

tered in the reading experience of an educated person. The Wheeler dictionary has some 70,000 entries, and Smirnitsky's about 50,000, though Smirnitsky is more generous with examples. Wheeler's work is in a smaller format (9¼-inch page) than Smirnitsky's, which has a bulky format (10-inch page); Wheeler is slightly smaller than *Webster's Seventh New Collegiate Dictionary* (1965). Wheeler has a double-column page; Smirnitsky has three columns. As one might expect from the Clarendon Press, the quality of the paper and the size and clarity of the type are superior. Smirnitsky wins out, however, in the price competition, selling for only \$7.50, while Wheeler costs \$18.00.

I tested the resources of both dictionaries (ninth edition of Smirnitsky) by using them to read a recent (July 1, 1972) issue of *Sovetskaia torgovlia*, painfully dull material for a noneconomist. Both performed well, though Wheeler, as mentioned above, is more helpful with oblique noun and verb forms. *Motoroller*, "(motor-)scooter," appeared in Wheeler but not in Smirnitsky. In a story about a visit of Fidel Castro to a training center for astronauts the word *stykovka* would give trouble to any non-Russian; Wheeler has it with the meaning "docking (of space vehicles)," while Smirnitsky lacks it. Neither dictionary has *trenazhër*, "trainer, flight simulator." General conclusion: if you are ever constrained to read *Sovetskaia torgovlia*, either dictionary will serve you well.

Part of the bulk of Smirnitsky's dictionary results from his inclusion of an excursus into Russian grammar and a similar summary of English grammar, inclusions which are useful both to English-speaking users and to Soviet users. The only additional material in Wheeler is an appendix (five pages) of official abbreviations. Wheeler's dictionary would have gained in value if he had emulated Smirnitsky, at least to the extent of including a few pages of Russian declensions and conjugations along with a few notes about Russian participles and gerunds. These forms seldom appear as entries in Russian-English dictionaries (though Wheeler does list some past passive participles), yet they are characteristic and frequent ingredients of written Russian. The space required for a grammatical sketch of Russian is not great, but it would be a great boon for nonspecialists (in the Russian language) who otherwise have to search through textbooks deciphering the participles (three) and the gerund in this not untypical sentence from the same issue of *Sovetskaia torgovlia*: "Po ustanovivsheisia traditsii, otmechaia svoi prazdnik, sovetskie kooperatory obozrevaiut proidennyi put', sosredotochivaiut vnimanie na nereshennykh zadachakh."

Taking all factors (completeness, up-to-dateness, clarity of presentation) except price into consideration, I not only recommend the acquisition of Wheeler's dictionary but consider it necessary for all who deal seriously with Russian texts.

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RUSSIAN FOR THE MATHEMATICIAN. By S. H. Gould. New York, Heidelberg, Berlin: Springer-Verlag, 1972. xi, 211 pp. \$8.80, paper.

This little book is intended to teach mathematicians and students of mathematics exactly enough Russian to be able to read mathematical Russian. For this limited objective the book is completely successful. The author is uniquely qualified to write this textbook, since he is a mathematician and philologist who for many years directed the translation program of the American Mathematical Society.

The first four chapters—about one-third of the book—deal with the Cyrillic alphabet, pronunciation, inflection, and aspect. The author's explanations are enlivened by a number of historical notes and comparisons with other languages, including proto-Indo-European. It is impossible to treat the Russian language fully in seventy-two pages, of course, and Dr. Gould has made a most skillful choice of the bare essentials. The reviewer would have been happy to see a description of Russian handwriting (as opposed to italics), which is occasionally needed in mathematical Russian (figures and drawings). Also, it would have been useful to include all three persons of verbs in both singular and plural. A reader could go through this text without knowing that verbs have a first person singular and second persons, both singular and plural. More attention might also have been paid to the problem of inserting "a," "an," and "the" into Russian-English translations. The fifth chapter deals with the special vocabulary needed for the reader of mathematical Russian. Some seventy-five common roots are listed, which account for, with compounds and derivations, almost all of the nonloanwords one needs to read mathematical Russian. A bit more than half of the text consists of readings from Russian mathematical texts. These will be of some mild interest to the mathematician, and they are well chosen to develop reading skill. One has to know some mathematics to understand them at all. The book closes with a thoroughly cross-referenced glossary.

Dr. Gould has written a splendid book for his limited purpose. After assimilating it, a mathematician will be in no position to read *War and Peace* in Russian, but he will assuredly be able to make his way through Bari's *Trigonometricheskie riady*.

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LE RENOUVEAU DE L'ART PICTURAL RUSSE. By *Valentine Marcadé*.
L'Age d'homme, Slavica. Lausanne: Écrits sur l'art, 1971. 394 pp.

Apart from Troels Andersen's excellent *Moderne russisk Kunst* (Copenhagen, 1967), which unfortunately is in Danish and therefore not widely known, Mme Marcadé's book is the first monograph to deal with aspects of Modernist Russian art since Camilla Gray's *Great Experiment* (London and New York, 1962). While Andersen is concerned mainly with the Futurist and post-Futurist stages of Russian Modernism, Mme Marcadé limits herself to the early period and sheds light on a less spectacular, but perhaps more creative, aspect of the Russian Silver Age.

Essentially, Mme Marcadé's book is a factual document and as such contributes a large collection of names and dates to our general reserve of information. The initial impression of the book is that it presents a serious study of the Wanderers, the Neonationalists, the Symbolists, and the early Futurists as principal contributors to the renaissance the Russian visual arts enjoyed between about 1870 and 1930. This impression arises not only from the wealth of material in the appendixes but also from the many sections in the main text and the abundant footnotes. However, when we come to analyze the book more thoroughly, these positive features are overshadowed by certain surprising defects: first, Mme Marcadé rarely comments on the factual material and refuses to allow her intellectual curiosity to wander very far; second, she supplies a minimum of *new* material