

# Lysenko Lives?

by William deJong Lambert

When Trofim D. Lysenko took control of biology in the Soviet Union, The New York Times explained it would be “just as if we had to accept Republican or Democratic dictation in scientific reasoning, depending upon which of the two major parties happens to be in power” (New York Times 1948: E6). It was 1948 — the year of the Berlin Airlift, communist coup in Czechoslovakia, founding of Israel and launch of the Marshall Plan; the start of the Cold War. At a session of the Lenin All-Union Academy of Agricultural Sciences in Moscow Lysenko declared genetics was a fascist science practiced by worshippers of Wall Street. The “gene theory” had provided the rationale for racism, colonization and the exploitation of the working class. With the words—“The Central Committee of the Party has examined my report and approved it”—Lysenko launched a purge of genetics that would be termed “the most chilling passage in all the literature of Twentieth Century science” (Gould 1983: 135).

In the aftermath geneticists were forced to recant and genetic research was halted. Even samples of the fruit fly, *Drosophila melanogaster* — the focus of genetic research at the time — were ordered destroyed by drowning in boiling water. A personality cult quickly developed around Lysenko: his portrait was hung at every scientific institute, and the Moscow philharmonic added a hymn honoring him to its repertoire.

Lysenko believed that any living thing could be made to survive in any environment, it only needed to acquire the characteristics required to do so. His theory was based on Lamarckism: that organisms evolve in direct response to the conditions of their environment, as acquired characteristics are inherited. By grafting melons onto squash you could grow them in the bitter climate around Moscow, by soaking and freezing the seeds of winter wheat you could transform it into spring wheat, trees should be planted in clusters so that they could cooperate, rather than compete, for light and nourishment. The weaker would sacrifice themselves for the stronger.

Lysenko was put in charge of the great Stalin Plan for the Transformation of Nature which, it was promised, would heat Siberia and turn the

deserts of Central Asia into a blooming garden. Lysenko’s recommendations proved useless, costly, and by the time of Stalin’s death in 1953 the plan had been abandoned. But Lysenko continued on, insisting mankind can discipline and control evolution in nature to serve the proletariat.

Lysenko’s success could only have happened in a place like the Soviet Union under Stalin. Those who knew better were afraid to speak up and Lysenko’s career lasted until he was removed from power along with Khrushchev in 1965. “Lysenkoism” became a term to describe tyranny and charlatanism in science — something that happened in irrational totalitarian societies. Further evidence for this belief followed from Chernobyl to the Aral Sea, and the connection seemed clear: political oppression extends beyond people — it also destroys the environment where they live.

The irony though is that even as genetic research was banned, every Soviet school child learned about Darwinian evolution. Charles Darwin was a hero — the first who’d developed a truly convincing materialist theory of the development of life on Earth. In the United States the situation was the opposite: more publications in genetic research came out of the U.S. than any other country, but Darwinian evolution was banned from public schools.

Today the Soviet Union is gone, replaced by a Russia slipping towards dictatorship — but genetic research has been restored for decades. Meanwhile in the United States Darwinism is again being challenged in public schools from Kansas to Pennsylvania, and the President denies global warming despite the flooding in New Orleans. When the government proposes digging for oil in Alaska to make up for failed war in Iraq it seems worth asking whether Lysenkoism isn’t something that can happen here too.

## References

- “Lysenko Again to the Fore,” *New York Times*. August 22, 1948: E6.  
Steven Jay Gould, *Hen’s Teeth and Horse’s Toes*. New York: Norton, 1983.

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