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Preface to a Prolegomenon

When the Geneva talks on suspending nuclear tests resume on 8 June, there is a possibility that the impasse of on-site inspection may be avoided. The Western powers have argued for such inspection because an earthquake that instruments are unable to identify as of natural origin might be the result of an underground nuclear explosion. The Soviet Union has argued that inspection should be subject to veto by the participants because it presents opportunities for espionage. Prime Minister Macmillan proposed a way out of the impasse which was seconded by Premier Khrushchev and which was introduced officially into the Geneva test talks by the Soviet delegation before the current recess. The proposal was to limit the number of veto-free inspections permitted each year.

The American delegation has been sufficiently interested in the proposal to join the British delegation in asking the Soviet delegation to elaborate on a number of points, among which are: how many inspections should be permitted each year? and what should be the scientific criteria for determining when an earthquake is a candidate for inspection? Although these questions concern provisions to be written into a test treaty, the answers would seem to require a scientific opinion on the technical implications of such matters as the number of natural earthquakes occurring annually in various parts of the world. But before such an opinion can be rendered, the Western powers and the Soviet Union must agree to assemble the necessary experts.

Moscow has at times been willing and at times unwilling to allow Soviet scientists to meet with Western scientists. Soviet scientists participated in technical talks last summer, and these talks led to the political talks now in recess. Early this year, however, Moscow was not willing to call in Soviet scientists to examine the new data concerning the differentiation between natural and artificial earthquakes that the United States developed in the course of its project Hardtack. The reason for the refusal probably was that such a study would have indicated the need for a more extensive inspection system than the one based on information developed at the summer talks. Moscow recently expressed interest in exploring further the means for detecting high-altitude explosions, but this gain does not apply to the present problem since such explosions offer no site to inspect.

Scientific talks may be a necessary prolegomenon to political talks, but the agreement to conduct scientific talks requires an initial political accord. The problem of determining a suitable limit to the number of on-site inspections is important not only in its own right but as an illustration of the need to include in the test treaty a mechanism for convening future scientific talks. Since it is likely that advances in science requiring modification in the system will occur, East and West must agree to recognize such advances, evaluate them, and revise the system accordingly. The inclusion in the treaty of a clause allowing for the revision of other clauses is a condition that we trust the Western powers will insist on and one we hope the Soviet Union will accept.—J.T.