

# Synopsis of the Major Encyclopedias of Traditional Western Music Notation

Markus Lepper



veröffentlicht auf der Plattform "osnados"  
<https://osnados.ub.uni-osnabrueck.de>  
in der Schriftenreihe "FB03 – Hochschulschriften"  
des Fachbereiches 3 – Erziehungs und Kulturwissenschaften  
der Universität Osnabrück

## Abstract

The article gives a comparison of six books about traditional western music notation (CWN) which come with an encyclopedic claim, trying to cover all possible questions on notation in a systematic way. Since these books all claim to treat the totality of all relevant questions, their tables of contents could be expected to be mere mutual permutations, but a detailed comparison of themes and topics shows surprising gaps and differences.

---

Dieser Text ist ein **Parergon** zu der Dissertation  
“de Linguis Musicam Notare”  
im Fachbereich 3 der Universität Osnabrück,  
betreut von Michael Oehler und Hartmuth Kinzler,  
erschienen im epOs-Verlag, siehe <https://www.epos.uni-osnabrueck.de/buch.html?id=150>  
Zu Referenzzwecken findet sich der DOI dieses Textes unter  
<https://osnadocs.ub.uni-osnabrueck.de>

## 1 Introduction

This article gives a comparison of books about traditional Western music notation. This method of writing down music is also called "common Western notation", "conventional Western notation", "CWN" or "bar based notation". It had been started in Western Europe in the seventeenth century, by enhancing the medieval "mensural notation" by bar lines and ties. (Read, 1979, pgs. 110,183)

Today CWN includes all those extensions developed during the last centuries, in classical and romantic Western composition, up to contemporary avantgarde and electro-acoustic music. For sake of shortness, this whole area will simply be called "music notation" in the following.

We look at six published books which come with a more or less *encyclopedic* claim, which try to cover all possible questions on notation in a systematic way. Due to this demand, their actual "tables of contents" could be expected to be mere mutual permutations, and the answers they give to be widely identical. But going into the details of the texts shows different. So these books are natural candidates for a *synopsis*, which is presented with this article.

## 2 The Books Considered

The works considered here, in chronological order, are Read (1979), Ross (1987), Stone (1980), Vinci (1991), Wanske (1988), and Gould (2011).

All these claim to cover all major issues in modern CWN; the latest calls itself "the definitive guide" in its title. Most of them consist of a first general part, and a second with rules specific for certain families of instruments, including the human voice and electro-acoustics, or certain ensembles, etc. Some, but not all of them, operate with real examples from musical history and existing engravings. Some of them appeared in recent times, some are already forty years old.

All of them are nice to read, but in the end, all these books will (mostly) tell you the same; this motivated us to write this synopsis article. There are only few questions for which different books give contradictory rules; one can assume that these questions are the real interesting ones. Astonishingly, there are still relevant details covered only by one of them; so far with "definitive" and "encyclopedic".

All books are in the English language, except Wanske (1988), which is written in German and has (as far as we know) never been translated. Here a short characterization of these works, in reverse historical order, as they appear in the synopsis table:

Most recent is the book by Gould (2011). It has more than sixhundred pages, treating *engraving* of music. The first half deals with notation in general. The second part treats rules and symbols special for different families of instruments.

In both parts, most rules are about the optical appearance of the notation text. But with many rules, the author gives *reasons* for the rules, nearly always coming out of *execution pragmatics*. Partly, these reasons reach into areas which could be called *semantics of notation*.

The work contains also a chapter dedicated to electro-acoustic music. Since the other works are significantly older, and the last decades brought revolutionary changes, comparison is not very sensible w.r.t this special topic.

The large chapter on *vocal text presentation* (pg. 437 pp.) is unique and left out in this article, especially because it is limited to English lyrics.

The work by Wanske (1988) is an historic important attempt to prepare for a note engraving computer software. While the technological aspects are somehow outdated, the book is still relevant in different respects:

First, the author has led interviews with engravers from big publishing companies to collect, publish and thus preserve their professional knowledge.

Second, aiming at a software solution, the author tries a first *systematic* approach:

(a) the basic symbols are grouped according to different aspects (internal graphical syntax, constant vs. variable geometry, categories of meaning).

(b) the rules for combining these basic symbols are also tried to systematize by introducing a notion of "chaining". This is without any doubt the correct approach.

(c) the author gives mathematical models for selected details, like matrices and derivation rules for basic symbols, possible relations of note heads, calculation of beam angle, calculation of slur contour, etc.

Therefore this book is still a paradigmatic approach to the very complex problem of musical notation. This book is not organized along the different parameters of music, like most others, and like our synopsis table, but the logic of combination and position calculation. Therefore the page references in the table below appear rather scattered.

The book by Vinci (1991) is comparatively small and focuses on *hand-writing* of music. Nevertheless, the topics (and even partly their sequential order) are the same as in the much larger Gould (2011).

The book by Stone (1980) is special because it explicitly covers hand-writing *and* engraving, and lists differences *explicitly*.

It also consists of a first general part, and a second part specific to families of instruments. Its main focus is on *modern* techniques, but of course the basic is still CWN, as defined above.

The structure is confusing: The second level are chapters, related to major fields like "Pitch", "Rhythm", "Scores". But the organization one level below follows the *names of concepts* in alphabetical order.

Very welcome and unique are some sections with more fundamental discussions from strategical and philosophical view point: About the different possible relations of new music's time organization and traditional metric notation (pg. 82 pp.), about different strategies for using beaming (pg. 114), etc.

The chapter on the *harp* is much more detailed than the rest of the book, it can serve as a hand-book for modern harp playing techniques! Since it is unique, we have ignored this extra material in the synopsis. So we did with the (very valuable) chapter on keyboard reduction.

The book by Ross (1987) comes with a comprehensive survey of the historic developments of music printing, type setting, engraving and stamping, from the fifteenth century up to "contemporary" music typewriters (one is even already electrical!-) and very first computer aided processes. Most of the book is written from the practitioner's point of view; preparatory steps of engraving and layout are described exhaustively, up to interesting details like that "the engraver never has to refer to the manuscript once the plate has been marked".

Gould (2011) frequently refers to Ross (1987); so does Stone (1980), namely to its first edition from 1970.

The work by Read (1979) starts with a short survey on the history of notation, but in its main part again tries to establish a systematic linear order.

It covers hand-writing (as opposed to the rules for engraving) in a dedicated chapter.

It is the only one of all the books which comes with *practical notation exercises* at the end of each chapter.

It is a very valuable and famous book and covers many aspects which got lost by its successors, which is clearly shown by the lines in the following tables with only one single entry.

### 3 Structure of the Tables

The following tables list fine-granular questions and topics, and refer to the pages where these are answered/treated in the different books. As a reference we give the number of the page where the explanation *starts*; subsequent page(s) should always be considered. This number refers to the edition from the bibliographic list below, but different editions should not vary surprisingly.

(In parentheses we show the page numbers where a concept occurs en passant in an example, without being bespoken at all, – so it seems taken as understood by the author.)

The list basically follows the sequential arrangement of topics from Gould (2011), because it is the latest publication with the most differentiated structure. We followed her structure in spite of some minor objections we do have (e.g. the topics concerning the general score layout are rather late; "freedom and choice" is extracted from the general discussion of time and tempo; some topics are doubled at different places, and not always in a consistent way). Nevertheless it should not be the function of such a synopsis article to establish an own and totally new sequential order. Some minor of these dislocations have been silently corrected, partly by doubling, as can be seen easily in the first column of page numbers in the tables below.

Indeed, a really adequate index would have to be multi-dimensional, because most questions arise from a combination of different topics. To create such an indexing system would require substantial effort, far beyond such a short survey article. Nevertheless, these tables can be useful:

- First, they may be valuable indexes for finding the answers for given questions when using one or more of these books, and
- secondly, they show at one glance gaps and special merits of the bespoken publications,
- and last not least, they can be the starting point for a more systematic approach.

Currently all question involving more than one concept require multiple table look-up, e.g. if you don't find the topic "dotted rests" under "rests", you must look under "dottings"; for "accidentals of chords" look under "chords" and "accidentals", etc.

The *wording and spelling* of notions, questions and topics have been taken from the book coming first in the list. Eg., Gould (2011) writes says "stave" and "staves", not "staff", and so we overtook this spelling. She writes "ledger lines", vs. Stone (1980) "leger lines", and "tails", vs. Read (1979) "flags". She spells "notehead" and "barline" in one word, vs. "note-head" in Read (1979). All this we took over.

We did not follow her in taking the word "bar" for the time duration between two "barlines" (see the usage on pg. 41), and follow Read (1979) who insists that the only correct word for this time section is "measure", while "bar" is just a synonym for "barline" (pg. 184).

We tried to cover the first and general parts of all books *completely*, while aiming at a sensible level of granularity. In the second, specific parts we were *very selective* and considered only the topics of general interest. We *completely left out* the chapters on piano reduction and on lyrics in vocal music.

## 4 Table of General Topics

This first table refers to the general topics. We tried to be exhaustive, with a reasonable level of granularity.

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Strategic dimension:</b> Different roles and functions of notation.	xi-xiv	58, 83-5, 272-4, 310-5	x	xv-xvi, 108-10, 316		3, 309, 451-3
Different levels of complexity due to style/epoche/genre/instruments etc.		85-94		108-10		
<b>Graphic Basics:</b> Rastral numbers	483	96	2		57-8, A28	
Fundamental graphical measures/distances in notation	5, 557, 481-2, 487-9	95-97, 259-61		44-5	56, 61, 74-5, 143-4	
What are the main kinds of <b>staves</b> and their role?	5	102	1, 3-6	22-3	58, 189-90	27-9
... changing to unpitched notes midway				22, 79		
... horizontally incomplete staves						31-2, 39-41
... staves ending not with a barline	489-90					313
<b>change of instrument</b>	510, 530-1, 559				206	441-2
What are the tone-defining/tone-less <b>clefs</b>						
... and where are they positioned vertically ?	5-6	45-6, 102-3	7-8	56-7	165-6, 173	51-5, 364, 423
... and where are they positioned horizontally ?	6				144	
... and for which instruments are they used?	7			72-3		53-5, 293, 303, 338-40, 354-6
Should a clef <i>change</i> be positioned						
... at the start of a piece?	7					
... w.r.t. line breaks ?	7		9	46, 57	59, 167-8	
... w.r.t. barlines ?	8	254-5	9	46, 57	167	
... w.r.t. repeat lines ?	234	254-5				
... w.r.t. groupings of notes/phrases ?	8					58
... w.r.t. groupings of pauses ?	8				167	
... w.r.t. tied notes ?	9					
... w.r.t. beams ?	23					
♯1 clef in 1 stave						59, 355
clef on a space, not a line					166	

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Noteheads</b>						
... shape and orientation	9-13	31, 36-40	11-12	30-1, 219		29, 63-5
... size	10	36				
Cross/diamond noteheads, shape, size and orientation	11-2			30-1		(406), 75
Triangular noteheads	12-3			31, 65, 294		405-6
Proposed alternatives					47, A53-5	32-4, 72, 75-7
<b>Basic durations</b> of note symbols		63-4	11, 27			65
<b>Stem</b>						
direction (single note-head)	13-4	106-7	23	49-50	83	64
length	14-5	41-2, 187-9	101, 12	47-9	83	64-7
... when notehead outside stave	14-5		24		86	66-7
... when stem points out of stave (>1 part)	14	188		47-8	87	
Invisible stems for whole notes	50, 119, 226-7, 491	167-8, 207, 231	173, 64	6, 37	138, 150	237
Common cross-stave stems for ensemble				162-3		
<b>Dimensions and positions of flags(tails)</b>						
... conflicting with ledger line	16				127	67, 79-80
Position of flag enlarges stem	16	106	14	49		67-7, 80
<b>beams</b>						
... size; appearance; relation to stem and stave	17-8	28-9, 42-3	14, 43-46	9-10	88	80-1, 83
... of fractional beams	17		47	12	124	84
... affecting stem length	18-9, 21	163-7, 195-7	48	48-9	101, 117, 125	80
Position of horizontal beams w.r.t the stave-lines?	17-8	25-6, 42, 161	43-4	9-10	118, 122, 125	
Position of beams with note-heads on ledger lines	19, 21	161	(43-4)		126	66-7
Degree of beam angle (possibly =0)?	19-24	26, 398-400	155-63, 45-6	10-12	97, 115	88
... in case of chords?	24-5				117	
Stem direction with beams?	24-25	154-5, 194-6		50	94	88
Position of angled beams w.r.t the stave-lines?	20-21	25-6, 161-2	47	10-11	98, 120, 125, A52	
Beams outside stave (>1 part)	21	26, 161		12		
Beams split for graphic/interval reasons	25					86
... split/sub-divided for semantic/execution reasons	169-70	169, 193-5				85, 306
Opposite stem direction on the same beam						
... in one(1) line?	26			13-14	126	88-9, 307-8
... in two(2) lines, e.g. in piano system?	314-7	135, 193-4		12-14	127	(70), 86, 307-8

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
Beams across rests	36, 164-5		(16), 49	15	(92), (176)	163, 102
Beamed rests / stemlets	165-6		49	15-16, 28	163	93
Beams for varying speed	140, 158			4, 124, 141		94
Dimensions of <b>ledger lines</b>	26	30, 50-1	10	30	182	43, 422
... with chords and overlapping parts	27					
... with chords containing second intervals	27		10		182	
<b>Octave signs,</b> orthography, placement, extension lines, w.r.t. line breaks	28-31	276		25, 44	173, 203	45-7, 422-3
Octavating clefs	32			56-7		55-6
<i>coll 8va</i>	32					47-8, (230)
When to use octavation vs. ledger lines / in score vs. parts	32-4, 255					47, 57-8
<b>Rests,</b> design and size	34-5	43-5, 104	15-7		173	96, 103, 424
... vertical placement (1 part per stave)	35, 38		15-7		173, 178	(96)
... vertical placement ( $\geq 1$ part)	36-38	170-1	16-7		176	97, 99-100
... sharing when $\geq 1$ part	37, 312, 528					(342-3)
Geometry of <b>barlines</b> of dif- ferent kinds	38-9	28, 65, 103-4, 120	50	6-9	74, 151	182-5, 312-3, 425
... anti-aligned positioning	489		52	8	59	
... between staves, not crossing them						215
Dotted barlines for meter subdivision	178			8		217, 312-3
Rhythmic <b>horizontal spac- ing</b>	39-41, 200-2	97-100, 108-127, 203-5, 264-8, 277-80	27, 36	46-7, 135-6	73	96, 425
Adjust spaces of changing stem direction	41	108, 135-7, 194			77	
General horizontal spacing rules (order, spacing)						
... between clef, key signa- ture, time signature at begin- ning of line etc.	41-2	128-32, 254-7	79	44-6	144	
... around those, in the mid- dle of line	42-3	128-32		46		
... accidentals and note spacing	43	128-33, 198- 202		45-6	146	
Alignments of notes(objects) in paral- lel lines	490-1	109, 143-154, 256-7	25	47		71
Horizontal spacing, general pragmatic considerations	490	263-4			73, A2, A6	
Vertical spacing, general pragmatic considerations	487-8, 523-5	268-74			60, A6	

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>(Single-stemmed) chords</b>						
... stem direction	47-8	189-90	24	50	84, 150	69
<b>Chords containing a second interval</b>	48-9	172-4	25		149-50	71
Chords containing more than one second intervals	49	172-4			(150)	
Aligned octaves (also for accidentals)	90	199, 202				(136)
Aligning chords with seconds, anti-stemmed	49	174	25		150	71
<b>Single-stemmed unisons</b>	50			78		
Single-stemmed unisons with alteration (eg. cluster)	50-2					73-4, 90
Cluster	326-9			57-63, 259-60		74-5, 299, 320-2, 408
<b>Double-stemmed writing</b>						
Unisons sharing noteheads	52	177		78, (165-5)	204	68-9, 343-4
Unisons with separate noteheads / seconds	53		26	78		
Overlapping/crossing parts ... with two stemless notes	53-4 54	175-6	26	164-5		342-3
Detailed discussion of off-setting conflicts in free keyboard writing	310-3	175-85				70-1, 305-6, 308-10
Crossing of beams and stems, since parts <sub>2</sub>		198				
<b>Dotted notes...</b>						
... meaning		60-1	39			113-4, 116-7
... positioning with single notes	54-5	118-9	40		169-71	114-5, 424
... positioning with chords and seconds	55-6		41		169-70	115, 424
... with double-stemmed writing	56-7 57-8	177, 185-7 187	40-1	125-6, 164-5		69, 115
... double-stemmed with seconds / overlap / both						
Dotted unisons – single stem, double-stem, cluster	58-60	177, 186	40-1	78, 125-6		69
Dots crossing barlines (e.g. BRAHMS)						117
<b>Dotted rests</b>						
... visual appearance	38	105	42		179	102, 119-20
... metric usage	161-4		18-23	134-5	170, 179-80	101, (102)



Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Ties</b>						
... geometry and position	60-1	29, 48-9, 230-2	60-1	36-7	136-40, 142	110-1
... between enharmonics	60	231	61		136	111
Tie direction and placement						
... for single notes	62, 64	231-2	60-1		137-40	111
... together with articulation	62, 122			43	142	
... position with duration dots	63-4				139	113
... and line breaks	65, 112	276	61-2	37-9	60	
... for chords	63-6	84, 206, 232	62-4	40-1, 167	138-9	112
... for double-stemmed writing	67-70		62-3	39, 167	139	113, 344
... plus overlap(crossing)	67					
... with ledger lines	68					
... with unisons	69-70					
Ties with moving chords	70-1	206		41	138	268
Ties crossing stems	63, 67-8					113
Open ties, <i>laissez vibré</i> , Pfte Pedal	72-3, 337					122, 369
Ties graphically in two(2) parts	68, 72, 133					122
Dotted lines for ties (with tremolo, etc)	225, 338		95	35-6	173	123, 391
<b>Accidentals, design and placement</b>						
Scope (affected by change of clef, octave, stave, voice)	79-81		72-5	53-5, 166		129-32
Alternative scoping practices (e.g. dodecaphonic)	86-7			55-6		
Spelling chromatic scales	85		73			
Spelling recommendations in non-tonal contexts	85					
Accidentals and ties / over barline / over line break	80-1	276	74	54-5		131
Orthography of cancellation	81-2		71	54		
Cautionary accidentals	82-3		72-5	55		129-30
Accidentals and grace notes	84					
Accidentals for ornaments	84-5	246		75-6		233-4, 246
Accidentals for chords	87-90	198-202	75-9		131-5	133-5
... including seconds	90	201-2			132-5	134-5
Accidentals in double-stemmed writing	90-1				134	134-5
Symbols for <b>Quarter-Tones</b>	94-6, 98			67-9		145-6
Symbols for other Micro-Tones	96-7			70		
<b>Key signatures</b>						
... design and placement	91-2	81, 254	69-70, 79-81		144-7, 168	135-8
... key changes and cancellation, also at line breaks	92-3	254-6	79-81 /		59, 148-9, 168	139-40
Key signatures in modern style (polytonal/new keys)	93-4					141-5
Key signatures doubling octaves						136

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Dynamic</b> symbols, design and placement	101-8	46-7, 238-45	86-8	16-7, 31-2	185-7, 205	250-4
... "niente" / "al niente"	108			18		
... indicated by size of note-head				18		256
... indicated by tabulatura notation						257
... indicated by numbers						257
"subito" symbol/text	107			19		255
<i>cresc.</i> and <i>dim.</i> hairpins	103-6	239-45	88		187-8	251, 253-5
Hairpins and line break	104	275			60, 188	255
Open hairpins	104, 107	275			188	255
<i>cresc.</i> and <i>dim.</i> distributed text version	106					250, 253
Additional qualifying text	106					251
<b>Slurs</b>						
... different semantics, depending from context	109			35		265-6
... position relative to notes (1 part)	109-11	48-9	64	36-7	139-143	266-7
... curve calculation		47-9, 210-30, 400-10				
... position relative to stem ends ( <i>ç</i> 1 part)	111		66		(140)	347
... w.r.t. staves	110	226				
... w.r.t. other articulations	121-2	75-6, 228, 231, 236-8	67-8	42-4	129-30, 142	110-1, 269-71
... and line break	112	274-5	66	37-9		
... on tied notes	62, 113	70-1, 206, 236-7, 275	65	37-9 41	141-2	266
S-shaped slur	(321)	208-9, 410			143	
Nested / connected slurs	113			35-6, 39		273
Dotted slurs	113			35		272-3, 348
Slurs on chords	114	206-7	67	39, 41, 167	140	267-8
<b>Articulation marks</b>						
... different kinds and their meaning	114-6	46-7, 75-6	58-7, 82-5	4-6	128-30, 210	260-5, 331, 348-9, 376-7, 402-4
SCHOENBERG stress marks	115		82-3	4-5		271
Repeated articulation / <i>simile</i>	116		53	33		
Placement (stem or note-head)	117-21	232-6	84-5	5	128-30, 171-2	264
... in double-stemmed writing	117-8		84			(342)
... together with seconds	119	209				
<b>Grace Notes</b> and Appoggiatura						
... design and placement	125-7	52, 107, 246-7	91	21-2, 42, 49-51	190-1	89-90, 238-41
... alignment (with barlines/in parallel parts)	127-8					239
... execution before/on the beat	128-9					241

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Arpeggiated chords</b>						
basic design, direction indication	131-2			3-4	198-9	242-3
... changing dynamics during arpeggio	132-3					243
... spelled-out arpeggios, with ties over gaps	133-4			4		241-2
... changing speed				4		
<b>Ornament</b> symbols		46, 58-9, 64-5, 245-6				245-7
<b>Trills</b>						
... symbols and placing	134-6	245	92	74-5	197	67, 232-5
Trill lines	136-7	246	92-3	25, 75	197	233-4
... and line breaks	137	246, 275		77		
Starting and finishing notes	138		93-4	75, 77		233
Specifying the trilling pitch	138-9		93	75-6	197	233
Timbral trills				77		
Varying speed	139-40					
<b>Glissando</b> , symbol, additional text and placement	140-4			19-21, 63	198	243-4, 326-9 374-6, 397-8
Portamento (= short glissando)	140			20, 64		
Glissando lines with line breaks, clef changes, accidentals	142					
... with unspecified start or end	142-3			20, 64		244
... starting/ending midway in note duration	144					
... with start/intermediate/end notes	144-5			64		
... over composite duration	145-6			21		73
... with articulation	146					
... with contour line	146			20-1, 64		
<b>Vibrato</b> , indicated by text	146-7			25, 74, 80, 304		
... with contour line	147			26, 71, 80		
<b>Expression</b> and <b>performance</b> instructions	492-5, 530	525, 297-8	90	32-3	A48-9	280-1
<b>Time Signatures</b>						
... dimension of symbols and placing	151-2	49, 104	(17)	177-83	145, 147	148-50, 157-8
... intermediate changes, also at line breaks	152	254		46, 146-7	168	157
Beaming rules w.r.t. ruling meter	153-8	168	37-9, 47	12, 110-4	90-2, 127, 193-4	81-87
... further inner grouping	156-7			14, 110, 113		84
... fractional beams in dotted rhythms	157		47	12		84-5
"Rhythmic" vs. "metric" beaming, discussion of concepts		169		114		91-2
Beams crossing barlines	158			112, 115, 117		90-3
Whole-measure rests	159-60	65, 122	17	45, 47, 135-6	173-4	97-8
Whole-measure notes	41	66, 121-3, 144		45, 47, 135	78	

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
Grouping of rests w.r.t. meter	160-4		18-23, 39	133-6	174-6, 178-81	99-101
Notes across the beat / ... ties vs syncopations	166-8, 170-1		39, 47	111, 146 146	93, 193-4 193	121-2 83, 118-121
Cross metrics / difference playing vs. writing by accents/brackets/(dotted barlines)/beaming	171-2			115-9		91-3, 170-2, 217
Note sequence without time signatures	609-12					
Dual time signatures / inter- changeable meters meters of variable stress / alternating meters / compound meters	172-4, 178-80			115		158-70, 173-7
Non-power-2 as denomina- tors	180-1					
Noteheads as denominators	182					179-80
Fractional numerators/de- nominators	180					175-7
Polymeter with coinciding barlines	174-5					170-1
... with shifting barlines	175-7, 577			85		171-5
Poly-tempo	177-8, 577-8, 614-6			119-22		
Common enlarged time sig- nature 517, 519-20			177-83		165	
Conductor signs/metronome marks/synchronization events	179, 617-21			159-62		177-8
<b>Tempo indication</b>	182-4, 492	289-90, 297	89	32, 145-6, 164	A8, A46-7	276
Metronomic tempo indica- tion	183		89	128, 164	A45	276-80
Tempo gradually changing	184-5		89-90			279
Tempo equation	183, 185-7		89	127-8		158, 167, 280
<b>Caesura and Comma</b>	187		91	128-9	208-9	105-6
<b>Fermata</b> on notes and bar- lines	187-90	49, 257-8	90	43, 128	173, 184-5, 208-9	106-7
<b>General Pause</b>	190				208-9	106
<b>Tuplets</b>						
... using simple numbers	193-4	302	28-32	27-9, 129-32	121, 159-64	187
... in compound time	204-7		31-33	130-32	164	188
... where to put the tuple in- dication horizontally	193-4		30	29-30	161-1, 164	194, 212-5
... by proportion indication	207-8			132		218-9
... sum duration without simple equivalent (e.g. 5/8)	208-9					
... by "number per dura- tion"	208			132-3		
... whether and where to put a bracket	194-5, 199- 200	302	30	26-9, 41	160-3	212-3
... aligning of brackets in parallel parts	196					
... angle of brackets	196-7				161	

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
Where to put the tuplet symbols vertically	197-9		30	27, 42	159-50	
... together with slurs	198			27	159, 162	
... in double-stemmed writing	199				159	
... in relation to the stave	199					
Horizontal alignment of rhythms with tuplets	200-2	149-53	28-31			187-211
Beaming and grouping in tuplets	210-3			27-9		213-4
Tuplets crossing barlines	210			112		220
Omitting repeating numerals	215				163	214-5
Two traditions of nested tuplets / quadratic tuplets	203-4, 214		34	130-1		189-90
Tuplets starting off-beat				112		219-20
Hemiola				129		
<b>Tremolos</b>						
One note tremolos						
... meaning	219-21, 224	66-7	94-5	148-50	200	393-4
... symbol dimensions and placing	221-3		94			
... carrying articulation symbols	223				163, 172	
... over tied notes	225		95	149		123, 391
Two note tremolos						
... meaning	225-6	67-8	96	74, 76, 149-51	199-200	235-8, 330, 394-7
... symbol dimensions and placing	226-7	117-8, 167-8	96			235
... with opposite stem direction	226-7			151		237
... with stemless notes	226		96			237
... across two (keyboard) staves	227			151		
... horiz. alignment of second note with parallel parts	227	148		151		238
... over tied notes	229					123
... in varying speed				124		
<b>Repetitions</b>						
Short Repetitions:						
repeated beats	230-1		57	33	202	223-4
Repeated chords	231		57	33	202	
Repeated measures	231-3, 578-9, 586		55-6	33-4	173, 202	224-5, 228
Long Repetitions:						
repeat symbols	233-4	104, 254-5	120, 50-1	34	147	185, 226-7
... <i>prima e seconda volta</i> endings	233-4, 236-7	258-9	51	34	60, 194-5	226
... measure numbering methods	237, 240	299		168-9		
... with changes of clef, time signature and key	234-5	254				227
... and scope of intensity directives, etc.	235					
... with small variations per repetition	235					228
<i>dal segno / da capo</i> verbal jump instructions	238-40	49, 257-8	58-9	34-5	60, 173, A8-9	228-9

## 5 Table of Topics Specific for Families of Instruments or Types of Notation

The following table refers to the **topics specific** for certain families of instruments or types of notation documents. Again, we follow the order of [Gould \(2011\)](#).

In contrast to the class of general topics in the preceding section, here we *do not include* the topics which are *too specific* to be of general interest (e.g. different stopping techniques for brass or different ways of knocking on the corpus of a harp !-). We collect only those topics which are also of general interest, which is at about the half of all material.

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Brass/Woodwind</b>						
Flutter tongue	247			25, 188		349
Transposition/enharmonic simplification	251-3, 505-6, 545			71-3, 199-200		340-2, 356
Harmonics/Multiphonics	257-8			192		
Mutes/Stops	263-4			162, 195, 200-2		359
<b>Percussion</b>						
Symbols for instruments/beaters	275			206-13		366, 378
Relation of staves/lines/instruments/players/hands	276-7		8	215-6		
Two note tremolos (simplified notation for Marimba etc.)	278					
Different forms of noteheads for instruments	282			219		365
Non-standard staves	283-4			23, 215		363, 368
Dry instrument rhythms	289			220		
Laissez-vibrer and damping	289-92			220		369
Timpani glissandi	296					374-5
Drum rolls	297			221-2, 225		371, 373
<b>Keyboard</b> (partly also for Harp, Guitar, Marimba, etc)						
Stave layout (four hands/two keyboards/more than 2 staves)	329-32			257-9	155	30-2, 300-2, 312
Relation of staves/instruments/hands	303-4	191-3				301-2
Stem direction for hand allocation	305-6	191-7, 208				303-4, 306
Hand crossing/identification, by text or brackets	306-7			260-1		302
Voice leading lines (also in ensemble score)	307					218
Unisons sharing noteheads	307-8					308-10
Unisons with black (beamed) and white notehead (also guitar!)	307-8	177				309

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
Tied notes across staves	308			273		311
Fingering	308-9	302-4			196-7	316
Finger substitution	309					310
Omitting (minimizing number of) rests	317-19, 311-3					307
Placing tuplet indication	319-20					
Slurs across staves	321-2	208-9				314-5
Slur crossing slur		209				315
Placing dynamics	323-4	210		31	186-7	252, 254, 313
... putting shared dynamics between staves	323	209, 241-2		31	186	252
Placing octave signs	324-5					
Glissandi	326					
<b>Pianoforte</b>						
... pedaling	332-7			25, 269-72	201	317-9
Silently depressed keys	338			261-2, 272		319
Catch Reverberation	338			272		
Harmonics	339			261-2		
Playing inside the piano	339-341			262-9		322
Preparation	341-2					
<b>Organ: stave layout</b>						
342-4	342-4	250-1		6, 274	155	35, 183, 303, 312
... manual, coupling and register indication	344-7			277-80		
... rhythmic registration				279-80		
... pedal marks	347-8			278	201	316-7
Held and released key notation				274-6		
Mechanically held keys	348			276-7		
<b>Harp: relation of staves and hands</b>						
351-2	351-2					
... tuning and enharmonic spelling	352-4			244-5		324-6
... crossing and parallel glissandi	358			236-9		328-9
... pedal glissandi	359			243		329
... harmonics	366			239-40		331-2
<b>Guitar: strings and fingering</b>						
373-6	373-6				196-7	
... harmonics	384-8					
... scordatura	388-9					
<b>Strings: string indication</b>						
394	394					386, 392
... bariolage	395-6					390
... fingering	396					
... double-stopping	396-8			310		384, 390
... triple- and quadruple-stopping	398-9			309-10		384, 389-90
... using two staves	399-400					
... bowing marks	405				200	401
... pizzicato	408-12			312-4		391, 399-401
... harmonics	413-24			311-2		385-9
... scordatura	424-5					
Avoid double crosses						392

Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Vocals:</b> staves' layout and clefs	433, 462-4				156-7	287-93
... position of dynamics/articulation/expr. marks	434			32, 295	187	252, 296-7
... syllabic beaming	435	169, 306		293		293-5
... syllabic slurs / placement	435-6			296-7		297
... placing text	437-54	304-9		299-301	79-80, 187	425
... speech notation, "Sprechstimme"	456-60			79, 297-8, 304-5	206-8	72-3, 298-9
<b>General Score Topics</b>						
Measure numbers	484, 490	299-302		168-70		184, 445
Rehearsal Marks	484-6			168	A8	184, 443-4
Between Movements	486-7					
Principal Part (SCHOENBERG)	496			17-8		282-3
Vi-De	496					
<i>ossia</i>	497					67-8
Orchestra score order	511-13	251-3		170-2		
Separating/markung instrumental sections graphically	514-521	247-51	4-6	6-8	155-7	35-7, 183, 422
Instrument labelling	507-10	296-7			A32-3	434-5
System dividers ("//")	521	249				
First page shows all instruments of this movement	521-2	284-5		170		435
Stage sharing/divided strings (also in parts)	525-30, 534-8, 584-6	280-4				342-3, 448-9
<b>Parts</b>						
... multiple rests	564-5, 580	287	17	136	177-8	102, 104-5, 414, 444
... page turns	452, 559-62	482, 272, 288		46, 143-4	A3-5	442-3
... abbreviations must be resolved		287				
... cues	566-77	107, 288-9	92	49, 51, 71, 160-1, 58-60	189	439-40
Clusters by ensembles, spelled out in parts						
<b>Electroacoustic Music</b>						
What to specify in a preface	591					
Roles and function of notation	592			316		
Starting/stopping playback tracks	592-3, 602-3			320		
Notation of played-back contents for synchronizing (pitch cues, graphical, proportional, text description)	593-5, 599-602			317-20		
Dynamics for electronic sounds	598-9					
Keyboard controlling samples	601-2					
Delay lines	603					
Program changes	604					
Continuous controllers	604-6					



Question/Topic	Gould	Wanske	Vinci	Stone	Ross	Read
<b>Freedom and choice</b>						
Cadenzas and ad libitum passages	610-12					
Independent parts / explicit (re-)synchronization	613-21					
Independent repetition	621-8			24, 154-7		
Free placing in a defined time-span	628-9			156-7		220-1
Proportional spacing	39, 594-5, 629-634, 636-7			24, 96-103, 122, 136-45		72
... for sustained notes and glissandi	632-4			26, 71, 223		
Approximate pitch	640-2			66, 70-1		
Choices and alternatives	643-9			152-4, 155-6		
Choices from dynamic ranges				17, 153		
(Purely) graphical notation				103-7		

## References

Gould, E. (2011). *Behind Bars: the Definitive Guide to Music Notation*. Faber, London.

Read, G. (1979). *Music Notation: a Manual of Modern Practice*. Taplinger, New York.

Ross, T. (1987). *The Art of Music Engraving and Processing*. Hansen Books, New York.

Stone, K. (1980). *Notation in the Twentieth Century: a Practical Guidebook*. Norton, New York.

Vinci, A. C. (1991). *Die Notenschrift: Grundlagen der traditionellen Musiknotation*. Bärenreiter, Kassel.

Wanske, H. (1988). *Musiknotation – Von der Syntax der Notenschrifts zum EDV-gesteuerten Notensatz*. Schott, Mainz.