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## Metric versus English Units

The metric system has some undoubted advantages over the English system of weights and measurement. Generation after generation of school children would find it easier to learn and easier to use. Scientists prefer it; among the small number of self-selected respondents to an American Geophysical Union questionnaire, 90 percent consider a change to metric units desirable, and 68 percent believe the change inevitable. They may be right, but conversion would pose a complex problem of balancing some attractive gains against some serious disturbances and losses. How much time saved in learning and using the simpler system is worth how much cost in plant conversion, dual inventories, and difficulties of abandoning a system deeply entrenched in milk bottles, machine tools, land titles, textbooks, boxcars, store scales, and in replacement parts for countless items built to English unit specifications?

Several recent attempts to balance the gains against the losses have resulted in different conclusions. Some countries have converted to the metric system. A New Zealand parliamentary committee has recommended decimal coinage and urged that if that recommendation is adopted it be followed by a study of decimalization of all weights and measures. A committee of the British Association for the Advancement of Science has studied the matter for over two years without deciding what to recommend. A committee of the American Geophysical Union recommends compulsory adoption of the metric system by the end of a transition period of 33 years, one generation. The AAAS Committee on Metric Usage has recorded its opposition to compulsory conversion. These different groups have obviously given different weights to the arguments pro and con.

Some aspects of conversion would be comparatively simple. Quart bottles could be retired in favor of liter bottles, and householders could learn with relative ease to buy meat and potatoes—and to watch their own weight—in kilograms instead of pounds. Similarly, some industries could switch fairly readily, as a good proportion of the chemical and pharmaceutical industries have demonstrated.

In other fields conversion would be difficult. Until the furnace and the plumbing system wear out, householders will need nuts, bolts, pipe fittings, and repair parts measured in English units. Manufacturers of machine tools, printing presses, and other durable equipment would have to provide dual inventories, or, if they did not, would antagonize customers and invite competitors to step into the market they had abandoned.

Following close on the heels of the basic question of balancing the gains against the costs are other questions. Should the U.S., the U.K., and the British Commonwealth act in unison, or reach their own decisions independently? If a change is made, should it be mandatory, and if it is not mandatory will it ever be made? Should the rest of the nation subsidize those segments of industry that will incur the heaviest transitional costs? Is there coming to be sufficiently good agreement on other units, for example, an inch of exactly 2.54 cm, that the advantages of the metric system are no longer as great as they once were? Does the widespread interest in science make the present a particularly good time to start? Advocates on both sides of the basic issue may soon have an opportunity to advance their arguments, for Congress may this year call for a thorough study of the problems and the advantages of adopting the metric system.—D.W.