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What Sort of Man is Lysenko ?

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For some time scientific workers outside Russia have felt a certain curiosity as to what manner of man Lysenko can be. It has become known that under the impulsion of his attacks many Russian geneticists, and those among the most distinguished, have been put to death either with or without pretreatment in a concentration camp. Opinions, however, have varied as to whether he should be regarded as one or another of three obvious possibilities.

(a) He might be a scientist with extravagantly unorthodox views, impelled merely by vanity and self-assertion to wish to impose these on his countrymen, or possibly

(b) an ignorant peasant, genuinely concerned with the prosperity of Russian agriculture, and impulsively impatient with the work of more highly trained biologists, owing to his difficulty in understanding it, and its remoteness from immediate practical application. The third possibility

(c) is that he is an ambitious politician of a type likely to become prevalent in a system avowedly guided by a rigid ideology, who hopes to use the ideological dogmas to which he finds his colleagues committed as levers for his own advancement in the party and in the state.

The pamphlet containing his address last July or August to the Lenin Academy of Agricultural Sciences provides material for deciding how he should be classified. After examining his arguments I have no doubt that we cannot, as many have been inclined to do, describe him simply as a scientific crank, or simply as a wrong-headed yokel. His mind does not seem to work in either of these ways. I should like to quote some passages which have influenced me ; they also help one to understand his special jargon. Here is one from page 12 :

' The representatives of Neo-Darwinism, the Mendelist-Morganists, hold that the efforts of investigators to regulate the heredity of organisms by changes in the conditions of life of these

organisms are utterly unscientific. They, therefore, call the Michurin trend in agro-biology Neo-Lamarckian, which, in their opinion, is absolutely faulty and unscientific. ' Actually, it is the other way round.

' First, the well-known Lamarckian propositions, which recognise the active role of external conditions in the formation of the living body and the heredity of acquired characters, unlike the metaphysics of Neo-Darwinism (or Weismannism), are by no means faulty. On the contrary, they are quite true and scientific.'

It seems that the author is much concerned as a partisan to establish a case ; and that he thinks this can be done by bald and dogmatic assertion.

The only specific account of an experiment purporting to prove a scientific fact is in the concluding remarks. It is too long to quote, but it concerns a claim to have changed the heredity of a tomato variety by grafting. As scientific polemic the passage is quite effective—if one accepts the claim as true. But it does not occur to Lysenko to suggest that his hearers need not take his word for it. Tomatoes are not difficult to graft. If the effect claimed really follows, anyone within only one year could satisfy himself of the validity of Lysenko's discovery. Still more, if it has the practical value, which Lysenko elsewhere so strongly advocates as a first condition of scientific work, how eager he should be that all horticulturalists should avail themselves of his discovery, which seems to open so direct a door to remoulding our plants just as we wish. But the man is thinking only of his controversial point.

There are ugly passages in the address in which the President of the Academy seems to be showing his teeth.

' The Morganist-Weismannists, *i.e.*, the adherents of the chromosome theory of heredity, have repeatedly asserted—without grounds whatever and often in a slanderous manner—that I, as President of the Academy of Agricultural Sciences, have used my office in the interests of the Michurin trend in science, which I share, to suppress the other trend, the one opposed to Michurin's.

' Unfortunately, it has so far been exactly the other way round, and it is of that that I, as President of the All-Union Academy of Agricultural Sciences, may and should be accused. I have been wanting in strength and ability to make proper use of my official position to create conditions for the more extensive development of the Michurin trend in the various divisions of biological science, and to restrict, if only somewhat, the scholastics and metaphysicians of the opposite trend. As a matter of fact, therefore, the trend so far suppressed—suppressed by the Morganists—happens to be the one which the President represents, namely, the Michurin trend.

' We, the Michurinists, must squarely admit that we have hitherto proved unable to make the most of the splendid possibilities created in our country by the Party and the Government for the complete exposure of the Morganist metaphysics, which is in its entirety an importation from foreign reactionary biology hostile to us. It is now up to the Academy, to which a large number of Michurinists have just been elected, to tackle this major task.'

This admonition is quickly reinforced (p. 22) :

' But the condition in the Academy has now sharply changed thanks to the interest taken in it by the Party, the Government, and Comrade Stalin personally. A considerable number of Michurinists have been elected members and corresponding members of our Academy, and more will be added shortly, at the coming elections. This will create a new situation in the Academy and new opportunities for the further development of the Michurin teaching.'

Well, if Comrade Stalin personally wishes it, it would be political disloyalty, the most heinous crime in Russia, to wish otherwise.

Academician P. M. Zhukovsky seems to have been bold enough to complain of the neglect of genetics in Doctorate theses. Lysenko gives him this hint (p. 35) :

' True enough, theses with a Morganist tendency appeared more rarely than Academician P. M. Zhukovsky would have liked. But there are reasons for this. Under the influence of the Michurin criticism of Morganism young scientists with an insight into questions of philosophy have in recent years come to realise that the Morganist views are utterly alien to the world outlook of Soviet people. In this light the position of Academician P. M. Zhukovsky does not look so good, seeing that he advises young biologists to pay no heed to the Michurinists' criticism of Morganism, but to go on developing the latter.'

It would seem that, gradually becoming aware that his arguments, and his supposed experimental proofs, are carrying no conviction, Lysenko is more and more reduced to overt threats (p. 39):

' V. I. Lenin and J. V. Stalin discovered I. V. Michurin and made his teaching the possession of the Soviet people. By their great paternal attention to his work they saved for biology the remarkable Michurin teaching. The Party, the Government, and J. V. Stalin personally, have taken an unflagging interest in the further development of the Michurin teaching.'

The last sparks of intellectual freedom in Russia seem still to be surviving, but feebly and under cover (p. 14) :

' It is clear to us that the foundation principles of Mendelism-

Morganism are false. They do not reflect the actuality of living nature and are an example of metaphysics and idealism.

' Because this is so obvious, the Mendelist-Morganists of the Soviet Union, though actually fully sharing the principles of Mendelism-Morganism, often conceal them shamefacedly, veil them, disguise their metaphysics and idealism with verbal trimmings.'

Evidently the Grand Inquisitor is not to be deceived by such concealed heresy. He is ready to stamp out the last spark.

No, I cannot believe in the light of this speech that the reward of Lysenko's triumphant career is the advance of scientific knowledge ; nor that it is the prosperity of poor peasants. The reward he is so eagerly grasping is Power, power for himself, power to threaten, power to torture, power to kill.