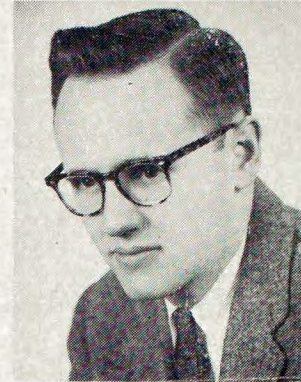


*"There should be a lobby
of scientists . . . pledged to . . .
support representatives and senators . . .
regarding issues of peace and war."*

*file
materials*

Two Per Cent For Peace

DONALD O. SMITH, ASSOCIATE EDITOR, *solid/state/design*



The minimum future achievements of science and technology in the next several decades can almost be predicted with certainty: such achievements will be at least as great as those of the past several decades. In order to grasp some of the implications of this minimum prediction, reflect for a moment on the four great new technologies of nuclear energy, space, automation and solid state electronics. None of these technologies existed twenty years ago, but the fact is that today they are in the process of remaking the world as an environment for human individuals and societies. Exploitation of these fields is barely underway so that, even if brand new technologies are not developed in the next twenty years, the technology progress rate cannot possibly slow down. Of course, it appears more likely that the "scientific explosion" we are currently experiencing is not leveling off, so that instead of minimum estimates of future technical progress, much less conservative thinking will probably be more successful.

However, the purpose of this essay is not to attempt serious guessing as to the possible future achievements of technology other than to establish that they could be very great indeed. The purpose is to speak of a much more serious problem—will we and our children be either dead or have reverted to the savage existence of root-gathering within the next several decades. As incredible as the constructive potential of science has turned out to be, even more incredible has the destructive potential proven, and by judicious use of nuclear bombs, poisonous gases and deadly bacteria, it should be possible to destroy any and everything that has meaning for men. It seems trivial to me to argue that perhaps after all, as of right now, not every single last human being and blade of grass would be destroyed by nuclear, chemical and bacteriological war. If such ultimate capacity does not exist as of right now, there can be little doubt that within two decades it could exist. In this context I recall a remark made by a very well known general shortly after World War II when the implications of automatic war were just beginning to be dimly foreseen. With characteristic hard-headedness this general remarked that the

difficulty with push-button warfare was that the only things that existed were the push buttons. Unfortunately, much more than push buttons exist today.

Certainly none of these ideas regarding the virtues of science and the dangers of war can be very new to anyone reading this essay and we have all at one time or another said—"but what can I do about it". The whole purpose of this essay is to point at something specific which can be done by individuals.

Recently a speech by Szilard was sent to me by a friend, and it was this speech that has prompted this discussion. Dr. Szilard is a man well qualified to be concerned with the destructive possibilities of modern science. Fermi and Szilard did the theoretical work on fission mentioned in Einstein's letter of August 2, 1939, to President Roosevelt which launched big-scale nuclear research, and he persuaded Einstein to send the letter. In this speech Dr. Szilard suggests a tentative set of moderate, specific steps which the United States government could take on its own initiative to lessen the danger of war. Included among these are two unilateral pledges: 1) America should unilaterally proclaim that she would not resort to any strategic bombing of cities or bases (either by means of atomic bombs or conventional explosives), except if American cities or bases are attacked, or if there is an unprovoked attack on cities or bases of one of America's allies; 2) America should proclaim that if, in case of war, she were to use atomic bombs against troops in combat, she would do so only on her own side of the pre-war boundary as long as similar restraint were used by the other side. This second pledge requires a fundamental understanding, probably not yet expressible by a politician who must get elected, that the aims of war can no longer be stated as in the good old days as "unconditional surrender", but must be severely limited to some form of partial defense.

It is not possible in this short space to do justice to Szilard's ideas, but let me quickly get to the last point, namely that there should be a Lobby of scientists in

(Continued on page 14)

HARNESSING THE ELECTRON BEAM

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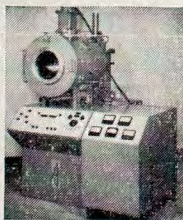
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SMITH

(Continued from page 13)

Washington speaking with the sweet voice of reason of the absolute necessity of peace short of unconditional surrender and that this Lobby should be able to deliver say 10 per cent of the votes for those representatives and senators who have insight into this absolute necessity. In order to help deliver these votes, people who believe in this Lobby would be pledged to contribute two per cent of their income to support these representatives and senators.

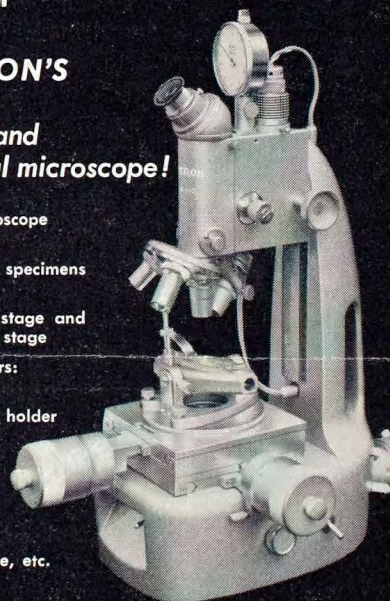
Quoting from Dr. Szilard, "the Lobby must not wield the power that it may possess unduly. People in Washington want to be convinced, they do not want to be bribed or blackmailed. He who gives consistent financial support to certain key members of Congress may evoke their lasting friendship and may count on their willingness to listen to them, *as long as they talk sense*. He who talks to members of Congress, but does not make sense, will not accomplish anything of lasting value, even if he temporarily sweeps some members of Congress off their feet by making huge political contributions to them."

If there is further interest on the part of readers of this essay in the ideas of Dr. Szilard and in the formation of a Lobby in Washington which represents the responsible opinion of a portion of the scientific community regarding issues of peace and war, I suggest that you write to Dr. L. Szilard, Hotel Dupont Plaza, Washington, D. C.

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