

Contents

Preface	11	1.7.4 Clusters	42
Acknowledgments	15	1.7.5 Polyphonic textures or "impressionistic polyphony"	43
1 Guitar Basics			
1.1 Essential components of the guitar	17	1.7.6 Other ways of stopping notes on the fretboard	47
1.1.1 Strings	17	1.7.7 Barré positions	48
1.1.2 Soundboard	18	1.7.8 Slurs—hammer-on/pull-off	50
1.1.3 Soundbox	19	1.7.9 Extensions of the pull-off	51
1.1.4 Fretboard	20	1.7.10 Vibrato	52
1.2 How a guitar tone is produced	21	1.7.11 Trills—on one or two strings	54
1.3 Traditional and nontraditional tunings	22	1.7.12 Glissandi/Portamenti	55
1.3.1 Historical tunings	23	1.7.13 String bending	57
1.3.2 Equal tempered tunings	24	1.8 RH techniques	60
1.3.3 Microtonal tunings	25	1.8.1 RH patterns: arpeggiation (Giuliani, Tárrega, Pujol)	60
1.3.4 Tunings based on the harmonic series or just intonation	26	1.8.2 RH strokes: tirando vs. apoyando	61
1.3.5 Tunings changed during a performance	26	1.8.3 Tremolos	62
1.4 Abbreviations and symbols for fingers and fingering positions	28	1.8.4 Cross-string trill	63
1.5 Notation basics	29	1.8.5 RH timbre	64
1.5.1 Traditional Expressive Markings	29	1.8.6 Filtering	69
1.5.2 Multiple staves	29	1.8.7 Strumming	70
1.5.3 Tablature notation	31	1.8.8 Pizzicato or RH muting	80
1.5.4 Action stave for the RH position	32	1.8.9 Bartók pizzicato/snap pizzicato	82
1.6 Fretboard chart	34	1.8.10 Plectrum	83
1.6.1 Negotiating the fretboard	37	1.9 Orchestrating for the guitar: key historical works	84
1.7 LH techniques	39	2 Guitar Harmonics	
1.7.1 Stopped notes and open strings	40	2.1 What are harmonics?	98
1.7.2 Single notes to chords	40	2.1.1 Harmonic series	98
1.7.3 Beyond the fretboard	42	2.1.2 How are harmonics generated on a guitar?	100
		2.2 Harmonics on the open strings of a guitar ..	100
		2.2.1 How high?	100

2.2.2	Location of open string harmonics.	102	3.4	Battuto	152
2.2.3	Harmonics on different strings	103	3.5	Guitar as percussion instrument	154
2.2.4	Harmonic dilemma in Webern's <i>Drei Lieder</i> , op.18	104	3.6	Tambour	154
2.2.5	Scordatura	104	3.6.1	Examples of tambour.	155
2.2.6	RH plucking techniques for harmonics . . .	105	3.6.2	RH muting as a percussive effect	157
2.2.7	Harmonics produced by the LH alone . . .	105	3.7	Golpé	158
2.3	Examples from the literature	105	3.7.1	Possible areas on the guitar to execute a golpé	158
2.3.1	Use of harmonics as sole material for a composition	108	3.7.2	Diversified golpé.	159
2.4	Notation of harmonics	111	3.8	Percussive map	161
2.4.1	Inclusion of the string number	111	3.8.1	Further extensions of golpé	162
2.4.2	Harmonics notated at concert pitch	112	3.9	Tamburo	164
2.4.3	Harmonics notated as fingered pitches . . .	112	3.9.1	Examples of tamburo.	165
2.4.4	Brief overview of harmonics notation . . .	113	3.10	Brushing/Rubbing/Scraping	166
2.4.5	More notational confusions	113	3.10.1	Güiro/"Guero" actions.	169
2.5	Half harmonics	114	3.11	String buzz	170
2.6	Notation of natural harmonics and half harmonics	116	3.12	Notational conventions	171
2.6.1	Notation of harmonics on scordatura strings	117	3.13	Foreign objects	173
2.7	Multiphonics	118	3.13.1	Slide	173
2.7.1	Positions of selected multiphonics on the fretboard	120	3.13.2	Other foreign objects: bows, beaters, thimbles, etc.	177
2.7.2	Corresponding multiphonic chords	121	3.13.3	More notational conventions	179
2.7.3	Examples from the literature	123	3.13.4	Beaters and mallets	179
2.8	Artificial harmonics.	125	3.13.5	Miscellaneous objects	181
2.8.1	Timbral differences	126	3.14	Prepared guitar	183
2.8.2	Examples from the literature	127	3.14.1	Capo tasto	183
2.8.3	Notation of artificial harmonics	128	3.14.2	Repertoire	184
2.8.4	Extensions of artificial harmonics	128	3.14.3	Other preparations	185
2.8.5	Notational reframing	130	3.14.4	Guidelines for guitar preparation	186
2.9	"Attackless" harmonics	131	3.14.5	Repertoire	187
2.10	Guitar harmonics in context	133	3.15.0	Guitar as percussion in context	189
3 Guitar as Percussion.					
3.1	Historical precedence.	137	4 "All in the Family"		
3.1.1	Contemporary examples: LH tapping	138	The Acoustic Guitar's Relatives		
3.2	RH tapping	139	4.1	Nineteenth century instruments	195
3.2.1	Tapping combinations	140	4.1.1	Octavine guitar	195
3.2.2	Case study: Rolf Riehm's <i>Toccata Orpheus</i> .	142	4.1.2	Terz guitar	195
3.2.3	Unpitched tapping	145	4.2	Deviation from the six strings: the seven-string guitar and the ten-string guitar/décacord. .	196
3.3	Bi-tones.	147	4.3	Double-neck guitars	199
3.3.1	Bi-tone chart.	147	4.4	Ukulele	202
3.3.2	Producing the auxiliary pitch of a bi-tone .	149			

4.5	Acoustic steel-string “flat-top” guitar	203
4.5.1	Ebow	205
4.5.2	Acoustic-electric guitar	207
4.5.3	Twelve-string acoustic guitar	208
4.5.4	Resonator guitar/slide guitar/Dobro®	209

5 Appendices

5.1	Technical notes	211
5.1.1	Helmholtz resonator	211
5.1.2	Multiphonic analysis	211
5.1.3	Bi-tone formula for yielding hertz	213
5.2	Diverse preparations and descriptions from Yates and Elgart	214

5.3	CD Track List	216
5.4	Bibliography	218
5.4.1	Solo works for the guitar	218
5.4.2	Guitar solo with ensemble or orchestra . .	219
5.4.3	Chamber music with guitar	219
5.4.4	Large ensemble/orchestral/choral/ stage work with guitar	220
5.4.5	Literature cited	221
5.4.6	Historical documents	222
5.5	Index	225
5.6	About the authors	233