

# Trofim D. Lysenko in Prague 1960: A Historical Note

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After the WWII Czechoslovakia became under the Soviet power. Increasing ideological influence was significant also for science, particularly biology. The paper gives some basic information on the role of Mitchurian biology and so called creative Darwinism in Czechoslovakia. It focuses also on the visit of T.D. Lysenko in Prague in 1960, which was a part of his journey through the Soviet satellite states in Central Europe.

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The favouritism of “Soviet Science” after 1945 rooted in post-war Czechoslovakia in radical criticism or general rejection of the Nazi science, in particular of so-called “German biology” (Deutsche Biologie) (Simunek, 2008; Janko, 2009). One must keep in mind that before 1945 Bohemia and Moravia was a multicultural and bilingual space with two parallel scientific communities, Czech and German. This was also the case of biology. Immediately after the end of WWII the criticism came in Czechoslovakia first from the ranks of Communist or strongly leftist thinkers and intellectuals. Among them, Arnošt Kolman (1892–1979), so-called Red Professor at Moscow University and prominent theorist of Marxist science occupied a very special place. Coming back to Prague from Moscow, he wrote systematically about science and Nazi political ideology, but his explanations were based on ideological standpoints and in many ways even self-contradictory. According to dialectical materialism, any use of biological, especially genetic, theory should be rejected as an expression of a “fascist biology or medicine”, which was misused by the Nazis. Although in 1946 he did see “fascist German biology” as a separate entity in one place, he also claimed quite generally that anthropology, psychology, and social hygiene are all “disciplines through and through forged by the fascists”. In relation to racism of the Third Reich, he saw as central the “pseudoscientific formal genetics” (Mendelism) (Kolman, 1946, p. 87–89).

The arrival of a totalitarian Communist regime in Czechoslovakia few years later (February 1948) led to the establishment of the ideology of Marxism-Leninism — and dialectical materialism — as the only acceptable framework of explanation and method. On top of that, it had also become a tool for eliminating any alternatives. The most radical excess, especially in the area of natural sciences, occurred in the first decade of the Communist dictatorship (1948–1958). Czechoslovak science and higher education were subjected to the direct supervision of the Communist Party, and the new centralized Czechoslovak Academy of Sciences (*Československá akademie věd*), founded in 1952 on a Soviet model and under the direct influence of Soviet ideologists, became the means of control and a symbol of the new orientation. Before long, many disciplines like sociology, the nascent cybernetics, and genetics, received the unenviable status of “*reactionary bourgeois pseudo-sciences*”.

In the name of “Mitchurian biology” (mičurinská biologie) and so-called “creative Darwinism” (kreativní darwinismus) — this being a new and higher level of Darwin’s concepts —



T.D. Lysenko before reading his paper in Prague, April 21, 1960 (ČTK)

it was called for an uncompromising assault on all its proponents. Since that the core of Lysenko's theory, especially the idea of "vegetative hybridisation", which should enable an abrupt, sudden change of one species into another, was also introduced in Czechoslovakia, especially by the agronomists. "Creative Darwinism" was, then, presented here as a sort of theoretical conglomerate based, first, on a Russian Darwinist school of late 19th century which rejected competition within species and emphasized the importance of the physical environment as a formative force of evolution; second, on some simplified ideas of the inheritance of acquired traits, and third, on Engels' *Dialektik der Natur* (Dialectics of Nature), which was published posthumously and appeared in the Soviet Union in the 1925 and in Czech translation only in 1952<sup>1</sup>.

After 1950 this was complemented also in Czechoslovakia by a fantastic theory of the self-taught Olga B. Lepeschinskaya (1871–1963) and her collaborators on the so-called vital-substance. So, at the rhetorical level, the fight against "Weismannism-Mendelism-Morganism" was almost from the very beginning accompanied by the fight against "Virchowianism".

As stated above, in the early 1950s, this ideological framework was enforced in Czechoslovakia, where too it served as an aid in the restructuring of power in natural and partially also social sciences. In the words of one Czech contemporary advocate of "Lysenkoism",

<sup>1</sup> It is probably worth of note that A. Kolman was a key figure in preparing the first edition of this Engels' writing in his capacity as head of the Institute of Red Professorship of Natural Sciences in Moscow in early 1930s. The discovery and publication of *Dialectics of Nature*, which consists mainly just of F. Engels's drafts and notes, did represent for Marxist philosophers of natural sciences a new inspiration. Main thoughts of this work were, however, published by Engels in a much better known work *Anti-Dühring*, which was published in Czech for the first time already in 1947, that is, before the Communist takeover, with a foreword by A. Kolman. On the first edition of Engels' *Anti-Dühring* and *Dialectics of Nature* in the Soviet Union see: Kolman, 2005, p. 184–187.

the victory of Mitchurin's biology was supposed to show "how essential it is to rid the life sciences of reactionary pseudo-science, which hinders scientific progress, separates science from practice and life, and thus serves reactionary interests of the decaying capitalist society" (Hašek, 1951, p. 7). It was repeatedly emphasized that "creative Darwinism" enables the "practical use and scientific transformation" of living nature for the benefit of mankind, the building of socialism and, last but not least, the betterment of "socialist science". Official propaganda used this cunningly in the often absurd promises of enormous increase in yields in plant and animal production. Reports on the "genius experimenter" Lysenko, his enthusiastic supporters and applications of his "vegetative hybridisation" and "vernalisation" in socialist economy, especially agriculture, were a regular feature of propagandist newsreels, radio broadcasts, both daily and scientific press etc.

Reviewing the published production, most of the T.D. Lysenko's writings were translated into Czech and Slovak language and published between 1948 and 1954. It was about 12 pieces, both monographs and shorter studies. In this period also 2 biographical and hagiographic booklets from Soviet authors (A.D. Popovskij and I.E. Gjuschenko) were translated as well. Concerning the teaching of O.B. Lepeschinskaya, there were 4 monographs translated between 1951 and 1954. Between 1950 and 1952 further 3 collections by Soviet authors<sup>2</sup>. These were followed only by very few works by Czech and Slovak authors (*Proti reakčnímu...* 1951). Soviet production was also periodically presented in the new series called *Soviet Science* (Sovětská věda), part Biology, Medicine and Agriculture published by a special branch of the Czechoslovak Ministry of Propaganda, so-called Czechoslovak-Soviet Institute in Prague.

All reasons why "Lysenkoism" and "creative Darwinism" made a significant impact in Czechoslovakia and were used by the establishment both as a means of oppressing scientists and agricultural practice probably with greater vehemence than in other countries of the Eastern Block (for example, East Germany) are still not completely clear. In the case of some prominent representatives of Czech science who instantly turned into fiery advocates of Stalinist scientific doctrines, their previous experience from the period of German occupation and the first Czechoslovak Republic could have played some role. This may well be true of the Prague agronomist Antonín Klečka (1899–1986), whose career started to advance rapidly as early as 1949, when he became the head of the Czechoslovak Academy of Agriculture (*Československá akademie zemědělská*; hereinafter ČSAZ), started carrying out its Sovietisation and tried to integrate the Mitchurian biology into his own research (Klečka, 1950; Orel, 2003, p. 166–167).

One might say that the period of toughest enforcement of Lysenkoism in Czechoslovak biology ended practically between already in the second half of the 1950s. For example, in 1956 it was already possible to publish a critical article on the opportunism of several leading Czech scientists and their blessing of obvious nonsense of Lepeschinskaya's research<sup>3</sup>. Another turning point was the Darwin Anniversary Year of 1959, which was connected with the exhibition called "Darwin's Legacy Today", organized by the National Museum in Prague, and a publication of collected articles in *Darwin Today* in 1959 (Kocian, 1959). Contributions presented here still tended towards "creative Darwinism" but many scientific and popular journals of that time had already published relatively open criticism of the scientific value of "creative Darwinism" and discussions of the gradually rehabilitated genetics

<sup>2</sup> See for example a shorthand record of the *Conference on the Problem of the Living Matter and Cell Development* (Málek, 1952, s. 65).

<sup>3</sup> 'Život prověřuje omyly' (The Life Proofs Mistakes) // Lidová demokracie. 1956. 28 dubna. S. 3.

in mid-1960s. The hard Lysenkoist line of misuse of Darwinism was finally abandoned in Czechoslovakia at the beginning of 1960s when, due to changes in the political situation, genetics was fully rehabilitated as an independent scientific discipline, and research in the synthetic direction of Darwinism and evolutionary biology could once again resume (Orel, 2003, p. 172–177).

From these reasons it is an interesting fact that it was just in June 1959 when Lysenko was officially honoured in Prague. At the XIV General Assembly of the ČSAZ that took place on June 5–6 he was elected to its honourable member<sup>4</sup>. At the 16<sup>th</sup> general assembly following the next year on April 21, 1960, Lysenko even personally received a special decree in Prague and hold a lecture on Mitchurian agrobiologie. His visit to Prague was most probably connected with his trip to several Soviet satellite countries in Central Europe such as Hungary. Another members of the official Soviet delegation that visited also the Experimental Institute of Plant production in Prague-Ruzyně were academicians Fedor G. Kirichenko and Igor A. Budzko<sup>5</sup>.

This high ranking visit was, however, not reflected in the official press such as *Rudé právo* daily or the professional *Vesmír* journal. At the same time “Lysenkoism” or “Mitchurian biology” were even not mentioned in an overview paper presented on the fifteen years development of biology in post war Czechoslovakia published by former supporter of Lysenko and leading Czechoslovak microbiologist, prof. Ivan Málek (1909–1994) (Málek, 1960, p. 198–200).

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<sup>4</sup> XIV. Valné shromáždění Čs. akademie zemědělských věd (14th General Assembly of the ČSAZ) // *Rudé právo*. 1959. 5 června. S. 3.

<sup>5</sup> Zemědělství vědci k výročí osvobození (Agricultural Scientists on the Anniversary of Liberation) // *Zemědělské noviny*. 1960. 22 duben. S. 1.

## Т.Д. Лысенко в Праге в 1960 г.: историческая заметка

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После Второй мировой войны Чехословакия находилась под влиянием Советского Союза. Возраставшее давление было значительным и для науки, особенно для биологии. Статья предлагает информацию о роли мичуринской биологии и так называемого творческого дарвинизма Чехословакии. Основной акцент сделан на визите Т.Д. Лысенко в Прагу в 1960 г., который был частью путешествия по советским сателлитам в Центральной Европе.

**Ключевые слова:** мичуринская биология, лысенкоизм, генетика, Чехословакия.