Notes

1 Picking through cultures: a guitarist's music history

1 On the history and music of the early guitar, see James Tyler and Paul Sparks, *The Guitar and Its Music from the Renaissance to the Classical Era* (Oxford, 2002).

2 See Robert Walser, Running with the Devil: Power, Gender, and Madness in Heavy Metal Music (Hanover, NH, 1993); Steve Waksman, Instruments of Desire: The Electric Guitar and the Shaping of Musical Experience (Cambridge, MA, 1999).

3 A nanban screen showing a Japanese female musician playing a vihuela (not a lute, as stated in the catalogue), is reproduced in Michael Cooper, S.J., et al., *The Southern Barbarians: The First Europeans in Japan* (Tokyo and Palo Alto, CA, 1971), 166.
4 These documents will be published in my

forthcoming article, "The Politics and Geography of Seventeenth-Century Music," in *The Cambridge History of Seventeenth-Century Music*, ed. J. Butt and T. Carter.

5 The main study of Murcia and his New World sources is Craig H. Russell's Santiago de Murcia's "Códice Saldívar No. 4": A Treasury of Guitar Music from Baroque Mexico, 2 vols. (Urbana and Chicago, 1995).

2 Flamenco guitar: history, style, status

1 Aside from meaning "Flemish" and denoting a musical genre from the mid-1800s, "flamenco" in Spanish was a designation for "Gypsy"; by extension, it also meant "brash" and "flamboyant."

2 It should be noted, of course, that the pitches given here and in the transcriptions below are not absolute, but relative designations referring to guitar fingerings and positions. Guitarists frequently use capos (*cejillas*) in order to adjust to the range of a singer, or to give the instrument a brighter sound. Thus, the "A Phrygian tonality" will be here referred to as such, and designated as *por medio* by guitarists, even if it is played with a capo at the fifth fret (making it D Phrygian in terms of absolute pitch). 3 Much of the information presented here derives directly or indirectly from my excellent guitar teachers Basilio Georges and

Dennis Koster. I am also especially grateful to

Georges and to *flamencólogo* Jay Kantor for their detailed comments on an earlier version of this text. I retain, however, full responsibility for the contents of this essay.

3 The Celtic guitar: crossing cultural boundaries in the twentieth century 1 Bob Brozman says:

The guitar can function as a portable culture translator. The guitar accompanied colonists around the world, and the colonized people often retuned to open tunings, because the European standard tuning lacks obvious logical visual and audio cues. Open tunings provide a much clearer picture of the fingerboard, enabling self-teaching. Furthermore, the diatonic European system of music is, in fact, the odd man out in world musical cultures, the rest of the world preferring the more mathematically simple and therefore natural-sounding modal approach. Open tunings not only facilitate this, but also provide drone strings, making self-accompaniment much easier. For example Open G major tuning occurs in the guitar music of: Hawaii, Mississippi, west Africa, south Africa, Philippines, India, Mexico, [and] South America.

(Personal communication, November 28, 2001)

2 I use the term "Celtic" in the interest of clarity, economy, and a realistic response to common practice, but with a caveat. The phrase "Celtic music" is mostly eschewed by players and aficionados of the traditional music of Ireland, Scotland, Brittany, and Wales, because it is essentially a marketing term invented by record retailers in order to lump together different traditional and neo-traditional musics that are, in reality, quite distinct from one another. Practitioners of "traditional music" are often wary of those who use the "Celtic music" term in an indiscriminate fashion, as such usage often comes with a set of mistaken, commercebased preconceptions about the perceived interchangeability of these styles. 3 However, self-accompaniment, on both pipes and harp, appears to have been part of Irish traditional and art music from the

[232]

233 Notes to pages 7–35

Middle Ages: the instrument called variously crot, crouth, crowd, cruit, cruth, and crwth (a simple gut-strung lyre) was associated with the performances of rekaire, poets who recited and chanted verses in noble courts. See Franz Jahnel, Die Gitarre und ihr Bau (Frankfurt, 1973), 22. In addition, in a famous, oft-cited and oft-misunderstood passage dating from 1183, the Welsh priest, folklorist, and author Giraldus Cambrensis describes Irish harpers thus: "They play the tinkling sounds on the thinner strings above the sustained sound of the thicker strings so freely," adding that he is astonished at their facility. Quoted in Ciaran Carson, Irish Traditional Music (Belfast, 1986), 35.

4 The thirteenth-century Scottish poet and prophet Thomas of Ercildoune (original model of the ballad hero "True Thomas"), cites the gittern, a Northern European relative of the vielle and ancestor of the guitar, in a list of instruments present at a musical event: "Harpe and fethil both thay fande / Getterne and als so the sawtrye / Lute, and rybybe, both gangande, / And all manere of mynstralsye." Cited in John Purser, Scotland's Music: A History of the Traditional and Classical Music of Scotland from Earliest Times to the Present Day (Edinburgh, 1992), 62. In his useful Rotunda Music in Eighteenth-Century Dublin (Dublin, 1992), 79, Brian Boydell cites a newspaper announcement regarding music-making in that city:

The Governors have at great Expense, increased their Number of Performers to a full and compleat Band, having written to London for a Woman Singer, and building a new Orchestra in the Garden, and intend to entertain the Publick with continual Variety of new Italian and German Musick, and some Instruments quite unknown in this Kingdom. On Wednesday the 4th inst a song by Master Passerini, accompanied on the Guitar by Mr Claget; and on Friday next a Duet on two Clarionets.

Both "English guitars" (wire-strung citterns) and "Spanish guitars" (with six gut strings in the fashion of the modern instrument) were available for sale to a middle-class urban Dublin clientele by 1746; Boydell's *A Dublin Musical Calendar 1700–1760* (Blackrock, 1988) mentions the stock of music printer and seller Dennis Connor, which included "flutes, concert flutes, guitars, violins, and hautboys" (259). However, the art- and light-music idioms of Dublin city life were and remained far removed from the folk music idioms of the rural South and West, and the modern guitar only becomes part of those latter idioms in the twentieth century. For more on the social and cultural contexts and associations for cittern and guitar in eighteenth-century Britain, see David Johnson, *Music and Society in Lowland Scotland in the Eighteenth Century* (Oxford, 1972), 23–27.

5 Guitars are depicted in English and Spanish settings in paintings by Watteau (1684-1721; La Gamme d'Amour), Bayeu (1746-93; Dance on the Banks of the Manzaneros, Museo Municipal, Madrid), and Ollivier (An English Tea Party at a Salon, showing the child Mozart in 1776 playing trio music for a noble audience), but these tell us nothing about the rural traditions of the far West. See Tom and Mary Ann Evans, Guitars: Music, History, Construction, and Players From Renaissance to Rock (New York, 1979), 145-50. 6 James Cowdery, in his The Melodic Tradition of Ireland (Kent, Ohio, 1990), 23, mentions Francis O'Neill's 1913 citation of the guitarist John Dunne (Irish Minstrels and Musicians.

Dublin, 1973, 217), active in Ireland in the late nineteenth century, but O'Neill offers little additional information beyond Dunne's name.

7 These included the independent companies Celtic, Emerald, Gaelic, and New Republic, followed later by the large multi-stylistic corporations Columbia and Victor. See Gearóid Ó hAllmhuráin, *A Pocket History of Irish Traditional Music* (Dublin, 1998), 106. 8 Ibid., 107.

9 Aibhlin Dillane and Geraldine Cotter,
"Piano," in *The Companion to Irish Traditional Music*, ed. Fintan Vallely (Cork, 1999), 298.
10 Ibid., 295. The term "pure drop" is derived from Irish rural idiom, and originates as a reference to pure and high-quality *poitín*, the spirit distilled from potatoes, barley, or oats. By extension, it refers to the expression of a powerful, unadulterated traditional quality in food, drink, or the arts.

11 However, Ciaran Carson, in his *Last Night's Fun: In and Out of Time with Irish Music* (San Francisco, 1998), accurately describes the more typical limitations of guitarists in this music, and the typical response to those limitations: "Or some guitar-player, oblivious to protocol, after footering and tuning, will start up a three-chord accompaniment in the wrong key in the middle of someone's unaccompanied song. Someone else will comment on the player's marvellous 'accomplishment'" (136).

12 For more on guitarists and pianists in the New York studios, see Ó hAllmhuráin, *Pocket*

234 Notes to pages 35–48

History, 108, and also Harry Bradshaw's liner notes to *The Tunes We Like to Play on Paddy's Day* (The Flanagan Brothers), Viva Voce 007 (1996), 2–8.

13 Ethnomusicologist Philippe Varlet, personal communication, 11/27/00. See also *From Galway to Dublin: Early Recordings of Irish Traditional Music* [Rounder ROUN1087], 1993.

14 See Ciaran Carson, *Irish Traditional Music* (Dublin, 1986), 52, and Ó hAllmhuráin, *Pocket History*, 102.

15 Ó hAllmhuráin, *Pocket History*, 103.
16 Piano played in a "vamping" (chording) style was an essential part of the céilí band sound, but plucked strings were used infrequently. Exceptions which "prove the rule" would include the great tenor banjo player Mike Flanagan on recordings with his brothers Joe and Louis (cited earlier), and the occasional guitar, tenor banjo, or banjo-mandolin player improvising chords

in support of the mainstay piano. 17 Ó hAllmhuráin, *Pocket History*, 128. 18 Ibid., 130.

18 Ibid., 150.

19 Sean Og Potts; anecdote quoted in National Public Radio special program, *The Boy in the Gap*, first aired March 1991.

20 Seán Ó Riada, *Our Musical Heritage* (Portlaoise, 1982), 74.

21 Ironically, many of the traditional players who heard, or even played in, Ó Riada's ensembles found his ideas peculiar, and anything but traditional: one elderly player, hearing Ceoltóiri Chualann on Irish radio, said "Aye; them're the ones who keep startin' and stoppin' the tunes in the middle, right?" James Kelly, personal communication, July 1998.

22 For those players without experience in playing in this tuning, a good introduction is in Andy Ellis, "DADGAD for Dummies: A Lesson with Fingerstyle Wizard Martin Simpson," *Guitar Player* (September, 2000), 61–65.

23 See Simon's uncredited borrowing of Carthy's arrangement of the traditional song "Scarborough Fair," from the album *Parsley*, *Sage*, *Rosemary*, *and Thyme* from 1966, in Evans, *Guitars: Music, History, Construction, and Players*, 330–31.

24 For good and clear examples of Moynihan's early and influential bouzouki style, consult the trio Sweeney's Men (*Tracks of Sweeney*, Castle Music America); for Finn's consult his duet record with fiddler Frankie Gavin (*Frankie Gavin and Alec Finn*, Shanachie).

25 For Planxty, which featured Lunny on bouzouki and Andy Irvine on mandolin, consult the eponymous "black album" Planxty (Shanachie, originally released 1972); for De Danann, which featured Finn and later Moynihan on bouzoukis, consult The Best of De Danann (Shanachie; compilation); for Altan, which featured Sproule's DADGAD playing and Ciaran Curran on "cittern" (a bouzouki variant), consult Altan (Green Linnet, 1987); for the Bothy Band, which featured Lunny on bouzouki and Mícheál Ó Dohmnaill on DADGAD guitar, consult After Hours: Live in Paris (Green Linnet 3016). 26 Matt Molloy, quoted in the liner notes to Music at Matt Molloy's (Real World CAROL 2324-2, 1993). For good examples of McGlynn's accompanimental prowess, consult this album; for Cahill's, consult the Live in Seattle recording (Green Linnet, 1999) with duet partner and fiddler Martin Hayes.

4 African reinventions of the guitar

1 Eric Charry, "Plucked Lutes in West Africa: An Historical Overview," *Galpin Society Journal* 49 (1996), 3–6.

2 Andrew L. Kaye, "The Guitar in Africa," in *The Garland Encyclopedia of World Music*, vol. I: *Africa*, ed. Ruth M. Stone (New York, 1998), 351.

3 Ibid.

4 Titles from the Original Music label are hard to find these days, but they are worth looking for, as they contain some of the best examples of older palm wine and highlife music. Recent *juju* recordings by King Sunny Ade and his main rival Chief Commander Ebenezer Obey are readily available. And there are new plans to release much of Ade's back catalog. Ade's group in particular demonstrates mastery at layering relatively simple guitar parts to create rich, orchestral textures.

5 John Collins, "Post War Popular Band Music in West Africa." *African Arts* 10 (1977), 53–60, cited in Christopher Alan Waterman, *Juju: A Social History and Ethnography of an African Popular Music* (Chicago and London,1990), 46.

6 Cynthia Schmidt, "Kru Mariners and Migrants of the West African Coast," *The Garland Encyclopedia of World Music*, vol. I: *Africa*, 376.

7 A CD called *African Elegant, Sierra Leone's Kru/Krio Calypso Connection* (Original Music) gathers together rare recordings of this early afropop form.

8 Rogie's *Dead Men Don't Smoke Marijuana* (Real World), recorded shortly before the

guitarist's death in 1994, is a fine example of the genre.

9 John E. Collins, "Jazz Feedback to Africa," *American Music* 5 (1987), 176–93, cited in Kaye, "The Guitar in Africa," 353.

10 Eric Charry, *Mande Music* (Chicago and London, 2000), 243.

11 Ibid., 251.

12 This field work formed the basis for my book *In Griot Time: An American Guitarist in Mali* (Philadelphia, 2000).

13 The *ngoni* is a four- or seven-string spike lute, a likely ancestor of the banjo, and the favored composer's instrument in Mali. The *kora* is a twenty-one-string bridge-harp constructed from a large calabash. It is favored by Mande *jelis* in Gambia and Guinea-Bissau. The *balafon* is a xylophone with wooden slats, around twenty in the case of the heptatonic *jeli* version. It is the favored *jeli* instrument in Guinea.

14 Eyre, In Griot Time, 56-57.

15 Examples 4.2–4.5 in this article are reproduced from articles by Banning Eyre by kind permission of *Guitar Player* magazine.

16 Gerhard Kubik, Africa and the Blues

(Jackson, MS, 1999), 197. 17 Ibid., 189–96.

18 Ibid., 69.

19 A good example can be heard on *In Griot Time: String Music from Mali* (Stern's Africa, 2000), "Wild Goose Chase."

20 Gary Stewart, *Rumba on the River: A History* of the Popular Music of the Two Congos (New York and London, 2000), 3.

21 Kazadi wa Mukuna, "The Changing Role of the Guitar in the Urban Music of Zaire," Journal of the International Institute of Traditional Music 36 (1994), 62–63.

22 Ibid., 67.

23 Lokassa's and Syran's quotes first appeared in Banning Eyre, "Super Soukous," *Guitar Player* (February, 1997), 75–84.

24 Mukuna, "The Changing Role of the Guitar," 69.

25 Christopher Ballantine, *Marabi Night* (Johannesburg, 1993), 14.

26 Thomas Turino, Nationalists,

Cosmopolitans, and Popular Music in Zimbabwe

(Chicago and London, 2000), 234-35.

27 Nollene Davies, "The Guitar in Zulu

Maskanda Tradition," Journal of the International Institute of Traditional Music

36 (1994), 118–19.

28 Ibid., 119.

29 Ibid., 121.

31 Ibid., 234–35.

32 Damping techniques are found in a number of African guitar styles. In Cameroon's bikutsi music, not covered in this chapter, guitarists actually weave a strip of foam rubber through the strings right at the bridge. This allows them to play freely and hard, producing only percussive, damped notes, never a ringing tone.

33 Banning Eyre, "Zimbabwe Roots Guitar," *Guitar Player* (December, 1994), 117–24.
34 The release simply called *Salegy!* by the band Jaojoby (Xenophile, 1996) provides an introduction.

35 These guitarists can be heard on compilations available on the German Feuer und Eis label, the British GlobeStyle label, and on Shanachie Records' World Out of Time series. The Shanachie release *The Moon* and the Banana Tree: New Guitar Music from Madagascar (1996) is particularly rich.
36 Ian Anderson, "Gitara Gasy!" Folk Roots 178 (1998), 22–31.
37 Ibid., 27.

6 A century of blues guitar

1 W. C. Handy, *Father of the Blues* (New York, 1974), 74.

2 Ibid.

3 Ibid.

4 Perry Bradford, *Born With the Blues* (New York, 1965), 14.

5 Johnny Shines, interview with author, Watsonville, California, January 23, 1989, published in *Blues Guitar: The Men who Made the Music*, ed. Jas Obrecht, 2nd edn. (San Francisco, 1993), 20.

6 Johnny Shines, interview with the author, Watsonville, California, January 23, 1989.
7 B. B. King, interview with the author and Billy Gibbons, 1991, published in *Rollin' & Tumblin': The Postwar Blues Guitarists*, ed. Jas Obrecht (San Francisco, 2000), 338.

8 Ibid., 340.

9 Interview with the author, published in "Ry Cooder: Talking Country Blues," *Guitar Player* (July, 1990), 85.

13 Rollin' and Tumblin', ed. Obrecht, 414.

14 Blues Guitar, ed. Obrecht, 2.

15 Introduction to his "Good Morning Blues," recorded in New York, June 19, 1940, reissued on *Good Morning Blues* (BCD 113 [1990]).

16 Bob Yelin, "Jazz Guitar Wouldn't be the Same Without George Barnes," *Guitar Player* (February, 1975), 26.

17 Rollin' and Tumblin', ed. Obrecht, 6.

³⁰ Turino, Nationalists, 223-310.

¹⁰ Blues Guitar, ed. Obrecht, 23.

¹¹ Ibid., 20.

¹² Ibid., 28.

18 Ibid., 2.

19 Ibid.

20 "Muddy Waters," interview with Jim O'Neal in *Living Blues* 64 (April, 1985), 25. 21 "Country Blues" and "I Be's Troubled," 78s recorded for the Library of Congress, Stovall, Mississippi, August 24–31, 1941; available on *Muddy Waters: The Complete Plantation Recordings*, MCA, 1993.

22 Rollin' and Tumblin', ed. Obrecht, 154.

23 Interview with author, in ibid., 6.

24 Ibid., 73

25 1993 interview with author, in *Blues Guitar*, ed. Obrecht, 257.

26 1994 interview with author, in *Rollin' and Tumblin*', ed. Obrecht, 432.

27 Ibid., 436.

28 Ibid., 11.

29 James Rooney, *Bossmen: Bill Monroe and Muddy Waters* (New York, 1971), 137.
30 *Rollin' and Tumblin'*, ed. Obrecht, 12.

31 Ibid.

32 Jas Obrecht, "Filthy, Filthy, Filthy: Keith Richards Comes Clean on Distortion and the Meaning of Music," in *The Rolling Stones: Inside the Voodoo Lounge* (San Francisco, 1994), 62. 33 Ibid.

34 Interview with author, in Rollin' and

Tumblin', ed. Obrecht, 290.

35 Rooney, Bossmen, 145.

36 Ibid., 145.

7 The turn to noise: rock guitar from the 1950s to the 1970s

1 One can find reference to "Rocket 88" as the first rock and roll record in Philip Ennis, *The Seventh Stream: The Emergence of Rocknroll in American Popular Music* (Hanover, NH, 1992), 233; and in David McGee's remarks on *Blue Flames: A Sun Blues Collection* (Rhino, 1990), contained in the *Rolling Stone Album Guide*, ed. Anthony DeCurtis and James Henke with Holly George-Warren (New York, 1992), 824. 2 Phillips's account of the incident is cited in Robert Palmer, "The Church of the Sonic Guitar," in *Present Tense: Rock & Roll and Culture*, ed. Anthony DeCurtis (Durham, NC, 1993), 22.

3 Robert Bowman and Ross Johnson, "Train Kept a Rollin': A Conversation with Paul Burlison of the Rock 'n' Roll Trio," *Journal of Country Music* 3 (1987), 17.

4 Ibid.

5 Ibid., 17–18.

6 I have detailed some of these developments at length in my book *Instruments of Desire: The Electric Guitar and the Shaping of Musical Experience* (Cambridge, MA, 1999). See especially Chapter 4, "Racial Distortions: Muddy Waters, Chuck Berry, and the Electric Guitar in Black Popular Music," 113–66. 7 Jacques Attali, *Noise: The Political Economy of Music*, trans. Brian Massumi (Minneapolis, MN, 1985), 19.

8 Samuel Floyd, *The Power of Black Music: Interpreting Its History from Africa to the United States* (New York, 1995), 28.

9 Gil Rodman offers perhaps the most insightful reading of Presley's television appearances, concentrating upon the Berle performance while debunking the common assumption that it was on the Ed Sullivan show that Presley made his biggest mark. Rodman, *Elvis After Elvis: The Posthumous Career of a Living Legend* (London, 1996), 146–58.

10 Ibid., 27-28.

11 Waksman, *Instruments of Desire*, 152. 12 Ibid., 162–65. Also see Timothy Taylor, "His Name Was in Lights: Chuck Berry's 'Johnny B. Goode," *Popular Music* 1 (1992), 27–40.

13 For a detailed account of the careers of Paul and Atkins, respectively, see the relevant chapters of *Instruments of Desire*, "Pure Tones and Solid Bodies: Les Paul's New Sound" (36–74) and "Mister Guitar: Chet Atkins and the Nashville Sound" (75–112).
14 Dan Forte, "Duane Eddy: The Return

of the King of Twang," *Guitar Player* (June, 1984), 78.

15 Link Wray, *Rock Guitarists* (Saratoga, CA, 1978), 169.

16 Dan Forte, "The Ventures: Still Rockin' After All These Years," *Guitar Player* (September, 1981), 95.

17 Ray Minhinnett and Bob Young, The Story of the Fender Stratocaster: Curves, Contours and Body Horns (San Francisco, 1995), contains an interview with Dale on his relationship with Fender (73-74). For further background on the Fender guitar company, see Richard Smith's authoritative Fender: The Sound Heard 'Round the World (Fullerton, CA, 1995); Forrest White, Fender: The Inside Story (San Francisco, 1994); and Tom Wheeler, American Guitars: An Illustrated History (New York, 1992), which is the best overall history of guitar manufacturing in the United States. 18 Patrick Ganahl, "Dick Dale: The Once and Future King of the Surf Guitar," Guitar Player (July, 1981), 38.

Magnificent Seven," Melody
Maker (September 9, 1967), 8.
20 Waksman, Instruments of Desire, 245. Also

see Iain Chambers, Urban Rhythms: Pop Music and Popular Culture (New York, 1985), 31–37.

237 Notes to pages 97-126

21 Jann Wenner, "Eric Clapton," in *The Rolling Stone Interviews: Talking with the Legends of Rock and Roll, 1967–1980,* ed. Ben Fong-Torres (New York, 1981), 28.

22 Steve Rosen, "Jeff Beck," *Rock Guitarists*, 11.

23 The story of Guy's discovery of feedback is best told in Jas Obrecht, "Buddy Guy," in *Blues Guitar: The Men Who Made the Music*, ed. Jas Obrecht, 2nd edn. (San Francisco, 1993), 205.

24 It was only later in the 1960s that Townshend turned to the Hiwatt amplifiers with which he would later become identified. In the middle of the decade, though, the guitarist was a dedicated user of Marshall amps. Moreover, by the account of Ken Bran, the engineer who oversaw the technical details of the Marshall workshop, the first 100-watt Marshall amplifier was produced for Townshend to use with the Who. John Seabury, "In Search of Volume: Guitar Amplification in the '60s," in *The Electric Guitar: An Illustrated History*, ed. Paul Trynka (San Francisco, 1995), 84.

25 Quoted in Dave Marsh, *Before I Get Old: The Story of the Who* (New York, 1983), 75.
26 Matt Resnicoff, "Godhead Revisited: The Second Coming of Pete Townshend," *Guitar Player* (September, 1989), 83.

27 Noel Redding and Carol Appleby, *Are You Experienced? The Inside Story of the Jimi Hendrix Experience* (New York, 1996), 44.

28 Douglas Hall and Sue Clark, *Rock: A World Bold as Love* (New York, 1970), 25.
29 Waksman, *Instruments of Desire*, 172.

30 Quoted in John Sinclair, *Guitar Army: Street Writings/Prison Writings* (New York, 1972), 9.

31 Susan Hiwatt, "Cock Rock," in *Twenty Minute Fandangos and Forever Changes: A Rock Bazaar*, ed. Jonathan Eisen (New York, 1971), 143.

32 For a more complete discussion of Page as guitar hero, and his use of the violin bow in performance, see Waksman, *Instruments of Desire*, 237–44.

33 Robert Walser, *Running with the Devil: Power, Gender, and Madness in Heavy Metal Music* (Hanover, NH, 1993), 63–65.
34 Robert Duncan, *The Noise: Notes from a Rock and Roll Era* (New York, 1984), 37.
35 Ibid., 46–47.

8 Contesting virtuosity: rock guitar since 1976

1 Reprinted in Jon Savage, *England's Dreaming: Anarchy, Sex Pistols, Punk Rock, and Beyond* (New York, 1992), 280. Dick Hebdige also discusses the diagram and its message in Subculture: The Meaning of Style (London, 1991), 112.

 Quoted in John Lydon with Keith and Kent Zimmerman, *Rotten: No Irish, No Blacks, No Dogs* (New York, 1994), 79.
 Ibid., 78.

4 Dan Forte, "Johnny and Dee Dee Ramone: Two Punks with an Axe to Grind," *Guitar Player* (April, 1985), 8.

5 Ibid., 9.

6 Robert Walser, Running with the Devil: Power, Gender, and Madness in Heavy Metal Music (Hanover, NH, 1993), 42–43.
7 The above description borrows liberally from Robert Walser's extended analysis of "Eruption" in Running with the Devil, found on 68–75. For a hands-on discussion of two-handed technique, see Edward Van Halen, "My Tips for Beginners," Guitar Player (July, 1984), 52–60.

8 For instance, Dan Amrich, writing in *Guitar World* magazine, proclaimed that with "Eruption" Van Halen "personally reconfigured the technical and aural parameters of his instrument – all in one minute, 42 seconds flat." Amrich, "Atomic Punk," reprinted in *Guitar World Presents Van Halen* (Wayne, NJ, 1997), 3.

9 Dan Hedges, *Eddie Van Halen* (New York, 1986), 3.

10 Jas Obrecht, "Eddie Van Halen: Young Wizard of Power Rock," Guitar Player (April, 1980), 98. For a more extended discussion of Van Halen's career in light of punk rock, see my essay "Into the Arena: Edward Van Halen and the Cultural Contradictions of the Guitar Hero," in Guitar Cultures, ed. Andrew Bennett and Kevin Dawe (London, 2001), 117-34. 11 "Randy Rhoads Stumbles into the Spotlight," Guitar World 3 (May 1982), 53. 12 Ironically, Van Halen himself resisted the lionization of classical music, even as his music opened the way toward its widespread use. Recounting his early experiences studying classical music, for instance, he declared about reading music that "all it's good for is to learn how to play songs that have been written. And I told you the reason I didn't like the violin was that I didn't like the songs we were supposed to play. I guess I was just a snot-nosed kid, and I didn't want to waste the time doing it." Steven Rosen, "The Life and Times of Van Halen," in Guitar World Presents Van Halen, 26.

13 Some of the most interesting comments in this regard came from another fleet-fingered metal guitarist, Vivian Campbell, who proclaimed in a 1985 interview that "the trouble amongst guitar players especially is that they think it's always against the clock. Competition's a wonderful, healthy thing, but it can get the better of you ... I don't give a flying fuck if I don't play as fast as Yngwie Malmsteen. Sometimes it would be nice, but I'm happier doing what I do." Jas Obrecht, "Vivian Campbell: Dio's Fire and Brimstone," *Guitar Player* (February, 1985), 25. 14 Joe Lalaina, "Yngwie Malmsteen: Like Him or Not, He Demands Your Attention," *Guitar World* 1 (January 1986), 25. Commenting upon Malmsteen's tendency toward such statements, Robert Walser astutely observed that the guitarist "exemplifies the wholesale

importation of classical music into heavy metal," not only in his playing style and points of musical reference but in "the social values that underpin these activities." Walser, *Running with the Devil*, 98.

15 Chris Jisi, "Crossover Dream," *Guitar World* 10 (November 1988), 38.

16 Jas Obrecht, "Neil Young: In the Eye of the Hurricane," *Guitar Player* (March, 1982), 55.
17 James Rotondi, "Is Shred Dead?" *Guitar Player* (August, 1993), 34.
18 Ibid., 32.

19 Joe Gore, "Jennifer Batten: Storming the Boy's Club," Guitar Player (July, 1989), 96. 20 This is not to say, of course, that women have not made significant headway in finding a voice within rock over the past two decades. Yet for all the rhetoric about "women in rock" that has been put forth, certain lines seem to remain rather firmly in place. Since the late 1970s, punk has been the creative space in which the greatest number of female instrumentalists (as opposed to singers) have found a space; the rise of the "Riot Grrl" movement in the early 1990s was in many ways the culmination of a long process of women taking hold of electricity. But, given the punk opposition to virtuosity, this has also meant that the majority of women rockers remain outside the sphere of virtuosic musicianship in its most flamboyant, visible forms, whether by exclusion or by purposeful resistance.

21 Tricia Rose, Black Noise: Rap Music and Black Culture in Contemporary America (Hanover, NH, 1994), 81–82.

22 Ibid., 82.

23 Simon Reynolds, *Generation Ecstasy: Into the World of Techno and Rave Culture* (Boston, 1998), 41.

24 Ibid., 102.

25 Ibid., 383.

26 Greg Rule, "The Chemical Brothers: Stompbox Techno," *Guitar Player* (August, 1997), 25.

27 Rose, Black Noise, 78.

9 The guitar in country music

1 Bill Malone, *Country Music*, U.S.A., rev. edn. (Austin, 1985), 10.

2 Timothy Scheurer, Born in the U.S.A: The Myth of America in Popular Music from Colonial Times to the Present (Jackson, 1991), 26, 54.
3 It should be noted as well that folk singers like Woody Guthrie are considered folk, while artists such as Gordon Lightfoot or Bob Dylan are considered "folk revival."

4 Despite its seemingly traditional sound, bluegrass music was actually a manufactured genre emerging during the 1940s with the music of Bill Monroe and others. The traditionalism is built into the music and the use of acoustic instruments locates a mid-twentieth-century genre in the traditionalism of the past.

5 Malone, Country Music, 154.

6 Both six- and twelve-string acoustic guitars are tuned identically. The twelve-string guitar has six courses with two tuned in unison and four tuned in octaves. Though predominantly a folk instrument, the twelve-string guitar is played by one country artist. Dan Seals, a former member of the pop-vocal duo England Dan and John Ford Coley, plays a twelvestring guitar left-handed and upside down. 7 Guitar manufacturers offer several models of acoustic guitars to suit any application. Martin, Gibson, Washburn, Ovation, and the Japanese manufacturer Takamine have an entire complement of guitars available ranging from the smaller parlor guitars or 000 models to the larger Dreadnought and jumbo styles. In addition, all of these manufacturers offer "electrified" acoustic guitars that are equipped with a pick-up imbedded in the bridge to facilitate the use of an amplifier. The "electrified" acoustic guitar allows the player to compete at the same sound level as other electrified instruments, external miking not being required.

8 Here, a twelve-string guitar is employed with the lowest three strung only with the octave strings.

9 Folk singer John Prine uses the same finger-style as Merle Travis, as does Mike Meldrum from the Canadian country-punk band the Law.

10 It is unclear who first coined the term "Nashville Sound" but it refers to three things: first, the period of time when the country music establishment was trying to recover a section of their market lost to rock and roll; second, the de-emphasizing or omission of pedal steel guitar and fiddle and adoption of pop elements like back-up singers and string sections; third, the particular production techniques that were used by producers Owen Bradley and Chet Atkins in an altruistic attempt to make country music more popular. Sometimes called "country-pop," "middleof-the-road," or "countrypolitan," it was designed to reach new listeners and retain the old ones. See Joli Jensen, *The Nashville Sound: Authenticity, Commercialization, and Country Music* (Nashville and London, 1998); Bill C. Malone, *Southern Music American Music* (Lexington, 1979), 127–28; and Bill Ivey, "Commercialization and Tradition in the Nashville Sound," in *Folk Music and Modern Sound*, ed. William Ferris and Mary Hart (Jackson, 1982), 129–41.

11 Donald D. Kilolani Mitchell and George S. Kanahele, "Hawaiian Steel Guitar: Origins and Development," *Guitar Player* (July, 1980), 32.

12 Ibid., 36.

13 "Dobro" has become the term used to define an acoustic guitar with a metal resonating cone in place of a sound hole. Resonator guitar is the traditional name and these were first developed by John Dopyera, who started the National Stringed Instrument Company in California during the mid-1920s. Resonator guitars are constructed of aluminum and began as a search for a louder acoustic guitar that would compete with the horns and rhythm sections of jazz bands of the 1920s. Dopyera left National in 1928 and developed a more affordable wood body guitar with a resonating cone. He introduced his invention in that same year under the name "Dobro" (R) - a combination of Dopyera and Brothers. Dobro merged with National in 1932 after much legal wrangling and, after World War II, National ceased making the Dobro guitar. Dopyera family members formed the Original Musical Instrument Company in 1967 and acquired the brand name Dobro® in 1970. Since 1993 Dobros have been manufactured by Gibson Musical Instruments, who obtained O.M.I. in that year. Further information can be found at www.nationalguitars.com and www.gibson.com.

14 Buddy Emmons, in *Definitive Country: The Ultimate Encyclopedia of Country Music and its Performers*, ed. Barry McCloud et al. (New York, 1995), s.v. "Steel Guitar," 767. Buddy Emmons is a prominent steel guitarist appearing on numerous recordings. He pioneered the development of the pedal steel guitar through his own company Sho-Bud Guitars of Nashville with friend Shot Jackson (the name Sho-Bud is constructed from the first names of the partners, Shot and Buddy) and his own brand of instruments that bear his name. 15 Slide guitar is related to steel guitar by virtue of the presence of a bar to fret the notes on the strings instead of the fingers. Slide guitar is most often associated with blues, owing to the fact that many pioneer blues artists used cut-off wine bottle necks as a slide, hence the name "bottleneck guitar." Periodicals like *Guitar* and *Guitar Player* often feature "lessons" on slide guitar technique.

16 The terms "fills," "licks," and "riffs" are present in the lexicon of popular music. "Fills" and "licks" are the same thing: snippets of melody played after melodic lines in a kind of call and answer manner. "Riffs" are longer melodic fragments usually in the introduction or between verses, a kind of instrumental signature for the song. 17 Other models were used as well, like the Gretsch Country Gentleman, made famous by guitarist/producer Chet Atkins, and the Gibson Les Paul played by Charlie Daniels. 18 Guitar amplifiers have become big business. Manufacturers come and go but there are a few that have remained the premier choices for many guitarists. Fender, Marshall, Peavey, Mesa-Boogie, Line 6, and Soldano are some of the more popular amplifier manufacturers. Magazines like Guitar Player and Guitar World constantly feature articles, reviews, and buyers' guides with a focus on amplifiers and their respective tone. The choice of guitar amplifier is analogous to the choice of automobile one would drive. There is a car for every personality and an amplifier for every guitarist.

19 Rich Kienzle, "The Electric Guitar in Country Music: Its Evolution and Development," *Guitar Player* (November, 1979), 30.

21 Ibid., 32.

22 Since the inception of glue-on nails, many country guitarists use artificial fingernails. 23 For those guitarists wishing to truly emulate the pedal steel, a mechanical device can be incorporated into the electric guitar that raises the pitch of the B string one whole step. The so-called "B-bender" is activated by a strap pin or bridge lever. By pulling down on the guitar neck or pushing with the heel of the picking hand, the string is raised to the requisite pitch.

24 "Natural positions" refers to the manner in which the notes of the major pentatonic scale lie on the fretboard. This positioning allows the first and third fingers of the fretting hand to perform the majority of the fretting. Similar techniques can be found among guitarists of all genres.

²⁰ Ibid.

10 Radical innovations, social revolution, and the baroque guitar

1 Joan Carles Amat, *Guitarra española y* vandola en dos maneras de guitarra, castellana y cathalana de cinco órdenes, intro. by Monica Hall, facsimile edn. of Joseph Bró edn. of Amat, between 1761 and 1766 (Monaco, 1980). It is probable that Amat's book was first issued in 1586, rather than 1596; see the entry by Craig H. Russell for "Amat, Joan Carles" in *The New Grove Dictionary of Music* and Musicians, 2nd edn., ed. Stanley Sadie (London, 2001), vol. I, 443.

2 "El bueno, y practico Pintor tiene aparejados todos los colores que son necessarios para pintar, de las quales está á su alvedrio si quiere pintar, ò un hombre, ò un león, ò un buey; de la mesma manera nosotros hasta aqui avemos aparejado todos los puntos, que son como materia, y como los colores del Pintor, de los quales se pueden formar toda manera, y suerte de tonos, saltando del uno al otro. Puedense con estos puntos hazer vacas, passeos, gallardas, villanos, italianas, pabanillas, y otras cosas semejantes, por doze partes; y lo que es de maravillar (lo que à muchos parecerá impossible) que con estos puntos puede qualquier a juntar, a acomodar por las dichas doze partes, todo lo que se tañe, y pueda tañer, con qualquier instrumento de musica." Amat, Guitarra española, Chapter 7, 23-24. All translations in this article are by the author. 3 Girolamo Montesardo, Nuova inventione d'intavolatura per sonare li balletti sopra la chitarra spagniuola (Florence, 1606). For a thorough discussion of Montesardo and the development of early guitar styles, see Richard Hudson, Passacaglio and Ciaccona: From Guitar Music to Italian Keyboard Variations in the 17th Century, Studies in Musicology, 37 (Ann Arbor, 1981), 17-25, 303. 4 Benedetto Sanseverino, Intavolatura facile delli passacalli, ciaccone, saravande, spagnolette, fulie, pavaniglie, pass'e mezzi, correnti, & altre varie suonate (Milan, 1620). See Hudson, Passacaglio and Ciaccona, 16, 304; and Richard

T. Pinnell, Francesco Corbetta and the Baroque Guitar With a Transcription of His Works, 2 vols. (Ann Arbor, 1980), vol. I, 33–35. 5 Giovanni Ambrosio Colonna, Intavolatura di chitarra spagnuola (Milan, 1637). See Hudson, Passacaglio and Ciaccona, 303; and Pinnell, Francesco Corbetta, vol. I, 36–40. Giovanni Battista Abatessa, Corona di vaghi

spagnola (Venice, 1627).6 Foriano Pico, Nuova scelta di sonate per la chitarra spagnola (Venice, 1628?). See Pinnell's

fiori overo nuova intavolatura di chitarra alla

Francesco Corbetta, vol. I, 48 n. 34 and his discussion on 41–43. Also see Hudson, *Passacaglio and Ciaccona*, 304. One of the most important treatments of the *alfabeto falso* occurs in Francesco Corbetta's first publication, *De gli scherzi armonici* (Bologna, 1639). See Pinnell, *Francesco Corbetta*, vol. I, 52–55.

7 Pietro Millioni and Lodovico Monte, *Vero e facil modo d'imparare a sonare et accordare da se medesimo la chitarra spagnuola* (Venice, 1678), 6.

8 Stefano Pesori, Lo Scrigno armonico (Mantua, 1640). Pesori, I concerti di chitarriglia (Verona, n.d. [post 1640]). Examination of the two sources reveals that Pesori frequently took the plates originally used in publishing Lo Scrigno armonico and then reused them for his subsequent I concerti di chitarriglia. He even cut out the original dedications and pasted in new ones so as to get more mileage out of the same plates. Giovanni Paolo Foscarini, Il primo, secondo, e terzo libro della chitarra spagnola, book 2 publ. in Macerata, 1629. Li Cinque libri della chitarra alla spagnola [Rome, 1640]; available in facsimile with an introduction by Paolo Paolini, Archivum Musicum, no. 20 (Florence, 1979). For a thorough discussion of Foscarini, see Hudson, Passacaglio and Ciaccona, esp. 53-55 and Chapter 3, "Passacaglio and Ciaccona in the Variation Pieces of Foscarini," 95-169. 9 For a thorough discussion of Corbetta, including this specific publication, the definitive work is Pinnell's Francesco Corbetta. 10 For discussions of the physical aspects of the five-course baroque guitar and its common tunings, consult Tom and Mary Evans, Guitars: Music History, Construction and Players from the Renaissance to Rock (New York, 1977), 24-39, 136-51; James Tyler, The Early Guitar: A History and Handbook, Early Music Series, no. 4 (London, 1980); Eloy Cruz, La casa de los once muertos: historia y repertorio de la guitarra (Mexico City, 1993), esp. 32-35; Pinnell, Francesco Corbetta, esp. vol. I, 20-21; Cristina Azuma Rodrigues, "Les musiques de danse pour la guitare baroque en Espagne et en France (1660-1700), Essais d'étude comparative," 2 vols., Ph.D. diss., Université Paris-Sorbonne, 2000, esp. 46-47, 59-60. 11 The effect is similar to the so-called "Nashville" tuning of a modern twelve-string, in which the lower octaves of the bass strings are removed, leaving only the higher octaves. 12 Nina Treadwell, "The Guitar Passacalles of Santiago de Murcia (ca. 1685-1740): An Alternative Stringing," Musicology Australia 15 (1992), 67-76, esp. 72.

241 Notes to pages 158–161

13 Pietro Millioni, *Quarta impressione del primo, secondo et terzo libro d'intavolatura di chitarra spagnola* (Rome, 1627). Foriano Pico similarly describes this ornament. Foriano Pico, *Nuova scelta di sonate per la chitarra spagnola* (?1628). Cited in Pinnell, *Francesco Corbetta*, vol. I, 42–43, 48, nn. 31 and 34. 14 Pinnell, *Francesco Corbetta*, vol. I, 42. 15 Francesco Corbetta, *La Guitarre royalle dediée au Roy de la Grande Bretagne* (1671), available in facsimile (Geneva, 1975); a complete study and transcription available in Pinnell, *Francesco Corbetta*, vol. I, 147–78 and vol. II, 193–331.

16 Corbetta, La Guitarre royalle, fols. 71r–73r, cascading runs found particularly on fol. 72v.
For a complete transcription, see Pinnell, *Francesco Corbetta*, vol. II, 296–97.
17 Francisco Gueráu, *Poema harmónico compuesto de varias cifras de la guitarra española* (Madrid: Manuel Ruiz de Murga, 1694), fol. 5r; facsimile edn. with an intro. by Brian Jeffery (London, 1977). Also see Janis Stevenson, "A Transcription of *Poema Harmónico* by Francisco Guerau for Baroque Guitar," M.A. thesis, San Jose State University, 1974.

18 "Estas condiciones, y otras que yo ignoraré, pide la Guitarra al que desea tocarla con algun primor: y aunque todas son necessarias para el buen orden, lo que mas hermosea, y causa mas harmonia, es la continuacion del Trino, Mordente, Extrasino, y harpeado; que aunque en la verdad, si la Musica es buena, y la tocas á compás, y el instrumento está templado, sonará bien; no obstante, usando destos afectos, que son alma de la Musica, verás la diferencia que vá de uno á otro." Gueráu, Poema harmónico, fol. 5. 19 Corbetta, La Guitarre royalle, 3, 5, 7-9. See Pinnell, Francesco Corbetta, vol. I, 164-65. 20 See Robert Strizich, "Ornamentation in Spanish Baroque Guitar Music," Journal of the Lute Society of America 5 (1972), 18-39; Tyler, The Early Guitar, esp. 83-102; and Azuma Rodrigues, "Les musiques de danse pour la guitare baroque," vol. I, 65-70. 21 Robert de Visée, Livre de guittarre dedié au Roy (Paris: Bonneüil, 1682) and Liure de pieces pour la gvittarre dedié au Roy (Paris, 1686); both available in facsimile (Geneva, 1973). For the most definitive recent research on de Visée, including a study of his ornamentation and baroque guitar technique, see the collaborative effort of Hélène Charnassé, Rafael Andia, and Gérard Rébours, Robert de Visée: Les Livres de Guitare (Paris 1682 et 1686); La guitare en France à l'époque baroque, transcription de la tablature et interprétation

(Paris, 1999). Nicolas Derosier, Les Principes de la guitarre (Amsterdam, 1690) and Nouveaux principes pour la guittare (Paris, 1699). 22 Santiago de Murcia, "Códice Saldívar No. 4" (c. 1732). Available in facsimile with some commentary by Michael Lorimer, Saldívar Codex No. 4, vol. I: The Manuscript (Santa Barbara, CA, 1987). Available in facsimile with an introduction, commentary, and complete transcription by Craig H. Russell, Santiago de Murcia's "Códice Saldívar No. 4": A Treasury of Guitar Music From Baroque Mexico, 2 vols. (Urbana and Chicago, 1995); see the "Cumbées" on fols. 43r-44v, reproduced and transcribed in vol. II, 47-48, 188-91.

23 See, for example, the guitar books of Angelo Michele Bartolotti, *Libro P[rim]o di chitarra spagnola* [Florence, 1640], and his *Secondo libro di chitarra* (Rome, c. 1655); both books available in facsimile with an introduction by Claude Chauvel (Geneva, 1984). See his Prelude in D minor in the *Secondo libro*, 69–70, esp. 70, and the allemande on 75.

24 Corbetta, La Guitarre royalle. Giovanni Battista Granata, Soavi concenti di sonate musicali per la chitarra spagnuola (Bologna, 1659), M.837 in Madrid, Biblioteca Nacional; available in facsimile, with an introduction by James Tyler (Monaco, 1979). Nicola Matteis, The False Consonances of Mysick or Instructions for the Playing a True Base Upon the Guitarre [London, 1682]; available in facsimile with an introduction by James Tyler (Monaco, 1980). Santiago de Murcia, Resumen de acompañar la parte con la guitarra (Antwerp and Madrid, 1714 [approbation dated 1717]), R.5048 in Madrid, Biblioteca Nacional; also available in two facsimile editions, one with an introduction by Monica Hall (Monaco, 1980), and another with an introduction by Gerardo Arriaga (Madrid, 1984); a complete translation and transcription is available in two doctoral dissertations - Craig H. Russell, "Santiago de Murcia: Spanish Theorist and Guitarist of the Early Eighteenth Century," 2 vols., Ph.D. diss., University of North Carolina at Chapel Hill, 1980; and Monica Hall, "The Guitar Anthologies of Santiago de Murcia," 2 vols., Ph.D. diss., Open University [England], 1983. Nicolao Doizi de Velasco, Nuevo modo de cifra para tañer la guitarra con variedad y perfeccion [Naples, 1640], R.4042 in Madrid, Biblioteca Nacional. François Campion, Traité d'accompagnement et de composition (Paris, 1716), and his Addition au traité d'accompagnement et de composition (Paris, 1730); both volumes available in

242 Notes to pages 161–163

facsimile (Geneva, 1976). Gaspar Sanz, Instruccion de musica sobre la guitarra española (Zaragoza, 1674 and 1697), R.14513 in Madrid, Biblioteca Nacional; available in at least three facsimile editions: (1) with an introduction by Luis García Abrines (Zaragoza, 1979); (2) (Geneva, 1976); and (3) with an introduction by Rodrigo de Zayas, Series "Los Guitarristas," Colección Opera Omnia (Madrid and Seville, [1985]). A complete transcription of Sanz's Instrucción is available both in Rodrigo de Zayas's edition and in the most recent contribution by Robert Strizich, The Complete Guitar Works of Gaspar Sanz, transcription and translation by R. Strizich (Saint-Nicolas, Québec, 2000). 25 James Tyler lists over eighty separate publications from the early Baroque as well as several dozens of manuscripts devoted to song accompaniments as opposed to solo instrumental playing in the Appendix to his The Early Guitar, 140–54.

26 Girolamo Montesardo, I lieti giorni di Napoli, concertini italiani in aria spagnuoa à due, e tre voci con le lettere dell'alfabeto per la chitarra (Naples, 1612). For a thorough discussion of this work, see Jean L. Kreiling, "I lieti giorni di Napoli: Girolamo Montesardo as Monodist," unpublished paper for James Haar's MU337/1 at the University of North Carolina at Chapel Hill, December 1983. Montesardo was a singer at San Petronio in Bologna before accepting the post of maestro di cappella at Fano in 1608. 27 Giovanni Girolamo Kapsberger, Libro primo di villanella a 1, 2, et 3 voci (Rome, 1610) does not use alfabeto symbols - not surprisingly, given that Montesardo's use of alfabeto chords had not yet appeared. Kapsberger's second and third books of villanelle (Rome, 1619, 1623), however, do insert the alfabeto chords into the score. See Kreiling, "I lieti giorni," 10. For further examples, see Paolo d'Aragono, Canzonette a tre voci (Naples, 1616), Andrea Falconieri, Libro primo di villanella (Rome, 1616), and Filippo Vitali, Arie a 1.2.3. voci da cantarsi nel chitarrone chitarra Spagnuola, & altri stromenti di Filippo Vitali, Libro Quarto (Venice, 1622). 28 Giovanni Battista Abatessa, Cespuglio di varii fiori overo intavolatura de chitarra spagnola (Orvieto, 1635).

29 Giovanni Casalotti's "Vilanelle di più sorte con l'intavolatura per sonare e cantare sù la chitarra spagnola," British Library, Add. MS 36, 877.

30 For a thorough discussion of Ms. 2804, see Hudson, *Passacaglio and Ciaccona*, 57.

31 Corbetta, *La Guitarre royalle*, 83–98; Henry Grenerin, *Livre de guitarre et autres pieces de*

musique (Paris, 1680); facsimile edition available (Geneva, 1977), 71-89. 32 The definitive study of the small theatrical genres and entr'actes of the era is Emilio Cotarelo y Mori, Colección de entremeses, loas, bailes, jácaras y mojigangas desde fines del siglo XVI á mediados del XVIII (Madrid, 1911). For a copiously researched study in English of Spanish theatre, see Louise K. Stein, Songs of Mortals, Dialogues of the Gods: Music and Theatre in Seventeenth-Century Spain (Oxford, 1993). See also Russell, Santiago de Murcia's "Códice Saldívar No. 4", vol. I, 17-18; and Craig H. Russell, "Spain in the Enlightenment," in The Classical Era: From the 1740s to the End of the 18th Century, ed. Neal Zaslaw, Man and Music, vol. V (London, 1989), 350-67, esp. 356-60.

33 See Louise Kathrin Stein, "El 'Manuscrito Novena': Sus textos, su contexto históricomusical y el músico Joseph Peyro," Revista de Musicología 3 (1980), 197-234, esp. 233-34. 34 The virtuoso baroque guitarists Eloy Cruz, Gabriel Camacho, and Isabelle Villey have been concertizing prodigiously in Mexico, playing "folkloric" versions of old Baroque pieces and relating them to the "classically oriented" versions that are notated in baroque guitar books from the past. Also see the ground-breaking article by Antonio Corona Alcalde, "The Popular Music from Veracruz and the Survival of Instrumental Practices of the Spanish Baroque," Ars Musica Denver 7 (1995), 39-68.

35 Possible collaborations between Francisco de Castro and Santiago de Murcia – all of them dating from the first decades of the eighteenth century – include: *El inglés* hablador, Los cuatro toreadores, Amor buhonera, *El amor sastre, La noche buena, El destierro de* hoyo, Pagar que le descalabran, and Juego de magister. See Russell, Santiago de Murcia's "Códice Saldívar No. 4", vol. I, 18, 54, 59–60, 72, 79, 95, 111, 136.

36 The most recent and compelling research on Gueráu has been done by Mallorcan scholars Mosen Antoni Gili, Joan Parets i Serra, and Antoni Pizà, all of whom delivered major addresses on "350 anys dels naixament de Francesc Garau i Femenia (1649–1722)" at the VI Trobada de Documentalistes Musicals, held in Artá, Mallorca, October 1999. Their lectures will appear in the published acts of that conference, which are forthcoming. Also see Gerardo Arriaga, "Francisco y Gabriel Gueráu, músicos mallorquines," *Revista de Musicología* 7 (1984), 253–99; and Russell, *Santiago de Murcia's "Códice Saldívar No. 4*", vol. I, 120–22. 37 Pinnell, *Francesco Corbetta*, vol. I, 121.38 Ibid.

39 For an examination of de Visée's settings of Lully and role at the French court, see Charnassé, Andia, and Rébours, Robert de Visée, esp. 15-17, 21-26, 62, 86-90. 40 For a discussion of the importance of French dance in Hispanic cultures in the late Baroque, see Craig H. Russell, "Imported Influences in 17th and 18th Century Guitar Music in Spain," in Actas del Congreso Internacional "España en la Música de Occidente", vol. I (Madrid, 1987), 385-403; Russell, "Lully and French Dance in Imperial Spain: The Long Road from Versailles to Veracruz," Proceedings of the Society of Dance History Scholars Fourteenth Annual Conference, ed. Christina L. Schlundt (Riverside, CA, 1991), 145-61; Russell, "New Jewels in Old Boxes: Retrieving the Lost Musical Heritages of Colonial Mexico," Ars Musica Denver 5 (1995), 13-38; Russell, "The Eleanor Hague Manuscript: a Sampler of Musical Life in Eighteenth-Century Mexico," Inter-American Music Review 14 (1995), 39-62; and Russell, "El manuscrito Eleanor Hague: una muestra de la vida musical en el México del siglo XVIII," Heterofonía 116-17 (1997), 51-97. Several books are indispensable in the study of French "noble danse," including Wendy Hilton, Dance of Court and Theater: The French Noble Style 1690-1725, ed. Caroline Gaynor, labanotation by Mireille Backer (Princeton, 1981); Meredith Ellis Little and Carol Marsh, La Danse Noble: An Inventory of Dances and Sources (New York, 1992); and Anne L. Witherell, Louis Pécour's 1700 "Recüeil de dances", Studies in Musicology, no. 60 (Ann Arbor, 1981).

41 For an extensive and perceptive study of French dance – as well as Spanish dance – and their direct influence on the repertoire for the baroque guitar, refer once again to Azuma Rodrigues, "Les musiques de danse pour la guitare baroque."

42 Murcia, *Resumen de acompañar*, esp. 57–81.

43 The advertisement is the last two unnumbered plates appended to the back of Raoul-Auger Feuillet and Louis Pécour, *Recüeil de dances composées par M. Pécour ... et mises sur le papier par M. Feuillet* (Paris, 1709).

44 For a thorough treatment of these dances and the ways they are distinguished, see Maurice Esses, *Dance and Instrumental "Diferencias" in Spain During the 17th and Early 18th Centuries*, 3 vols. (Stuyvesant, New York, 1992) vol. I: *History and Background, Music and* Dance. Also see Russell, Santiago de Murcia's "Códice Saldívar No. 4", vol. I, esp. 12–17. 45 Madrid, Biblioteca Nacional, Ms M.811: "Libro de diferentes cifras de guitara [sic] escojidas de los mejores avtores año de 1705."

46 "Passacalles por la L," in Sanz, *Instrucción de música*, book 3, plate 9. "Passac[alles] de la L," in "Libro de diferentes cifras," 51–55. The fingering for the "L" shape that is indicated in the title produces a C minor harmony. 47 "Passacalles por la +," in Sanz, *Instrucción de música*, book 3, plate 5. "Passac[alles] de 3° tono," in "Libro de diferentes cifras," 39–42. The fingering for the "+" shape that is indicated in the title produces an E minor harmony.

48 "Muchos ay señora mía que se burlan de la guitarra y de su son. Pero si bien consideran hallaran que la guitarra es un instrumento el más favorable para nuestros tiempos que jamas se bió. Por que si el día de oy se busca el ahorro de bolsa y de la pena, la guitarra es un theatro para cantar, tañer, dançar, saltar, y correr, baylar, y zapatear." Preface to Luis Briçeño, Metodo mvi facilissimo para aprender a tañer la gvitarra a lo español (Paris, 1626); available in facsimile (Geneva, 1972). For a discussion of Briceño and his role at the French court, see Richard Pinnell with Ricardo Zavadivker, The Rioplatense Guitar, vol. I: The Early Guitar and Its Context in Argentina and Uruguay (Westport, CT, 1993), 130.

49 "Perdónesele Dios a Vicente Espinel, que nos traxo esta novedad y las cinco cuerdas de la guitarra, con que ya se van olvidando los instrumentos nobles." Quoted in Pinnell, *Rioplatense Guitar*, 159.

50 See Pinnell, *Francesco Corbetta*, vol. I, 77, 84, 86, 93–95, 117, 122–23, 131–35, 139–41, 147–50, 179–83.

51 See Arriaga, "Francisco y Gabriel Gueráu, músicos mallorquines," and Russell, *Santiago de Murcia's "Códice Saldívar No. 4*", vol. I, 115–16, 120–31.

52 For example, the numerous pamphlets issued by Spanish publisher Pablo Minguet y Yrol in the mid 1750s – under the title *Reglas y advertencias generales que enseñan el modo de tañer todos los instrumentos mejores [Rules and General Advice that Teaches the Way to Play All the Best Musical Instruments]* – all place on their title pages the bold claim "that any amateur will be able to learn easily and with great facility [these instruments and rules] and without having a teacher (para que qualquier aficionado las pueda comprehender con mucha facilidad, y sin maestro)." 53 For numerous excellent iconographic depictions of the baroque guitar in various social contexts, consult Tom and Mary Evans, *Guitars*, esp. 136–51.

54 "Se vuol ballare, signor contino, il chitarrino le suonerò," Figaro's *cavatina* in Scene 2 of Act I.

55 Modern historian Richard Pinnell has masterfully shown the extent to which the guitar was an indispensable part of life in South America, Central America, and other regions within the orbit of Spanish influence. His scholarship meticulously chronicles each step of development from the first explorers up to more recent times, and - significantly he explores the various ethnic and social implications of this encounter between cultures. Pinnell and Zavadivker, Rioplatense Guitar, esp. 163 ff. Much information is found in Gabriel Saldívar y Silva and Elisa Osorio Bolio de Saldívar, Historia de la música en México: Épocas precortesiana y colonial (Mexico City, 1934/rpt. 1987). Robert Stevenson's monumental studies of music in the Americas in the 1500s and 1600s continue to be the definitive contributions in the field. See Stevenson, Music in Aztec and Inca Territory (Berkeley and Los Angeles, 1968); Music in Mexico: A Historical Survey (New York, 1952); and The Music of Peru: Aboriginal and Viceroyal Epochs (Washington, DC, 1960).

56 Pinnell and Zavadivker, *Rioplatense Guitar*, 179.

57 Ibid., 169–75.

58 Ibid., 181-87.

59 The Aguirre manuscript is in the possession of the Gabriel Saldívar family in Mexico City. For information concerning the Aguirre manuscript consult: Gabriel Saldívar y Silva, Bibliografía mexicana de musicología y musicografía, 2 vols. (Mexico City, 1991), esp. vol. I, 81-87; Russell, "New Jewels in Old Boxes"; Stevenson, Music in Aztec and Inca Territory, 234-35; Robert Stevenson, "La música en el México de los siglos XVI a XVIII," in La Música de México: I. Historia, 2. Periodo Virreinal (1530 a 1810), ed. Julio Estrada, Instituto de Investigaciones Estéticas (Mexico City, 1986), 41-43; and José Antonio Guzmán Bravo, "La música instrumental en el Virreinato de la Nueva España," also in La Música de México. I. Historia, 2. Periodo Virreinal (1530 a 1810), 120.

60 These genres are found in the following locations in the Aguirre manuscript: *tocotín*: "tocotin por 3 y 4 rasgado y Punteado," fols. 14v–15r; [tocotín de] dos vozes," fol. 15r; "tocotin por P y + Punteado. dos vozes," fol. 15r–v. *corrido*: "Corrido," fol. 27r, "Otro

[corrido] Por arriba," fol. 27r. guasteco:
"El Guasteco por 1 y +," fol. 22v. chiqueador:
"Chiqueador de la Puebla Por 1," fol. 19v;
"Chiqueador por 4 y alacran rasgado,"
fol. 20r; "Balona de Bailar chiqueadora por +
y P. rasgada y Punt[ea]da," fol. 25v.

61 "*chiqueadores* = (1) Rodajas de carey que usaban antiguamente las mejicanas como adorno. (2) (Méjico) Rodajas de papel, como de un centimetro de diámetro, que, untadas de sebo u otras substancias, se pegan en las sienes para curar el dolor de cabeza." María Moliner, *Diccionario de uso del español*, 2 vols. (Madrid, 1979), vol. I, 609.

62 *chiqueadores* = (American) headache plasters. *chiquear* = (American) to pamper, to mollycoddle, to flatter. Ramón García-Pelayo y Gross et al., *Larousse Diccionario Moderno español-inglés, English–Spanish* (Paris, 1976), 271.

63 These genres are found in the following locations in the Aguirre manuscript: *panama*: "Panama," fol. 29r; *porto rico*: "Puerto rico de la Puebla por 1 y 2 rasg[ue]da y p[untea]da," fol. 19r; "Portorrico por 3 y 4 rasg[uea]do y Pun[tea]do," fol. 19v; "Portorrico Por 4 y alacran rasg[uea]do," fol. 20r; "Portorrico por P. y + rasg[uea]do," fol. 20r; "Portorrico de los negros por 1 y 2 rasg[uea]do," fol. 20r; "El mismo [portorico] Por 4 y alacran," fol. 20v.

64 "El Coquis Por 2 y 3 rasg[uea]do y Punt[ea]do," fol. 21r. "*coquí* = (Cuba, Puerto Rico; 'Hylodes martinicensis'). Reptil pequeño, al que se aplica ese nombre por el sonido de su grito." Moliner, *Diccionario de uso del español*, vol. I, 764.

65 "Morisca por 6 y 7 rasg[ue]ada," fol. 12v. "morisco (see "moro") = (1) Natural del África Septentrional frontera con España, donde estaba la provincia romana llamada Mauritania, de la que el Marruecos que fue español es una parte. (2) Por extensión, musulmán. (3) Se aplica a los musulmanes que invadieron España y vivieron en ella entre los siglos VIII y XV, y a sus cosas." Moliner, *Diccionario de uso del español*, vol. I, 456. "morisco = Moorish. The term morisco is applied to the Spanish Moors who, during the Reconquest (711–1492), accepted Christianity." Larousse Diccionario Moderno, 623.

66 "Zarambeques, o Muecas" on fols. 45r–46r and "Cumbées" on fols. 43r–44v of Murcia's "Códice Saldívar No. 4."

67 Eugenio Salazar in the mid-1500s equates the cumbé and guineo. See Russell, Santiago de Murcia's "Códice Saldívar No. 4", vol. 1, 70–71,

and nn. 241, 242, 243, 244 on 219-20. The dramatist Francisco de Castro uses the terms guineo and zarambeque interchangeably in his charming Pagar que le descalabran (pre-1713). See Russell, Santiago de Murcia's "Códice Saldívar No. 4", vol. I, 79, and nn. 276, 277, 278 on 225. Recently, Rolando Pérez Fernández has authored two important studies directly related to the *cumbés*: "El chuchumbé y la buena palabra," Son del sur 3 (November, 1996), 24-36, and 4 (June, 1997), 33-46; and La música afromestiza mexicana (Xalapa, Mexico, 1990), esp. 59-64. 68 "[Las palabras] son en sumo grado Escandalosas obcenas, y ofensibas de Castos Oydos, y se an cantado, y cantan acompañadolas con Baile no menos Escandaloso, y obceno - acompanado con acciones demostraciones y meneos desonestos, y probacativos de Lascibia, todo ello en grabe ruina, y Escandolo á la Almas del Pueblo Christiano." Archivo General de la Nación. Inquisición, tomo 1297, expediente 3, fol. 19r.

11 Perspectives on the classical guitar in the twentieth century

1 The Naxos label, classical music's largest, is currently in the middle of a comprehensive CD retrospective of the guitar repertoire that so far numbers eighty.

2 Andrés Segovia, *Segovia: An Autobiography* of the Years 1893–1920, trans. W. F. O'Brien (New York, 1976), 6.

3 Emilio Pujol, *Tárrega, Ensayo Biográfico* (Lisbon, 1960), quoted in Frederic

V. Grunfeld, *The Art and Times of the Guitar* (London, 1969), 286.

4 Segovia, Segovia, 59.

5 "Llobet had serious misgivings which prevented him from securing compositions from the great composers who were his friends - Debussy, Ravel, Fauré, Falla, and Granados. He believed that the guitar was not resonant or strong enough to be heard in the more important and large concert halls of Europe, a belief that was shared by Tárrega and his disciples." See Charles Postelwate, "Andrés Segovia: A Living Legend," American String Teacher (Winter, 1981), 29-30. 6 One measure of the willpower of Segovia is that he insisted on playing a Wigmore Hall recital in 1937 just a few hours after learning that his thirteen-year-old son had been accidentally electrocuted at an aqueduct. 7 Segovia, Segovia, from the book jacket.

8 Postelwate, "Andrés Segovia," 31.

9 Peter Mennin, former president of the Juilliard School, summed up this criticism

when he was interviewed by Allan Kozinn of the *New York Times*: "What I don't understand is why Segovia went after composers like Turina, Ponce and Torroba rather than composers like Stravinsky or Webern – the truly great, or at any rate, much more significant composers of his day. He had an opportunity to seek out first-class music from first-class composers, but instead, he developed a literature that is not very substantial musically." Quoted in Brian Hodel, "Twentieth-Century Music and the Guitar: Part I: 1900–1945," *Guitar Review* 117 (Summer, 1999), 12–13.

10 The composer Joaquin Nin-Culmell set out to write a piece for Segovia, and, as he reports, "He said, 'Send your piece to me and I'll fix it.' Of course no composer is willing to accept that kind of statement!" *Guitar Review* 99 (Fall, 1994), 2.

11 See Peter E. Segal, "The Role of Andrés Segovia in the Shaping of the Literature of the Classical Guitar," Ph.D. diss., Temple University, 1994, 39–45.

12 Naxos is producing one with various artists, and guitarists Antonio Lopez and Gérard Abiton are recording Ponce projects on Soundset and Mandala, respectively.
13 Brian Hodel, "Villa Lobos and the Guitar," *Guitar Review* 72 (Winter, 1988), 22.
14 Richard D. Stover, *Six Silver Moonbeams: The Life and Times of Agustín Barrios Mangoré* (Clovis, CA, 1992).

15 Richard D. Stover, "Agustín Barrios Mangoré, Part II: Emerging Genius," *Guitar Review* 99 (Fall, 1994), 33.

16 Eleftheria Kotzia, "Wish you Were Here: Ida Presti," *Classical Guitar* 19/9 (May 1992), 1.
17 For Bream's own feelings about this topic, see his conversation with Victor Coelho in "Julian Bream in 1990," *The Lute Society Quarterly* (July, 1991).

18 Graham Wade and Gerard Garno, A New Look at Segovia: His Life and His Music,
2 vols. (Pacific, MO, 1997), vol. II, 55.
19 See Julian Bream, "Toru Takemitsu: An Appreciation," *Guitar Review* 105 (Spring, 1996), 2.

20 Hans Werner Henze, *Royal Winter Music – First Sonata on Shakespearean Characters for Guitar* [GA 467] (Mainz, 1976), introduction.

21 Many extended techniques and notations are covered in John Schneider's *The Contemporary Guitar* (Berkeley and Los Angeles, 1985).

22 Gareth Walters, "A Conversation with John Williams [Part II]," *Guitar Review* 92 (Winter, 1993), 10.

23 Jim Tosone, "A Prodigal Son Returns: Eliot Fisk in Conversation," *Guitar Review* 107 (Fall, 1996), 18–19.

24 Wade, Segovia, vol. II, 90.

25 In my case, I found the classical guitar through a Segovia concert, but having come from playing fairly advanced piano music I felt a paucity in the repertoire. I immediately got a piece from my father, a composer, thus beginning my life of working with composers, but I also clearly remember picking up Bream's 20th-Century Guitar and listening breathlessly as one fine piece after another floated by.

26 Perhaps the editions of Sor's Estudios most clearly embody the old and new. Segovia's edition of twenty of the studies remains a kind of rite of passage for young guitar students. However, in publishing a facsimile edition of the complete works of Sor, Brian Jeffery in 1981 said "[Segovia's edition of Sor] does not reach the minimum standards of editing which were current at the time this book was first published, let alone today" (Soundboard, 1981). Later, it was revealed that Segovia worked in part from a Napoleon Coste version of those pieces, and some of the note and tempo changes in fact derived from Sor's friend Coste. The Segovia edition is now published with notes showing the original tempo markings of Sor, but the fact is that Segovia's edition remains immensely valuable. It reveals, perhaps more than any source, the technical thinking of Segovia, and also modernizes many of the technical issues remember that Sor basically avoided the right-hand ring finger, an idea that is no longer possible with today's repertoire, and was hardly even put into practice by Sor's own contemporaries.

27 Jim Tosone, "A Conversation with JohnWilliams," *Guitar Review* 97 (Spring, 1994), 6.28 As Brian Hodel, who has lived for manyyears in Brazil, remarks:

This is a music as much centered on the nylon-stringed classical or Spanish guitar as on any particular music genre. Elements of European classical guitar tradition participate in it, along with those of jazz and myriad native styles, urban and rural, traditional and commercially conceived. Many classical guitarists from Brazil began by playing popular music, later returning to it in arrangements for their repertoires. Brazilian popular – and sometimes traditional ("folk") – guitarists often study classical guitar methods and pieces as part of their largely informal training. Many Brazilian jazz guitarists play the nylon-stringed instrument with great facility and some can play steel-stringed electric guitars with classical right-hand technique.

("The Brazilian Guitar," *Guitar Review* 84 [Winter, 1991], 12)

29 Mention should be made here of Maria Luisa Anida, the Argentinian guitarist who played duos with Llobet, but who was discouraged from touring by him because she was a woman.

30 Reprinted in *Guitar Review* 32 (Fall, 1969),3.

12 Antonio Stradivari and baroque guitar making

1 Prior to 1969, the date on the pegbox of this guitar was thought to read 1680, but a closer examination revealed the last figure to be an "8" rather than a "0"; see David D. Boyden, *Catalogue of The Hill Collection of Musical Instruments in the Ashmolean Museum, Oxford* (Oxford, 1969), 45.

2 Gianpaolo Gregori, "La harpe et les guitares d'Antonio Stradivari," *Musique, Images, Instruments: Revue française d'organologie et d'iconographie musicale* 3 (Paris, 1997), 17–19, 30–31.

3 "Belchior Dias a fez em. / 1X^a nomes de dez.^{ro} 1581."

4 Antonio Corona-Alcalde, "The Viola da Mano and the Vihuela, Evidence and Suggestions about their Construction," *The Lute: The Journal of the Lute Society* 24, part 1 (1984), 11–13.

5 Joël Dugot, "Un nouvel exemplaire de vihuela au musée de la musique?", *Luths et luthistes en Occident, actes du colloque organisé par la cité de la musique. 13–15 mai 1998* (Paris, 1999), 307–17.

6 Michael Prynne, "A Surviving Vihuela de Mano," *The Galpin Society Journal* 16 (May, 1963), 22–27; Pierre Abondance, "La Vihuela du Musée Jacquemart-André: restauration d'un document unique," *Revue de Musicologie* 66, no. 1 (1980); Antonio Corona-Alcalde, "The Vihuela and the Guitar in

Sixteenth-Century Spain: A Critical Appraisal of Some of the Existing Evidence," *The Lute: The Journal of the Lute Society* 30 (1990), 3–24; Dugot, "Un nouvel exemplaire de *vihuela.*" Richard Bruné feels the Jacquemart-André instrument is not authentic because it is "proportionally corrupt, musically impossible, and does not have a provenance beyond its acquisition around 1880 – a time of extensive musical instrument fakery." Personal communication. 7 According to Egberto Bermudez, Pierre Abondance considers the Quito instrument to be a guitar. Egberto Bermudez, "The Vihuela: The Paris and Quito Instruments," in The Spanish Guitar, exhibition catalog (New York and Madrid, 1991), 38. Richard Bruné views the instrument as "an anachronistic New World creation." Personal communication. 8 Measurements of the vihuela body lengths and string lengths are taken from Dugot, "Un nouvel exemplaire de vihuela," 317. The author examined the vihuela from the Musée Jacquemart-André when it was on loan to the Metropolitan Museum of Art in 1991-92. Measurements of the Belchior Dias guitar were kindly supplied by the Royal College of Music.

9 Juan Bermudo, *Declaración de instrumentos musicales* (Osuna, 1555), Chapter 60, fol. 93v; Chapter 64, fol. 95r; Chapter 65, fol. 96r; Chapter 86, fol. 109r. For a new translation, see Dawn Astrid Espinosa, "Juan Bermudo, 'On Playing the Vihuela' from *Declaración de instrumentos musicales* (Osuna, 1555)," Journal of the Lute Society of America 28–29 (1995–96), 22, 36–39, 127–30.

10 Bermudo, *Declaración*, chapter 65, fol. 96r; Espinosa trans., 40.

11 Ibid., chapter 65, fol. 96r; Espinosa trans., 41.

12 Bartolomeo Lieto, *Dialogo quarto di musica* (Naples, 1559/rpt. Lucca, 1993), unpaginated; Corona- Alcalde, "The Viola da Mano and the Vihuela," 8.

13 Pablo Nassarre, *Escuela musica, segun la practica moderna*, vol. I (Zaragoza, 1724), 461.

14 Ibid., 461-62:

There are two principal parts: the body and the place of manipulation, which is commonly called the neck. The woods of which the body is made must be strong and solid, as with all the other instruments, except the top, which should always be of *pino avete* for the reasons stated. The lower extreme is semicircular in form, as is the upper part, with the difference that in the middle of it originates the neck. A straight line is not formed by the two angles of the sides, for they curve toward the middle of the body [forming the waist].

The acoustical proportions, which should have the same [numerical] figures as the shape, are as follows: The greatest width of the extreme lower part of the body must be doubled to equal the length, and the upper extreme width, which should be smaller in width [than the lower part], must be in a proportion of *sexquiquarta* (5 : 4) of the lower.

The measurement of the two extremes should be in proportion to the length of the entire body. The depth of the body should be dupla sexquialtera (5:2) of the width of the two extremes; and speaking practically, the width of the lower bout should be half of the whole body length, which is dupla (2 : 1). The upper bout should have a width of four parts, having five below, so that it may have a fifth part less than the lower; for the measure of the middle, it should be one-third the length, it should be one part wide, which is the tripla (3:1). For the depth of the sides, of five parts, in which the lower-bout width is divided, take only two; the same applies to the upper-bout width, which divided in five parts, gives two in depth, so that both are *dupla sexquialtera* (5:2). This is everything with respect to the body. That which is played at the place of manipulation, called the neck, can have a length with allows one to form six to eight stops. These instruments have the distinction that all of the stops which are formed on the neck are semitones.

15 Michael Praetorius, Syntagma Musicum II: De Organographia Parts I and II, trans. and ed. David Z. Crookes (Oxford, 1986), 59.
16 Marin Mersenne, Harmonie Universelle: The Books on Instruments, trans. Roger Chapman (The Hague, 1957), 137.

17 The technical drawing made by Stephen Barber (obtained from the Ashmolean Museum) has rectified this problem, but as such, it does not accurately represent the instrument in its present state.

18 Gregori, "La harpe et les guitares

d'Antonio Stradivari," 25–26.

19 Luisa Cervelli, La Galleria Armonica; Catalogo del Museo degli strumenti musicali di Roma (Rome, 1994), 273.

20 Dimensions of the guitars were obtained from the following sources: "Hill" guitar, a technical drawing supplied by the Ashmolean Museum; "Rawlins" guitar, staff of The Shrine to Music Museum, Vermillion, SD;

"Giustiniani" guitar, Gianpaolo Gregori, La Chitarra "Giustiniani" Antonio Stradivari 1681 (Cremona, 1998), 25–27.

21 Ignazio Alessandro Cozio di Salabue, *Carteggio*, transcribed by Renzo Bacchetta (Milan, 1950), 420–21.

22 Andrea Mosconi and Carlo Torresani, *Il Museo Stradivariano di Cremona* (Milan, 1987), 20–21.

23 Stewart Pollens, *The Violin Forms of Antonio Stradivari* (London, 1992), 24–28.
24 See Mosconi and Torresani, *Il Museo Stradivariano di Cremona*.

248 Notes to pages 223–228

25 Giovanni Paolo Foscarini, *Li cinque libri della chitarra alla spagnola* (Rome, 1640), unpaginated. See under "Modo d'accordar più Chitare per sonar di concerto."

26 "Misura della Longezza e Largezzo del manico della Chitara Tiorbata" 27 "Misura della longezza e largezza della tratta di Citara Tiorbata et in su la detta tratta ge vanno susa sette bassi e Questa in Cima deve essere una Quarta da violino e il restando deve da chitara tutte sette."

28 "Questi deve esser compani due Cantini di Chitara / queste deve essere compane due Sotanelle di chitara / queste deve essere compane doi Cantini da Violino grossi / queste altra corda deve essere un Canto da violino / questa altra corda deve essere una sotanella di Chitara / questa altra corda deve essere un Canto da Violono ma di più grossi / questa deve essere un cantino da violino / corda."

29 The author has experimentally determined that gut strings of 0.40–0.57 mm diameter and 74.4 cm in length can be tuned up to e^1 at $a^1 = 440$ Hz. Such a high pitch would, however, be highly precarious.

30 The lutenist and guitarist Lynda Sayce commissioned Edward Fitzgibbon to construct a full-scale copy of the "Hill" Stradivari guitar. She reports that it was necessary to reduce the string spacing and neck width to render the copy playable. The lute and guitar maker Stephen Barber contends that the string spacing is, in fact, usable. He feels the "Hill" guitar may have been designed for continuo playing, though he admits he makes his copies with 670–80 mm string lengths, with ten frets on the neck.

31 Gregori, *La Chitarra "Giustiniani*", 26.32 Ibid., 25.

33 I would like to thank Richard Bruné for suggesting the function of the triangular blocks.

34 Gregori, *La Chitarra "Giustiniani*", 25–26. 35 As indicated above, Stephen Barber's technical drawing of the "Hill" guitar (obtained from the Ashmolean Museum) depicts a scaled-down instrument with a 690 mm string length (a few original dimensions are mounted on the drawing for reference). Presumably, the drawing was scaled to facilitate the construction of "comfortable" instruments for modern use.