On the Chinese Academy of Sciences
Introductory Note

The article presented here originates in the Chinese Academy of Science’s project to write its history for its fortieth anniversary. It is a most unconventional chronicle. The author is Shuping Yao, a young historian who has worked for the policy office of the Academy and who is now a member of its Institute for Policy and Management. Her concern for the future of science in China makes this essay poignant, and much more informative about the social circumstances of Chinese science than most publications on the topic. It was drafted before the Chinese government turned its guns on unarmed citizens in June 1989, before the revival of the “anti-bourgeois-liberalism” campaign that has once again made such candor impossible.

A great deal of what Shuping Yao has to say reflects abiding realities of science policy that need not be spelled out for a Chinese readership, but that will not be obvious to outsiders. Having been invited to introduce this remarkable document, I will do so by sketching some Chinese attitudes toward science and scientists.

The Chinese revolution of 1949 is living memory for those who shape the present. Most political leaders were educated as soldiers, or, to be more precise as guerrillas. Only a few of those at the top attended the Worker’s University in France in the 1920s or were trained as professionals in the Soviet Union in the 1950s. For the generation of leading cadres in between, foreign study or even higher education were not options.

The great issue in China since 1949 has been, as Chinese put it, “Red or expert?” Will modernization lead to wealth and world power, or will worldly success leach away the socialist principles on which the state was founded, leaving the revolution betrayed as China follows the Soviet Union down the path toward state capitalism? Can socialist principles keep China on a unique path toward communism, overcoming eventually the force of self-interest, or is this a mere fantasy that will keep the country poor and dependent? “Redness” (faithfulness to Communist ideals) and expertise: loyalty to party at no matter what cost, or above all the modern, rational priorities that offer everyone hope for a better life but compromise local values and ideological disciplines?

This dichotomy divides the cadres from top to bottom. In a society that does not esteem differences of opinion, people who deeply disagree are forced to share power. There are never enough experienced managers and decision-makers. The Cultural Revolution was the last uncompromising attempt by one side to decimate the other, and the result was murderous chaos. Large numbers of high officials, including Deng Xiaoping and many others among the highest, were purged and humiliated for years, only to find themselves back in power when it was all over. Authority remains
uncomfortably divided, but even today purges within the Party tend to be limited in scale and temporary at least for those who survive.

The same battles not only divide the governing class, but rage within the minds of most of its members. Central planning, except perhaps in the gilded military sector of the economy, has failed. Private initiative is perhaps too successful, making ordinary peasants many times richer than the cadres who govern them. Even in a command state, wealth past a certain point buys power. The sincerest compliment power pays to wealth is the crescendo of corruption and profiteering among cadres that occasioned the protests of early 1989. It was the refusal of power to see its corruption curbed that led to the June bloodbath.

Men whose authority was earned with their own hands, alive though they may be to the benefits of development, are not eager to hand decision-making over to brain-workers. And they have no reason to trust those who, when they have dared speak frankly, argue (as Yao does) that the endless political rituals recurrently expected of all Chinese distract scientists from what they are bound to see as the more urgent application of expert knowledge.

Mao Zedong set the tone in the 1920s with his faith that there was negligible potential for revolution in China’s underdeveloped cities, but that it was seething among the hundreds of millions of unemancipated peasants. Post-1949 society was based on the principle that the only guarantee of “redness” was descent from a poor peasant or worker family. Scientists and engineers could be useful for this or that technical task, but their professional training infected them with irredeemably bourgeois values, and made them potential betrayers.

It is not surprising that for Mao the salient characteristic of intellectuals was what he called their stink. This was not a stigma of individual wrongdoing, lack of faith in the party or its aims, or unwillingness to sacrifice oneself for socialism. It was purely and simply a matter of hereditary class membership. One might redeem oneself through faith or works up to a point, but in practice, unless intellectuals were kept in a state of craven fear, they persisted in making trouble. They could not accept with unalloyed sincerity the right of ignorant officials to dictate the conditions of highly technical work, to insist specialists testify that relativity is bourgeois and genetics imperialist, to schedule one session after another to study mindless ukases, to impose ideological tests for professional recognition or generally to treat public-spirited citizens as a species of bad smell. Even in those who did not complain, the infection always lurked.

In the Hundred Flowers campaign of 1956, when all were encouraged to point out what needed to be changed, the deluge of complaints and call for reform suggested (all the more so as the Hungarian uprising began), that perhaps intellectuals wanted to deprive the party of unqualified control, and to deny cadres their right to sow terror in the laboratory. What followed was a “rectification” movement that, for most, made work impossible and life hellish in the late 1950s, and then from 1966 more or less until 1981. At the moment, at least for those who did not join the chorus of complaints about corruption in 1989, work is merely uncertain and life worrisome.
The implicit theme of Yao's modestly apolitical essay is that "redness," the main source of power, has not yet learned to tolerate expertise, the main source of innovation. Perhaps the intolerance acknowledges that intellect, no matter how docile, can never be tamed once and for all.

In China since the end of the empire in 1911, generations of scientists and engineers of merit, talent, and motivation have offered much and demanded little. They have kept a faith in rationality as a positive and constructive force that postmodernist thinkers, not altogether to their credit, will find quaint. They have wanted to be told only what is needed, to explore the technical frontier, to share knowledge with colleagues elsewhere, and to be allowed a modicum of support and respect. Yao reports that these demands have been regularly considered excessive. Intellectuals are still seen by party leaders as genetically flawed, and by ordinary people as underpaid freaks, always making trouble for themselves. The issue in the last analysis is whether the creative energies of scientists in China will ever be freed by a new level of toleration as those of entrepreneurial farmers were temporarily freed in the 1980s.

This essay is in effect a policy document. It concludes with a plea that modest emancipation will yield great returns. These arguments are being made for the thousandth time since the end of the Cultural Revolution. Time will tell whether they are heard.

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