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Music in Holland: Consonances According to Simon Stevin

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The 17th century was a gold century for Dutch science in general and in particular for the theory of music, still belonging to the physical mathematical disciplines. Beeckman, Stevin and Huygens produced important writings on the subject. In the present paper, the conception of consonance for musical intervals of Simon Stevin is presented. A quite strange conception according to most historians of music because Stevin contested the shared opinion for which consonance of two notes occurs for ratios of their pitches expressed by simple integer numbers. For instance, the fifth, one of the most consonant intervals, was unanimously associated to the ratio 3/2 (= 1.5). According to Stevin, this was instead a quite crude approximation, as the correct value of this interval should be $2^{(8/12)}$ (= 1.587). The paper does not pronounce about Stevin's approach. It rather wants to discuss one of the proofs appearing in Stevin's musical treatise, *Vande spiegeling der singkonst*. The few historians that commented Stevin's proofs sustained that his reasoning was not so stringent and faulty of paralogism. It will be shown that this not the case; and if Stevin's result was wrong, this depended by experimental errors only.

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