thought of a particular formulation. The use of the designation "MKSA (Giorgi)" for a formulation, and not simply a system of units, is seen clearly in Table 2 on page 170 of ref. 5. Thus ambiguity has arisen, which must now be resolved.

The correct use of "SI" is clear: a particular system of units developed from the MKSA base units. It seems appropriate to say that a "Giorgi system" is a formulation of electromagnetism compatible with MKSA, and in which $\mathbf{B} = \mu_0 \mathbf{H}$ in a vacuum (μ_0 understood to have dimensions). The formulations of electromagnetism currently associated with SI are of the Giorgi type. The two principal examples are "Giorgi–Kennelly", the original orthodox system, named after Kennelly who piloted it to acceptance in 1935[6], and "Giorgi–Sommerfeld", introduced in the same year[7,8]. These uses of the designations "Giorgi–Kennelly" and "Giorgi–Sommerfeld" are found in the Coulomb Law Report 1950—except that they misinterpret Sommerfeld[8]. A selection of formulae on both systems is presented in Table 1.

The use of SI units is not tied to the Giorgi formulae. I now describe two alternative SI systems. The "SI-Electric" system is the natural 4-base generalization of both the traditional "electrostatic" and "electromagnetic" systems. The essential characteristic of both these systems is that $\tau_m = c^2 \tau_e$. In one of the traditional systems $\tau_e = 1/4\pi$, in the other $\tau_m = 1/4\pi$. In a general 4-base electric structure, one of the force constants is arbitrary, and the other follows from the above relation. For the SI-Electric structure $\tau_e = 8{\cdot}85 \times 10^{-12} \mathrm{Fm}^{-1} = \varepsilon_0$. This value of the electric force constant, in conjunction with MKS as mechanical units, and div $\mathbf{j} = -\dot{\rho}$ to relate charge to current, determines the value of the unit of current as the ampere.

The "SI-Gaussian" system is the natural 4-base generalization of the traditional Gaussian system. The force constants are equal to each other, becoming simply the "electromagnetic force constant" τ. In the traditional Gaussian system, $\tau = (1/4\pi)$. In the SI-Gaussian system, $\tau = \varepsilon_0$, as for the SI-Electric system.

No future satisfaction rests with the adoption of any of the Giorgi approaches. Electrical engineers use Kennelly, so it is obscurantist to adopt Sommerfeld in the name of "uniformity". Further, both Kennelly and Sommerfeld are physically incoherent, so theoretical physicists have good grounds for rejecting them. The objection is not that **B** and **H** "really are" physical quantities of the "same nature", but that the Giorgi systems lead to confusion, and ultimately error. Both non-Giorgi systems are physically sensible, so one can hope that they may prevail. SI-Electric should be adopted as the general norm, and for all quantitative statements, for it has the practical advantage of eliminating c from elementary formulae. The conversions between SI-Electric and SI-Gaussian, and to either from the traditional formulae, are so simple (in remarkable contrast with Giorgi) that theoretical physicists may work with SI-Gaussian, and even set $\tau = 1$ or $1/4\pi$, as they now work with $c = 1$—the re-introduction of the required constants is trivial.

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Metrication and Decimalization: the Next Round

Sir,—So far as Britain is concerned the present round of metrication and decimalization, at the official level, may be thought of as extending from about 1950 to 1980. This includes the Hodgson and Halsbury reports, their implementation, and the official adoption of MKSA or SI.

During the subsequent thirty years, there is a *prima facie* case for a further round of metrication and decimalization. Three innovations seem worth considering. (1) A system of electrical and magnetic units, consistent with the watt and joule, where the practical unit of current is the passing of 10^{18} electrons per second (and electrons, not charges). (2) The replacement of the mole by a kind of decimal mole, consisting of 10^{24} molecules. (3) The citation of the mass of small natural entities, as well as larger ones, in metric units. So far as is known this instance of metrication was proposed first in 1951 (ref. 1) and in these columns. The other points ((1) and (2)) are straightforward cases of decimalization. It can greatly simplify calculations[2] to eliminate factors such as 6·24181 and 6·02252. Besides the usual advantages, these proposed reforms (*a*) can make it much easier to move, in thought, between the level of magnitude of atoms and the level of magnitude of laboratory objects; and (*b*) can make it much easier to move across from one discipline to another.

While of benefit in the physical sciences, these reforms seem likely to be especially useful in the biological sciences and at the research level, when considering electrons, atoms, molecules, organelles and cells. Provided these ideas get consumer trials from many people, they might well become adopted officially by about the end of the century.

Yours faithfully,

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Museum on the Move

Sir,—In the editorial comment (*Nature*, **221**, 1094; 1969) on the letter from Dr W. R. P. Bourne (**221**, 1177; 1969) regarding the move of the British Museum Bird Room from London to Tring, the British Trust for Ornithology (BTO) is quoted as being in favour of the move, together with other ornithologists.

The comment was not intended to be a statement of BTO policy and the BTO does not wish to prejudice the views of either side. BTO members, as a whole, are not aware of the move and the majority are not affected by it. Most BTO members are amateur bird watchers and not professional ornithologists.

I believe that a misunderstanding has arisen as a result of some comments which I made over the telephone to one of your correspondents last week. I obviously did not make clear the distinction between BTO members, who are on the whole amateurs, and the professional ornithologist who regularly consults the collection at the Bird Room. Members of the BTO staff would obviously gain convenience by the move to Tring as collection and library could be consulted easily and quickly without the necessity of a trip to London.

Yours faithfully,

Keith G. Clark

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