CÉSAR FRANCK’S METRONOME MARKINGS RECONSIDERED

Ton van Eck

Introduction

The publication by Joël-Marie Fauquet, in his excellent and well-documented biography of César Franck, of the metronome markings written down by Franck in a copy of the Six Pièces pour grand orgue formed the basis of Marie-Louise Langlais’s comparison of these markings with the recognized Franck “traditions” in France (see bibliography). She discusses three traditions, but, in the opinion of this author, the recordings by André Marchal should be considered a fourth.

Langlais concludes that “In experimenting with the tempos indicated by Franck, today’s organists will experience new sensations, substituting a virtuoso technique, lively and with full contrasts, for a sort of pathos associated with the composer.”

During a masterclass with Olivier Latry (titular organist of Notre-Dame Cathedral in Paris) at St. Bavo Cathedral and Basilica in Haarlem from October 25 to 27, 2000, dealing with the organ works of César Franck, this subject was discussed, and the fact that M. Latry has not signed this article as co-author is due only to his modesty. I wish to thank him for an inspiring discussion and for his valuable suggestions.

It is remarkable that the metronome markings written down by Franck are generally about 20% faster than those of the above-mentioned three “traditions.” Of the three organists that Marie-Louise Langlais has cited—Dupré, Langlais, and Tournemire—only the last had known Franck personally and, without any doubt, had heard him play the organ. Thus he must have known Franck’s style of playing, at least when improvising but possibly also when interpreting his own compositions.

In the table constructed by Marie-Louise Langlais, we can observe that none of the representatives of the three traditions consistently uses faster or slower tempos than the other two. If in one piece one of the organists uses a faster tempo than his colleagues, another piece is played faster by one of the others, although Tournemire and Jean Langlais frequently agree on approximately the same tempo. It is at least questionable that for the Six Pièces all of them use significantly slower tempos than those written down by Franck.

Without any doubt, the metronome markings in the edition of the Six Pièces cited by Fauquet are in the composer’s hand, probably written down for, or at the request of, a student. It is known that Franck distributed printed copies of his compositions, usually inscribing them with an autograph dedication. Also, Louis Ganne (1862–1923), later known as a composer of ballets for the Folies Bergères and of musical comedies for the Casino de Paris, received a signed copy from his teacher, alas without any supplementary indications.

Other compositions of Franck bearing metronome markings have been listed by Wilhelm Mohr (see bibliography). As compared to the Six Pièces, one can discover a parallel between the entrance of the choir in the Chœur général de l’oratorio La Rédemption (see Ex. 1, p. 53) and the Final for organ. The same is true for the accompanying motifs in the Air de l’Archange, also from Rédemption, and the Prélude of the Prélude, Fugue et Variation (see Ex. 2, p. 53).

The choice of these two oratorio pieces is not haphazard. The unity of beat and the character of the two works agree strongly with the two organ pieces mentioned.

The metronome markings of the pieces from Rédemption, however, differ considerably from both organ works: for the quarter note, 158 against 200 (Final) and 48 against 72 (Prélude), respectively.

The fact that Franck himself wrote down the metronome markings does not imply that he also observed and scored them at the metronome. This could explain the almost consistent positive deviation from the values we know given by the three organists cited by Marie-Louise Langlais.

We can imagine that Franck wrote down the markings quickly for a student at the latter’s request, he playing...
while the student watched the metronome.

We know from Fauchet’s biography that Franck always seemed to be pressed for time. The student, subsequently, observed the wrong values at the right period of the pendulum and Franck wrote these wrong values down in the score.

In order to explain how this could happen, we first have to consider the principle of the original metronome as constructed in 1816 by Johann Nepomuk Maelzel (1772–1838) following a design by the mechanical engineer Dietrich Nikolaus Winkel (1790–1826).

**Material and Method**

As shown on page 52, Maelzel’s metronome (Figure 1) takes a central role in the treatment of the question.

The wooden case has a steep pyramidal shape. Behind a lid at the upper part of the front there is a slightly backward inclined strip that serves as a pendulum. We can consider this pendulum as a lever of the second class with a short arm below the axis and a long one above. At the lower extremity there is a circular ballast and at the upper arm a small trapezoid-shaped weight of brass attached to it by a blade spring that slides up and down the strip and stops at horizontal notches. Behind the pendulum there is a scale division for the tempo, printed on a paper strip. Such a standardized device is a product that is typical of 19th-century industrial construction.

The trapezoid weight has to be moved up and down the strip with its base (the largest side) at the top (see Figure 2).

One can imagine, however, that somebody less experienced in using a metronome could make a mistake, putting the trapezoid weight with its base at the bottom after it had accidentally come off the strip. This could easily happen since the weight can be removed at the top of the strip.

The latter situation even seems plausible, because, in that case, the vertical sides of the weight are almost parallel to the vertical walls of the case of the metronome (see Figure 3). A less-experienced musician or musical amateur could think that this is the normal position without being aware that the tempo observed being are about 20% faster than the real beat of the pendulum.

Starting from the hypothesis that the values recorded at the metronome are too fast, there might be two possible explanations for the situation of the trapezoid weight at the observation of the values of the metronome:

1. The trapezoid weight was in the right position (with the base at the top), but the person who operated the metronome observed the values at the bottom.

2. The trapezoid weight was in the wrong position (with the base at the bottom), and the person who operated the metronome again scored the values at the bottom, which in this case is more obvious.

The values obtained in both cases are not totally identical, because in the first case the weight’s center of gravity is at a slightly higher point on the strip than in the second case, with the result that the metronome beats at a slightly slower tempo.

The hypothesis that the person who scored the markings made a mistake by observing the metronome values at the wrong place is less improbable than it seems at first glance.

During the masterclass mentioned above, Olivier Letry stated that in his opinion Vierne probably made the same mistake when indicating metronome values for his Third Organ Symphony. Vierne was not totally blind and could distinguish a number of objects, although indistinctly. It cannot be ruled out that Vierne, regardless of whether he had put the trapezoid weight upside down on the strip or not, also observed the tempo markings at the bottom of the trapezoid weight. The values for all movements of this symphony (as indicated by Vierne) and the converted values have been printed in Table 1.

The organist who maintains the tempo in the right column achieves a more balanced interpretation that will be advantageous to the clarity of sound for the audience, especially at Notre-Dame Cathedral in Paris with its great reverberation.

**Results**

The results of this investigation are presented in Table 2. From left to right, the reader will observe in the first column the tempo markings as formulated by César Franck, in the second column the reference values (quarter, half, etc.), and in the third column the values as written down by Franck.

The fourth column contains the corresponding values at the upper side of the trapezoid weight, taking as a point of departure that the values written down by Franck were observed at the bottom side of the trapezoid weight. This is also the case in column five, but with the trapezoid weight upside down on the strip at the same level as in column four (values observed again at the bottom of the weight). The data in the sixth column are the mean of the values of the three traditions rounded to whole numbers. Data in the last column that result from quite diverging values are printed in italics, and data resulting from at least two (almost) identical values are printed in boldface.

In the table it can be observed that the difference between the values in column three and four decrease as the tempo increases. This is not surprising since the axis of the trapezoid weight is being moved toward the axis of the pendulum and hence the influence on the pendulum is becoming less. Although the values in column five are all slightly higher than those in column four, the
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difference (decreasing as the speed increases) is less important.

It is interesting to compare the values in columns four and five with the mean tempo of the three "traditional" columns. In most cases, there is hardly any relevant difference. In some cases, the tempos in column four and five are higher; in other cases, those in column six are higher.

Discussion

In many of his compositions for organ, César Franck qualifies his tempo markings with a preceding adjective, such as poco, quasi, and molto, or one that follows, such as con moto, ma non troppo, and quasi.

It seems that by these additions Franck is trying to ward off extreme tempos, fast as well as slow. If the metronome markings published by Pauquet are strictly observed, the sometimes extremely rapid markings for some of the Six Pièces do not belong to the world of these subtle adjectives.

As pointed out, it seems improbable from a musical point of view that all organists from the school of Franck or his contemporaries should have played the Six Pièces in a significantly slower tempo than the composer himself did, which would be true if the tempos written down by Franck are really those he asked for.

It is also improbable that the tempos were observed at the bottom of the treble staff. In its correct position, because in the Lento movement of the Prélude, Fugue et Variation, the dotted quarter note has a value of 60. If this value had been observed at the bottom of the weight in its correct position, the weight almost comes off the strip because the attachment clip is situated above the strip. This is an argument against this possibility. However, with the weight upside down, it is still attached securely by the clip to the strip, and this is very likely the situation of the metronome when the values were established. It also explains why, playing at the correct tempo, the wrong values have been observed.

The matching pyramidal design of the vertical walls of the weight and the walls of the metronome case contribute to the likelihood of such a situation.

In this case, the tempo markings in general correspond with the different traditions. In some pieces, like the Prière and the Finale, they are somewhat faster; in another, like the Prélude and the Variation from Prélude, Fugue et Variation, somewhat slower; in some other pieces they are very close to the mean tempo of the three "traditions," as in the Pastourelle.

If the values, corrected in this way, of the Prélude and the Finale are compared with the markings for the Air de l’Arc et a l’Echo and the Chœur général from
Rédemption, respectively, it can be observed that these are almost identical. This makes the relatively slow tempo, even as compared to that of the three “traditions,” acceptable.

Conclusion
The metronome markings for César Franck’s *Six Pièces* as published by Joël-Marie Faquet are in the handwriting of the composer. Faquet certainly knew that this was a remarkable discovery, but he has, quite rightly, published the data without any commentary because he was aware that the much faster tempos than those normally applied required further investigation. As a good researcher, Faquet realized that although the same data and phenomena are observed, the interpretation might be very complicated with diverging explanations. We all read the same score but interpret it in a personal way.

In the opinion of this author, although the period of the metronome used for the determination of the tempo markings was the right one, it is doubtful that the values written down by Franck have been observed correctly. Also the trapezoid weight on the metronome might have been placed upside down.

After correcting the data in the situation supposed by the author, Franck’s values appear to fit exactly into the existing “traditions.” These traditions established by great interpreters and based on musical principles were not extremely divergent in tempo, even if they could differ in other aspects. Could all of them deviate so far in one direction from the tempo intended by the composer?

Maybe Tournemire’s rejection of the metronome-like movement in the last part of the *Fantaisie in C* also has more implication on Franck’s other compositions than we can imagine.

The author wishes to express his gratitude to Anthony Bagliav for his help with the translation of this paper.

**BIBLIOGRAPHY**

**Ton van Eck** (b. 1948) is titular organist of St. Bavo Basilica and Roman Catholic Cathedral and Basilica in Haarlem, as well as a recitalist and organ consultant. He was a finalist in several international competitions (Chartres, Rennes, Beauvais, Haarlem) and on three occasions prize-winner of the International César Franck competition in Haarlem. This article first appeared in the Dutch Journal, *De Orgelvriend.*

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**Table 1. Tempo Indications in Louis Vierne’s Third Organ Symphony, Op. 28 (1911)**

<table>
<thead>
<tr>
<th>Indication</th>
<th>Metronome Marking by Louis Vierne</th>
<th>Converted Metronome Marking</th>
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</thead>
<tbody>
<tr>
<td>Allegro maestoso</td>
<td>( \frac{1}{4} = 120 )</td>
<td>( \frac{1}{4} = 98 )</td>
</tr>
<tr>
<td>Poco piu vivo</td>
<td>( \frac{1}{4} = 126 )</td>
<td>( \frac{1}{4} = 104 )</td>
</tr>
<tr>
<td>Cantilène</td>
<td>( \frac{1}{4} = 88 )</td>
<td>( \frac{1}{4} = 66 )</td>
</tr>
<tr>
<td>Andantino moderato</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermezzo</td>
<td>( \frac{1}{4} = 144 )</td>
<td>( \frac{1}{4} = 120 )</td>
</tr>
<tr>
<td>Allegretto non vivo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adagio</td>
<td>( \frac{1}{4} = 84 )</td>
<td>( \frac{1}{4} = 63 )</td>
</tr>
<tr>
<td>Quasi Largo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>( \frac{1}{4} = 120 )</td>
<td>( \frac{1}{4} = 98 )</td>
</tr>
</tbody>
</table>

**Table 2. Comparison of the Recorded Data with the Other Metronome Values**

<table>
<thead>
<tr>
<th>Title of the Composition and Indication of the Tempo</th>
<th>Value of Reference</th>
<th>Franck’s Marking</th>
<th>Scored at the Bottom</th>
<th>Weight Inverted</th>
<th>Mean of the “Traditions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fantaisie, Op. 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poco lento</td>
<td>80</td>
<td>58</td>
<td>60</td>
<td>73</td>
<td></td>
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<tr>
<td>Allegro cantando</td>
<td>104</td>
<td>80</td>
<td>82</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Allegro</td>
<td>80</td>
<td>58</td>
<td>60</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Adagio</td>
<td>69</td>
<td>46</td>
<td>48</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Grande Pièce symphonique, Op. 17</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andantino serioso</td>
<td>112</td>
<td>90</td>
<td>92</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Allegro non troppo e maestoso</td>
<td>104</td>
<td>80</td>
<td>82</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Andante</td>
<td>125</td>
<td>104</td>
<td>104</td>
<td>103</td>
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<td>Allegro</td>
<td>72</td>
<td>48</td>
<td>51</td>
<td>60</td>
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<tr>
<td>Allegro non troppo e maestoso</td>
<td>104</td>
<td>80</td>
<td>82</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Andante</td>
<td>72</td>
<td>48</td>
<td>51</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Beaucoup plus largement que précédemment</td>
<td>(144)</td>
<td>96</td>
<td>(102)</td>
<td>104</td>
<td></td>
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<tr>
<td>Prélude, Fugue et Variation, Op. 18</td>
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<tr>
<td>Cantabile</td>
<td>72</td>
<td>48</td>
<td>51</td>
<td>60</td>
<td></td>
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<tr>
<td>Lento</td>
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<td>40</td>
<td>42</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Allegretto ma non troppo</td>
<td>112</td>
<td>90</td>
<td>92</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Andantino</td>
<td>72</td>
<td>48</td>
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<td>60</td>
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<td>Pastorale, Op. 10</td>
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<td>Andantino</td>
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<td>54</td>
<td>56</td>
<td>62</td>
<td></td>
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<tr>
<td>Quasi Allegretto</td>
<td>128</td>
<td>104</td>
<td>104</td>
<td>62</td>
<td></td>
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<tr>
<td>Andantino</td>
<td>78</td>
<td>54</td>
<td>56</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Prière, Op. 20</td>
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<td></td>
<td></td>
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<td>Andantino sostenuto</td>
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<td>72</td>
<td>73</td>
<td>63</td>
<td></td>
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<tr>
<td>Final, Op. 21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allegro maestoso</td>
<td>(200)</td>
<td>(152)</td>
<td>(156)</td>
<td>121</td>
<td></td>
</tr>
</tbody>
</table>

1Dupré and Langlais only. Tournemire: “on insistant sur les grands accords.”
2Dupré and Langlais only. Tournemire: “d’un calme infini, rejette le mouvement métronomique, grâce à Dieu!”
3Langlais, 92; Tournemire, 96; Dupré, 120.
4Tournemire, 60; Langlais, 112; Dupré 120.