and division of base units, we have J_u/m_u^3. [7] This clearly indicates that pressure is energy divided by volume.

2. Replacement of electrical current with impedance

   Impedance is selected in place of electrical current to emphasize the symmetry of the units of electrical quantities and magnetic quantities (see Appendix B), "A method of organizing the dimensions of electromagnetic quantities"). With the unit of electrical current as a base unit, there is no symmetry, and a confusing collection of units whose methods of derivation are difficult to understand systematically, such as C, V, Ω, F, H, T, and Wb, become necessary. In the International System of Units (SI), how these units are derived from the unit of electrical current, A, is not ordinarily an issue and so there is a perception that they are used as completely independent units. By taking the approach described in Appendix B, it was possible to minimize the number of derived units that have a characteristic symbol.

3. Elimination of luminous intensity

   Luminous intensity is omitted because it is a quantity that is dependent on human biological characteristics. No particular optical unit is established and the unit of radiant flux, Wu, (which has the same dimension as work) is used as the unit of luminous flux. That is to say, the light that has the maximum relative luminosity factor that produces the same visual effect is converted to radiant flux and expressed in terms that unit. Other optical units are derived from the unit of luminous flux. The method of deriving the unit of luminous intensity from the unit of luminous flux is selected because it is considered to be more natural than the reverse (in the International System of Units, too, the unit of luminous intensity, cd, which is a base unit, is actually defined in terms of radiant flux). In the Universal System of Units Standard, the unit of luminous intensity is W_u/rad^2. The work equivalent of luminous flux thus becomes the dimensionless quantity, $K_m^{-1} = 0.002644_{(12)}$.

4. Dealing with supplementary units

   In the Universal System of Units Standard, the supplementary units are treated as units of clearly independent dimensioned quantities.

   (a) Plane angle is counted as one of the dimensions of the base unit.

   (b) Solid angle is regarded as the squared quantity of a plane angle (explained later).

   Furthermore, although the logarithmic quantity is ignored in the International System of Units (SI), in the Universal System of Units Standard, it is recognized as a base unit dimension. The same dimension is used for the quantity of information as well.

The only 'units' in the Universal System of Units Standard that have characteristic symbols are the 24 types that are listed below (base units that are natural units, supplementary constants that are not coherent but can be used according to natural units, defining constants, base units that are derived from the defining constants, derived units of dynamical quantities, and derived units of electromagnetic quantities – see Table 2). The constants that are classified as supplementary constants are not coherent with respect to natural units, but cannot be ignored for practical reasons.

[7] For now, I will use letters prefixed to the corresponding SI unit symbols to use in place of the new symbols required by the Universal System of Units Standard: n (natural prefix) or u (universal prefix). This is true for the following as well.