

Frans van Lunteren *

The Netherlands and the International Bureau of Weights and Measures

BOTH IN THE 1790'S AND THE 1870'S PARIS hosted international meetings concerned with the standardization of weights and measures. In both cases Dutch representatives played a prominent role in the negotiations. But there is a striking contrast in the political maneuvers of the Dutch state following each of these conferences. Whereas in the 1810's the Netherlands had been one of the few European states to adopt the new metric system, in 1875 the Dutch were exceptional in their refusal to sign the Metric Convention and in their consequent withdrawal from the Comité International des Poids et Mesures, which was to supervise the activities of the future Bureau International des Poids et Mesures. In both cases these political decisions were predominantly based on the advice of the Dutch scientists who had represented the state at the international conferences.

In the latter case we are dealing with Johannes Bosscha, professor of physics at the Delft Polytechnic. In Dutch scientific circles Bosscha's opposition to the establishment of the Bureau and his negative advice to the government had been highly controversial. It is perhaps telling that immediately after Bosscha's decease in 1911 the Dutch Academy advised the government to join the CIPM. Pieter Zeeman's entry into the CIPM in 1929 finally ended the Dutch isolation.

In this talk I will discuss Bosscha's steps and motives as well as the resulting disputes in the Academy with the reputed physiologist Franciscus Donders. At the bottom of this controversy were different loyalties as well as different perceptions of the proper role and nature of scientific institutions.

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