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The musical systems by Rameau and Tartini. Creativity and inconsistency

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The 18th century saw important developments in musical theory and practice. In addition to the inevitable change in tastes, there was also a change favored by the new scientific acquisitions. Music began —more clearly than in the past —to be considered from two different points of view: the physical point of view that could be the object of scientific, physical and mathematical inquire, the perceptual point of view that was the object of aesthetics. The first point of view framed music in the nascent science of acoustics, a term spread by Sauveur, studied by mathematicians; a theory that concerned not only music but also any kind of sound. The second point of view framed music in the arts and was developed by professional musicians, instrumentalists or composers.

However, this dichotomy was not a clear-cut. Some musicians (and some philosophers of nature) believed that the two spheres of competence were connected. Particularly interesting, in this regard, are the contributions of two of the greatest musicians of the century, the French Philip Rameau and the Italian Giuseppe Tartini, who believed that physics and mathematics could also have something to say on the aesthetic aspect. Both musicians approached musical theory with the conceptual tools of physics and mathematics; both believed they could have their opinion as natural philosophers as well. Both discussed their theories with the leading mathematicians of the time, with an animated contradiction to say the least. Rameau with Euler, d'Alembert, Mairan, Castel; Tartini with Euler, Giordano Riccati, Paolo Battista Balbi.

In this work the musical systems of Rameau and Tartini are compared in more depth than as found in the literature and the criticisms of mathematicians are commented.

References

Rameau JP (1750) *Démonstration du principe de l'harmonie, servant de base à tout l'art musical théorique & pratique*. Durand and Pissot, Paris

Tartini G (1754) *Trattato di musica secondo la vera scienza dell'armonia*. Stamperia del Seminario, Padova

Capecchi D (2020) *Epistemology and natural philosophy in the 18th century*. Springer, Cham

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