

The Notation of Meter and Tempo ca. 1620–1670: Theory and Practice

*Alexander Silbiger*¹

Many musical scores from the later seventeenth century give the impression that the notation of meter and rhythm had nearly evolved to present-day forms. Their deceptively modern appearance disguises, however, the continued operation of elements of the old mensural system, adapted, not always successfully and certainly without consistency, to the newer musical styles. As with the modal system, it took more than a few decades to eradicate all traces of this ancient heritage from musical theory and practice.

One question that interests us especially here is the extent to which composers still drew upon mensural conventions to communicate tempo relationships. The first obstacle to an easy answer is that by the early seventeenth century there was no longer a uniform practice for the notation of meter and tempo; the adaptation of the old mensural system to new musical demands seems often to have been done on an experimental, ad hoc basis. Some composers decided on their own rules, which may have been understood by those in their immediate circles, although not necessarily by the world at large. Writers of pedagogical tracts responded to the resulting chaos either by describing—as well as they could—the wide range of notational options and their possible interpretations, or by coming up with some logical and consistent system in the vain hope that it would meet all needs and enjoy universal adoption. An example of the former is found in a copy by Jan Adam Reincken of Sweelinck's rules of composi-

1 This article is a revised version of a paper "Metrical Notation in Germany c. 1660: A Case Study," presented to the Roundtable on Metrical Notation and Its Meanings at the Sixth Biennial Conference on Baroque Music, Edinburgh, July 1994. The current version is dedicated with fondness and gratitude to my esteemed colleague Kerry Snyder on the occasion of her eightieth birthday.

tion,² an example of the latter in the *Zangh-Bloemzel*, by Joan Albert Ban.³ Before turning to the actual practice of a specific composer, I shall briefly summarize the treatments of the subject by these two authors.

Reincken's Rules

Reincken's copy of Sweelinck's rules is dated 1670, and as the notes on meter and proportions do not appear in earlier copies of the rules, it is thought that they were added by him. Reincken is chiefly concerned with the triple proportions; see figure 1. He begins with the *tripla major*, with three semi-breves to the beat and signature $\frac{3}{4}$, and the *tripla minor* or *sesquialtera* with three minims to the beat and signature $\frac{3}{8}$.⁴ (The mensural signs and note values in the central columns of figures 1 and 2 are my interpretations of their verbal descriptions in the sources.) The *tripla major* by its nature requires a slow, weighty beat, while *sesquialtera* is a bit livelier, but not too fast. Both can be written entirely in black notation, in which case they are called *hemiola major* and *minor*, and the numerical signatures are omitted. Next Reincken mentions the "kleine Tripel," with three crotchets to the beat and signature $\frac{3}{4}$, which has a rather fast and joyful beat, and was popular with Italian singers; and the *sexdupla* with six crotchets and signature $\frac{6}{4}$, which was beaten like a duple meter, with alternating up and down strokes for each group of three crotchets.

The foregoing, he writes, are the traditional and common proportions, already used by the ancients. In fact, Reincken's four levels and their tempo relationships correspond roughly to those prescribed by Frescobaldi in the preface to his *Capricci* of 1624, except that Frescobaldi does not use the $\frac{3}{4}$ signature; see figure 2.⁵ Both musicians associate shorter note values

2 Jan Adam Reincken, "Ein tractaet worin Vierley ahrten siendt zu finden so zur Composition seer Nützlich und Nöthich," in *Werken van Jan Pieterszoon Sweelinck*, ed. Herman Gehrmann, vol. 10 (Leipzig: Breitkopf & Härtel, 1901), 56–57.

3 Joan Albert Ban, *Zangh-Bloemzel (Theoretical Part) & Kort Sang-Bericht*, Early Music Theory in the Low Countries, ed. Frits Noske, vol. 1 (Amsterdam: Frits Knuf, 1969).

4 In this article note values will be specified according to British practice (semibreves, minims, crotchets, etc.) rather than American practice (whole notes, half notes, quarter notes, etc.).

5 Girolamo Frescobaldi, *Orgel- und Clavierwerke: Il primo libro di capricci, fatto sopra diversi soggetti, et arie (Rom, Soldi, 1624)*, Organ and Keyboard Works, ed. Christopher Stembridge, vol. 2 (Kassel: Bärenreiter, 2015), 3.

Used already by the ancients:

<i>tripla major</i> or <i>hemiola major</i>	$\frac{3}{4}$ ○ ○ ○ ● ● ●	<i>längsamen, gravitetischen Tact</i> (but modified by <i>adagio</i> , <i>allegro</i> , etc.)
<i>tripla minor/sesquialtera</i> or <i>hemiola minor</i>	$\frac{3}{2}$ ♩ ♩ ♩ ♩ ♩ ♩	<i>etwas lustiger; nicht zu geschwinde</i> <i>battuta</i>
<i>kleine tripel</i>	$\frac{3}{4}$ ♩ ♩ ♩	<i>ziemlichen geschwinden und</i> <i>fröhlichen Tact</i>
<i>sexdupla</i>	$\frac{6}{4}$ ♩ ♩ ♩ ♩ ♩ ♩	alternating up and down strokes every three semiminims

Forms used by the new composers include (among others):

$\frac{12}{8}$ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩	other form of <i>sexdupla</i> ; also with $\frac{6}{4}$
$\frac{3}{4}$ ♩ ♩ ♩	<i>gar geschwinden Tact</i> used by Italian singers

Figure 1. Reincken, *Von den Trippelen* (1670).

with faster tempos, but neither refers to any quantitative proportional relationships, either among these levels, or between any of them and the note values in duple meter. Reincken notes, in fact, that *tripla major* sometimes is performed fast, or even back and forth between slow and fast, although knowledgeable musicians will indicate such deviations with Italian tempo markings like *adagio*, *allegro*, and so forth.

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Reincken goes on to describe meters introduced by the newer composers, with groupings of 3, 6, 12, or even 18 quavers. Some of these, he states, are encountered primarily in sonatas and similar instrumental music.⁶ He condemns the frequent abuse of the duple meter $\frac{6}{4}$ (or cut-time)

⁶ "...wird sunst fast Nirgends gesehen als In Sonaten und dergleichen Instrumental Music," Reincken, "Ein tractaet," 56.

<i>trippole maggiori</i> or <i>sesquialtere maggiori</i>	$\frac{3}{1}, \frac{3}{2}$ ○ ○ ○	<i>adagio</i>
<i>trippole minori</i> or <i>sesquialtere minori</i>	$\frac{3}{1}, \frac{3}{2}$ ♪ ♪ ♪	<i>alquanto più allegra</i>
<i>tre semiminime</i>	[3?] ♪ ♪ ♪	<i>più allegra</i>
<i>sei per quattro</i>	$\frac{6}{4}$ ♪ ♪ ♪ ♪ ♪ ♪	<i>battuta allegra</i>

Figure 2. Frescobaldi, *Il primo libro di capricci* (1624), Preface.

signature for indicating fast tempos, and its even more indiscriminate employment as a generic duple signature. This signature properly belongs in the ancient masses and motets of Palestrina, Lasso and the like, where the tactus falls on the breve.⁷ We shall shortly see that Reincken was not the only seventeenth-century musician to disapprove of its use in the music of his own time.

Ban's Reforms

The Dutch composer and pedagogue Joan Albert Ban (c. 1597–1644), who corresponded with Mersenne, Descartes, and Doni and was an early admirer of Monteverdi, makes some enlightening and arguably, enlightened contributions to the topic. In the preface to his madrigal collection *Zangh-Bloemzel* (Amsterdam 1642) he promises some simple rules that will do away with the “knoeieryen” (messes) of *modus*, *tempus*, *prolatio*, etc., with which the old musicians created no end of confusion; see figure 3.⁸ As part of his agenda to clean up those messes, he replaced all the Latin terms with newly defined Dutch ones. For duple meter (“Eventydtts Maetslagh,” or even-time tactus) he describes a “slow beat” with signature \mathfrak{c} —slow enough so that syllables on the eighth notes can be clearly understood—and a “faster beat” with signature ϕ . In both, the downstroke of the tactus falls on the semibreve, but the “faster beat” is in fact faster by one third; see figure 3. As his example indicates, the slower beat is associated with shorter note values,

7 Reincken, “Ein tractaet,” 57.

8 All translations from the Dutch are the author's.

Eventyds Maetslagh:

<i>Langzame Maetslagh</i> (slow)	
<i>Rasser Maetslagh</i> (faster)	 one-third part faster (4 : 3) than <i>Langzame Maetslagh</i>

Oneven Tydts Maetslagh:

<i>Groote Drieslagh</i>		3 semibreves = 1 semibreve in <i>c</i>
<i>Middel Drieslagh</i>		3 minims = 2 minims in <i>c</i>
<i>Kleine Drieslagh</i>		3 black minims = 1 minim in <i>c</i>

Relationships:

c ♩ | ♩

$\frac{3}{1}$ ○ ○ ○ | ○ ($\frac{3}{1}$ ○○○ = *c* ○)

$\frac{3}{2}$ ♩ ♩ | ♩ ♩ ♩ (black minims, $\frac{3}{2}$ ♩ = $\frac{3}{1}$ ♩)

$\frac{3}{4}$ ♩ ♩ | ♩ ♩ ($\frac{3}{4}$ ♩♩♩ = *c* ♩♩♩)

$\frac{3}{8}$ ♩ ♩ | ♩ ($\frac{3}{8}$ ♩♩♩ = $\frac{3}{4}$ ♩♩ ; $\frac{3}{8}$ ♩♩♩♩ = $\frac{3}{4}$ ♩♩♩ ;)

Pulse equivalences: $\frac{3}{1}$ ♩ = *c* ♩ (exact)

$\frac{3}{1}$ ○ = $\frac{3}{4}$ ♩ = $\frac{3}{2}$ ♩♩ (approximate; $\frac{3}{4}$ ♩ faster by 9:8)

Figure 3. Ban, *Zangh-Bloemzel* (1642), pp. [xii]–[xiv].

a common association with the *c* signature, related to its earlier history.⁹

Ban’s precise quantitative relationships are extended to triple meter (“uneven-time tactus”), of which he proposes three levels: a “large triple beat,” with signature $\frac{3}{1}$ and three semibreves for each tactus (thus equivalent to Reincken’s *tripla major*); a “middle triple beat” with signature $\frac{3}{2}$ and three minims for each tactus (thus equivalent to Reincken’s *sesquialtera*); and a “small triple beat” with signature $\frac{3}{4}$ and three black minims (rather than crotchets!) for each tactus (thus equivalent to Reincken’s *hemiola minor*). The tactus of $\frac{3}{1}$ has the same speed as that of *c*; the tactus of $\frac{3}{2}$ goes

9 For example, in the novel middle-sixteenth-century *note nere* madrigals, the—at the time near universal—*c* signature was replaced by *c*, and their note-picture was dominated by crotchets rather than by minims.

faster by one-third than that of $\frac{3}{4}$, thus having the same relation to it as the tactus of \mathfrak{c} to that of \mathfrak{c} ; and the tactus of $\frac{3}{4}$ goes faster by one-half than that of $\frac{3}{2}$, and therefore its black minims go twice as fast as the semibreves of $\frac{3}{4}$, or at the same speed as its white minims. Thus, in Ban's system the minims go at one of two rates: a slow pulse that governs \mathfrak{c} , $\frac{3}{4}$ and $\frac{3}{4}$, and a pulse faster by one-third, which governs \mathfrak{c} and $\frac{3}{2}$. Underlying Ban's seemingly complex system of ratios is a very elegant rational idea: by the proper combination of signature and note value the composer can indicate a series of pulse rate levels that are progressively faster by either one-third or one-half. This, he probably thought, would provide a sufficient choice of tempo relationships in most musical situations.

One would like to think that Ban's precise quantitative relationships roughly approximated the common practice of his time. Certainly, the notion that sometimes the speed of \mathfrak{c} (*tempus imperfectum diminutum*) is not twice that of \mathfrak{c} (*tempus imperfectum*), but merely a bit faster, goes back to the fifteenth century. Many musicians seemed to have sided with Reincken, however, in condemning the use of \mathfrak{c} to prescribe a somewhat brisker tempo, rather than for its original purpose of prescribing a shift of the tactus from the semibreve to the breve. They preferred to distinguish the different tempo levels in duple meter by markings like *adagio* or *allegro*, by shorter or longer note values, or by a combination of those devices.

I want to draw attention to some other interesting relationships that arise from Ban's ratios. $\frac{3}{4}$ functions as a *tripla* proportion to \mathfrak{c} , whereas $\frac{3}{2}$ functions as a *sesquialtera* proportion to \mathfrak{c} . But the "cross" relationship between $\frac{3}{2}$ and \mathfrak{c} is of quite a different nature. Rather than being a proportion with *tactus* equivalence, it is one with pulse equivalence: the minim of $\frac{3}{2}$ has the same speed as the crotchet of \mathfrak{c} . A similar equivalence is approximated by the semibreve of $\frac{3}{4}$ and minim of \mathfrak{c} , or the black minim of $\frac{3}{4}$ and the crotchet of \mathfrak{c} ; the precise ratio works out to 9:8.

The notion that some transitions between different meters call for pulse rather than *tactus* equivalence (or in modern language: beat rather than measure equivalence), has been suggested by several scholars, and finds theoretical justification in Ban's system.¹⁰ Pulse equivalence, far from being a seventeenth-century innovation, apparently was an ancient practice among instrumentalists, as is shown by instructions in an early six-

10 See for instance, Paul Brainard, "Proportional Notation in the Music of Schütz and his Contemporaries," *Current Musicology* 50 (1992): 21–46, especially 30–34.

teenth-century keyboard manuscript with popular dance-settings in the Venice Biblioteca Marciana, in which the player is told that following the sign \mathfrak{z} , semibreves have the value of minims, minims the value of crotchets, and crotchets the value of quavers; in other words, all note values must be taken twice as fast as under \mathfrak{c} .¹¹ It should be no surprise that instrumental solo players took a different approach than choirs to tempo relationships: tactus equivalence provides a natural transition for a vocal ensemble directed by a tactus beater; but for a solo player, pulse equivalence is much easier to realize. In fact, early lute and keyboard tablatures often do not use mensural and proportional signs at all, or limit themselves to \mathfrak{c} and \mathfrak{z} .

Meter and Tempo in Weckman's Autographs

I turn now to the working scores of a musician whose notational practices, while generally following traditional principles, show an unusual consistency, economy, and purpose. My focus will be five manuscripts partly or entirely in the hand of Matthias Weckman. As was this composer's habit, all were written with unusual attention to detail, and with the occasional addition of verbal explications.¹² The manuscripts are listed in table 1, along with summaries of their contents and the signatures and tempo markings that appear in each. The first three items on the list (KN 207/6, KN 207/14, and KN 149) contain his own compositions and are devoted to sacred music, ensemble sonatas, and keyboard music respectively. They date from the period 1655–1674, when Weckman served as organist at the Jacobikirche in Hamburg. The last two items contain copies of works by others, with sacred works in KN 206 and keyboard pieces in the "Hintze MS," and date from the years before 1655, during which he was employed at the electoral court at Dresden. From the sketchy information supplied in the table—soon to be fleshed out a bit—it should be evident that Weckman's notational practice depended both on the type of music and on whether he was the author.

In the collection of his own sacred concertos, KN 207/6, Weckman uses only two signatures: \mathfrak{c} for sections in duple meter and \mathfrak{z} for sections in triple

11 "Cod. It. IV-1227," fol. 1v; reproduction and transcription in *Balli per Cembalo*, ed. Christopher Hogwood (Launton, Oxfordshire: Edition HH Ltd, 2007), vi–vii.

12 On Weckman's autographs, see Alexander Silbiger, "The Autographs of Matthias Weckmann: A Reevaluation," in *Heinrich Schütz und die Musik in Dänemark zur Zeit Christians IV*, ed. Anne Ørbæk Jensen and Ole Kongsted (Copenhagen: Engstrøm & Sødning, 1989), 117–44.

meter—with one exceptional segment, which I will describe shortly. The triple-meter sections have groupings of three semibreves and thus correspond to *tripla major*. Many of the sections that include instruments have the *adagio* marking, although Weckman never adds that marking to sections for just voices and continuo. In duple-meter, sections marked *adagio* predominate, and one of the concertos, “Zion spricht, der Herr hat mich verlassen,” has, in addition to several *adagio* markings, an annotation at its beginning that the entire piece should be taken “langsam und affetuos [slow and expressive].”¹³ The *adagio* sections tend to use shorter note values than those without markings, with harmonic movement in crotchets rather than minims, and extended passages of semiquavers, although that pattern of differentiation is not observed to the same degree in each of the concertos.

In the one exceptional segment within a section in *tripla major*, Weckman evidently wished to subdivide the beats of the string parts once more into three. He lacked the means of notating such a compound meter within the context *tripla major* (the old *tempus perfectum cum prolatio major* was no longer in use), and decided to notate the instrumental parts in question with the proportional signature $\frac{9}{8}$, along with groupings of three quavers to each semibreve of the concurrent voice parts, which continue in $\frac{3}{4}$, with to modern eyes a rather odd-looking result; see figure 4!

The instrumental sonata collection KN 207/14 mainly uses the signatures \mathfrak{c} and $\frac{3}{2}$ with minim grouping, the latter thus corresponding to Reincken’s *sesquialtera*. In the duple-meter sections there are, in addition to quite a few *adagio* markings, several segments marked *allegro*. However, while an *adagio* may appear anywhere, even at the beginning of a sonata, an *allegro* always follows an earlier marking of *adagio*, suggesting that when no tempo is marked (e.g., at the beginning of a piece), *allegro* is understood.

As can be seen from table 1, a greater variety of meter signatures is encountered in the keyboard music collection KN 147, although \mathfrak{c} remains the only duple-meter signature. Note that triple groupings of semibreves do not appear in this collection. The courantes and sarabands always have the signature 3; giges have the signatures $\frac{6}{8}$ or $\frac{12}{8}$, with two or four groups of quavers between barlines?¹⁴

13 For more details on these concertos and their sources, see Silbiger, *Mathias Weckmann: Sacred Concertos*.

14 The giges of Partita 5 and 6 are given the signatures $\frac{6}{8}$ and $\frac{9}{8}$ respectively, although both include four groups of three quavers between barlines and neither show differences in metric patterns from the giges with signature $\frac{12}{8}$.

The image shows a musical score for two staves, labeled 'Vn. I' and 'A.'. The top staff (Vn. I) is in treble clef and contains measures 177 and 178. Measure 177 features a triplet of eighth notes, and measure 178 features a triplet of quarter notes. The bottom staff (A.) is in bass clef and contains the vocal line for the same measures. The lyrics 'cs hat ü- ber- wun- den.' are written below the vocal staff, with 'cs' under the first measure and 'hat ü- ber- wun- den.' under the second measure. The time signature is 3/2.

Figure 4. Matthias Weckman, “Weine nicht,” mm. 177–78.

Weckman’s copies of compositions by others include several signs not found in his own works. In KN 206, a repertory largely of motets and psalm settings, most of the triple groupings are notated in semibreves, with a few in minims; there are no groupings of crotchets or quavers. The signs include \circ_3 , $\circ_{\frac{3}{1}}$, ϕ_3 , $\phi_{\frac{3}{2}}$, and just $\frac{3}{2}$. The correspondence between signs and note values is less consistent than in his own works; some $\frac{3}{2}$ proportions appear with semibreve groupings, some with minim groupings.

TABLE 1. Meter and Tempo Indications in Weckman's Autographs

[KN 207/6] Lüneburg, Ratsbücherei, Mus. ant. pract. KN 207/6¹⁵

Hands: fols. 1–15 not identified; fols. 15–78 Weckman

Content: Weckman, 4 sacred concertos for voices, strings, and organ

Duple meter: c ; *adagio*

Triple meter, \circ groupings:¹⁶ $c\ 3$, $\frac{3}{4}$; *adagio* (once)¹⁷

[KN 207/14] Lüneburg, Ratsbücherei, Mus. ant. pract. KN 207/14¹⁸

Hand: Weckman

Content: Weckman, 11 sonatas (one incomplete) for instrumental ensemble (most for cornettino, violin, trombone, bassoon, and continuo)

Duple meter: c ; *adagio*, *allegro*

Triple meter, \circ grouping: $\frac{3}{4}$ (once)

Triple meter, \downarrow grouping: $\frac{3}{2}$; *adagio*, *allegro*

[KN 147] Lüneburg, Ratsbücherei, Mus. ant. pract. KN 147¹⁹

Hands: fols. 1–28 not identified; fols. 29–77 by Weckman

Content: 32 toccatas, canzonas, and dances (organized in suites), almost certainly by Weckman²⁰

Duple meter: c , *adagio* (once); *adagio* and *allegro* in the non-autograph portion

Triple meter, \downarrow grouping: $\frac{3}{2}$ (once)

Triple meter, \downarrow grouping: 3 (dances only), $\frac{3}{4}$, $c\ \frac{3}{4}$; *allegro* (once, with $\frac{3}{4}$)

Triple meter, \downarrow grouping: $\frac{6}{8}$, $\frac{12}{8}$, $c\ \frac{6}{4}$ [= $\frac{12}{8}$]

15 Complete edition in *Mathias Weckmann: Four Sacred Concertos*, ed. Alexander Silbiger, Recent Researches in the Music of the Baroque Era 46 (Madison: A-R Editions, 1984).

16 See also figure 4.

17 A triple meter section is marked *allegro* in another source (see below), but not in KN 207/6.

18 Complete edition in *Matthias Weckmann: Gesammelte Werke*, ed. Gerhard Ilgner, Das Erbe deutscher Musik, series 2, vol. 4, Schleswig-Holstein und Hansestädte (Leipzig: Henry Litolffs Verlag, 1942), 3-54.

19 Complete edition in *Matthias Weckmann: Sämtliche freie Orgel- und Clavierwerke*, ed. Siegbert Rampe (Kassel: Bärenreiter, 1991); facsimile edition in *Matthias Weckmann: Lüneburg, Ratsbücherei, Mus. ant. pract. KN 147*, ed. Alexander Silbiger, 17th Century Keyboard Music, vol. 9 (New York, Garland Publishing, 1988).

20 There is disagreement about the authorship of the five pieces in the non-autograph portion.

[KN 206] Lüneburg, Ratsbücherei, Mus. ant. pract. KN 206²¹

Hands: Weckman, except for fols. 64v–65 and 105v–124

Content: 75 settings of sacred texts for voices and instruments by German and Italian composers, including Grandi, Merula, Monteverdi, and Schütz

Duple meter: \mathbf{c} ; *adagio*

Triple meter, \circ grouping: $\circ 3$, $\circ \frac{3}{1}$, $\phi 3$, $\phi \frac{3}{2}$, $\frac{3}{2}$

Triple meter, \downarrow grouping: $\frac{3}{2}$

[Hintze] New Haven, Yale University, Music Library, MS 21 H59 (“Hintze MS”)²²

Hands: Weckman, with emendations and annotations in another hand.

Content: 28 dances and other keyboard pieces by French and German composers, including Chambonnières, Froberger, and Kerll.

Duple meter: \mathbf{c} , ϕ

Triple meter, \downarrow grouping: $\mathbf{c}3$

Triple meter, \downarrow grouping: 3

To his copy of a psalm setting of Stadlmayr, Weckman added a revealing annotation: “NB. Diese Stadlmayr braucht noch allzeit solch signum ϕ aber ich habe dieses \mathbf{c} davor v. m. stadt dieselben allzeit gebraucht” (NB: This Stadlmayr still uses always the meter signature ϕ , but I have used everywhere \mathbf{c} in its stead). Evidently, Weckman, like Reincken, disapproved of Stadlmayr’s usage, to the point that he decided to change it in each instance. Furthermore, the very fact that he inserts a note about this editorial change suggests that elsewhere Weckman respected the meter signatures of his exemplars, which would account for the variety of signatures and lack of consistency in his copies of works by others. As a matter of fact, several keyboard pieces in the Hintze manuscript do use ϕ .

Thus we see that in his own works Weckman always used the \mathbf{c} signature for the duple-meter sections, and that he relied primarily on tempo markings, sometimes in association with note values, to communicate the desired tempo. In his sacred concertos, *adagio* predominates; the chamber music has a mix of *adagio* and *allegro*—*allegro* being marked only after a preceding *adagio*, which suggests it was the default—while in his keyboard

21 No complete edition; inventory of its contents in Silbiger, “The Autographs of Matthias Weckmann,” 130–35.

22 Complete edition in Rampe, *Weckmann: Clavierwerke*.

music tempo markings are uncommon, perhaps because the specific genre or dance type was sufficient to indicate the tempo.

In practice, tempo choice was surely more flexible than this restriction to the two levels of *adagio* and *allegro* would suggest. Nevertheless, one wonders whether the legacy of the ancient diminished and non-diminished time was still present in the thinking about tempo manifested by these two markings. In any case, the extreme difference between *allegro* and *adagio* to which we have become accustomed in later repertoires does not seem appropriate for this music. For example, Beethoven's metronome markings show that the same note values could go as much as ten times faster in his *allegro* than in his *adagio*. I will show here that Weckman more likely was thinking of a ratio somewhere between one and two.

One of the sonatas in the autograph KN 207/14 contains a passage in duple meter marked *adagio*, with a daunting thicket of short notes and rests, accompanied by an annotation reading, "NB Wenn es etwa jemandem also zu schwer düncket, der konnte dies erste fuga, noch eins so langsamen Noten schreiben und die battuta etwas *allegro* gebrauchen (NB if this seems too difficult, copy the first fugal passage out in double note values and take the beat somewhat *allegro*)" (see figure 5). Clearly this beat needs to be less than twice the speed of the original *adagio* beat, because at twice the speed nothing would have changed and the passage would be just as difficult as before. Weckman evidently had in mind a faster beat, but less than twice as fast.

Implication of the revisions in Weckman's sacred concertos autograph

Two of the sacred concertos in KN 207/6 show evidence of revisions that transformed the note picture in the other direction; that is, the note values were halved and an *adagio* marking was added. Presumably this would effect a faster performance, although less than twice as fast.²³

Figure 6 shows a segment from the sacred concerto "Wie lagt die Stadt so wüste" (KN 207/6, p. 74), scored for soprano (top line), bass (second line from the bottom),²⁴ five string instruments (between the two voice lines),

23 Without the *adagio* marking, halving the note values presumably would result in a tempo twice as fast.

24 The text for the bass voice appears below the continuo line, presumably because directly below the bass line it would have interfered with the continuo figures. Measure numbers refer to those in Silbiger, *Weckman, Sacred Concertos*, 114.

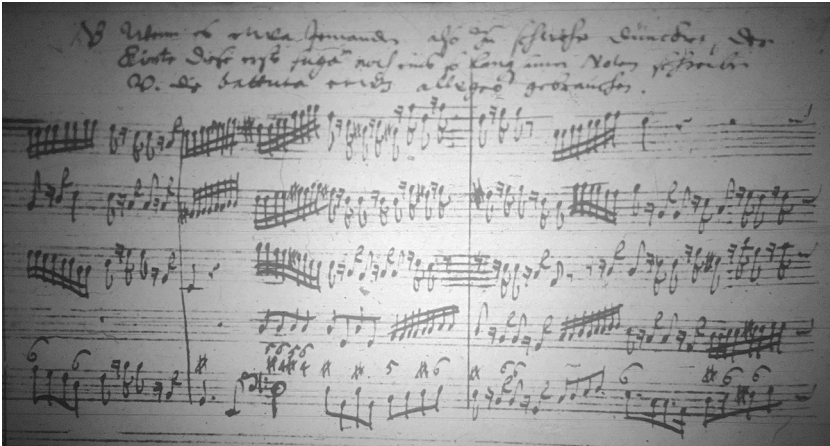


Figure 5. KN 207/14, Sonata à 4 istromenti [no. 5], p. 27, mm. 6–10.



Figure 6. Weckman, "Wie liegt die Stadt so wüste,"
mm. 283–88 (KN 207/6, p. 74).

and organ continuo (lowest line), with the marking *adagio* carefully inserted above each part (transcription in figure 7a). The first striking feature of this segment is that the crotchets in the first two measures have unusually large note heads. This anomaly and other telltale signs reveal that following the first semibreve and up to the second barline all note values and rests have been halved. (See below regarding the beginning of the soprano part.) A reconstruction of the hypothetical original can be seen in figure 7b. Specifically, the following alterations can be observed:

1. All the original minims have been turned into crotchets. Weckman's minims are consistently larger than his crotchets, which accounts for the large note heads of those altered notes.

2. The original crotchets have been given a beam or a flag, and the quavers a second beam or flag. Since those alterations involve merely additional pen strokes, this is not so evident at first sight, but will become apparent upon closer inspection in several places. (Note, for example, how in several pairs of semiquavers the added beams almost touch the note heads.)

3. The crotchet rests have been changed to quaver rests. One can observe that a bit of the staff line on the upper right side of some of those rests has been erased, because Weckman's crotchet rests have a flag extending to the upper right and sometimes cross the staff lines; see, for example, the first quaver rest in the fourth string part and in the bass part (5th and 7th staves from the top).

4. Clearly visible are the erasures of two original barlines (shown dotted in the transcription), and the insertion of two new barlines shifted by a minim to the right, to accommodate the changes in note values. Weckman's original barlines seem to have been drawn with a ruler, but the inserted barlines had to be drawn by hand to make them fit. Note the jogging of the second bar line when it gets to the lowest part!

5. What happened at the beginning of the soprano part is not entirely clear. Since the initial semibreves in the other parts were not altered, there should have been no need to change anything up to the semibreve b", which was transformed from a semibreve to a minim by adding a stem. Nevertheless, it looks like Weckman mistakenly blackened the opening minim to half its value and turned it into a crotchet.

6. The *adagio* markings probably were inserted as part of the revision, to insure a moderate increase, rather than a doubling of the tempo.

Alexander Silbiger – Meter and Tempo ca. 1620–1670

adagio

Canto
ach, sie-he an mein E - lend;

Vn. 1
adagio

Vn. 2
adagio

VdG. 1
adagio

VdG. 2
adagio

VdG. 3
adagio

Basso
adagio
ach, sie-he an mein E -lend, sie- he an mein E -lend; denn der feind prang -

Org.
adagio

Figure 7a. Weckman, “Wie liegt die Stadt so wüste,”
mm. 283–86 (transcription of present state).

Canto
ach, sie-he an mein E - lend;

Vn. 1

Vn. 2

VdG. 1

VdG. 2

VdG. 3

Basso
adagio
ach, sie-he an mein E -lend, sie- he an mein E - lend; denn der feind prang -

Organo
adagio

Figure 7b. Weckman, “Wie liegt die Stadt so wüste,”
mm. 283–86 (reconstruction of original state).

Why did Weckman go through the not inconsiderable effort of making these changes? One possibility might be that he hoped to obtain a more urgent pace from the performers in preparation for the dramatic fugal conclusion to the work. Another possibility (which I consider more likely) was that the composer in fact wanted to slow down this very dense and busy final section, because at too fast a speed it threatened to approach total chaos. Note that there is no subsequent cancellation of the *adagio*. Nevertheless, the halving of the note values appeared necessary to prevent the opening of this section with its repeated chords from losing intensity and becoming ponderous.

The second example appears in the concerto *Weine nicht*, in the same manuscript, and involves two related instrumental sinfonias separated by an alto solo.²⁵ Both appear in a portion of the manuscript not in Weckman's hand, although I believe that Weckman played a role in the revision (see below). Several signs indicate that the sinfonias were copied from an exemplar in which the note values were twice as large (with a few accidents during the transcription process).

Figure 8a shows the opening of the first sinfonia, which is marked *adagio* at its beginning (transcription in figure 9a). The copyist seems to have started the first and second violin parts (top two lines) in double note values (starting with a semibreve followed by a minim), and subsequently halved them. This can be seen in the two minims in the first measure, drawn as semibreves with stems attached by a second, upward stroke, rather than with the single continuous stroke seen in all other minims on the page that have upward stems (those with downward stems are always drawn with two strokes), and in the subsequent crotchet, superimposed on the ghost of the original minim. (The second violin part also shows the correction of a copying error, possibly because in the exemplar the second violin had been notated in soprano clef.) This suggests the scribe was working from an exemplar notated with double note values, but after entering the first few notes decided (or was instructed) to change to shorter note values. There exists, in fact, another source of this work in the Uppsala Universitetsbiblioteket, notated in German organ tablature, in which both sinfonias are noted with double note values and lack the *adagio* markings

25 On "Weine nicht," its sources, and their relationship, see the Preface to Silbiger, *Weckman, Sacred Concertos*, vii–xi.

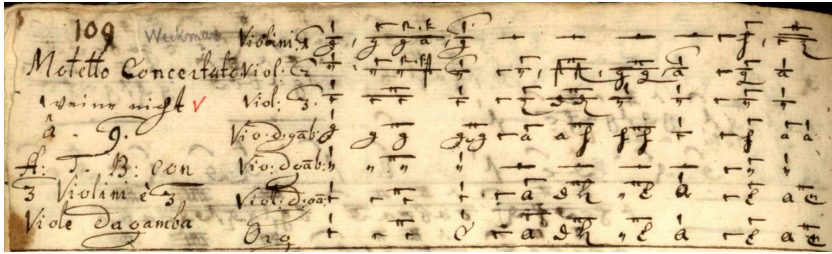


Figure 8b. “Weine nicht,” mm. 1–5, Uppsala 79. f. 109v.

(figure 8b).²⁶ Figures 9a and 9b compare transcriptions of both versions as they appear in Lüneburg and in Uppsala, respectively.

Figures 10a and 10b show the beginning of the second Sinfonia, which enters after the intervening alto solo, as they appear in the Lüneburg and the Uppsala manuscripts (transcriptions in figures 11a and 11b). Unlike the first sinfonia, which was marked *adagio* at its beginning, in the second sinfonia *adagio* is not indicated until the third measure (that is, after the second barline). In the Lüneburg copy, the scribe evidently decided not to start halving note values until the third measure, at the *adagio* marking.²⁷ The note values of those first two measures are identical to those in the Uppsala versions, except for the endings of each of the two phrases. In the Lüneburg version each of the two phrases in each voice ended on a semibreve, and most those semibreves were subsequently changed to a minim followed by a minim rest). In Uppsala each phrase ended on a semibreve, followed in most cases by a semibreve rest—see below. Commencing with the third measure, at the *adagio* marking, all notes have been transcribed to half the values of those in Uppsala. However, at the transition point to shorter note values, at the end of the second measure, the Lüneburg scribe evidently ran into a problem. In the Uppsala version, the lower strings (parts 3, 4, and 7) do not enter until the next measure (after the barline), following a minim rest. Evidently the Lüneburg scribe copied each part successively from the top to the bottom, but he miscalculated the point at which the first violin should enter in reduced note values, having it enter a semibreve too soon. He must have

26 Uppsala Universitets Biblioteket, Vok. mus. i hdskr. 79.

27 Perhaps because the first two measures of the second violin and bass lines echo the vocal and bass lines of the preceding alto solo, “Weine nicht.”

Sinfonia

Vln 1
Sinfonia

Vln 2
adagio

Vln 3

VdG 1

VdG 2
adagio

VdG 3
adagio

Org.
adagio

Fig. 9a. Weckman, “Weine nicht,” mm. 1–4
(transcription of the version in KN 207/6)

Vln 1

Vln 2

Vln 3

VdG 1

VdG 2

VdG 3

Org.

Fig. 9b. Weckman, “Weine nicht,” mm. 1–4
(transcription of the version in Uppsala 79).



Fig. 10a. "Weine nicht," Sinfonia, mm. 77-83, KN 207/6, p. 6-7.

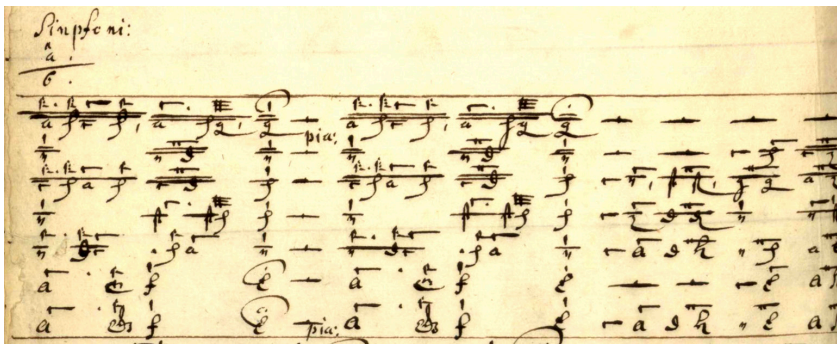


Fig. 10b. "Weine nicht," mm. 77-83, Uppsala 79. f. 109v.

Sinfonia

Vln 1
Vln 2
Vln 3
VdG 1
VdG 2
VdG 3
Org.

pian. *adagio*

6 76 # *pian.* 6 76 # # b # b #

Fig. 11a. Weckman, “Weine nicht,” mm. 77–84
(transcription of the version in KN 207/6).

Sinfonia

Vln 1
Vln 2
Vln 3
VdG 1
VdG 2
VdG 3
Org.

pia:

#

Fig. 11b. Weckman, “Weine nicht,” mm. 77–84
(transcription of the version in Uppsala 79).

become aware of the problem when he began copying the third part and noticed that in order to line it up with the first violin it had to begin at the end of the second (rather than in the third) measure. He decided solve the problem (or cover up his mistake) in the third part by changing the last semibreve of that measure to a minim, and by squeezing in the subsequent crotchet rest and note. For consistency, the last semibreve of the preceding measure was also changed into a minim followed by a minim rest. There was no difficulty in modifying the subsequently written lines accordingly, but telltale signs show the adjustments to the top two voices. In the first measure a stem was added to the last semibreve of the second violin (as in lower parts), and following it, a minim rest inserted. In the top line there was not enough space after the last note for the same adjustment, so a minim was placed to the left of it, probably with the intention of erasing the original semibreve; the fermata above it was also moved. But that semibreve and its fermata were never erased, and the copyist also forgot to introduce the needed changes in the two top voices at the end of the second measure (i.e. change the semibreve to a minim, followed by a minim rest). As a result, the first two violins are still sustaining a G-sharp and an E while on the last crotchet beat the lower voices introduce an A-major triad—a polytonal effect surely not intended by the composer!

As in the previous example, we can only speculate on why these revisions were made despite the work they clearly involved. Perhaps the composer hoped that the shorter note values would achieve more forward motion through all the subsequent chromaticism, rather than become bogged down in them. After all, the exhortation is: “do *not* cry,” despite the intense pain and sorrow—a message also delivered by the alto solo framed by the two sinfonias. Perhaps he decided that, rather than trying to revise the notation in the existing score as he did in “Wie lagt di Stadt so wüste,” it would be less messy to remove the entire opening fascicle and replace it with an appropriately revised score, which he instructed an assistant to prepare. My main purpose here in going over these revisions in such a detailed fashion is, however, not to make a case about how they might strengthen the message of the text, but rather to show how both examples indicate a conceptual equivalence of doubling note values and adding an *adagio* marking, even if in performance the two are not necessarily entirely equivalent.

Explanations and questions

My argument then is that the notion of two tempo levels of duple meter, traceable to the fifteenth century as *tempus imperfectum* and *tempus imperfectum diminutem*, with the latter prescribing a faster speed but in practice not twice as fast, survived to some extent into the seventeenth century. However, by this time many musicians (although by no means all) rejected the use of the signature of ϕ for the faster tempo, which in their views signaled the switch of the *tactus* to *alla breve*, and thus was no longer relevant to modern music making. Instead they preferred to indicate the two tempos by the distribution of note values, a preponderance of shorter values usually suggesting a slower tempo, and/or contrasting terms, such as *adagio* and *allegro*, in either case under the signature ϵ . Composers in whose works one rarely—if ever—encounters ϕ , include, in addition to Weckman, Monteverdi, Frescobaldi, Schütz, and Froberger.²⁸

Weckman much less often adds tempo markings like *adagio* and *allegro* to the triple-meter sections of his own compositions. Instead there is a diversity of proportional signs and note-value groupings: in the sacred concertos he uses semibreve groupings; in the chamber music, mostly minim groupings; and in his keyboard music mostly crotchet and quaver groupings. His copies of works by other composers show a similar trend. Do these distinctions reflect an association of different tempos or tempo ranges with the different genres, or an association of different notational conventions with those genres? Both types of associations may well be involved. One expects slower tempos in choral church pieces (especially those intended for memorial services, such as those in KN207/6) than in keyboard dances and canzonas. But one also expects singers trained in choir schools to be comfortable with traditional quasi-mensural notation, whereas instrumentalists may be more accustomed to shorter note values corresponding to a characteristic instrumental, tablature-related tradition. The use in dances of the signature $\mathfrak{3}$ without denominator may represent such an instrumental convention.

Did Weckman and his contemporaries envision tempo relationships among the different forms of duple and of triple meter and between duple

28 The contrasts in note values and styles between Froberger's sets of fantasias and canzonas in his *Libro secondo* of 1649, or between the sets of *ricercars* and canzonas in *Libro quarto* of 1656, are perfect examples of the two tempos; nevertheless, ϵ is used throughout.

and triple meter sections of multi-sectional works that would have approximated the ratios proposed by Ban? Did *tripla major* still function as a triple proportion to the *adagio* level of duple meter, and did *tripla minor* continue to function as a *sesquialtera* proportion to the *allegro* level, as suggested by the earlier theorists (see figure 3)? Even more intriguing is the question whether pulse equivalence was expected between minims of a duple *allegro* and the semibreves of a following *tripla major*, or between the crotchets of a duple *adagio* and the minims of a following *tripla minor*. I am not sure whether scholarship by itself will be able to find definitive answers to these questions; the efficacy of the suggested relationships is probably best tested in performance.

Alexander Silbiger is Professor Emeritus of Music
at Duke University, Durham NC.

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