## """""current comments"

Does the Quality of Soviet Science
Justify Double Coverage in CC? Copyright
Controversy Calls for Reappraisal!
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The signing of the Universal Copyright Convention by the Soviet Union has caused a fresh appraisal of many interrelated problems. I've commented previously on the subject of government-fostered cover-to-cover translation programs,1 and on copyright,2,3 But the question of evaluating Soviet science is not a simple or easy task to contemplate. I have dealt with our policy on dual coverage of some Soviet journals in CC \( \end{align\* / Engineering & Technology and CC/Physical & Chemical Sciences.4 I must now disagree with my own earlier conclusions on the matter.

Quite recently I congratulated certain German and French journals for accepting the de facto role of English as the lingua franca of science.5 The Soviet Union has not. Ideologically it should be the one country above all to claim an internationalist outlook. The Soviet Union has aggressively pursued its interest in UNISIST, UNESCO'S project to establish a worldwide scientific information system. The Soviet Union also has adopted the Universal Decimal Classification, And, I believe, the USSR will go even further to gain complete or at least equal access to the world's scientific information.

It is difficult to know what specific factors caused the USSR finally to

adopt the Geneva copyright convention. There has been much speculation on the question. One factor was a growing awareness that export of information products could affect its balance of payments. In spite of the esteemed status of science in the USSR, a niggardly amount of foreign exchange is allocated for *import* of scientific information.

Now that the Soviet Union will stop large-scale reprinting of foreign copyrighted journals, it will have either to pay royalties, buy more copies (requiring more foreign exchange), or increase its use of single-copy photocopying. The Russians assert that the latter is permitted by the Geneva convention.6

This view of the problem seems short-sighted. It contradicts Soviet expectations of a rise in foreign exchange through sales of Soviet works in translation. (The market for Russian-language material is quite slim.) If Soviet or foreign-made English translations are to bear fruit, there must be reciprocity. If single copies of American journals can be made in the Soviet Union in a few central agencies, 7 then the same ought to apply to Soviet journals, whether in Russian or in

translation. There will be some interesting legal tangles to unravel if, for example, the Russians license some western publishers to translate their journals but not others. Right now the Soviet Union is demanding royalties from the National Lending library of the UK. I have not yet heard the final outcome!

The psychological warfare branch of the Soviet Foreign Ministry (or whatever) could not have chosen a better issue than copyright as a cause of friction and dissension in the West. If, for example, the Soviets were to license a different publisher to translate and publish the Soviet Journal of Experimental and Theoretical Physics (JETP), it would dramatically affect the American Institute of Physics, which has been publishing JETP all along. Although AIP and other non-profit organizations are primarily interested in the dissemination of physics information, an establishment has been built up around these journals. Similarly, organizations like Plenum Press could be affected. Plenum not only pioneered in this field through its Consultants Bureau Division -- it created a whole new cover-to-cover translation industry. Furthermore, Plenum was encouraged not only by the Soviet & U.S. governments, but also by organizations like AIP. On the other hand AIP, Plenum and others also have the right to demand quid pro quo for their publications.

It would seem wiser for the Soviet Union to accept a reasonable transitional royalty from such publishers, since they are asking for similar treatment by Western publishers. There is no simple way to administer such reciprocity, especially since the Russians are dealing with publishers one at a time. The problem is receiving considerable attention from the International Association of Scientific, Technological and Medical Publishers (STM), as well as from the Information Industry Association and NSF.

But all of this gets away from the 'Garfield Doctrine': a plague on both your houses! There should be neither cover-to-cover translations, nor Russian editions. Rather, Soviet scientists, as all others, should publish in English--in their own or foreign journals. Many leading Soviet scientists have done so for years. But we really don't know the extent to which their publications are duplicated in Russian. We do know that dual publication is a common practice in other East European countries, having uncovered ample evidence of it in abstracting for our Current Abstracts of Chemistry & Index Chemicus TM

The cost of this duplication is enormous. In addition to the cost of printing two sets of journals, there is the cost of duplicate indexing or abstracting, or the cost of systems to detect the duplication. The confusion and anxiety over this business is not trivial.

In more affluent times, libraries were prepared to place "standing" orders with publishers for anything they published. Such a policy is warranted for publishers with a consistent record of high quality. But the 'justification' for translating many Soviet journals is by no means 'quality'-based. Does the AIP apply its editorial standards to the

journals it translates? From our citation studies we have learned that it cannot be assumed, from mere existence of a cover-to-cover translation, that the journal was worth translating in the first place.

What about the quality of Soviet journals? It is well known that publication is guaranteed to certain institute directors in the Soviet Union. Thus. publication for him and his staff is not based on quality of work submitted but on past performance or political influence. While the politics of "in" groups affects selection policies in certain western journals, it is not unreasonable to claim that publication in most journals is not based upon political reliability. Some of our Soviet colleagues will protest this assertion, but I cannot otherwise account for the low quality of so many papers appearing in the leading Soviet journals. Apparently the drive to publish or perish is even stronger in the USSR than in the West.

Indeed, one can judge the significance of these practices when measuring the real impact of Soviet papers. Other things being equal, one would expect Soviet chemists to produce the same number of significant papers as an equal number of Western chemists. Chemical Abstracts reports that 25% of the world's chemical literature is now in Russian. But, not surprisingly, far less than 10% of the significant papers are published by Soviet scientists. Just how much less than 10% awaits further study. But preliminary data lead to an inescapable conclusion.

The question of covering Soviet journals in CC and SCI® has always

been a dilemma at ISI . Should we cover an important Soviet journal in its Russian version and/or in its English translation. To select the latter means significant delay. If JETP is as heavily cited as the record shows, we believe it must be covered promptly in the Russian version. But does its importance justify a second coverage of the English version? We have come to the conclusion that no journal is worth such redundant cost. If we publish the contents page in English, then the reader can decide whether to look at the Russian version immediately. (In many cases he'll find an English abstract.) He can then have the article translated or wait for a translation to be published.

If, however, the journal is of average quality, then how important is the time lag introduced by covering the translation only? One can argue that if the journal is worth covering at all it should be covered promptly.

If, on the other hand, we boycotted Russian-language journals, might this not coerce Soviet scientists into using English? Such a policy would be inconsistent with our willingness to list English language contents pages of other "exotic" foreign-language journals, such as the Japanese or Chinese, which are even less known to CC readers.

The need to cover an ever-increasing number of new and interesting international journals forces us to be more selective in our coverage of national journals. While it may have been helpful for our readers to know what is published by Belorussian, Ar-

menian, and other Soviet scientists, the failure of their work to attract significant mention in the literature suggests a mainly regional or local interest. Such journals will be removed and replaced by journals of greater merit on all counts. We hope that the few Soviet authors who are adversely affected will publish in journals we do cover, whether Russian or English, preferably the latter. I am certain that their work will be given every consideration by any editor. Indeed I am confident that Western editors would gladly handle any difficulties with English prose. Even poor English cannot hide a well-argued scientific presentation. It would help if even more foreign scientists served on editorial boards of society journals.

As long as our coverage of Soviet science represents more than 10% of our coverage, and it does, and as long as we strive to select the best from all countries and from all specialties, we feel we will adequately present a picture of Soviet scientific accomplishment. In further confirmation of the reasonableness of this approach, our research department has produced for me a list of the most frequently cited Soviet papers. It is clear, as with western authors, that their work appears in a limited number of leading journals-all of which we cover regularly.

<sup>1.</sup> Garfield, E. Concerning cover-to-cover translation journals. Current Contents® (CC) No. 17, 29 April 70, p. 4-5.

<sup>2.</sup> Some implications of the Soviet Union's becoming party to the Universal Copyright Convention. CC No. 15, 11 April 1973, p. 5-7.

<sup>3.</sup> Copyright revision bill requires priority action to meet needs of the information revolution. CC No. 16, 18 April 73, p. 5-8.

<sup>4.</sup> Cover-to-cover translation of Soviet journals; a wrong 'solution' of the wrong problem. CC No. 29, 19 July 72, p. 5-6.

<sup>6.</sup> The logic here is that Soviet law applies. In the Soviet Union one can legally make single copies of any work, domestic or foreign. Their viewpoint will be reinforced

by the recent US court decision allowing onetime copying for use in education and research. New legislation in the West, however, will probably not change the Soviet viewpoint in the year ahead.

<sup>7.</sup> Arutjunov, N.B. The requirements to be met by national scientific and technical information systems. UNESCO Bull. Libr. 27(5):246.49, 1973.

<sup>8.</sup> Of the 1000 articles most cited in the years 1967-72, only six appeared in Soviet journals. Of the 152 most-cited journals in science and technology, only 4 are Soviet journals: a) Uspekhi Fizischeskikh Nauk, b) Zhurnal Eksperimentalnoi i Teoreticheskoi Fiziki, c) Fizika Tverdogo Tela, and d) Zhurnal Fizicheskoi Khimii. Of the 152 journals with highest impact (citations per article published) only 3 are Soviet journals-a, b, and Yadernaya Fizika. See: Garfield, E. Citation analysis as a tool in journal evaluation. Science 178:471-79, 1972.