

How the mind works: Napoleon denounces the dreary, image-free nature of the metric system

More than 200 years after the French first had metrication foisted upon them in the wake of the Revolution, there are many expressions using traditional units of measure still alive in their language. 'Faire une tête de dix pieds de long' 'to pull a very long face', is one of them.

When Napoleon Bonaparte came to power, he was well aware of its unpopularity and his memoirs reveal how he deplored it. Within a year of overthrowing the Directory and becoming First Consul, he took steps to halt the metrication and decimalization of weights and measures. The Republican Calendar had been a dismal failure; the division of the circle into 400 grads instead of 360 degrees had been no better. Both were peremptorily abolished.

However, when it came to measures of length, volume and weight things were more problematic. Napoleon acknowledged the need to standardise measures throughout the land since under the *ancien regime* there had been far too many local variations. All that had been needed was to have made the units of weight and measure of Paris common to all provinces. Like much of the populace, Napoleon was not in favour of a system built around the unit of a metre, nor was he in favour of the new nomenclature. 'Nothing is more at odds with the way the mind, the memory and the imagination work. A fathom, a foot, an inch, a line, a point, are fixed portions of size that the imagination conceives independently of the relationships between them.' His psychological interpretation of these issues remains as convincing as ever: the mind does not work in the ruthlessly rational way propounded by the metric system. Its natural bent is to work with units of sizes that are born of practical use and bear simple memorable names.

Unfortunately, his initial meddling made matters worse. By decree, he allowed the substitution of the old names of traditional measures for several of the names of metric units. Thus, a *litre* could be translated by the word *pinte*, a *kilogramme* by *livre*, a *decalitre* by *boisseau* [bushel]. This proved an ill thought-out exercise in semantics. Taking the names of old familiar measures and using them to replace the names for some metric units only brought more confusion.

So, some months before Napoleon made his military retreat from Moscow, he made a strategic retreat of a different nature. In the face of continuing public resistance to the metric system, he introduced a system of weights and measures known as the *système usuel*. The new system, essentially for vernacular use alongside the official metric system, allowed the old familiar names to be used with precise metric values approximating to their traditional ones. Defining those values necessitated the use of fractions of the metric units and so a fundamental principle of the metric system, namely decimal division, was broken. A *livre* became half a kilogram, a *pied* became a third of a metre and a *pouce* [inch] became a thirty-sixth of a metre.

Although the July Monarchy outlawed all weights and measures other than those expressed in metric units from January 1st 1840, the old measures were not forgotten so easily. In any French market today the terms *livre* and *demi-livre* are in constant use. The Napoleonic use of the *livre* for half a kilogram has somehow stuck. So one old name at least is still used, albeit at a metric value, and a division by fraction has not been eradicated.

Look in any good French dictionary under any of the headings for common traditional measures and you will find a wealth of idioms that pepper everyday speech. Even after 200 years' use, there is a dearth of expressions built around metric units. This says much for the dreariness of metric terminology and even more for the indestructible imagery of the old terms.

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'Measurement In The French Idiom'

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