponents: Weismannist, Mendelist, Morganist, Virkhovianist, Einsteinist, or (if the "ism" was based on the name of a "saint") anti-Michurinist, anti-Pavlovian, anti-Darwinist, anti-Marrist. Using the names of officially approved friends and enemies was important, as it allowed a critic to pass silently over the actual content of scientific concepts en route to the real business at hand: exposing the "servility," "sterility," and "idealism" of opponents. For example, Mitin was not describing Shmal'gauzen's writings but rather indicting their author when he noted: "The names of Timiriazev, Michurin, Lysenko are ignored in his works, but Dobzhansky, Timofeeff-Ressovsky, and others like them are praised."[115] Christening a scientist as Michurinist or Mendelist, Darwinist or anti-Darwinist defined the scientist's positions not on scientific, but on social, ideological, and political issues, thereby definitively establishing or refuting a person's political correctness.

"Founding Fathers"

References to the authority of Great Scientists are a typical component of the professional culture of every scientific community. Scientists routinely use such references to justify and legitimate their institutional, intellectual, and

career ambitions. During the 1930s, Soviet scientists adjusted this rhetorical technique to the requirements of their symbiont, the party-state apparatus. This adjustment was simplified and facilitated by the cult of "the founders of the party"—Marx, Engels, Lenin, and Stalin—that permeated the Bolshevik political culture. Soviet scientists included these sacral ideological authorities in their own pantheon of Great Scientists, spreading the authority of party founders over their own "founding fathers." The party apparatus, in turn, recognized the authority of Great Scientists, establishing special prizes for scientific research named after such founding fathers, celebrating their various anniversaries, and giving their names to scientific institutions.

Soviet scientists regularly invoked the legacy of their alleged founding fathers to legitimate their own interests. It was always preferable to be able to justify one's science by citing the ideological founders—Marx and Engels, Lenin and Stalin—but when it was impossible to find some relevant or useful quotation in their works that dealt with the discipline, subject, or problem at hand, suitable quotations from a founding father did the job. Celebrations of an event in a founding father's life, such as birth, death, or publication of an important work, were used to stage public demonstrations—sanctioned, of course, by party authorities and signifying party approval of not only the founding father, but also the discipline or institution commemorating the jubilee. The very list of recognized founding fathers and their essential characteristics emphasized in numerous glorifications, then, reflected the image of science and the scientists endorsed by the party authorities.

As one might expect, during the Michurinist campaign members of the scientific community employed the legacies of such founding fathers to create their own Michurins and Mendels and to adapt the universal rhetoric of *partiinost'*, Marxism, and practicality to the particularities of their discipline. At every institutional meeting, the names of founders were repeatedly invoked. One speaker gave a typical declaration at a meeting of the Academy of Pedagogical Sciences: "A. Makarenko is the same in Soviet pedagogy and psychology as I. Michurin is in biology."[116] The top officials of all scientific institutions used the legacies of the founders as a comprehensive substitute for the Michurinist doctrine in their discipline. At the meeting of the Academy of Sciences, participants regularly invoked numerous founding fathers of Soviet biology and agronomy: Ivan Michurin, Ivan Sechenov, Aleksei Severtsov, Kliment Timiriazev, and Vasilii Vil'iams. At the Academy of Medical Sciences meeting, the favored founder was Pavlov. The joint meeting organized by the Institute of Russian Language and the Institute of Language and Thought on October 22, 1948, invoked Nikolai Marr.[117] As one of the participants put it: "The only possible position for a Soviet linguist is the materialist doctrine of N. Marr."[118]

Conversely, "anti-Michurinists" in all disciplines were accused of neglecting the legacies of their respective founding fathers. At the meeting of the Academy of Sciences, for instance, Mitin declared: "How could [one] consider

academician Shmal'gauzen's *Factors of Evolution* a scientific book if [the author] deliberately ignores such a significant work by Timiriazev as his article on factors of evolution?"[119] Prezent and other Lysenkoists accused Shmal'gauzen of the "perversion" of the ideas of Severtsov. A number of medical scientists were similarly attacked for "deviation from Pavlov's teaching."

The importance of asserting control over a founder's legacy is clear in Lysenko's letter to the Central Committee *after* the VASKhNIL meeting: "I consider it my obligation to inform you that anti-Michurinists, such as Zhebrak, B. Zavadovskii, and a number of others, some time before and even during the [VASKhNIL] meeting, attempted to sever my theoretical work in biology from Michurin's teaching. . . . They do everything to prove that their Mendelist-Morganist views do not diverge from Michurin's teaching. *They want to tinker with Michurin's teaching to make it fit Mendelism-Morganism.*"[120] Of course, Lysenko was quite right in his accusation (although he was as guilty as any): all interest groups indeed wanted to "tinker with" the legacies of their founding fathers to make them fit their agendas.

The Cold War, however, added a new twist to the use of founding fathers: they all now had to be "native." During the war, the scientific community used various celebrations related to founding fathers to improve its links with its Western counterparts. For instance, Newton's three hundredth anniversary in 1943 was commemorated by a special meeting of the Academy of Sciences, a new biography written by Sergei Vavilov, and a collection of articles written by leading Soviet physicists.[121] Although the Cold War did not destroy the authority of the Great Scientists such as Newton and Darwin, it made Western founders inappropriate for "Soviet" science. The banishment of genetics as "foreign Mendelism-Morganism-Weismannism" and the party approval of Michurinist biology initiated a broad search for native founders in various disciplines immediately after the VASKhNIL meeting. It is not surprising, then, that instructions to commission biographies of such founding fathers and to publish "new" (as a rule, revised) editions of their collected works occupied a prominent place in the resolutions of all Michurinist meetings. Furthermore, in early January 1949, a special General Assembly of the Academy of Sciences was held on the history of Russian science. The meeting's main goal was to certify the founding fathers for various disciplines.[122]

Countless biographies of founding fathers published in the late 1940s and early 1950s resembled the *Lives of the Saints*. All were constructed in accordance with the same plan: the founding father of every field, as it happened, had been (with very few exceptions) a Russian; he had been a materialist; he had sympathized with socialism, worked fruitfully for the common good, and criticized foreign science (and had often been defamed, abused, mistreated, or insufficiently appreciated by it). If the founder had died before the revolution, he had struggled against (or at least been unsympathetic to) the tsarist government; if he had lived during the Soviet period, his research had been generously nurtured by the party (and usually by Lenin and Stalin personally); and,

as a result, he had left a legacy of unique and astonishing achievements. A typical line in the portrayal of a founder was: "Here we encounter a man who had mastered Marxism-Leninism, practiced it in his life for sixteen years, and moved from practice to theory."[123] The resultant image, of course, had little in common with historical reality. Constructing a founding father involved emphasizing certain biographical facts while passing over others in silence, juggling and falsifying ideas and words, and, most importantly, emphasizing ideological and political issues instead of scientific ones. That was the purpose of founding fathers, after all: to acclimatize the values of "Michurinist science" to a particular disciplinary landscape.

It is hardly surprising that the image of every discipline's founding father had to exemplify the official point of view: as a rule, the "title" of founding father was directly confirmed by the highest party organs. For example, in its resolution "On the Development of I. Michurin's Legacy" (1936), the Central Committee certified Michurin's status as a founding father of Soviet biology. Every mention of Michurin's name at the 1948 meetings emphasized that "Michurin was discovered for our people and for progressive science by the genius of Lenin and Stalin."[124] Scientific institutions were often named for the founding father of the discipline, and the Central Committee approved the name to be used in the christening. In June 1948, for example, the Academy of Medical Sciences established a new Institute of Physiology of the Central Nervous System. The institute was organized on the basis of two institutions: the Institute of the Brain (formerly Vladimir Bekhterev's institute) and the Institute of Physiology (formerly Lina Shtern's institute). The new institute was originally to bear Bekhterev's name, but after a discussion in the Central Committee, it was instead named after Ivan Sechenov.[125] In 1949, with the sanction of the Central Committee, the entire country celebrated Pavlov's centenary with great fanfare. And the overthrow of Marr as the founding father of Soviet linguistics in 1950 was done by Stalin personally.[126]

In such circumstances, oaths of "faithfulness" to the legacy of great teachers confirmed not only scientific, but also ideological and political succession. Conversely, "neglect" and "perversion" of a founding father's ideas were treated as sacrilege as well as violations of scientific authority. Founding fathers, then, not only embodied the essential characteristics of "Soviet" science and the "Soviet" scientist, they also represented the authority of the highest party and state agencies in specific fields.

Thus, the rhetoric of the Michurinist campaign reveals the specific images of "Soviet science" and the "Soviet scientist" established in the late 1940s. The most important element was "Soviet," which signified the fundamental difference between "Soviet" and "Western" sciences that resulted in turn from the differences between the Soviet and Western states, enhanced by the Cold War confrontation. The images reflected the complete subordination of science to the party, the obligation of the scientific community to obey orders from above and the current imperatives of power. The rhetoric employed in

the campaign emphasized the main vectors of this political correctness—patriotism, *partiinost'*, Marxism, and practicality.

The Dialectics of Symbiosis

In the fall of 1948, the Michurinist campaign swept through the Soviet scientific community like a storm, bringing with it the standard rituals and privileged rhetoric that had been worked out between the Central Committee and the scientific leadership. Both geographically and intellectually, the Michurinist campaign soon transcended genetics and even biology. Various institutional and disciplinary groups constructed their own substitutes for the "sacred" and the "damned," preserving the essential form of the ritual. The instrumental meaning of the ritual performed at the numerous Michurinist meetings was to reassure the control agencies that the scientific community assented to the images of "Soviet science" and the "Soviet scientist" endorsed by the party. Skillfully using the resources of their professional culture, scientists quickly incorporated these images into their rituals and rhetoric. They demonstrated to the control apparatus that scientists agreed completely with the model of relations among science, the party, the state, and ideology embodied in these images, and that the new "political correctness" had been fully implemented in the Soviet scientific community.

In covering their institutions with a Michurinist veneer, however, top administrators of the scientific community were not merely displaying their obedience. They were also trying to camouflage their institutions and disciplines, hoping to immunize them from further party encroachment (for example, the kind of specific edicts that dismembered genetics) by portraying them as already covered—"preapproved," as it were—by Michurinism. Hurrying to declare their own institutions and research agendas as already "Michurinist," they hoped to limit future interventions by party bureaucrats into their own business.

The differences between the dynamics of the meetings held in the Academy of Sciences, the Academy of Pedagogical Sciences, and the Academy of Medical Sciences clearly show that the leadership in each of these academies had its own, quite different agenda, with tactics suited to serve it. The Orgburo instructions on behalf of Michurinist biology unambiguously demonstrated to the academies' leaders that their partners in the Stalinist science system—high-level party-state bureaucrats—intended to interfere directly in their domain: the institutional structure and intellectual content of science. Not surprisingly, to counteract these intentions of the party bureaucracy, the academy leaders developed special tactics.

In the Academy of Sciences, the nation's largest scientific institution and the center of genetics and biological research, the academy leaders followed the Orgburo's direct instructions, at the same time obviously striving to limit the

effects of the party approval of Lysenko's doctrine to genetics only. The Orgburo instructions to dissolve the Institute of Evolutionary Morphology and to fire its director, Shmal'gauzen, were very dangerous precedents, presenting a serious threat to the academy leaders' control over their institutions. Orbeli's dismissal and Oparin's appointment were also a very serious warning to the academy leaders, signifying the possible decline of authority in party-state circles of all the scientists from the older generation who had come to occupy key positions in the Stalinist science system during the war. Academy leaders reaffirmed their own control by carefully but persistently opposing the attacks of influential "outsiders"—the ministers of higher education, agriculture, and state farms---who represented the party-state agencies of the Stalinist science system. They also reaffirmed their control by seeking to prevent Michurinist biology from spreading to other biology institutions, declaring that all the institutions *not* mentioned in party edicts were actually "Michurinist."

In the Academy of Pedagogical Sciences, the nation's main center for scientific advice on secondary education, the leaders did not await party edicts. They hurried to "purify" the institutions involved with biology education *before* direct party orders would provide them with concrete instructions that could be much more devastating. They also sought to defend nonbiology institutions by declaring them to be "Michurinist."

In the Academy of Medical Sciences, the country's second largest scientific institution, the leaders probably had the same motives as their colleagues in the pedagogical academy. Their position, however, was more complicated: although closely connected with such biological fields as anatomy, physiology, cytology, and microbiology, medical research was remote from Michurinist agrobiology. To assert their "Michurinism," leaders of the medical academy invited Lysenko himself to deliver a report at their gathering and actively searched for an analog of the Michurinist doctrine in their own fields.

Thus, the leaders of all three academies used the Michurinist campaign, which had been intended to assert the party's authority over science, for the opposite purpose—to reassert their own control over their "internal" policies and to limit party intervention. Despite their rituals of obedient subservience and their rhetoric of political correctness, they knew that words were mere words. Scientists retained their real interests and quickly co-opted the rituals and rhetoric of the Michurinist campaign to serve and defend those interests—which they managed to do more adeptly than a naive observer of their rituals and rhetoric might have guessed.

CHAPTER 8

Walking the Walk: Education versus Research

> . . . To reorganize the work of research institutes, publishing houses, journals, [and] departments in higher educational institutions, [and] to revise the programs and textbooks on biology, genetics and breeding in order to make the Michurinist trend completely dominant in Soviet biological science.
>
> —The Central Committee of the Communist Party, July 10, 1948

THE DICHOTOMY between education and research was a characteristic feature of the Stalinist science system. This is understandable in that the party-state patrons of science needed and demanded very different things from these two enterprises. From scientific research, they required the production of knowledge that would help them to build the economy and a strong military defense. The product of education, however, was to be above all a loyal adept of the party line.

The educational system was a focus of particular attention by the Communist Party from the earliest days of its rule. The urgent need for professional education and, more importantly, the ideological and political "upbringing" of new generations, led the Bolsheviks to reorganize and strictly control education. The curricula of all educational institutions included courses on Marxism-Leninism, the history of the Communist Party, dialectical materialism, atheism, and other ideologically important subjects. The numerous research laboratories and institutes that had flourished within educational institutions in the 1920s were all closed or reorganized in the 1930s. Thus, the educational system became an apparatus for inculcating the party-state's ideological and political concepts, largely detached from the research system.

The ideological role of education led to the establishment of strict party-state control not only over curricula and syllabi, but also over the professoriate. The primary goal of the Institute of Red Professors (established in the 1920s) was, as its very name made plain, to prepare reliable cadres for the system of higher education. The appointment of party members to the key administrative positions in schools and universities became a characteristic feature of Bolshevik educational policy. A number of professors quit teaching and migrated into the research system, particularly the academies. As a result, the leadership of the educational community and, hence, the educational bureaucracy was dominated by party bureaucrats who had neither connections with nor any particular interest in research.