Le Tremblement

The *tremblement* (also called *cadence*) was acknowledged to be the most important, yet the most difficult ornament in 17th-century France. Without *tremblement*, French music would be incomplete. Singers not knowing how to perform *tremblement* would never be able to sing in a pleasant way.

> These ornaments [roulades of the throat, i.e., *tremblement*] are the most difficult of all things to do in singing… But they are, however, as delightful as they are difficult… (Mersenne 1636)[20]
>
> In this sense, I do not speak of *cadences* which are the result of musical composition, but only of the *tremblements* which are done vocally which everyone acknowledges to be one of the vocal art's most important decoration without which it would be entirely incomplete. (Bacilly 1668)[21]
>
> Of all the *agréments* [ornaments] practiced in singing, the *tremblement* – which the Italians call *trillo*, and which the French call by corruption, *cadence*, holds the first rank in that it is the most brilliant and that it is encountered more often than other ornaments. (Montéclair 1736)[22]

Montéclair was not the only one who compared *tremblement* with the Italian *trillo*, Mersenne also knew how the Italian *trillo* sounded like.

Mersenne points out that in his time the Italian *trillo* denotes the repetition of notes. This is an ornament that was used in Mersenne's days disappeared later. The *trillo* that Montéclair described was the same as the French *tremblement*, but not the same *trillo* described by Mersenne.

> One should also remark that the aforesaid shakes are not on a single note or string like those sounds produced by strings, for they would be faulty, unless one wished to imitate the *Trillo* of the Italians… (Mersenne 1636)[23]

So, how to execute the French *tremblement* in the views of Mersenne, Bacilly and Montéclair?

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[20] Mersenne 1636, p. 171.

[21] Bacilly 1668, p. 83.

[22] Montéclair 1736, p. 80.

[23] Mersenne 1636, p. 171.

The first thing to note about the implementation of *tremblement* is the physical place of execution – the throat. All three authors, Mersenne, Bacilly and Montéclair, unanimously mentioned the position of execution of the ornament:

> […] because it is necessary only to beat the air of the throat without the aid of the tongue to make a number of shakes. (Mersenne 1636)[24]

> It must also be mentioned here that there is a certain kind of *tremblement* which is done at the base of the throat and which is usually quite tight and short. (Bacilly 1668)[25]

> The perfect *tremblement* is formed at the bottom of the throat, without the chest making any effort, and without the *coulé* or *battements* [flapping] being shaken by the inhalation or the quivering. (Montéclair 1736)[26]

Mersenne continued to explain that articulating the *tremblement* in the throat is the ideal way, while it is not so pleasant or attractive to use the movement of the tongue or the lips.

> Those do not have a throat disposed to the aforesaid *cadences* and passages use movements of the tongue, which are not so pleasant, particularly when they are made with the tip… As for shakes [*tremblement*] made by the lips, they are not attractive, nor permitted, any more than those that seem to be drawn from the stomach. (Mersenne 1636)[27]

To possess a throat well-disposed to the *tremblement* was, in fact, believed to be a gift of nature by many in the 17th century, and for those who do not have it, Bacilly stated, that it could be acquired through good training and exercise. Bacilly pointed out three types of people who cannot perform a *tremblement* well:

1. Singers who have a voice but without a *cadence* at all,
2. Singers who have it but are too slow,
3. Singers who have it but are too fast and coarse.

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[24] Mersenne 1636, p. 171.

[25] Bacilly 1668, p. 93.

[26] Montéclair 1736, pp. 80-81.

[27] Mersenne 1636, p. 171.

To these conditions, Bacilly suggested solutions for them respectively:

1. By practicing alternation between two notes rapidly and equally like how a harpsichordist would practice on the keyboard.

2. By practicing a *tremblement* that is slow in the beginning but fast at the end, and should learn how to do *flexions de voix*, which adds brilliance and expression to the singing.

3. By doing long and continual exercise in slow alternation between two notes to slow down the voice.[28]

How to execute a tremblement?

Mersenne, Bacilly and Montéclair all described in their treatises their way of executing a *tremblement*. Interestingly, the three of them focused on quite different aspects, so that when we look into all their writings, we can understand comprehensively how it was supposed to be done:

> For example, if the cadence is composed of the three notes, *la*, *sol*, *fa*, one should place the shake on the *sol*, making 4, 8, 16, or as many repercussions as one can or wishes on *la sol*, *la sol*, *la sol*, etc., as one sees in the following example [Ex.1], which has eight 32nds that should be made in the time equal to the half measure *sol*. (Mersenne 1636)[29]
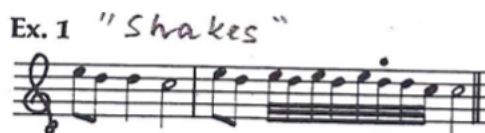

Figure 5: Mersenne 1636, p. 172.

Mersenne explained three things: the shake of the notes, which notes to be repeated, and how many repetitions should be made. Mersenne's *tremblement* consists of eight 32nd notes, of which the last two notes are *sol* (the ornamented note) and *fa* (the final note)[30]. He is the only author who pointed out the lengthening of the note marked with a black dot. He believed that increasing the number of beats of that third-last note in the *tremblement* will achieve "an extraordinary sweetness, which may contain the greatest charms of the song."

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[28] Bacilly 1668, p. 83.

[29] Mersenne 1636, p. 172.

[30] I am using the French solemnisation here as French authors would have done then.

Bacilly's *tremblement* is slightly different from Mersenne's *tremblement* in that he listed three things to observe in an ordinary *tremblement*:

1. The note which precedes it,
2. The alternation of the throat, and
3. The ending, that is, the *liaison* from tremblement to the ending note.

Figure 6: Example of *tremblement* (Bacilly 1668, p. 84)

Compared to Mersenne's *tremblement*, which has only a description of the second rule from the aforementioned list, Bacilly also included two more rules for the preceding note and the ending note. Bacilly's example of the *tremblement* is also different from Mersenne's in that Bacilly's contains only six 32nd notes (instead of eight) and no repetition of the second last ornamented note.

It is emphasized by Bacilly that the ending of the *tremblement*, which is the *liaison*, had to be treated very delicately and lightly, and therefore, was not usually written in scores. Otherwise, it is very possible that inexperienced singers would give the same stress to the *liaison* as other notes, which was regarded as rude and disagreeable. Bacilly gave another written example of *tremblement* showing how to perform it:

Figure 7: Example of *tremblement* on the word 'pourveüe' (Bacilly 1668, p. 84)

We should note from the above example (Figure 7) that the performed *tremblement* is different from the first example Bacilly gave in Figure 6. The length of the second last note *la* in the ornament is doubled to an 8th note and the last note *sol* is shortened to a 16th. Moreover, the first note of the *tremblement* is marked with a slur from the previous note. This realisation of the ornament is more similar to Mersenne's.

The first rule specified by Bacilly, which was not mentioned by Mersenne, was about the note before the *tremblement*. There are different names used by Bacilly for the note: *appuy* (appoggiatura), *anticipation*, *soûtien de voix* (support of the voice) and *preparation*. This note is often confused with the *port de voix*.

One common mistake that Bacilly pointed out is that singers would repeat the *appuy* after sustaining it before going into the *tremblement*, which is unnecessary. As we have seen from the above example (Figure 7), a slur was written for the *appuy*. Bacilly thought that the *appuy* had to always be performed with the *tremblement*, though there are exceptions, for instance, it could sound bad in some final cadential points. Nevertheless, Bacilly refused to further establish more rules regarding the use of the *appuy* because he believed that good taste alone can be the judge.

I have discovered that, although Bacilly was trying his best to give systematic instructions in his treatise by stating rules for ornaments, he could not help but listing a lot of exceptions for these rules. He himself also believed that those rules are to be broken, and good taste has to come before any rules.

> By this practice, they [those who conceive of themselves as being the greatest mentors] render the song insipid without any variety, without considering that there are often exceptions to the general rule which are much more pleasant in their effect than the proper observance of the rule would be. (Bacilly 1668)[31]

Bacilly's lengthy article for the *tremblement* is mainly about the third rule: when to apply the *liaison*, and when to omit it. Since the *liaison* has a sweet effect and an unenergetic quality, it is not always appropriate to use it in all *tremblements*. Below I summarized in points the exceptions indicated by Bacilly:

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[31] Bacilly 1668, p. 91.

Table 2: Bacilly's instructions on where to practice the *liaison* in *tremblement* (Bacilly 1668, pp. 82-94)

Practice the *liaison*	**Omit the *liaison***
1. On a penultimate syllable of a feminine word.	1. On an antepenultimate syllable of a masculine word.
2. When the *tremblement* is followed by two descending notes.	2. When there is no room to insert one.
3. When the composer has definitely marked the *liaison* on the music.	3. When the composer has expressively written out his intention.
4. In non-cadential points or unimportant cadential points.	4. In principle cadential point where the music demands some solidity.
5. After *cadences* in the middle or at the end of an air.	5. At places which require a very fast tempo.
6. After *cadences* which descend to a final note a second away, or at the same pitch.	6. After *cadences* which descend to the final note by a third.

Bacilly also detailed some general rules about the use of the *tremblement*. Below I summarized the conditions:

Table 3: Bacilly's instructions on the *tremblement* (Bacilly 1668, pp. 82-94)

Practice the *tremblement*	**Omit the *tremblement***
1. On long syllables.	1. On short syllables.
2. In descending passage as long as the syllable is long.	2. On sharps (#), especially in ascending passage.

The omission of the *tremblement* on sharps (#) may seem surprising, because it was often practiced in 18th-century French vocal music, but it is in fact based on the following fragment:

> [...] singers who use a *tremblement* on sharps, as I have mentioned, will not
> be singing according to the intensions of the composer since there are often
> sharps occurring on short syllables; and it would be foolish to sing these in a

lengthy manner which is the inevitable result of the use of a tremblement. (Bacilly 1668)[32]

It is important to note that it was undesirable to practice the *tremblement* in all possible circumstances regardless of the appropriateness because then the singer would go from the exceptional and the delicate to the common and the unpolished.

Montéclair had a clear definition for the execution of the *tremblement*, and he also included a musical example of the ornament. In his example, nothing is mentioned about the *preparation* note as stated in Bacilly's first rule, but he has included a description of producing the alternation of the two notes in the *tremblement* like a birdsong:

> The *tremblement* is formed by the combination of the two pitches or conjunct degree which the throat makes heard successively like a kind of *ramage* [birdsong], by flexible, light, distinguished and linked flapping to each other. In this way, several continuous *coulés* form the *tremblement*. (Montéclair 1736)[33]

Figure 8: Montéclair 1736, p. 81.

As we can see from the above musical example, the alternation between the two notes can vary from two to six, or maybe more. He illustrated that the number and speed of the *tremblement* is dependent on the length of the note and, especially, the meaning of the word. It was not mentioned by the other two authors that the meaning of the word can affect the number and speed of the ornament. Montéclair gave two examples as well of performing the *tremblement* in different expressions:

> The *tremblement* softy or slowly beaten is suitable for languishing and plaintive songs. The *tremblement* lively or lightly beaten is suitable for serious, light and happy songs. (Montéclair 1736)[34]

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[32] Bacilly 1668, p. 88.

[33] Montéclair 1736, p. 80.

[34] Montéclair 1736, p. 81.

Montéclair also gave an instruction on the ending of the *tremblement*, that they usually end it with a *chûte* (the falling note) or with a *tour de gosier* (the turn of the throat). The *chûte* is similar to the ending of Mersenne's and Bacilly's, but the *tour de gosier* is quite different from the others.

> We sometimes end the *tremblement* with a *chûte*, Q, and sometimes with a *tour de gosier*, R. This is what we call 'closing the tremblement'. (Montéclair 1736)[35]

Figure 9: Montéclair 1736, p. 81.

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[35] Montéclair 1736, p. 81.

Apart from the basic *tremblement*, there are other variations of the ornament suggested by Bacilly and Montéclair, of which Bacilly had three types and Montéclair had four types of *tremblements* that they believed singers should learn.

Bacilly proposed three types of *tremblements* in the end of his article about *cadences* and *tremblements*, but there is mainly text without much musical examples showing how to perform them exactly, therefore, it was not very clear to me how some of them should sound like. Below is a summary of the types of *tremblement* suggested by Bacilly.

1. **The throat *tremblement***
   a. Done at the base of the throat.
   b. Tight, short and intense.
   c. Good for passionate expression.
   d. Cannot be explained but only felt, can only be learnt through practical experience
   e. In some cases where there is a demand from the meaning of the word, it should not be performed with an *appuy*, otherwise it becomes an ordinary *tremblement*.
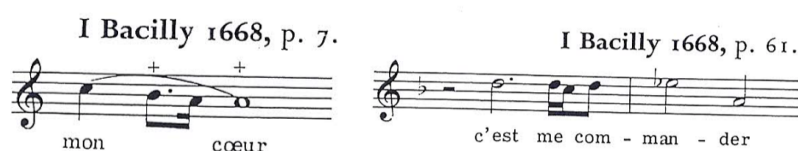

Figure 10: Examples of application of the throat *tremblement* (Bacilly 1668, p. 94)

2. **The *double cadence***
   a. Formed by a certain *tour de gosier*.
   b. It has within itself a kind of *tremblement étouffé* (see point 3).
   c. The voice hardly comes forth but immediately cuts itself off a-borning.
   d. It can be performed in two ways:
      i. By ascending to a note from underneath
      ii. By using the *tremblement* on the note itself (the more mastered way)

3. **The *tremblement étouffé***
    a. After singing the *appuy*, the voice starts to shake but actually only seems to as if only wanting to repeat the note on which it would ordinarily make a complete *cadence*.
    b. Common and important in vocal music.
    c. Those who know it will have an advantage.

The four types of *tremblement* mentioned by Montéclair are the *tremblement appuyé*, the *tremblement subit,* the *tremblement feint*, the *tremblement double*. Below is a summary of the 4 types of *tremblement* suggested by Montéclair. (For more details, please see Table 2.)

1. **The *tremblement appuyé* (to lean on/ to stress/ to start)**
    a. Prepared by starting the voice a tone immediately above the note that is to be trilled.
    b. The *appuy* has a certain duration, and its length depends on the value of the note to be trilled.
    c. To perform it well:
        i.   Stress it well.
        ii. Beat (flap) it well.
        iii. End it well.

Figure 11: *Tremblement appuyé* (Montéclair 1736, p. 82)

2. **The *tremblement subit* (sudden)**
    a. It is beaten without supporting/stressing it.
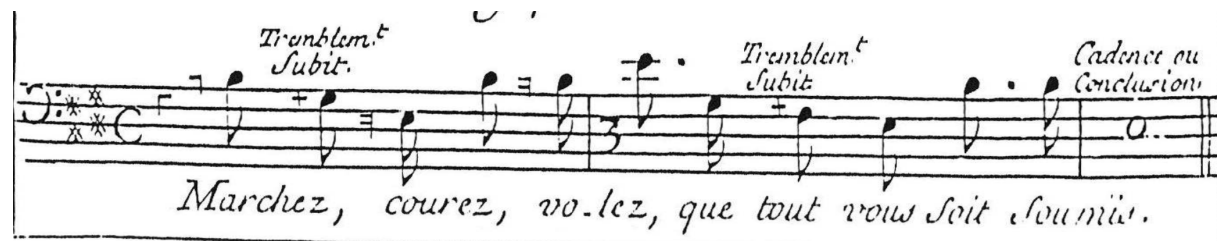   b. Used more in recitatives than in air.

Figure 12: *Tremblement subit* (Montéclair 1736, p. 82)

3. **The *tremblement feint* (weak)**
    a. Perform an *appuy* as if it was a perfect *tremblement*, but after stressing the *appuy* for a long time, at the end of the note, only give a small flap of the throat that is almost imperceptible
    b. It is practiced when
        i. the meaning of the word is not finished
        ii. The song has not yet reached its conclusion

Figure 13: *Tremblement feint* (Montéclair 1736, p. 83)

4. **The *tremblement doublé* (doubled)**
    a. It is formed by three conjunct notes and ends with a *tour de gosier*.

Figure 14: *Tremblement doublé* (Montéclair 1736, p. 84)

Comparing the types of *tremblement* of Bacilly and Montéclair, I have discovered three things. First, the first short *tremblement* suggested by Bacilly might be the same type as Montéclair's *tremblement subit,* since they are both short and sudden, and not performed with an *appuy*. Though, there was not much description by Montéclair for this variation. Second, it seems that the *double cadence* (Bacilly) and the *tremblement doublé* (Montéclair) are the same or similar type of *tremblement*, because they both mention the necessity of the *tour de gosier*, but other than that, it was not clear how Bacilly's *double cadence* was supposed to be performed. Third, it also seems to me that the *tremblement appuyé* is the basic form of Bacilly's *tremblement*, which also consists of an *appuy* before the trill. However, it was not clear to me how Bacilly's *tremblement étouffé* should be performed, as he assumed that those who know how to perform it would know it. Neumann believes that the *tremblement étouffé* is the *tremblement feint*.

> Besides this basic form of the trill, Bacilly speaks of a *tremblement étouffé* or *demi tremblement* which, if I interpret the description correctly, is the prototype of what later writers called the *tremblement feint*: a trace of a trill appended at the extreme end of a long appoggiatura, forming approximately the following design:
> As can be seen, it is related to the *port de voix feint*. [36]

In my opinion, it is possible that the *treblement étouffé* is performed the way Neumann suggested, but Bacilly's description is too obscure for me to make a judgement like this.

Conclusion

As a reader, I think Montéclair's explanation, although written with the least words, has the clearest instruction as compared to Mersenne's and Bacilly's treatises. It is unfortunate that Bacilly did not include a lot of musical examples of the execution of certain types of *tremblement*. Nevertheless, having read all three of the treatises gives us a more comprehensive picture of the 17th- and early 18th-century *tremblement*.

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[36] Neumann 1983, p. 249.