



Tips from the Experts

Finding Scientific Translations Today: Do We Need Classical Footpaths in a Digital Age?

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Introduction

“Do you have recommendations on how to access these old foreign journals, especially translations?” Questions like this from our scientists and engineers have been on the rise lately, and when an MIT chemist recently asked this, our staff in Hayden Library welcomed the opportunity to more rigorously investigate pathways into this elusive gray literature. Fifty years ago the demand for this material motivated federal and private organizations to fund and develop what became a miniature ecosystem for these works. Scientific societies and commercial publishers established cover-to-cover translation journals; however, thousands of individual articles were translated and distributed as technical reports through public and private outlets. Librarians recognized the value of these documents and created both access tools and special collections to facilitate their use. But what about today? With instant access to translator tools and robust databases, are there reasons to consult these historical tools to find a translation created before 1970?

This user’s request for several Russian translations inspired us to test this hypothesis: When today’s online sources fail to find a scientific translation produced before 1970, the search must include the historical translation reference sources.

Brief Background

“We now realize that if the United States had translated the information available in Russian publications there would have been no surprise at the first Sputnik launching. Information on Soviet earth satellite plans had been published in October, 1957, a year before the launching.” So stated Robert Martin in his description of the increased demand for translations ([Martin 1960](#)). Librarians were spurred on to collaborate, gather these documents into organized collections, and create tools to find them. The Special Libraries Association (SLA) took an active role: its Translation Activities Committee established the SLA Translation Center in 1952 “through contract with The John Crerar Library” ([National Translations Center 1969](#)) and compiled the *Consolidated Index of Translations into English (CITE)*. This collection became the National Translations Center (NTC), which moved to the University of Chicago in a 1984 merger ([About](#)

[Crerar Library n.d.](#)). Eventually, the NTC went to the Library of Congress (LC) and was closed in 1993 ([Library of Congress 1993](#)). Today, their site states translations went to the Canada Institute for Scientific and Technical Information (CISTI) in Canada and the British Library ([Science Reference Services 2018](#)), but some librarians speculate LC may still house a mass of inaccessible translations.

Where to Search First

The search for historical translations is both art and science: no perfect sequence of tools exists, and most users who seek assistance have already searched the Internet. One initial step is to determine whether the original language journal had a cover-to-cover counterpart for the year(s) sought. Two classic sources help: *Journals in Translation* ([British Library, and International Translations Centre 1991](#)), a directory that lists cover-to-cover translation journals and their original language counterparts, and *CAS Source Index* ([American Chemical Society 2009](#)), the serials directory from the American Chemical Society.

If no cover-to-cover title exists, the tactics change to searching for the translation as an individual work. Usually any or all of the technical reports databases: NTRL, NTIS, NTRS from NASA, DTIC (Defense Technical Information Center), and DOE's database [osti.gov](#) come into play. If a library has access to Joint Publications Research Service (JPRS) online, that would be a key source. Finding as many report numbers as possible will maximize the chances of locating copies, especially those on microforms.

Where to Search Next

Most librarians will next turn to relevant subject databases such as SciFinder, Inspec, and Compendex; however, results in these are often disappointing. Doing a Cited Reference search in Web of Science is another approach. Worldcat or HathiTrust might locate a topical compilation of key articles or a collected works of the author. But, as described below, searching the historical resources could be more fruitful.

Historical Vs. Online Tools

Our chemist wanted translations of articles on metaphosphates, mostly authored by Russian chemist Yu K. Delimarskii (alternative spellings include Delimarski, Delimarskiy and Delimarskyi). The approach was simple: search for translations of 25 Russian articles across three databases and four print sources, and compare overall results and the bibliographic details each provided.

Given the comprehensiveness of SciFinder, we chose it as a key database to search and then also included NTRL and NTIS. Our four print sources: *CITE* ([National Translations Center 1969](#)), *The Bibliography of Translations from Russian Scientific and Technical Literature* ([Scientific Translations Center 1953](#)), *Transatom Bulletin* ([Euratom, and Centre National de la Recherche Scientifique 1960](#)) and the USAEC's *Translation Title List and Cross-Reference Guide* ([1953](#)) were titles we had on site that were important in the past. According to an insert bound into our copy of *CITE* ([Chillag 1971](#)), it only included citations from the Russian *Bibliography*. Because *CITE* does, however, include many references from *Technical Translations* ([Institute for Applied Technology, United States, and Special Libraries Association 1959](#)), we consulted it also but did not find additional access points.

Results and Discussion

Table 1 shows that we found citations to all 25 original language articles in SciFinder; to our surprise, however, it gave no citations to translations. NTRL included 14 of the 25 Russian citations but importantly offered 5 report numbers not in *CITE* as well as an AD report number no other source included. Our third database, NTIS, included none of the citations: not surprising since its pre-1964 coverage is weak.

The historical indexes played a major factor. *CITE* (arranged by year, journal name, and citation details) had a strong showing: it included 23/25 Russian citations and provided several report numbers we could search. But because *CITE* refers heavily to items in the closed or disbursed NTC collection, the most valuable leads are to translations from the AEC-TR series. *Transatom Bulletin* indexed 18 of our Russian 25, but with its European focus and author index it provided much more: 42 translations by our author from 1960-1970 alone.

Table 1. English Translations Found from Russian Citations

Sources: Databases	Number of Translations Found	Notes
SciFinder	0	Included all 25 Russian citations.
NTRL	14	1 unique number, no full text.
NTIS	0	Not surprising, since mostly 1964+.
Sources: Historical Print Indexes		
Bibliography of Russian Sci/Tech Literature	12	Ceased in 1956. Only provided RT numbers.
CITE	23	Provided NTC, AEC, and other numbers.
Transatom Bulletin	18	Provided 2 numbers not in CITE, 11 not in USAEC. Ceased in 1977.
USAEC Translation Title lists	13	Provided 8 numbers not in CITE; probably need to consult this also; many of these lists are online in HathiTrust.

To sum up:

The historical print sources provided 32 access points. The only useful online source for finding English translation access points was NTRL. At the end of our searching, we put 11 translations (all AEC-TR series) into our chemist's hands.

Where are the Digital Versions?

The role of online translator tools will continue to expand: Yandex, Google Translate, and Bing Translator are current and popular examples. DeepL, EU Translator, and PROMT are other options. Each one has different limits, prices, and features to consider.

The digital futures for the historical print tools is less clear. Most of the AEC lists were digitized thanks to the Technical Report Archive and Image Library network ([TRAIL 2010](#)) and other efforts; these are in HathiTrust. *Transatom Bulletin* and the Russian *Bibliography* may not be candidates for digitization, but many science libraries still own them. And if you need a copy of *CITE* (which, importantly, lacks authority control over its citations, i.e., you have to generously scan the hardcopy) today Abebooks ([2019](#)) lists one for \$146!

Conclusion

This study was small and targeted in scope, but the value of using historical translation indexes seems clear, especially for the physical sciences. These tools add key access points for tracking down English versions of needed articles. Today it is not difficult to envision when technology translates whole original language articles on demand seamlessly. But until then, it is important to remember and use these historical indexes. Discovery and access to translations is challenging, but we still benefit from classical footpaths others have made. And we're grateful!

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