

## Baroque Dance Tempi

After this meeting with great artistry, we will now move down to technicalities... I will talk about the tempi in different dance types from the baroque and how to interpret the sources that we have. It was my first dance teacher Ann-Marie Ulfvarson who opened my eyes to this subject and my lecture will mainly rely on her research.

When I meet musicians and talk to them about playing dance music and accompanying dance, the most common reaction is that it is very difficult, and I often recognize a fear of destroying everything for the dancer by taking a slightly quicker or a slightly slower tempo. I often feel this fear is a bit exaggerated. Of course there are dances that are very delicate when it comes to the tempo, but I often think it's more important to find the right character of the dance. But still, the tempo is something you always get back to when it comes to the different dance forms of the baroque.

In communicating today we use the metronome, which gives us the beats per minute. It is very simple and exact, and leaves no question to which tempo we mean. But in the time of Lully, they used the pendulum, which they named a chronometer. The idea of the pendulum is that by adjusting the length of the thread, you get the weight to move either slower or faster. According to physical laws (which include the acceleration of earth), it doesn't matter where you drop the weight. [Illustration.]

The chronometer was first described by Marin Mersenne in his *Harmonie Universelle* in 1636, but he never used it. The first one to introduce it in practice was Etienne Loulié in 1696. He tells us that he has used the chronometer to note down the exact tempo of all the works of Jean Baptiste Lully, with help from musicians who played under the direction of Lully himself. Unfortunately the only tempi that remain today are those of the sarabande and the gigue. Five years later the chronometer was also used and described by Joseph Sauveur, who translated the tempi in the measure of "tierce". In 1705 the composer Michel L'Affilard did the same, as well as noted down recommendations of the tempi for different dance forms, using the same system of "tierce" as Saveur did. Later on, in 1732, the count d'Onzembray made an improved and more reliable construction of the chronometer, also giving the tempi of the different dance forms in "tierce" (1/60 second).

So how can something this clear be ambiguous in any way? First of all there is a slight variation of the tempi given in the sources. Secondly we have the lack of one universal system for measuring, like the metrical system of today. At this time in France they used pieds (feet), pouce (thumbs) and lignes (lines). But there were different kinds of feet: pied universel or pied de Bourgogne, which measured 33,12 cm, and pied de roy or pied de Paris, which measured 32,48 cm. But the differences of the feet and the variations of the tempi in the sources only make slight differences to our interpretation of the tempi. The main problem is this: if I drop the weight from here [letting it swing], do I count a full swing or only from one side to the other? If you ask a physicist today the answer is clear. It is a full swing. But in L'Affilard's description it is not that clear when he writes that the swings are "des allées et des venues qu'on appelle vibrations" – the leaving and coming that we call vibrations. The different readings of L'Affilard have also been the reason for the different interpretations of baroque dance tempi today.

I will now give you some examples of what happens when practicing these different interpretations, by improvising to different dance forms:

### **Minuet (70-75 bpm)**

35: Rameau – Zoroastre  
71: Marais – Alcide

### **Gigue (90-112 bpm)**

102: Boismortier – Deuxième serenade ou Simphonie Française  
51: Marais – Pièce de viole

### **Sarabande (60-86 bpm)**

74: Marais – Alcide  
37: Rameau – Daphnis & Aeglé

### **Gavotte (90-120 bpm)**

103: Lully – Armide  
51: Aufschnaiter – Serenad no 6

It is always dangerous to make a conclusion from what “feels” right in your body, since a body is full of habits and each muscle has its own memory of the movements you have been doing all your life. The interpretation of these tempi has often led to discussions and somewhat divided the baroque dance world in two parts – the slower and the quicker.

However, Ann-Marie Ulfvarson did find some very clear evidence in her research. According to both Saveur in 1701, and d’Onzembray in 1732, a simple pendulum for marking the seconds should have the length of 3 foot, 8,5 lines. If we change this into cm by using the length of the pied de roy, which was the most common measure in France at this time, we get 99,4 cm. [Illustration.] Now we can try this... ..and we see that there is one second at each side – the swing they meant was actually half a swing and this leaves us with the quicker tempi. Today we can also use a formula where we use the acceleration of earth in order to calculate the length of the pendulum for each tempo, and for 1 second we get exactly 99,4 cm.

Francine Lancelot, the great French baroque dance pioneer, was one of the first to promote the quicker tempi, but today they are getting more and more accepted. But still, there are a few people who do argue for the slow tempi in saying that the quick ones are just not danceable and simply not enjoyable.

I am not a short person, and when I go to France to take a baroque dance class today, I feel like a giant, and I would certainly not feel smaller if I came to France in the time of Louis XIV. Though I was just saying that we shouldn’t trust the memory we keep in our muscles, we have to face the fact that shorter legs are quicker than taller ones. Unfortunately.