

FROM THE ASTRONOMER'S VIEWPOINT

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BECAUSE the measurement of time is a fundamental concern of the astronomer, special attention will always be given to the opinions of a group like ours on matters of calendar reform. This is in accordance with history and tradition. In 1919 to 1922, the International Astronomical Union made a formal study of calendar reform. It appointed an eminent committee (known as Commission 32) which made the following recommendations: (a) Adoption of a perpetual calendar of 52 weeks, plus one or two extra days; (b) Division of the year into four quarters of 91 days each, arranged into three months of 31, 30 and 30 days respectively.

This action, taken more than 30 years ago, shows that astronomers through their International Union have a certain claim to the paternity of The World Calendar, the plan that, according to the Secretary-General of the United Nations, "has received the most favorable comments of all the proposals studied on an international plane."

The action of the International Astronomical Union in 1922 was promptly followed up by the League of Nations, which inaugurated its study of calendar reform in 1923. The astronomers' recommendations became the starting point of the League's deliberations, and in the end the League (after considering and eliminating 500 different plans for calendar revision) gave its total preference to The World Calendar of 12 months and equal quarters, which corresponds exactly to the recommendations of the astronomer's Commission 32.

Our dissatisfaction with the present calendar is easily explained. We use the calendar as a system of time measurement, just as we have systems of linear measure, and systems of measuring electrical energy, heat, light, money and other things.

In linear measure, we have 12 inches to a foot, three feet to a yard, etc., and these units are always the same and always comparable and commensurate. In time measurement, the small units of time such as the hour, minute, and second, are good and useful and reliable.

But with our longer time-units, we have complete confusion. The day, the month and the year are incommensurable; that is, it is impossible to express

one time-unit accurately in terms of another. The monthly units vary in length from 28 to 31 days; quarters and half-years are variable units. The year is not an exact number of weeks, nor are the quarters and half-years; the weekdays wander from year to year.

For accuracy's sake, we should seek to make these units fit as closely as possible. Our present calendar falls far short of the precision that is so desirable in the modern world of advanced technology, coordination and rationalization.

It is the despair of the scientist and the statistician that days, weeks, months and quarterly divisions should wander about in such aimless fashion. Weekdays and month-dates never agree in successive years; the weeks run in and out of the months in an unpredictable manner; the months are unnecessarily irregular in length, and a year is never an aggregate of its internal time-units.

These defects have costly and annoying results. They complicate the working out of programs for all undertakings which have to be planned ahead; they require costly adjustments of month, quarterly and half-yearly data in order to make them comparable from year to year; they entail needless annoyance and difficulty to many activities of life; the midweek holidays dislocate industrial production and cause absenteeism.

The perpetual World Calendar meets with a high degree of satisfaction all the inaccuracies of the present system. Its structure is about as near perfection as we are likely to get. Its 12 months are arranged into equal quarters of 91 days; the quarters divide into an exact total of 13 weeks; the half-years are equal; the patterns of weekdays and month-dates are identical year after year.

The most outstanding feature out of the new calendar, aside from its stable patterns of weekdays and month-dates, is the comparability of its quarters. It gives new emphasis to the quarterly unit of time, which eventually will prove highly important and valuable. I recall a statement by a government official in the Office of Price Administration in Washington:

“The quarterly period is in many ways the most important time-division in industry. Three months is the closest and most practical expression of the season, which is set by Nature as the normal operating period in production and business. The best that operating executives can hope to do, restricted as they are by irregular and incomparable days, weeks and months, is to know accurately what goes on four times a year, and to do something about it. Any more frequent presentation of figures is utopian; any less is dangerous. Four quarterly analyses for scientifically equalized periods are ideal. I am fully in favor of such an improved and stabilized calendar.”

It is important that this meeting, and other astronomical gatherings, shall continue to express approval of The World Calendar, and shall urge our government to instruct its delegation at the United Nations to push the enactment of this reform.

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