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Mozart's Tempo Indications: What do they refer to?

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ABSTRACT: Nearly three quarters of Mozart's "tempo indications" do not refer to the beat. In late 18th century tempo means more than speed: the *movement* is defined by a combination of *meter*, *smallest note values* and *tempo word*, a module defining speed, accentuation, articulation, agogics, manner of playing and character. Lost knowledge of the compound meters is one reason for the alleged inconsistency of Mozart's tempo indications. A thorough comparison of his 1.435 autograph indications will clarify the order and characteristics of Mozart's tempi and explain **the logic in his tempo system**.

Mozart's Tempo Indications: What do they refer to?

(Translation: Lindsay Chalmers-Gerbracht and the author)

There are probably few performers of Mozart who have not asked themselves this question some time. Do Mozart's tempo indications refer to eighth notes, quarter notes or half measures? Many hold the opinion that "the only sensible answer is: they refer to the beat" (1). Let us examine this question with the aid of several examples.

As Mozart composed his works prior to the invention of the metronome by Maelzel – and there are good historical and stylistical reasons for this - we have the chance to consider how his tempo indications are to be understood without the support of technical devices. If one examines his autographs closely, there are more than a handful of examples which demonstrate how seriously Mozart took this matter and how on occasion he wrestled with the problem of precisely expressing his conception of speed, accentuation and execution.

For example, in the 1st movement of the Posthorn Serenade, K. 320, measure 7, he originally wrote *Allegro*, then prefixed this by *Molto*, scored this out and added *con spirito*. In the Rondeau, the original *Allegretto* was changed to *Allegro ma non troppo* (do we still see a difference between these terms today?). In the first movement of the Symphony in G minor, K. 550, and in the Credo of the Coronation Mass he replaced his original indication *Allegro assai* by *Molto Allegro*. In the 2nd movement of the Symphony in C major, K. 338, he added *più tosto Allegretto* to the *Andante di molto* in the principal 1st violin part (2). Sarastro's aria "In diesen heil'gen Hallen" was originally marked *Andantino sostenuto* before he changed this into *Larghetto*. The 4th movement of the String Quartet in D minor, K. 421, best demonstrates his struggles to find the most accurate tempo indication: he scored out his original *Allegretto* and substituted *Andante*. He later crossed this out again and wrote the former *Allegretto* underneath. Even later, he added the indication *ma non troppo* in a lighter shade of ink! What fine nuances - and there are numerous similar examples.

The frequently expressed opinion that Mozart's tempo words were no more than an indication of a movement's character and that "Mozart had no system of indication" (3) is hence not very convincing. On the one hand he made fun of the occasional quibbling when he wrote "Allegretto grazioso, ma non troppo presto, però non troppo adagio. Così-così-con molto garbo ed espressione" (4). On the other hand, he had a range of over 300 modules consisting of tempo word + meter + smallest note value at his fingertips to describe what at the time was termed *Bewegung* (*movement*) or *Mouvement*. His autographs contain 19 different modifications for *Allegro*, 17 for *Andante*, 6 for *Allegretto*, 4

for *Adagio*, 5 for *Andantino*, 3 for *Presto* and 4 for *Menuett*, respectively *Tempo di Menuetto*; moreover there are *marcia*, *Moderato*, *Largo*, *Larghetto*, *Maestoso*, *Vivace*, *Grazioso* and *Cantabile* and some German indications for his *Lieder*. ([Mozart's autograph verbal tempo indications](#))

His second – or to be more precise rather his first – means for indicating the tempo was the **meter**; we shall see how. He uses: ϕ ; 2/4, 3/4, 4/4; 3/8, 6/8 and 12/8. (5) In addition to these there are types of meter which I would like to term "virtual" - as the time signature does not reveal them. They play a special - and sometimes confusing - role. This includes the 4/8 time which Mozart (like Haydn and Beethoven) always notated as 2/4 and the similarly unknown variant of 6/8 time, which actually consists of two combined 3/8 measures. A further species exists in 3/4 time, as: "in three-four time there is a distinction between light and heavy three-four time. [...] In heavy three-four time, in which sixteenth and often thirty-second notes are frequent, one counts in eighth notes" (Friedrich Wilhelm Marpurg 1763). Further discussion on these "virtual" meters will follow below.

On the subject of autograph records, it must be mentioned that tempo indications not by Mozart himself are unfortunately not always indicated by cursive script or footnotes in the New Mozart Edition (6). The complete works contain a total of 2,569 movements (and parts of movements) with individual tempo indication out of which 1,029 movements either have no tempo terms at all or markings not by Mozart, very often by anonymous authors and frequently not even from Mozart's time. Only 1,435 of the Italian tempo indications are Mozart's own and can be used as a basis for thoughts about what he meant by them.

What do these tempo words refer to? If the answer is "to the beat", it must be explained what this means: is the "beat" the denominator of the respective time signature? Obviously not: in an *Adagio* 4/4 we do not count quarter notes but eighth notes (however, not in an *adagio* tempo but at a speed approximately corresponding to the quarter notes of a 4/4-*Allegretto* tempo). In an *Allegro* 3/8 however, we count dotted quarter notes at the same speed. A *fast* ϕ is beaten in *slow* half notes, a *slow* ϕ in *fluent* quarter notes (7). Beats are nothing more than aids to performance practice and are only correlated to a certain extent with the tempo words. What in turn do these refer to?

This is relatively simple in the case of "normal" classical 4/4 time (containing 16th notes), the "archetype of modern meter" (W. Seidel), for which the Italian tempo terms are tailor-made (8). An *Andante* "walks" in quarter notes (however fast or slow: a topic on its own!), an *Allegro* makes the quarter notes "cheerful", i.e. faster, an *Allegretto* makes them a little, an *Allegro assai* much faster. This appears to be fairly simple, even if it is insufficient for a definition of tempo in modern understanding due to the vagueness of the expressions.

More problematic – and the initial motive for this investigation – are the other meters, particularly 6/8, which I would like to take as an example for our research. In this case, the existing alternative between a reference of the same tempo term to either eighth notes or dotted quarter notes leads to a difference in speed of 300 %. Let us take a look at the following examples:

a. On the one hand, *Andante* 6/8, Model *Pamina* Aria

- 1. "Ach, ich fühl's, es ist verschwunden", *Pamina's* G minor aria No.17 in *Die Zauberflöte*
- 2. the 2nd movement of the Piano Trio in G major, K. 496

ex. 1: *Die Zauberflöte*, no 17 + ex. 2: K. 496, II

- 3. the 2nd movement of the G minor Symphony K. 550
- 4. the 2nd movement of the "Linz" Symphony, K. 425
- 5. the A minor Rondo for Piano K. 511

- 6. "Per questa bella mano", 1st part of the aria for bass and double-bass, KV 612

b. On the other hand, Andante 6/8, Model "Pace, pace"

- 1. "Pace, pace, mio dolce tesoro", measure 275 in 4th Finale of *Figaro*
- 2. "Una donna a quindici anni", Despina's Aria No. 19 in *Così fan tutte*
- 3. "Vostre dunque saran queste carte", measure 605 in 2nd Finale of *Figaro*

ex. 3: Figaro, "Pace, pace", m. 275 + ex. 4: Così fan tutte, no 19

c. Thirdly the Andante 6/8, Model "Prague"-Symphony

- 1. "Prague"-Symphony, K. 504, 2nd movement
- 2. "Oh Engländer", 2nd section of the Duet Osmin and Blonde, *Entführung*, No.9

ex. 5: K. 504, II + ex. 6: Entführung, no 9

- 3. the "Incarnatus est" from the *Credo Mass* K. 257
- 4. String Quartet in D minor, K. 421, 2nd movement
- 5. Trio in Eb major ("Kegelstatt Trio") for Piano, Clarinet and Viola, K. 498, 1st movement
- 6. "Paris"-Symphony, K. 297, 2nd movement (*originally "Andantino"*)
- 7. String Quartet in F major, K. 590, 2nd movement (*altered in the first edition to "Allegretto"*)

Which of these could we understand as "Andante 6/8": the slow (and usually *too* slow) tempo of the Pamina aria and the Piano trio K. 496 – or the obviously less slow tempo of Figaro's "Pace, pace" and the (often too fast) Despina aria? And how can the Prague and Paris and symphonies, Osmin's "Oh Engländer" and the cited chamber works be classified?

For 200 years now, people have been racking their brains over this – and have not always kept close enough to the subject at hand. *Andante* means "walking": *Who* is walking?? The professor from the desk to the bookshelf, or *the music*, a disembodied being? Since the time when Mozart's works were no longer directed by the first violinist or from the keyboard (9) – as was customary in Germany during his lifetime – but were led in the modern fashion by a conductor beating time, (which was introduced soon after Mozart's death), there is the question as to what part of the measure the tempo term refers to: to the whole note, half note, quarter note or eighth note? (10) This question has led into dead-end tracks, not only in the most recent specialized literature but also among performers. It was the wrong one to ask right from the beginning. There is only one answer: in most cases neither nor! **Hans Gál** had already referred to this matter in his article "The Right Tempo" in 1939: "The solution of the whole riddle is that they [Haydn, Mozart, Beethoven, Schubert] had not the slightest intention of connecting the tempo indications with the beat." In music from the Classical period, the time signature is not a direction for conducting. And, although Gál came from Vienna, he added: "I have rarely met a musician who was aware of this fact."

If in all the above examples half-measures are taken as the beat, it becomes clear that a minimum of three totally different tempi must be assigned to the term *Andante* if the pieces are to be performed in a reasonable manner. What about Mozart's modifications for *Andante*, such as *con moto*, *sostenuto*, *moderato*, *maestoso*, *un poco adagio*, *cantabile*, *di molto* and *più tosto Allegretto* – why did he not use them here?

In my opinion, the solution of the riddle is that the Andante 6/8 in "Ach, ich fühl's" and "Pace, pace" are written in two seemingly identical but totally different meters: one compound 6/8 meter, composed of two 3/8 measures put together (Pamina aria; Piano trio K. 496) and one simple 6/8 which is basically no more than a 2/4 meter with eighth note

triplets ("Pace, pace"). However, there has been great confusion in the terms from the 18th century up to the present day: by the term "zusammengesetzte Takte" ("compound meters") many theorists have meant what was also called "vermischte" ("mixed") meters: i.e. 9/8, 12/8 as well as our "simple" 6/8 - but actually these should be called "subdivided meters" since they originate from 3/4, 4/4 and 2/4 meters in which the quarter notes are each subdivided into eighth note triplets. Others like Koch, Kirnberger, Schulz, Weber and Fink use the term "compound" for meters which are indeed compound entities made up from two smaller meters. I shall follow this concept as this term describes best the character of these meters (such as $2/4=2/8+2/8$; $6/8=3/8+3/8$ and $4/4=2/4+2/4$) which are so essential for an understanding of works from the classical period (11). The model "Prague-Symphony" is also in compound 6/8 meter ($6/8=3/8+3/8$) but has a slightly faster tempo for the reason that – unlike the Pamina aria and the 2nd movement of the Piano trio K. 496 – it contains no thirty-second notes determining the tempo.

As the phenomenon of the "compound" meters in the above sense is barely mentioned in literature from the end of the 19th century onwards, (not even in the most recent encyclopaedias such as the "New Grove 2001" and the "Musik in Geschichte und Gegenwart II", Sachteil, 1994-98), let us include in this essay a few examples from the statements given by music theorists of Mozart's time:

Heinrich Christoph Koch (1749-1816), an exact contemporary of Mozart and connoisseur of his music, termed by Hugo Riemann as "one of the most insightful theorists of his time", whose "Versuch einer Anleitung zur Komposition" was highly praised by Johann Nikolaus Forkel in 1784 and, even in 1878 described by François-Joseph Fétis as being the ultimate work to have been published up until then, - an author who is in my opinion still not consulted frequently enough;

In his "Musikalisches Lexikon" ("Musical Dictionary") from 1802 he writes: "Six-eight meter. This term describes *two species of meters which differ fundamentally from each other*, namely: 1) the simple mixed meter which is created out of the two-four meter with a dot added to each quarter note and 2) the meter composed of two three-eight meters. These can be distinguished from each other in that each measure contains two "strong" and two "weak" beats." (12)

Johann Philipp Kirnberger in "Die Kunst des reinen Satzes in der Musik" 1776 (13): "On the subject of meter": "In addition a distinction can be made between simple and compound meters: simple meters contain *only one metrical foot* which cannot be divided in the middle; compound meters on the other hand can be divided in the middle of each measure, as they are composed of two combined measures in simple meter." (14)

"Remarks on compound meters": "In both duple and triple time there are melodies which are made up of *whole measures* which are obviously *heavy and light in turn*, so that one feels a whole measure only as one metrical foot. If the melody is thus constructed so that you feel a whole measure as only one metrical foot, it is necessary to *combine two measures* in order to produce a single measure in which the first part is [intrinsically] long and the second part [intrinsically] short. Should this contraction not be carried out, one would [...] create *a melody consisting of nothing but strong beats* which would be as unfavourable as a passage of speech consisting solely of one-syllable words, each one accentuated.

This is therefore the origin of compound meters, i.e. the compound 4/4 from two combined 2/4 measures, the compound 6/8 from two combined 3/8 measures and so forth" [i.e. compound 2/4 from two combined 2/8 measures and - according to Marpurg (15) - even compound 3/4 from three combined 2/8 measures.]

This method of combination only occurs in order *that the performer may reach a correct execution and play the second part of the measure more lightly than the first part*. It is possible to distinguish these types of [compound] meters in that the endings fall completely naturally in the *second* half of the measure; [...] thus in compound 6/4 meter the end can occur on the fourth quarter note which is not however possible in simple 6/4 time. Otherwise, as far as a heavy or light execution and tempo are concerned, compound meters cannot be distinguished from simple meters." (16)

The following statements by **Heinrich Christoph Koch** are also very interesting as he describes the possibility of variable caesurae, being either on the first or second part of the measure in compound meter, a very frequent occurrence in the case of Mozart.

§ 71 "As each measure of compound time is composed of two measures of simple time, it contains of necessity two strong and two [respectively four] weak parts; *therefore the caesurae, the mental resting points, must be able to occur in all types of compound meter either on the first or the second part of the measure*;

§ 73 "[...] Here the [...] *characteristic of compound meter* is demonstrated through the possibility that the caesurae of the half and the full cadences can also fall on the second part of the measure. If this is the case in a melody [...], one can be sure that the melody is composed in compound meter. [...] For this reason, if one wishes to decide on the nature of the meter, it is in all cases best to consider the extent of the parts of the melody at the same time [...]." (17)

Here is a short list of examples from various tempo groups (without consideration of the smallest predominant note values):

a. Adagio 6/8

simple:

- Piano sonata in F major, K. 280, 2nd movement

compound:

- Piano concerto in A major, K. 488, 2nd movement

b. Andante 6/8

simple:

- 1. "Pace, pace, mio dolce tesoro", *Figaro*, Finale IV, measure 275
- 2. "Vostre dunque saran queste carte", *Figaro*, Finale II, measure 605
- 3. "Una donna a quindici anni", Despina's aria, *Così fan tutte*, No. 19

compound:

- 1. "Ach, ich fühl's, es ist verschwunden", Pamina's aria, *Zauberflöte*, No.17
- 2. Piano trio K. 496, 2nd movement
- 3. G minor Symphony, K. 550, 2nd movement
- 4. A minor Rondo for Piano, K. 511

c. Allegretto 6/8

simple:

- 1. "Ich sollte/ ich sollte/ ich sollte fort!" *Zauberflöte*, Introduction, measure 120
- 2. "Di pasta simile son tutti quanti", *Così fan tutte* No. 12, bar 24

compound:

- 1. "Seid uns zum zweiten Mal willkommen", *Zauberflöte*, terzetto No. 16
- 2. Piano concerto in F major, K. 459, 2nd movement
- 3. Piano Trio in G major, K. 564, 3rd movement

d. Allegro 6/8

simple:

- 1. "Giovinette che fate all'amore", *Giovanni*, coro No. 5
- 2. the 3rd movements of the piano concertos in Eb major, K. 482 and Bb major, K. 595

compound:

- 1. "Dann schmeckte mir Trinken und Essen", *Zauberflöte*, Papageno aria No. 20
- 2. "Papagena! Papagena!", *Zauberflöte*, arietta Papageno, No. 21, measure 413
- 3. Oboe quintet K. 370, 3rd movement (6/8 + ϕ !)
- 4. String quintet K. 517, 3rd movement
- 5. Piano trio K. 548, 3rd movement
- 6. Piano Sonata in D major, K. 576, 1st movement

In an essay entitled "Mozarts Tempo-System. Zusammengesetzte Takte als Schlüssel" ["Mozart's Tempo System. Compound Meters as Key"] I have said more on the subject. (18) However, what is the answer to the question of reference points of the Italian tempo terms? The following extracts from Marpurg, Kirnberger and Leopold Mozart should be representative for the late 18th century's conception of the role of meter in the determination of tempo. Each meter has a tempo of its own:

Marpurg 1760: "If one asks why duple meters are sometimes expressed as 2/2 and sometimes as 2/4, the answer is that the movement ['Bewegung'] of a particular meter determines the choice of the time signature and, for this purpose, a slower duple meter must be written in 2/2 and a faster meter in 2/4. The same procedure can easily be applied to triple meters [3/2, 3/4, 3/8]" (19)

Kirnberger 1776: "In general it can be established that in meters with an equal number of metrical units, those with greater or longer values are by nature more serious in character than those with shorter values: thus the 4/4 meter is less cheerful than the 4/8 meter; the 3/2 meter heavier than the 3/4 and the latter not as cheerful as the 3/8 meter. [...] Cumbersome and very serious is the 3/2 meter, [...] Gentle and noble seems to be the character of the 3/4 meter, particularly if it exclusively, or for the most part, consists of quarter notes. The 3/8 meter after all possesses a vivacity which has a touch of wantonness about it." (20)

Likewise **Leopold Mozart** 1756: "C , 2 or 2/4 , ϕ ; 3/1 , 3/2 , 3/4 , 3/8 , 6/4 , 6/8 , 12/8: These types of meters alone are sufficient to indicate to a certain extent the natural difference between a slow and fast melody." (21)

Numerous sources confirm that in the 18th century 3/8 time was generally played at a faster tempo than 3/4 time, 4/8 faster than 4/4 and 2/4 faster than ϕ . However this is not the last word on the subject, for – as all practical musicians know – the smallest predominant note value also plays a role in the determination of the tempo. Because of its thirty-second notes the Allegro 2/4 of the Piano sonata in Bb major, K. 281 cannot be played as fast as the Allegro 2/4 of the third movements of the Piano sonatas K. 279 in C major and K. 282 in Eb major; the Allegro 4/4 of "Eine kleine Nachtmusik" KV 525 and of Leporello's "Catalogue" aria "Madamina", containing no sixteenth notes of importance, must be played faster than the Allegro 4/4 of his duet with Don Giovanni "Oh statua gentilissima" (No. 22), or the 1st movement of the D major Piano concerto, K. 537, both

dominated by sixteenth notes.

Here is a further quotation from **Kirnberger** on the subject:

"A study of the different *note values* shows that dance movements [but also all others], in which sixteenth- and thirty-second notes occur have a slower tempo than those which in the same meter have only eighth notes or at the most sixteenth notes as the shortest note values.

Thus the *tempo giusto* is determined both by the *meter* and the longer and shorter *note values* in a piece of music. Once the young composer develops the feeling for this, he will soon recognize *to what extent the additional words* largo, adagio, andante, allegro, presto and all their modifications [...] *add or subtract speed to the given natural tempo*". (22)

This can hardly be put more plainly, and I think that all those favoured theories in which Mozart's tempi are based on the pulse rate (which rate? - 60/sec. at breakfast, 80 in rehearsal or up to 120 in performance?) and are interrelated through proportions such as 1:2, 1:3 or 2:3, should become irrelevant. I cannot help suspecting that particularly the alleged "tempo relations" - not mentioned by any music theorist of the 18th century (!) (23) - are so often postulated because tempo transitions are of course a lot easier if the underlying basic beat remains constant and only the value of the notes changes. For listeners who do not know the notation of the piece, it appears then that everything is played at the same speed. Is this what Mozart had in mind, or are his more than 300 different types of "tempo" not rather the structural organisation within an abundant cosmos of speeds, accentuations and manners of playing, a variety which is also characteristic for his melody, harmony, rhythm, periods and forms?

On the one hand Mozart's Italian tempo words can be connected to the classical 4/4 time without difficulty if one takes into consideration the shortest tempo-relevant note values (excluding grace notes, tremoli, tiratas, arpeggios etc.). In the same way tempo words refer directly to the beats of the "heavy" 3/4 time, "simple" 2/4 time and "simple" 6/8 time. (See hatched fields in the following diagram.) In ϕ on the other hand, being a larger meter, the parts of the measure are in the case of an *identical tempo word* slower, and in the smaller meters 3/4 (in one), 3/8, as well as in "compound" 6/8 (3/8+3/8) and 2/4 (2/8+2/8), they are faster than in "normal" 4/4 time. There is an increase of tempo in both the "additional words" from *Largo* to *Prestissimo* and - independently of these - in the different *meters* from ϕ to 2/8.

diagram "Tempo and manner of playing"

Except in ecclesiastical fugues in the *stile antico* ϕ is for Mozart definitely not "double the speed" of the classical 4/4. (For the baroque "large" 4/4 however with its 4 heavy main accents per bar the definition does apply. It will be treated in my next essay "Mozarts Tempo-System II".) As all tempo indications refer first to the denominator of the time signature, the half notes in classical *Alla breve* are of course *slower* than the quarter notes in 4/4. Kirnberger p. 106: "In a consideration of meters, those with larger denominators, *Alla breve*, 3/2 and 6/4 time, are heavier and slower in pace than those with smaller denominators". As one of numerous examples compare the Allegro ϕ in the *Zauberflöte* Overture to the Allegro 4/4 of the Introduction No.1 ("Zu Hilfe! Zu Hilfe!") or the Andante ϕ "Bald prangt, den Morgen zu verkünden" to the Andante 4/4 "Heil sei euch Geweihten". However, neither of these examples convince me of the opposite opinion that for Mozart there was no difference between 4/4 and ϕ (on this subject see his letter from 20.4.1784). In a comparison of all his movements in both meters it can be demonstrated that the quarter notes in ϕ are substantially faster, but not twice as fast, as those in 4/4 time.

A general rule for the relation between *alla breve* and 4/4-time (except in the *stile*

antico) could be given approximately like this:

» one measure in ϕ has the same duration as one measure in $4/4$ time with the *next higher grade of tempo*, i. e.:

Larghetto ϕ = Andante C, Andante ϕ = Allegretto C, Allegretto ϕ = Allegro C.

The same is valid for **$2/4$ time in relation to $4/8$** :

» one measure in $2/4$ time has the same duration as one measure in $4/8$ time with the *next higher grade of tempo*, i. e.:

Larghetto $2/4$ = Andante $4/8$, Andante $2/4$ = Allegretto $4/8$, Allegretto $2/4$ = Allegro $4/8$.

The comparison of Mozart's tempi reveals numerous cases of overlapping: the quarter notes in an *Andante* $4/4$ are approximately as slow as those in a "simple" *Larghetto* $3/4$; in a "simple" *Andante* $3/4$ the quarter notes are as moderately slow as the eighth notes in an *Andante cantabile* $3/8$; in *Andante* $3/8$ the eighth notes possess the same cheerfulness as the quarter notes in *Allegretto* $4/4$.

The reason why Mozart did not simplify this system and avoid cases of overlapping - which would make things much easier for us - is because all these meters and "additional words" belong to different compositional types or models and require different manners of playing. Concerning the directions given by meters and note values:

Johann Abraham Peter Schulz in the article "Tact" [meter]: "The manner of playing and the *speed* are defined by the longer or shorter note values which are individual to each meter; i.e. heavy and slow in the first case, and lighter and livelier in the latter. [...] $3/8$ time for example should be played in a light manner; should a movement in this meter be marked Adagio and contain thirty-second notes, then the execution must be heavier than if there were no thirty-second notes, but not as heavy as if the movement were written in $3/4$ time." (24) And in the article "Vortrag" (25): "The degree of heaviness or lightness of a piece depends chiefly on the meter. The longer the note values of the meter, the heavier the manner of playing must be and the shorter the note values the lighter." (26)

Joh. Ph. Kirnberger: "Two pieces of music having the same degree of Allegro or Largo can nevertheless have a quite different effect, their movement although at the same speed being more fluent or ponderous, lighter or heavier according to the kind of meter. From this we realise that movement and meter must be used in harness." (27)

In 1776 **Johann Friedrich Reichardt** gives very detailed instructions on the subject of the manner of playing dictated by the "additional words":

"- The varied character of movements also calls for varied bowstrokes. Thus the bowstroke in the *Adagio* is very different from that in the *Allegro*, the main distinction being that in the *Adagio* the bow remains more on the string than in the *Allegro*. In an *Adagio* nothing but a rest must cause the bow to leave the string. Even with notes marked staccato with a stroke ('), even with this shortening, the bow must never fully leave the string, but must remain in contact with an eighth part of its hair.

- In the *Andante* the bow have the lightness of the *Allegro's bows* without its sharpness and the tape-ring off not so quickly.

- The same also applies to the *Allegretto*: here, however, the sharpness of the bowstroke becomes somewhat livelier and occasionally also somewhat sharp.

- Last but not least, in the *Allegro* a sharp bowing of the detached notes and rapidity of cut-offs is finally highly essential".

- Intensifying superscriptions, such as, for example, Allegro di molto, Allegro assai, Presto,

Prestissimo, apply merely to the tempo and do not alter the character of the bowstrokes. For the bowstroke to be affected, a designation such as *Allegro e con brio*, *Allegro e con spirito*, *con fuoco*, *resoluto*, and so on, must be added to the superscription.

- Likewise, the superscriptions that lessen the speed of Allegros, e.g. *Allegro ma non troppo*, *non tanto*, *moderato*, and so on, also make no difference in the character of the bowstrokes, but refer merely to the tempo. If, however, *cantabile*, *dolce*, or some other designation is affixed that more precisely determines the character of the movement, then this refers to the bowing, which must become gentler and more connected.

- Similarly, in slow movements the superscriptions *maestoso*, *affettuoso*, *mesto*, *grave*, announce that the longer bowstrokes should receive a stronger, more expressive accent, and then that notes followed by rests must not be cut off abruptly, but rather be allowed to fade away gradually." (28)

A superb summary of all this is given by **Johann Abraham Peter Schulz** in his article "Tact" in Sulzer's "Allgemeine Theorie der Schönen Künste":

"So, putting meters of all kinds side by side together, it seems sufficient to have one meter of two beats and another of four for even time, and a third of three beats for uneven time; a precise indication at the beginning of the piece would determine the rapidity or slowness at which it should be performed: nothing more seems to be necessary for a piece as regards meter and movement." [This opinion, described here as wrong, corresponds precisely with the romantic, as well as the modern, understanding.]

"Overlooking the fact that the movement is capable of infinite degrees of rapidity and slowness which cannot be defined by words or other signs, in such a case you would still need as many signs or words to describe how the piece should be performed; i.e. should it be played heavily and forte, or more lightly and mezzo forte or very lightly and, as it were, playfully? For this is what the whole character of the piece depends on. There is a world of difference if a piece, irrespective of its tempo, is played on the violin with the full weight of the bow, or lightly and just with the tip. What we are talking about is not some artificial rendering, but one based on the character of each individual piece, without which the music would be a rigid and tedious monotone; and this character must be understood if it is to be captured in order to find the right manner of playing."

"If a piece is to be played lightly but at the same time in a slow tempo, the composer will choose, depending on the degree of lightness required in the performance, a meter of short or shorter beats, and use the words *andante* or *largo* or *adagio* etc., according to how far the slowness of the piece should exceed the natural movement of the meter. And conversely: if the piece is to be played in a heavy manner but at the same time at a fast speed, he will choose a heavy meter and add the words *vivace*, *allegro* or *presto*, depending on the sort of performance he wants. An experienced musician seeing the species of note values in such a piece will be in a position to capture the manner of playing and the movement which correspond exactly with the composer's ideas; at least as exactly as can be expressed by any other signs or words, however precise they are." (29)

Mozart's "tempo" indications therefore focus not merely on the physical *speed* which usually preoccupies us, but also on the performance as a whole. ϕ , $3/4$, $3/8$, and the compound $2/4$ ($2/8+2/8$) and $6/8$ ($3/8+3/8$) meters indicate an individual tempo of their own not corresponding to the beat of "regular" $4/4$ time. This *tempo of the meter* is modified by the *shortest note values* and the "additional words". So - unlike our habitual use - tempo words are no "tempo indications" by themselves, they are only part of these. Meter, smallest note values and tempo word combined produce a sort of module for the determination of the metrical accentuations, the speed, character and manner of playing - i. e. the "movement" in the widest interpretation of the term. Nearly three quarters of all

Mozart's autograph tempo words therefore do not refer to whatever may be regarded as "the beat".

The author's comparative study of the complete autograph tempo indications by Mozart will demonstrate that Swarowski's assertion that Mozart used only "two fast tempi, one medium and one slow tempo" (30) is as untenable as the widespread belief that the sometimes grotesque metronome markings by Tomaschek which after all appeared 49 years after Mozart's death (!), and those by Hummel, Czerny, G. Weber, Schlesinger and others for Mozart's works, provided objective information on his tempi. If at all they are witnesses of a change of taste which had taken place during Rossini's time and are devoid of meaning as far as our understanding of Mozart is concerned. Metronomization of whatever origin is in principle inconsistent with the nature of Classical tempi (31). They originated during a pre-technical era, before the obsession of measuring began to influence our thinking, and are intended to be found through "handiwork" by the performers themselves – albeit within a highly sophisticated and complex system of correlated musical parameters. For this reason, metronome markings for Haydn and Mozart are *always* wrong. (Metronome)

In the end, the only way to get rid of speculation about pulse-rates, walking speeds (32), metronome markings and "tempo relations" and also from the comparison among more or less reliable treatises from the time before Mozart (33), is to enquire of Mozart himself. Although the subject of tempo was mentioned only sporadically and not always clearly in his letters – he was all the more exact, as we saw above, with their indication in his scores. In a comparison of all 1.435 movements which have autograph tempo indications, it is in almost every case possible to find a similar movement, often in the same work, or within the same artistic period. Often there is one which "is driven so forcibly into its own natural movement" (34), that there can be no question about its tempo. Several movements (slower and faster by definition) with the same meter and smallest note values will serve as comparative standard. Hence, the order and characteristics of Mozart's tempi, his more than 300 tempo modules, can be clarified and the logic in his system of tempo indications explained, - provided this is done without prejudice.

Within this context, the following categories must be taken into account: 1) the meter, 2) the shortest tempo relevant note values, 3) the tempo word, 4) the harmonic density and its interconnection with the meter, 5) the rhythm, 6) the articulation and 7), if applicable, the text, verse meter and (with special precaution!) the dramatic context.

It must also be examined whether the genre ("ecclesiastical, theatrical or chamber style") and the key play a role, and, in addition, whether there was perhaps also a development in Mozart's conception of tempo from the early compositions to the works of his last period.

Once the order of the tempo modules has been established, each performer is free to search *within the highly sophisticated system used by Mozart* for what could be the "right" tempo for the piece, the ensemble and audience on the day, in this particular theater, church or concert hall.

FOOTNOTES:

- (1) Claudia Maurer Zenck, "Vom Takt" (Wien: Böhlau-Verlag, 2001), 70.
- (2) Which incidentally means that for him Andante was not a slow tempo!
- (3) Maurer Zenck, 87.
- (4) Rondo of his Flute Quartet in A major, K. 298.

- (5) He only used 3/2 and 4/2 – and characteristically without a tempo indication – in several movements in the *stilo antico*: in K. 49, 85 and 321, and never 6/4; these meters were by that time already considered as old-fashioned.
- (6) In some 190 cases even foreword and critical notes give no information on the source.
- (7) If René Leibowitz insists that Mozart's Andante ϕ should be conducted in half notes, to be consistent he would then also have to conduct the Presto-3/8 sections in eighth notes, which of course he does not. ("Tempo und dramatischer Sinn in Mozart's ‚Don Giovanni‘", in: "Mozart. Die Da Ponte-Opern", "Musik-Konzepte", Sonderband, ed. text + kritik, München, 1991, 212fn)
- (8) 508 out of 725 movements by Mozart in 4/4 time belong to this category.
- (9) Jean-Jacques Rousseau: "The Paris Opera is the only theatre in Europe where time is beaten without being observed; in all other places time is observed without being beaten" ("Dictionnaire de Musique", vol. 1, article "Battre la Mesure", 114)
- (10) Hans Swarowsky / Manfred Huss, "Wahrung der Gestalt", Wien, 1979, p 76: "The establishment of the modern way of conducting has robbed much of the feeling for a naturally appropriate tempo". And also very nice: "Music which has never asked to be conducted is the most difficult music to conduct."
- (11) There is also the modern term "added" meter, which to my mind does not make it clear enough that measures as *entities* are meant.
- (12) With regard to 6/8 meter this should read *four* "weak" beats; Koch had taken the wording uncorrected from the entry on 4/4 meter. (Heinrich Christoph Koch "Musikalisches Lexikon", Frankfurt, 1802, reprint: Hildesheim, Georg Olms, 1964, c. 1307 and 1482.
- (13) Johann Philipp Kirnberger (in collaboration with Johann Abraham Peter Schulz): "Die Kunst des reinen Satzes in der Musik" ("The Art of pure Writing in Music") 2nd part, Berlin and Königsberg 1776, 116. - A work on which Triest comments in the Leipzig periodical "Allgemeine Musikalische Zeitung" in 1801 that "particularly due to its consistency and clarity surpasses all similar publications and will perhaps continue to do so for a substantial period of time and the study of which no serious young composer can go without." ("Bemerkungen über die Ausbildung der Tonkunst in Deutschland im achtzehnten Jahrhundert") ["Remarks on the cultivation of the art of music in Germany in the eighteenth century"].
- (14) See Mozart's shifting of the bar-lines by half a measure in the Duet Pamina-Papageno "Bei Männern, welche Liebe fühlen" (*Zauberflöte*, No. 7) , and in the Quartet "La mano a me date" (*Così fan tutte*, No. 22) which would not have been possible in simple 6/8 meter.
- (15) Friedrich Wilhelm Marpurg: "Kritische Briefe über die Tonkunst" ("Critical Letters about the Musical Art"), vol. II, Berlin 1762, 25.
- (16) Kirnberger, 131.
- (17) Heinrich Christoph Koch: "Versuch einer Anleitung zur Composition", Leipzig, 1787, Reprint Hildesheim, 1964, 2nd part, 333, 335.
- (18) in: Manfred Hermann Schmid (ed.), "Mozart-Studien" 13, Tutzing, 2004, 11-85.
- (19) Marpurg, vol. I, 100, § 6.
- (20) Kirnberger, 133.
- (21) Leopold Mozart, "Versuch einer gründlichen Violinschule" ("Attempt at a Comprehensive Violin Method"), Augsburg, 1756, 28.
- (22) Kirnberger, 106

(23) "It is above all Johannes Antonius Bank (1972) and Uwe Wolf (1992) who speak out against the assumption of tempo proportions [in the 18th century]. Among other things they refer to the numerous new time signatures – nonsensical as proportions –, to corresponding statements in certain treatises [...] and forewords as well as the complete absence of any references to a proportional interpretation e.g. of the verbal tempo indications." ("Musik in Geschichte und Gegenwart" II, Sachteil, vol. 7, 1997, article "Notation") and also Klaus Miehling ("Das Tempo in der Musik von Barock und Vorklassik", Wilhelmshaven, 1993, 334)

(24) Johann Abraham Peter Schulz in J.G. Sulzer's "Allgemeine Theorie der Schönen Künste", Volume IV, Leipzig 1794, reprint: Hildesheim, Georg Olms, 1967, p 497.

(25) "Vortrag": the art of a performer using his mechanical skill of execution with consideration of the character and purpose of the composition. Tempo, dynamics, articulation, agogics and embellishments are the essential components of a good "Vortrag". [This is the gist of what F.W. Marpurg says about "Vortrag" in his "Critical Letters about the Art of Music" (1760) vol. I, p 500]. - H.Chr. Koch describes the task of a good 'Vortrag' as "representation of the actual meaning and the spirit of a piece of music" (in his "Musikalisches Lexikon", column 1.729).

(26) J.A.P. Schulz in Sulzer, volume IV, 701-709.

(27) Kirnberger, 105

(28) Joh. Friedrich Reichardt (1752-1814), Royal Prussian court music director: "Über die Pflichten des Ripien-Violinisten", Berlin and Leipzig, 1776, 25-27, 69.

(29) J.A.P. Schulz in Sulzer, vol. IV, 493/94

(30) Swarowsky, 67.

(31) And I dare to consider that Beethoven's – and our own – difficulties with his metronomization stem from this.

(32) Jean-Pierre Marty ("The Tempo Indications of Mozart", 1988), bases his somewhat subjective metronomization of Mozart's tempi on an arbitrary scale of walking speeds of either MM=60 or MM=44, which in a classical circular reasoning leads to such statements as all of Mozart's Andante ϕ were either $1/2=60$ or $1/2=44$.

(33) Particularly by Quantz two generations earlier (!) with his tempo/pulse-rate table intended for *pupils* !

(34) Leopold Mozart, 30.