Correspondence

EDITORS' NOTE: Readers are welcome to comment on matters discussed in this journal. Letters should be addressed to the Editors, Problems of Communism, US Information Agency, 1776 Pennsylvania Ave. NW, Washington, DC, 20547. (Please note: Subscription orders or inquiries should be addressed according to instructions on the front inside cover.)

Marxism and Geography

TO THE EDITORS: I should like to offer a correction and two amplifications to my article on "Marxism and Geography" (November-December 1965).

First, in the last paragraph on page 14, I never intended to say, as the printed wording may imply, that those Western geographers who have written about the Anuchin controversy have not seriously grappled with the issues Anuchin raises. I did write in my original manuscript that most Western geographers, unlike Anuchin, have not been seriously examining problems of environmental influences and man-land relationships in recent years. In fact, one reason this is so is that we have too few such perceptive minds as the "probabilist" O. H. K. Spate, whose article on Anuchin is among those I cite.

Second, I had originally said about 20th-century man (second paragraph, page 15): "His whole mode of existence and the manmade comforts that surround him seem to draw him away from aware-

ness of the surface of the earth, and of the elemental truths of man's confrontation with his natural environment and with his God." Granted that it is somewhat controversial to try to establish a relationship between theology and the metaphysics of man-land relationships, as my longer original manuscript tempted to do, I hardly think it either necessary or appropriate in a discussion of communism to eliminate, as the editors have done, a phrase (in italics above) which in itself shows little more than that the writer believes in God. This is after all the principal advantage of our presumed way of thinking over an ideology built on the writings of Karl Marx.

Third, I was very sorry to find that the editors found it necessary to delete my discussion of Soviet physics, which among other things served to tie together some of the ideas introduced in the opening paragraphs of my article. In particular, I was anxious to point out that, despite obvious differences, there are many parallels between the intellectual development of Lenin and that of Einstein. Both men were nourished by the healthy skepticism of Mach and other 19thcentury positivists and skeptics who believed that scientific thought must be based only on sense impressions of physical objects and events. It is possible to depart from this healthy skeptical attitude towards an excessive emphasis either on sense impressions or on physical objects and events. The first departure leads to a kind of subjective idealism which the Soviets identify with Berkelevism. The second departure leads to materialism, which the Soviets identify with their own Marxism-Leninism. Having dispensed with the inspiration of Machism or its equivalent, which had enabled them to do away with all previous forms of idealism and other theoretical speculation on the ultimate nature of reality (i.e., metaphysics), Lenin and his followers proceeded to castigate Machism itself and also any form of idealism arising from it, such as Einsteinian relativity.

Yet it is somewhat appropriate that Einsteinian relativity should, since 1955, be judged harmonious with dialectical materialism, since, although it is indeed a departure into subjective idealism, it also shares with Marxism-Leninism the weaknesses which accompany rejection of all previous metaphysical speculation. I congratulate the editors of Problems of Communism for retaining my statements on pages 13-14 which clearly imply that both Mach and Einstein were mistaken in rejecting the traditional-intuitive definitions of space and time. Such statements have great difficulty getting into print these days, as a growing number of neo-Newtonian scientists and philosophers will

My concluding section offered the opinion that recent Soviet commentary on Einsteinian relativity, such as that of V. A. Fok, represents not so much an abandonment of the antagonism to Einstein which was so widespread in the Stalin era,

as a limitation of the criticism to its most sophisticated forms. Fok's conversion of general relativity into a non-relativistic theory of gravitation is actually a powerful criticism, but it appears that most Soviet physicists, including Fok himself, regard it as a minor modification within the general structure built by Einstein. Perhaps Soviet physicists did not want to attack that structure violently because they felt that they could not develop nuclear weaponry and power plants successfully if they did, and that such developments were incontrovertible proof of the validity of Einsteinian relativity anyway. This is suggested by such statements as that of Piotr Kapitsa, which is quoted on page 64 of the November-December 1965 issue of Problems of Communism in Lee Kerschner's enlightening article on cybernetics in the USSR. Kapitsa inferred that one must trust the theory of relativity in order to believe the atomic bomb exists.

This is a grossly misleading inference which far too many physicists who should know better continue to expound. The atomic bomb does not depend on the theory of relativity, although it was invented by scientists who believed in the theory of relativity. The basis for a theory of nuclear power can be derived from the classical formula for energy and from the empirical knowledge that matter decays into electro-magnetic energy, which was on hand ten years before relativity was introduced.

Fok's revision of general relativity involves the introduction of a "preferred coordinate system"; and in such a system the velocity of light is not constant with respect to any moving observer. But this condition, verified by experiment

(Sagnac, Michelson-Gale, etc.), is contrary to special relativity, and so serves to expose the theoretical inconsistencies on which that theory is built.

There are also other roads to such an exposure, many of which have already been traveled a great distance by Western scholars (e.g., Dingle, Evans, Builder, Otis) who oppose the relativistic orthodoxyan orthodoxy which is every bit as inimical to the advance of human knowledge as was unmitigated Stalinism, and which Ernst Mach, as long ago as 1913, recognized as false and "growing more and more dogmatical." Fok's treatment of relativity has some parallels to Anuchin's treatment of the Stalinist line on environmental influences.

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IN FUTURE ISSUES-

An essay from Safety Exit, a forthcoming book by Ignazio Silone Communism in Latin America: New Paths?, by Bruce Jackson Economic Reforms in Poland, by Leon Smolinski Moscow and Eastern Europe, by Melvin Croan Spies Unlimited, by Hugo Dewar Soviet Literary Developments, by Victor Frank