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Early spatial representation of the perceptual similarities between nine colors, obtained by a multidimensional scaling analysis of errors during paired-associate learning. The closeness of any two colors was determined by the frequency with which a response number ("one" through "nine") arbitrarily assigned to one color was mistakenly made to the other during learning. See page 390. [Roger N. Shepard, Department of Psychology, Stanford University, Stanford, California]
Drift and Danger in U.S.–Soviet Relations

The dismantling of meaningful scientific exchanges with the Soviet scientific community, provoked by the military occupation of Afghanistan and the subsequent internal exile of Sakharov, calls for second thoughts. It is not as though the uses of the scientific exchanges have zero value to diplomacy while advancing science. The fact is that in the Soviet system the scientific elites not only are extraordinarily valued professionally but also enjoy that rarest of socialist graces, an edge of independence. Turning a blind eye to that fact is shortsighted.

The temper of U.S.–Soviet political relations slides from bad to worse. As tensions increase, the risks of overreaction with awful consequences are enhanced. There is, on this side, talk of retargeting schemes, of new attack weapons hatched from supertechnology, and more than a hint of Star Wars. From the other side comes political adventurism and an internal tightening of the screws, but mostly a menacing silence. As far as can be judged, not a single diplomatic card is being turned up by either side, or by third parties that could bring the principals together to cool the temperature of growing crisis. Drift, governments need to be reminded, is the worst of all policies.

The evidence is that the boycott technique, as applied to scientific exchanges with the Soviets, is availing next to nothing. It has not relieved the besieged defenders of Afghanistan any more than it has restored such civil and professional rights as Sakharov ever enjoyed. When an instrument of policy turns up useless, the sooner it is put down the better. But that is a hard thing to do when it has been invested with the authority of the establishment. Such is the price that is paid for going too far and leaving no exit.

One does not have to eat crow, much less condone the behavior of the Soviets in pressuring dissent through violence and police action, to press for a reopening of scientific traffic. The United States maintains what pass for friendly relations with a large class of nations whose political virtue does not meet the standards that we can afford, and we stomach it for reasons of expediency. When it comes to the matter of the Soviets, the difference is not trivial: it is central. The groundwork of a smoldering enmity is heating up, and it cannot be allowed to flash to steam. The conscience of science, however justified its outrage at Soviet behavior, nevertheless has the greater burden of striving to prevent the ultimate outrage, the dimensions of which are better known to scientists on both sides than to distracted and unprotected publics.

It violates no confidences to report that leaders in science in both countries view the present tension with undisguised alarm. Although the driving forces and emotions at work are remote from science, the blow, when and if it comes, will be a confrontation between Western science and technology and its Eastern equivalent. It is this tragic failure that is to be avoided, and when the politics of diplomacy are paralyzed, then a form of science as diplomacy can no longer wait to be exercised. This is what troubled scientists on both sides are now signaling to one another, and for good reasons.

The position is that we are very nearly out of safety valves as the nuclear superpowers drift toward impasse. If scientific responsibility is more than an idle phrase, it requires participation in the pursuit of peace and conflict resolution. The quarantining of Soviet science, however principled, defeats the chances for engaging a concerned and far from impotent cohort of opinion and influence in a dialogue of reason.

Disagree as we will with the actions and the philosophy of the Soviet system, we can find common ground in the shared dread of a collision of power. We should get on with it, before time runs out.

—William D. Carey