

Time in service of a rhetorical performance

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Johann Joachim Quantz (1697-1773)

“Versuch einer Anweisung die Flöte traversière zu spielen / On playing the Flute” (Berlin 1752)



J.-C. Veilhan *The Rules of Musical Interpretation in the Baroque Era* (1979):

“Quantz suggests a pulse beat at 80 to the minute as a standard which could serve to give one an idea of each tempo in question.”

♩ = 40	♩ = 40	♩ = 80	♩ = 120	♩ = 160
♩ = 40	♩ = 40	♩ = 80		♩ = 160
Adagio assai Adagio pesante Lento Largo assai Mesto Grave etc.	Adagio cantabile Adagio spiritoso Arioso Larghetto Soave Dolce Poco andante Affetuoso Pomposo Maestoso Alla siciliana etc.	Allegretto Allegro ma non tanto Allegro ma non troppo Allegro ma non presto etc.	Allegro Poco allegro Vivace	Allegro assai Allegro di molto Presto etc.

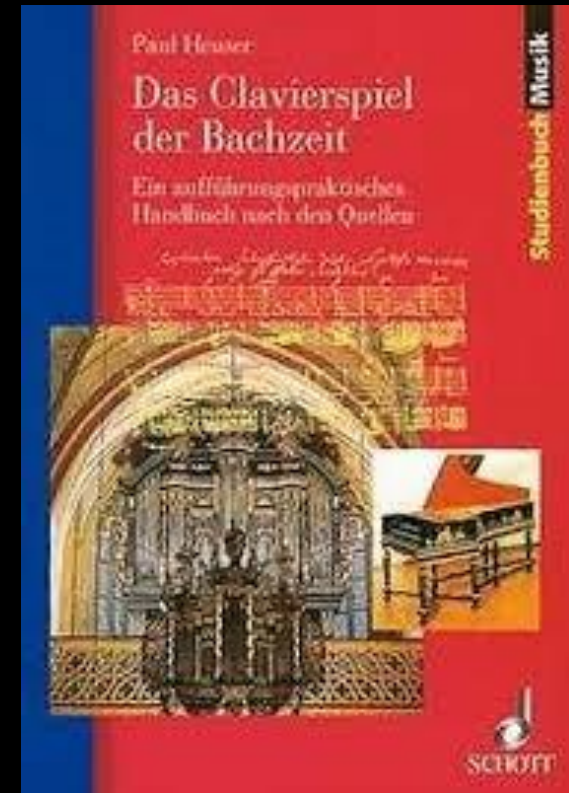
Hans-Peter Schmitz *Quantz Heute: der „Versuch einer Anweisung die Flöte traversière zu spielen“ als Lehrbuch für unser Musizieren (1987):*

”For our time the tempi of Quantz are extremely fast. A menuet at tempo 160 bpm!”



Paul Heuser *Das Clavierspiel der Bachzeit: Ein aufführungspraktisches Handbuch nach den Quellen* (2004):

“Quantz’s *Pulsschlagtheorie* ‘Pulse beat theory’ is problematic for modern use and only applicable for slow music.”



J. J. Quantz *Versuch...* (1752):

“In my opinion, the best tool for establishing an appropriate tempo (Zeitmaaß) [...] is the pulse on the hand of a healthy person. [...] Five heartbeats here or five heartbeats there – no one will notice the difference.”

J. J. Quantz *Versuch...* (1752):

“What should have been played fast at earlier times, was played as slow as nowadays. [...] The many fast notes in the instrumental pieces of old German masters appeared much more complicated and dangereous as they sounded.”

21st century musicology:

the tempi seen in fig. 2, which were applied to the quarter note of the melody of the sarabande, and the half note of the courante.

16 dancers participated in the experiment. They were asked to perform the choreography of the sarabande and courante on the music presented to them. The dancers performed the choreography twice in each tempo, which was recorded on video. After the two performances, they were asked to evaluate the tempo of the music on the basis of 1) the character or the dance, 2) fluency of their dance movements, 3) how they felt rhythmical cadence, 4) the difficulty to perform the choreography, 5) how comfortable they thought the tempo was on a 7-point Likert scale. Starting with the 'neutral' tempo of 80 BPM, alternately, a faster and a slower tempo were played until the dancers indicated that it was impossible to perform the choreography.

4.2 Analysis

Analysis of music recordings

944 recordings of music by Lully, Louis and François Couperin, Marais, Hotteterre, d'Anglebert, Chambonnières, Rameau and Jacques de la Guerre were used to give a representative view of tempi in historically informed performances of French baroque music. The collection consisted of 507 sarabandes (mostly in 3/4, with some examples in 3/2 or 6/4) and 437 courantes (mostly in 3/2, with some examples in 3/4). Whereas the tempi of the sarabandes were very similar despite the metrical difference, the group of courantes in 3/4 were clearly performed faster. As this meter does not correspond to the meter used in the dance study, 26 courantes were excluded from the analysis.

The distributions of tempi for both dances are very similar, with means of 68.86 and 68.47 bpm for courante and sarabande respectively. The range of tempi is larger for the sarabande, which

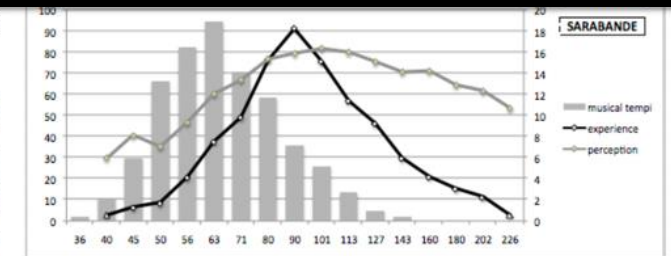


Figure 2: Tempi for the courante and sarabande in music recordings and dance performance

The results of the video analysis show that precision and smoothness score the highest for 80 bpm with the courante (mean=88.9%), and with the sarabande for 113 bpm (mean=80.8%). The peak is much sharper for the courante, the sarabande has high scores for all the tempi between 80 and 127 bpm. The dancers synchronize best at 90 bpm with the courante (mean=88.9%) and at 101 bpm with the sarabande (mean=82.9%). Also, nobody was able to perform the sarabande slower than 40 bpm and the courante faster than 180 bpm. The dancers themselves rated 80 bpm as the optimal tempo for the courante, and 90 bpm as optimal for the sarabande.

The results are summarized in figure 2, where we see the distribution of tempi found in the music recordings (grey bars), the average score of the evaluations by the dancers (experience, black line) and the average score of the smoothness and precision parameters from the video analysis (perception, grey line).

Epilogue: “Do the efforts of musicological research only serve the historical interests, or should they actually be applicable in performance practice? [...] This book is about Tempo. However, in performance practice, one should follow a number of performance-related variables.”



Artistic research:

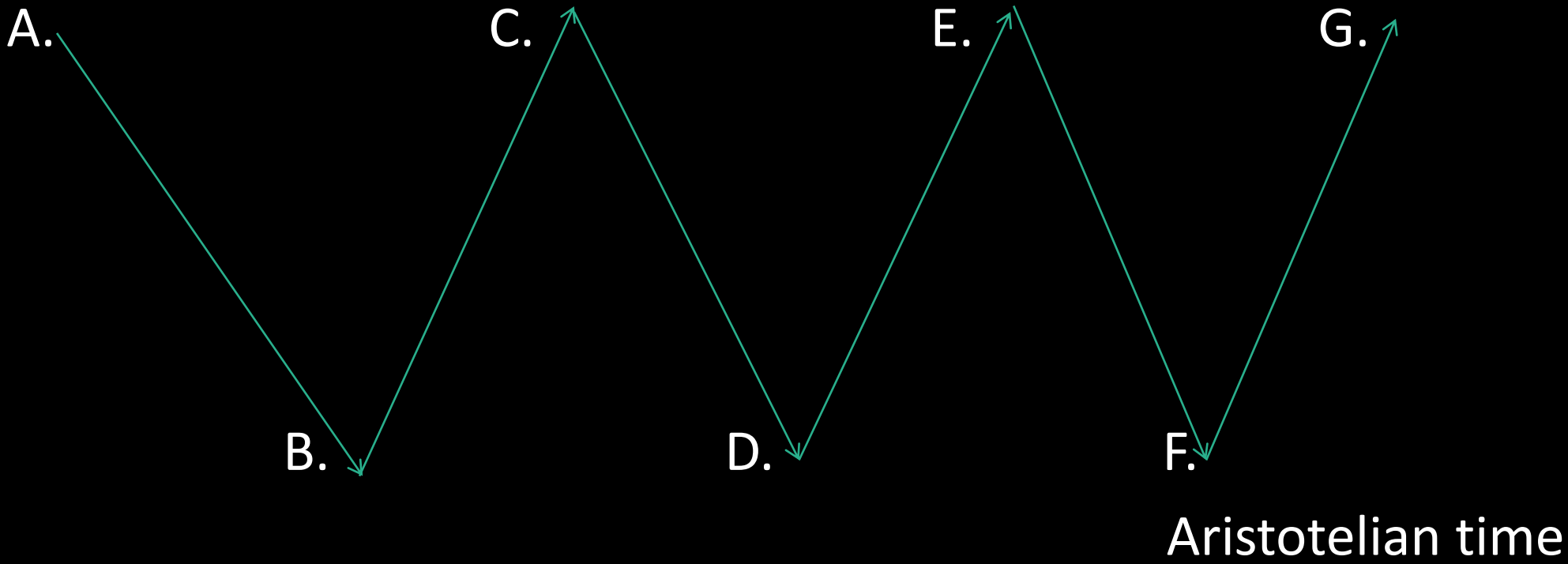
Tempo is a subjective matter in historical performance practice, therefore several tempo options within a certain range can be regarded as correct as long as the piece maintains its characteristic movement, drive and appeal to the players and, foremost, to the listeners.

Johann Philipp Kirnberger (1771):



Newtonian absolute time
Isaac Newton (1642-1726)

Tactus:



18th century compositions:

Continuous /Newtonian flow of music (J. S. Bach, F. Geminiani, A. Corelli...)

16th-17th century compositions:

Aristotelian flow of music (G. Frescobaldi, B. Marini, W. Byrd...)

Fragmentary compositional style

1. G. Frescobaldi – Toccata in d (1615)
2. L. Couperin – Unmeasured prelude in a (ca 1658)
3. J. S. Bach – *1. Fort gai from Suite in a, BWV 818a (ca 1722-1725)*