Notes

Preface

 Yehudi Menuhin, *The Violin* (Paris and New York, 1996), p. 248.
 In George Stratton and Alan Frank, *The Playing of Chamber Music* (London, 1935), p. 5.

1 The string quartet and society

1. Norman Lebrecht, 'The Chamber Revolution', Daily Telegraph (2 May 2001), p. 21. 2. Curiously enough, the modern literature is thin. No broad-based, extended social-economic history of the string quartet has yet been written, arguably because the localised, in-depth histories of concert life, ensembles, recording and broadcasting on which it would have to be built have only recently started to emerge. Books that touch on some of these themes include: Joël-Marie Fauquet, Les sociétés de musique de chambre à Paris de la Restauration à 1870 (Paris, 1986); Timothy Day, A Century of Recorded Music: Listening to Musical History (New Haven and London, 2000); and Jennifer Doctor, The BBC and Ultra-Modern Music, 1922-1936: Shaping a Nation's Tastes (Cambridge, 1999). There are also several monographs about particular ensembles, but as yet no over-arching history.

3. I am grateful to Cyril Ehrlich for reading an earlier draft, and for much stimulating discussion.

4. For a history of the quartet genre see Stanley Sadie (ed.), *The New Grove Dictionary of Music and Musicians*, 2nd edn (29 vols., London, 2001), vol. XXIV, pp. 585–95, s.v. 'String Quartet'. The changing social function of chamber music, broadly defined, from its beginning to the present day is traced in *ibid.*, vol. V, pp. 434–48, s.v. 'Chamber Music'.

5. The derivation of the term 'music of friends' is uncertain. The phrase was used by Richard H. Walthew to define the essence of chamber music in one of his published lectures for the South Place Institute, London, in 1909; see his *The Development of Chamber Music* (London and New York, [1909]), p. 42.

6. In a letter to C. F. Zelter, 9 November 1829, reproduced in *Goethes Werke*, Abteilung IV: *Briefe*, vol. XLVI (Weimar, 1908), pp. 139–41.
7. Not all instruments were deemed socially acceptable for domestic use in gentrified circles.

For a broad discussion of the linkages between gender and musical instruments in respectable society see Richard Leppert, *Music and Image: Domesticity, Ideology and Socio-cultural Formation in Eighteenth-century England* (Cambridge, 1988), pp. 107–75. That string quartet playing was strongly associated with the leisure time of men is aptly illustrated by Ian Woodfield in his *Music of the Raj: a Social and Economic History of Music in Late Eighteenth-Century Anglo-Indian Society* (Oxford, 2000), pp. 127–30, 211–18.

8. Instances of women listening can be found in Brian Robins (ed.), *The John Marsh Journals: the Life and Times of a Gentleman Composer* (*1752–1828*) (Stuyvesant, NY, 1998); see, for example, p. 431.

9. The Mozart letter is quoted in Alec Hyatt King, *Mozart Chamber Music* (London, 1968), p. 31; the English quartet party, of November 1788, is described in Robins (ed.), *John Marsh Journals*, p. 441. There are many other such vignettes in these diaries.

10. Cited in Gerald Seaman, 'Amateur Music-making in Russia', *Music & Letters* 47 (1966), p. 252.

11. The passage can be found in Roger Fiske (ed.), *Michael Kelly: Reminiscences* (London, 1975), p. 122.

12. Jean Mongrédien, French Music from the Enlightenment to Romanticism, 1789–1830, Eng. trans. Sylvain Frémaux (Portland, OR, 1996), p. 292. Information on eighteenth-century print-runs and sales is tantalisingly elusive; but for insights into the Viennese publisher Artaria's dissemination of its publications of Mozart's works see Rupert M. Ridgewell, 'Mozart and the Artaria Publishing House: Studies in the Inventory Ledgers, 1784–1793' (diss., University of London, 1999).

13. Sometimes called *quatuors dialogués* or *quatuors concertants et dialogués*. The French repertoire is carefully outlined in Mongrédien, *French Music*, pp. 289–99.

14. Barbara R. Hanning, 'Conversation and Musical Style in the Late Eighteenth-century Parisian Salon', *Eighteenth-century Studies* 22 (1989), pp. 512–28. For an extended discussion of notions of conversation in the eighteenth-century quartet more generally see Mara Parker, *The String Quartet*, *1750–1797*: *Four Types of Musical Conversation* (Aldershot, 2002).

15. Sometimes called *quatuors d'airs variés*; on this genre see Mongrédien, *French Music*, pp. 297–8.

16. Simon McVeigh, *Concert Life in London from Mozart to Haydn* (Cambridge, 1993), p. 52. See also Woodfield, *Music of the Raj*, pp. 211–18, for an extended discussion of the desirability and practice of hiring a professional leader for an English quartet party.

 Mary Sue Morrow, Concert Life in Haydn's Vienna: Aspects of a Developing Musical and Social Institution (Stuyvesant, NY, 1989), pp. 9–10. Schuppanzigh led the first performances of many of Beethoven's quartets, and was the dedicatee of Schubert's A minor quartet. For further discussion see the article on Schuppanzigh by K. M. Knittel in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XXII, pp. 818–19.

18. On salons in Vienna see Morrow, Concert Life, pp. 1–3, 13–33; on those in Paris see Mongrédien, French Music, pp. 235-43 and Richard J. Viano, 'By Invitation Only: Private Concerts in France during the Second Half of the Eighteenth Century', Recherches sur la musique française classique 27 (1991-2), pp. 131-62. 19. Many French chamber music societies are well documented in Fauquet, Les sociétés de musique. Otto Biba ('Franz Schubert in den musikalischen Abendunterhaltungen der Gesellschaft der Musikfreunde', in Franz Grasberger and Othmar Wessely (eds.), Schubert-Studien: Festgabe der Österreichischen Akademie der Wissenschaften zum Schubert-Jahr 1978 (Vienna, 1978), pp. 7-31) adds a Viennese perspective to modern coverage, while some documentation of London is in Christina Bashford, 'Public Chamber-Music Concerts in London, 1835–50: Aspects of History, Repertory and Reception' (diss., University of London, 1996). Several other societies can be traced in the articles on specific cities, and their bibliographies, in Sadie (ed.), The New Grove Dictionary, 2nd edn.

20. Ella's claim appears in his *Musical Sketches*, *Abroad and at Home* (London, 1869), p. 206. On adaptations of the concert hall for chamber music see Christina Bashford, 'Learning to Listen: Audiences for Chamber Music in Early-Victorian London', *Journal of Victorian Culture* 4 (1999), pp. 25–51.

21. Standing somewhat apart from the main body of nineteenth-century quartets, and yet similarly linked to technical prowess and performance opportunities, are the sparkling *quatuors brillants* (effectively violin concertos with lower-string accompaniment) that many French player-composers (Rode, Kreutzer, Baillot) produced in the first three decades of the century. See Mongrédien, *French Music*, pp. 296–7.

22. Ensembles led by Josef Hellmesberger in Vienna, by Jules Armingaud in Paris and by Joseph Dando in London were of this sort. 23. Other packagings included the Musikalische Abendunterhaltungen in Vienna, where a string quartet tended to open proceedings, and a vocal quartet conclude them. In between came instrumental solos and songs: see Biba, 'Franz Schubert', pp. 10-11. In Florence, the Società Sbolci (established 1863) interspersed string quartets and concertante piano works with sung items, much in the manner of London, except that the vocal music was exclusively sacred. Some concert societies, for instance the Florentine Società del Quartetto, the Musical Union in London, and the Quartett Abenden in Berlin, focussed programmes solely on three instrumental ensemble works.

24. In London, programme notes were first supplied for the Musical Union concerts (from 1845), and later for the Quartett Association's concerts, Chappell's Popular Concerts and the South Place Sunday Concerts.

25. Pocket-sized scores of chamber works by Haydn, Mozart and Beethoven were issued by K. F. Heckel of Mannheim in the 1840s and 1850s and distributed widely (see Cecil Hopkinson, 'The Earliest Miniature Scores', Music Review 33 (1972), pp. 138-44); in Florence in the 1860s the music publisher Guidi issued small scores of the works being performed in the Società del Quartetto's annual concert series (see Fig. 1.3). The well-known miniature scores published by Eulenburg commenced publication in 1891. Piano-duet transcriptions of the central, Viennese repertoire, issued by such firms as Breitkopf & Härtel, appeared in significant numbers from mid-century; for a broad discussion see Thomas Christensen, 'Four-hand Piano Transcription and Geographies of Nineteenth-century Musical Reception', Journal of the American Musicological Society 52 (1999), pp. 255-98.

26. This was particularly the case at the (London) Musical Union; see Christina Bashford, 'John Ella and the Making of the Musical Union', *Music and British Culture*, *1785–1914: Essays in Honour of Cyril Ehrlich* (Oxford, 2000), pp. 210–11.

27. Duisberg's concerts are highlighted in the survey of chamber music in Sandra McColl, *Music Criticism in Vienna 1896–1897: Critically Moving Forms* (Oxford, 1996), pp. 53–6. Basic documentation of the South Place initiative is in W. S. Meadmore, *The Story of a Thousand*

Concerts ([London], [1927]) and Frank V. Hawkins, The Story of Two Thousand Concerts (London, [1969]) and his A Hundred Years of Chamber Music (London, 1987). The extent to which the 'lower orders' penetrated chamber-music concerts awaits serious exploration, on both local and national levels; for an assessment of Samuel Midgley's attempts to establish cheap chamber concerts in Bradford in the early twentieth century see David Russell, 'Provincial Concerts in England, 1865-1914: a Case-Study of Bradford', Journal of the Royal Musical Association 114 (1989), pp. 43-55. 28. Mackenzie's views are in Walter Willson Cobbett (ed.), Cobbett's Cyclopedic Survey of Chamber Music, 2nd edn (London, 1963), s.v. 'Gramophone and Chamber Music, The'. 29. This repertoire can be traced in Compton Mackenzie's discography in the Gramophone, 2/11 (1925), pp. 406–11; the article was part of Mackenzie's serialised listing of chamber music records - 'as complete as I can make it'. 30. For a snapshot of the repertoire at this period see R. D. Darrell (comp.), The Gramophone Shop Encyclopedia of Recorded Music (New York City, 1936).

31. The BBC, for example, broadcast chamber-music concerts on the Home Service on Thursday evenings. Many artists and ensembles, including the Busch and Griller quartets, performed in them.

32. In the late 1920s and 1930s the Gramophone published much of this material in a series of articles entitled 'Chamber Music and the Gramophone'; more permanent music appreciation literature issued by Percy Scholes (The First Book of the Gramophone Record (London, 1924)) included quartets and chamber works. The true enthusiast's bible, however, was Cobbett's Cyclopedic Survey of Chamber Music. 33. Available recordings of quartets can be traced in issues of the Gramophone Long Playing Classical Record Catalogue, established in 1953. High-quality record reviewing can be found in issues of the Gramophone magazine and many other sister titles, as well as the general press; one notable permanent compilation is Edward Sackville-West and Desmond Shawe-Taylor's elegantly written and authoritative The Record Guide (London: Collins, 1951; rev. edn 1955). The growth of classical music listening in general is discussed in Day, Century of Recorded Music, pp. 58-141.

34. Their careers are explored in Nat Brandt, *Con Brio: Four Russians called the Budapest String Quartet* (New York and Oxford, 1993) and in Daniel Snowman, *The Amadeus Quartet: the Men and the Music* (London, 1981).
35. On all-female quartets before World War I see Marion M. Scott and Katharine E. Eggar, 'Women's Doings in Chamber Music', Chamber Music 3 (October 1913), pp. 12-15, and the discussion in Cyril Ehrlich, The Music Profession in Britain since the Eighteenth Century: a Social History (Oxford, 1985), pp. 160-1. Women players later emerged in the Quartetto Italiano, Hollywood Quartet, Aeolian Quartet, Allegri Quartet, Endellion Quartet and Kronos Quartet, among others. Late twentieth-century all-female ensembles include the Fairfield Quartet, Sorrel Quartet and Colorado Quartet. On the changing shape of the music profession in the twentieth century see Ehrlich, ibid., pp. 164-232, passim. 36. See Cyril Ehrlich, 'The First Hundred Years', in Julia MacRae (ed.), Wigmore Hall 1901-2001: a Celebration (London, 2001), pp. 31-65 for this and other insights about artists, audiences and repertoire.

37. This point is made by Snowman, *The Amadeus Quartet*, p. 49, and by Brandt, *Con Brio*, p. 7.

38. For example, the Kolisch Quartet, back in the 1920s and 1930s, had championed the Second Viennese School, the Hungarian Quartet played many of the Bartók quartets and the Pro Arte took much Martin ů, Milhaud and Honegger into its repertoire. The Juilliard Quartet, founded in 1946, made contemporary American works something of a priority, and the Fitzwilliam Quartet, established in 1968, specialised in Shostakovich.

39. For more on Cobbett see the article on him by Frank Howes (revised by Christina Bashford) in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. VI, pp. 70–1.

40. Coolidge is discussed in Brandt, *Con Brio*, pp. 17–18: she also underwrote the Berkshire and Coolidge quartets. Coolidge or her foundation commissioned many chamber works, including quartets (a list of commissioned composers is given in the article on her by Gustave Reese (revised by Cyrilla Barr) in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. VI, pp. 390–1).

41. See Brandt, *Con Brio*, pp. 12–19 for further discussion.

42. For a helpful discussion of canon in the postmodern age see Jim Samson, 'Canon (iii)', in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. V, pp. 6–7.

43. Theodor W. Adorno, 'Chamber Music', *Introduction to the Sociology of Music*, Eng. trans.E. B. Ashton (New York, 1976), pp. 85–103.

2 Developments in instruments, bows and accessories

1. See, for example, Louis Spohr, *Violinschule* (Vienna, [1832]), p. 15.

2. See, for example, John Hawkins, *A General History of the Science and Practice of Music*

(2 vols., London 1776. repr. 1853/R1963), vol. II, p. 688; and Georg Simon Löhlein, *Anweisung* zum Violinspielen (Leipzig and Züllichau, 1774), cited in W. H., A. F. and A. E. Hill, *Antonio Stradivari, His Life and Work* (1644–1737) (London, 1902, 2/1909/R1963), p. 253.

3. Some of the theories and experiments about modifications to stringed instruments are discussed in Antonio Bagatella, *Regole per la costruzione de' violini* (Padua, 1786); 'Noch etwas über den Bau der Geige', *Allgemeine musikalische Zeitung* (24 October, 1804), col. 49; 'Nochmalige Untersuchungen über den Bau der Violin', *Allgemeine musikalische Zeitung* (30 January, 1811), cols. 69–82; and Jacob Augustus Otto, *Ueber den Bau und die Erhaltung der Geige und aller Bogen-Instrumente* (Halle, 1817).

 For details of the origins and early history of the violin and viola, see Robin Stowell, *The Early Violin and Viola: a Practical Guide* (Cambridge, 2001), pp. 28–34; the origins and early history of the cello are discussed by John Dilworth in Robin Stowell (ed.), *The Cambridge Companion to the Cello* (Cambridge, 1999), pp. 7–14.
 The 'scraping' of certain instruments, particularly Guarneri violins, evidently became common practice. This process, for which the Mantegazza brothers of Milan were especially notorious, involved reducing the thickness of the table and back with the aim of making the instrument speak more readily.

6. Illustrations of the modified, as compared with the original, neck-setting are common. See, for example, David D. Boyden, *The History of Violin Playing from its Origins to 1761* (Oxford, 1965), Plate 26; Robin Stowell, *Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries* (Cambridge, 1985), Fig. 7, p. 25.

7. The frontispiece of Leopold Mozart's *Versuch einer gründlichen Violinschule* (Augsburg, 1756) offers one eighteenth-century example, while Boyden's *The History of Violin Playing* includes various examples from earlier sources (see especially Plates 8, 9, 10, 11, 14, 20 and 23).

8. The customary position for the violin soundpost nowadays is directly in line with and slightly (*c*. 6–7 mm) *behind* the right-hand (treble side) foot of the bridge.

9. For an interesting comparison of various fittings from early violins and in particular of eight bass-bars extracted from instruments made between 1777 and 1894, see Gerhard Stradner, 'Eine Ausstellung: zur Entwicklung der Geige', in Vera Schwarz (ed.), *Violinspiel und Violinmusik in Geschichte und Gegenwart* (Vienna, 1975), pp. 314–23.

10. According to the Hill brothers, Stradivari's original violin fingerboards had varied in length from 19.05 cm to 21.59 cm. See W. H., A. F. and A. E. Hill, Antonio Stradivari, pp. 204-5. 11. Vincenzo Lancetti recorded (1823) that, about 1800, necks of Italian violins were being lengthened 'according to the fashion prevailing in Paris'. See George Hart, The Violin, its Famous Makers and Imitators (London, 1875), p. 151. 12. See 'Noch etwas über der Bau der Geige', Allgemeine musikalische Zeitung (24 October 1804), col. 50; 'Nochmalige Untersuchungen über den Bau der Violin', Allgemeine musikalische Zeitung (30 January 1811), cols. 69-82. 13. A Stradivari violin is listed in Viotti's will amongst his most valuable and prized possessions. See Arthur Pougin, 'Le Testament de Viotti', Le Ménestrel 68 (1902), p. 371. 14. 'Alto Viola' and 'Tenor Viola' parts were included in the Walsh edition (1734) of Handel's Concerto Op. 3 no. 1. Furthermore, three viola lines exploiting different registers were common in seventeenth-century French five-part ensembles; this is verified by the naming of the viola parts in Louis XIII's 24 Violons du Roi as haute-contre or haute-contre taille, taille, and quinte or cinquiesme.

15. See John Dilworth, 'Unfinished Journey', *The Strad* 107 (1996), p. 484.

16. Dilworth (*ibid.*, p. 487) confirms that the success of smaller violas made in England, the Netherlands and elsewhere from the early 1700s influenced Italian makers such as Guadagnini, Storioni and Bellosio to produce violas of a length of 40.6 cm or less.

17. Notably Hermann Ritter's championing of Karl Hörlein's *viola alta*. See Robin Stowell, *The Early Violin and Viola: a Practical Guide* (Cambridge, 2001), pp. 177–8.

Martin Agricola, *Musica instrumentalis deudsch* (Wittenberg, 1528; 2/1529/R1969, rev. 6/1545), p. x.

19. For measurements of the Stradivari 'Forma B' cello, which is now an accepted standard (although dimensions of the body can still vary considerably), see Stowell (ed.), *The Cambridge Companion to the Cello*, p. 10.

20. An example of an Amati instrument of 1611 in this hybrid form is housed in the Ashmolean Museum, Oxford.

21. Robert Crome mentions a similar device (*c*. 1765).

22. High twist is a term coined by Ephraim Segerman (no such term is found in available primary sources) for a length of gut (treated, twisted and polished intestines of sheep, rams, or wethers) which is given as much twist as possible when wet and subjected to further twisting while it dries or slims. Such a string is more flexible, but weaker than plain gut. Catline strings (variously called 'Katlyns', 'Cattelins'. 'Catlings' or 'Catlins') were made by twisting together two or more wet high-twist strings in a rope construction. They were thicker but more flexible than plain gut. See Djilda Abbot and Ephraim Segerman, 'Gut Strings', *Early Music* 4 (1976), pp. 430–7. For a contrary view re 'catline' strings, see Stephen Bonta, 'Catline Strings Revisited', *Journal of the American Musical Instrument Society* 14 (1988), pp. 38–60.

23. There were distinct national preferences for stringing in the eighteenth century. See Stowell, *The Early Violin and Viola*, p. 35.

24. In Howard Mayer Brown and Stanley Sadie (eds.), *Performance Practice* (2 vols., London, 1989), vol. II, p. 48.

25. Löhlein (Anweisung, p. 9) states that the violin G string was wound with silver. Pierre Baillot (L'art du violon: nouvelle méthode (Paris, 1835), p. 247) later cites either brass or silver, and Spohr (Violinschule, pp. 12-13) stipulates either plated copper or solid silver wire. Open-wound strings involved the gut core being wound, covered or overspun with tensioned metal (traditionally brass or silver) wire. If the core were visible between the windings, the strings were variously called 'open wound' or 'half-wound' ('half-covered' or 'half-overspun' were further alternatives), but when the winding was applied tightly and close together, 'close wound' was the usual description. See Segerman, 'Strings through the Ages', The Strad 99 (1988), p. 52.

26. Alberto Bachmann, *An Encyclopedia of the Violin* (New York, 1925/R1966), p. 150.
27. Segerman ('Strings through the Ages', pp. 195–201) has calculated string diameters and tensions, making reasonable assumptions as necessary from information (or lack of it) provided in a variety of sources from the early seventeenth century to the present.

Boyden, *The History*, pp. 321–2.
 Sébastien de Brossard, 'Fragments d'une méthode de violon' (MS, *c*. 1712, Bibliothèque Nationale, Paris), p. 12.

30. Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (Berlin, 1752, 3/1789/R1952); Eng. trans. Edward R. Reilly as *On Playing the Flute* (London, 1966), p. 215; Leopold Mozart, *A Treatise*, p. 16. See also Johann Reichardt, *Ueber die Pflichten des Ripien-Violinisten* (Berlin and Leipzig, 1776), p. 86. Of course, thicker strings lay high off the fingerboard and were more difficult to make respond.

31. François-Joseph Fétis, *Antoine Stradivari, luthier célèbre* (Paris, 1856; Eng. trans. John Bishop, London, 1864/R1964), p. 74, and Carl

Guhr, *Ueber Paganinis Kunst die Violine zu spielen* (Mainz, [1829]), p. 5; Spohr, *Violinschule*, p. 13.

32. This appears to have been very much a German trend. See also, for example, 'Anmerkungen über die Violin', *Musikalische Real-Zeitung* (11 October, 1788), col. 106; Bernhard Romberg, *A Complete Theoretical and Practical School for the Violoncello* (London, [1839]), p. 5.

33. Segerman ('Strings through the Ages', p. 198) considers that the most likely unit is the gauge system known as 'grades of millimeters' [sic] commonly employed in the nineteenth century and still used in Pirastro's string gauges (called PM or Pirastro Measure). In this system a mm is divided equally into twenty grades, each grade therefore measuring 0.05 mm.

34. Spohr, Violinschule, pp. 8–9.

35. Quantz, On Playing, pp. 233-4.

36. See Edward Heron-Allen, *Violin Making as It Was and Is* (London, 1884), p. 194, and Baillot, *L'art*, p. 223.

37. Baillot, L'art, p. 16.

38. Reported in the *Revue Musicale* (8, no. 14 (April 6, 1834), pp. 110–11) is a forerunner of the wolf-stop on the cello; described as a brass bracket which was attached to the tailpiece, it served the function of purifying the tone of individual notes, particularly the A and B. See Valerie Walden, *One Hundred Years of Violoncello* (Cambridge, 1998), p. 67.

39. Brown and Sadie (eds.), *Performance Practice*, vol. II, p. 49.

40. The Vega (or 'Bach') bow, promoted by Emil Telmányi in the 1950s to facilitate smooth sustained performances of polyphonic violin music, is not a reproduction of a Baroque model and enjoyed limited success.

41. Carel van Leeuwen Boomkamp and John Henry van der Meer, *The Carel van Leeuwen Boomkamp Collection of Musical Instruments* (Amsterdam, 1971), pp. 57–8.

42. Hawkins, A General History, vol. II, p. 782.
43. Boyden, The History, p. 209 and Plate 29d.
44. In his 'edition' of Leopold Mozart's violin treatise (1801), Woldemar illustrates one further type, used by Mestrino, which is similar to, though a little longer than, the Cramer model.
45. Fétis, Antoine Stradivari, Eng. trans., p. 124.
46. David Boyden, 'The Violin Bow in the Eighteenth Century', Early Music 8 (1980), p. 206.

47. Woldemar, *Grande Méthode*, p. 3.
48. François-Joseph Fétis (ed.), *Biographie universelle des musiciens et bibliographie générale de la musique* (Brussels 1835–44, 2/1860–5/R1963), vol. VII, p. 246. Boyden ('The Violin Bow in the Eighteenth Century', p. 210)

verifies that the measurement given conforms to that of Baillot's own Tourte bow preserved in the Library of Congress in Washington.

49. Fétis, *Antoine Stradivari*, Eng. trans., p. 117. 50. Franz Farga, *Violins and Violinists*, Eng.

trans. E. Larsen (2nd rev. and enl. edn, London,

1969), p. 92. Jean-Baptiste Vuillaume

(1798–1875) later proved that the unstrung stick could normally be expressed mathematically in terms of a logarithmic curve in which the ordinates increase in arithmetical progression while the abscissae increase in geometrical progression. See Fétis, *Antoine Stradivari*, Eng. trans., p. 124.

51. Spohr, Violinschule, p. 18.

52. Joseph Roda, *Bows for Musical Instruments of the Violin Family* (Chicago, 1959), p. 65.

53. Leopold Mozart, A Treatise, p. 97.

54. Michel Woldemar, Méthode de violon par L.
Mozart rédigée par Woldemar (Paris, 1801), p. 5.
55. A review in Les tablettes de Polymnie (April, 1810, pp. 3–4) of the Paris Conservatoire
Concerts highlights one particular attempt at achieving some uniformity in the bows employed.

56. Spohr, Violinschule, p. 17.

57. Roda, Bows, p. 53.

58. See Roger Millant, *J. B. Vuillaume: sa vie et son œuvre*, Eng. trans. (London, 1972), p. 108; Mark Reindorf, 'Authentic Authorship', *The Strad* 101 (1990), p. 548.

59. Octagonal sticks were largely favoured by Tourte.

60. Charles Beare (in Sadie (ed.), *New Grove* Dictionary 2nd edn, vol. VII, 417–18, s.v. 'John (Kew) Dodd') suggests that the improvements in bow construction implemented in France before 1800 came to England much later, perhaps only after 1815.

61. Charles Beare, in *ibid*.

62. For details of other attempts at

'improvement', some apparently quite ludicrous, see Heron-Allen, *Violin Making*, pp. 104–21; Jane Dorner, 'Fiddlers' Fancy', *The Strad* 94 (1983), pp. 180–5, 243–6.

63. See Chapter 6.

64. In Richard Dawes (ed.), *The Violin Book* (London, 1999), p. 61.

65. Current details of the Violin Octet and principal references to earlier work are provided in Carleen Hutchins, 'A 30-year Experiment in the Acoustical and Musical Development of Violin Family Instruments', *Journal of the Acoustical Society of America* 92 (1992), pp. 639–50.

66. See Hanno Graesser and Andy Holliman, *Electric Violins* (Frankfurt am Main, 1999) for an overview of modern developments in the violin family and details of methods and techniques for tuning, amplification, equalisation and special effects.

3 From chamber to concert hall

1. The significance of the Czech Quartet is discussed in Chapter 4.

2. See Chapter 2.

- 3. See Chapter 2.
- 4. See Chapter 4.
- 5. See Chapter 1.

6. See Chapter 13.

7. See also John W. Wagner, 'James Hewitt, 1770–1827', *Musical Quarterly* 58 (1972),

pp. 259–76.

4 The concert explosion and the age of recording

 See Daniel Snowman, *The Amadeus Quartet:* the Men and the Music (London, 1981); Suzanne Rozsa-Lovett, *The Amadeus: Forty Years in Pictures and Words* (London, 1988); and M. Nissel, *Married to the Amadeus* (London, 1998).
 In Cobbett (ed.), *Cobbett's Cyclopedic Survey*, vol. I, p. 302.

3. David Blum, *The Art of Quartet Playing* (London, 1986).

4. This beautifully balanced group is featured in David Round, *The Four and the One: in Praise of String Quartets* (Lost Coast, 1999).

5 Playing quartets: a view from the inside

Throughout this chapter, the quartet members are referred to as 'he'. This has been done purely for the sake of convenience.

1. Letter of 15 October 1841, in Paul and Carl Mendelssohn Bartholdy (eds.), *F. Mendelssohn: Briefe aus den Jahren 1833 bis 1847* (Leipzig, 1863; Eng. trans. 1863), pp. 276–7.

2. See the section on blend, pp. 107–9.

3. Furthermore, as I have in mind quartets which exist over many years and are constantly rehearsing and performing, I shall think of their interpretations not as static, but as evolving with time and experience so that any performance, however convincing for the moment, is in retrospect only work in progress.

 See pp. 121–3 for possible ways forward in cases where insoluble disagreement does occur.
 This highlights again the vagueness of words in comparison to music.

6. Examples of this may be found in the ensuing discussion of specific aspects of quartet playing.7. It is often, but not always, the highest voice, which may or may not be scored for the first violin.

8. There are, exceptionally, cases where the primary voice is not even played at the highest dynamic within the group e.g. the finale of Bartók's Sixth Quartet, b. 63; or the second

movement of Berg's *Lyric Suite*, bb. 66–8, where the *Hauptstimme* is explicitly marked at a lower dynamic than the cello. Sometimes a muted, still, highly characterised voice can gain the attention through a surrounding cacophony. 9. Of course, a quartet's range of possibilities of sonority depends to some extent on the compatibility of the instruments and bows the players choose, and even the type of strings they use.

10. The pressure throughout recent history to raise pitch to gain brilliance and clarity is making instruments shrill, putting them under too much pressure and sacrificing their mellower tones, as well as straining the voices of singers who have to collaborate with instrumentalists. 11. Letter of 24 October 1777, in Hans Mersmann (ed.), *Letters of Wolfgang Amadeus*

Mozart (New York, 1972), pp. 38–42. 12. At times, the opposite happens as an over-reaction; rests, in particular, are easily clipped.

13. As an experiment, it is interesting for a quartet to listen to the slow beats of a metronome and then turn off the metronome and mentally count ten beats and clap the eleventh without looking at each other. It is rarely absolutely together.

14. The same is equally true of the rehearsal or training of an actor or a sportsman, as opposed to the description of their activities.

15. Some players find also that at the early stages of learning a piece it is better to experiment, and to allow things to remain fluid, listening and noticing, before fixing and defining too much. 16. The compatibility of a quartet's members has to extend not only to rehearsing and performing, but also to practical matters such as how to choose repertoire and plan programmes and itineraries, cope with publicity, accommodate the individuals' non-quartet engagements and commitments, look after their joint financial interests, and so on. In economic terms, quartet-players are self-employed business partners and need to be able to handle this very unmusical side of things.

17. So if Joachim chose his local partners well, his *ad hoc* quartets may well have given excellent performances.

6 Historical awareness in quartet performance

1. Two books are indispensable for general reference on matters of performance: Robin Stowell, Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries (Cambridge, 1985), which is particularly useful for its inclusion of English translations of French, German and Italian texts;
and Clive Brown, *Classical and Romantic Performing Practice 1750–1900* (Oxford, 1999).
2. See Chapter 2.

 Karl von Dittersdorfs Lebensbeschreibung, seinem Sohne in die Feder diktiert (Leipzig, 1801); Eng. trans. A. D. Coleridge (1896/R1970), p. 90.
 James Webster, 'The Bass Part in Haydn's Early Quartets', *The Musical Quarterly* 63 (1977), pp. 390–424.

5. Reginald Barrett-Ayres, *Joseph Haydn and the String Quartet* (London, 1974), p. 20.

6. Louis Spohr, *Selbstbiographie* (2 vols., Kassel and Göttingen, 1860–1; Eng. trans.

1865/R1969), vol. I, p. 281.

7. Pierre Baillot, *L'art du violon: nouvelle méthode* (Paris, 1835), p. 5.

 Michel Woldemar, Grande Méthode ou Etude Elémentaire pour le violon (Paris, 1800), p. 3.
 Baillot, L'art, p. 77.

10. Leopold Mozart, Versuch einer gründlichen Violinschule (Augsburg, 1756); Eng. trans. Editha Knocker as A Treatise on the Fundamental Principles of Violin Playing (London, 1948, 2/1951), pp. 100–1.

Francesco Galeazzi, *Elementi teorico-pratici di musica* (2 vols., Rome, 1791, 1796), vol. I, pp. 122–9; in Stowell, *Violin Technique*, pp. 117–25.
 Baillot, *L'art*, pp. 146–9.

Carl Flesch, *The Memoirs of Carl Flesch*; Eng. trans. Hans Keller (London, 1957), p. 87.
 Joseph Joachim and Andreas Moser, *Violinschule* (3 vols., Berlin 1902–5); Eng. trans. A. Moffat (London, 1905), vol. III, p. 9; Carl Flesch, *Die Kunst des Violinspiels* (2 vols., Berlin 1923–8); Eng. trans. Frederick H. Martens as *The Art of Violin Playing* (New York, 1924–9), vol. I, pp. 30–5.

15. Johann Wolfgang von Goethe, letter to Carl Friedrich Zelter, 9 November 1829, Sämtliche Werke, vol. XX.3, p. 1275 ('man hört vier vernünftige Leute sich untereinander unterhalten'); Baillot, L'art, pp. 268–9 ('le dialogue charmant semble être une conversation d'amis'); L. A. C. Bombet, trans. William Gardiner, The Life of Haydn, in Christopher Hogwood, Haydn's Visits to England (London, 1980), pp. 63–4 ('the conversation of four agreeable persons').

16. L. Mozart, *A Treatise*, p. 97; Wolfgang Mozart, letter to his father of 22 November 1777, re the violinist Ignaz Fränzl: 'er hat auch einen sehr schönen runden Thon; er fählt [sic] keine Note, man hört alles'. *Die Briefe W. A. Mozarts* (Georg Müller, 1914), vol. I, ed. Ludwig Schiedermair, p. 122.

17. See, for example, Daniel Gottlob Türk, *Klavierschule oder Anweisung zum Klavierspielen*

(Leipzig and Halle, 1789; enlarged

2/1802/R1967); Eng. trans. Raymond Haggh as School of Clavier Playing (Lincoln, NE, 1982), pp. 91 and 325–6, and Johann Schulz in Johann Sulzer, Allgemeine Theorie der schönen Künste (Leipzig, 1771–4), s.v. 'Takt', pp. 1130–8. The subject is treated at length in Donald Trott, 'Accentuation in the Late Eighteenth Century' (DMA diss., University of Oklahoma, 1984). 18. Jérôme-Joseph de Momigny, *La seule vraie* théorie de la musique (Paris, 1821), pp. 111 and 112–13.

 Hugo Riemann, 'Der Ausdruck in der Musik', Sammlung musikalischer Vorträge, vol. I, no. 50 (Leipzig, 1883), p. 47.

20. Richard Wagner, *Über das Dirigieren* (Leipzig, 1869); Eng. trans. Edward Dannreuther as *On Conducting* (London, 1887/R1976), p. 32. Joachim and Moser, *Violinschule*, Eng. trans. Alfred Moffat, vol. III, pp. 13 and 16.

 L. Mozart, A Treatise, Preface, p. 7.
 Brown, Classical and Romantic Performing Practice, p. 268.

23. Charles Rosen, *The Classical Style* (London and New York, 1971), p. 27.

24. Jean-Philippe Rameau, *Génération Harmonique* (Paris, 1737), p. 104.

25. Momigny, *La seule vraie théorie*, p. 124;
Louis Spohr, *Violinschule* (Vienna, [1832]),
Preface for parents and teachers, p. 3, footnote explaining 'absolute purity of intonation'.
26. In Patrizio Barbieri, 'Violin Intonation: a Historical Survey', *Early Music* 19 (1991), p. 74 and n. 36 and 70.

27. *Ibid.*, p. 71 and n. 14. Demonstrated by the French physicist Jacques-Alexandre Charles at the Paris Conservatoire.

28. Anton Bemetzrieder, in Barbieri, 'Violin Intonation', p. 82 and n. 50 ('the B of the second string of the violin, which is tuned to the E of the first string does not please the sensitive and skilled ear in the chord of the sixth, which it makes with the open D string'); Joachim and Moser, *Violinschule*, Eng. trans. Moffat, vol. II, pp. 17a, 18.

29. Flesch, *The Art of Violin Playing*, vol. I, p. 22.

30. Bemetzrieder, in Barbieri, 'Violin Intonation', p. 82 and n. 50; Bernhard Romberg, *Méthode de violoncelle* (Paris, 1840), pp. 20, 127, in Barbieri, 'Violin Intonation', p. 84 and n. 57.
31. Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (Berlin, 1752; 3rd edn, 1789/R1952); Eng. trans. Edward R. Reilly as *On Playing the Flute* (London and New York, 1966), Chapter XVI, § 7.
32. In Barbieri, 'Violin Intonation', p. 74, and n. 27. 33. L. Mozart, A Treatise, p. 70; Francesco Geminiani, The Art of Playing on the Violin (London, 1751), p. 4 and Essempio II. 'The Position of the Fingers marked in the first Scale (which is that commonly practised) is a faulty one; for two Notes cannot be stopped successively by the same Finger without Difficulty, especially in quick Time.' 34. Martin Agricola, Musica instrumentalis deudsch (Wittenberg, 1545), fol. 42 v: sig. F2 ('Auch schafft man mit dem zittern frey'); Leopold Auer, Violin Playing as I Teach It (New York, 1921), p. 49. 35. Flesch, The Art of Violin Playing, vol. I, pp. 35-40. 36. William C. Honeyman, The Violin: How to Master It (55th edn, Newport, Fife, 1935), pp. 78-9. 37. Flesch, The Art of Violin Playing, vol. I, p. 40. 38. Yehudi Menuhin, Unfinished Journey (London, 1977), pp. 314-15. 39. Eric Coates, Suite in Four Movements (London, 1953), p. 47. 40. Flesch, The Memoirs, p. 50. 41. Flesch, Die Kunst des Violinspiels, 2nd edn (Berlin, 1929), vol. I, pp. 3 and 4. 42. Liza Honeyman, in William C. Honeyman, The Violin: How to Master It, p. 106. 43. Karl von Dittersdorfs Lebensbeschreibung, Eng. trans. pp. 54, 51-2. 44. Gustave Vallat, Etudes d'histoire, de mœurs et d'art musical: Alexandre Boucher et son temps (Paris, 1890), pp. 121, 122. 45. W. J. von Wasielewski, Aus siebzig Jahren -Lebenserinnerungen (Leipzig, 1897), pp. 78-9. Ten years later, during a performance of Beethoven's Violin Concerto, Joachim dealt with a broken E string in similar manner and, in tropical heat, played the Bach Chaconne as an encore (*ibid.*, pp. 80–2). 46. Flesch, The Art of Violin Playing, vol. I, p. 11. 47. Flesch, Die Kunst des Violinspiels, 2nd edn (Berlin, 1929), vol. I, pp. 63-4. 48. Liza Honeyman, in William C. Honeyman, The Violin: How to Master It, p. 106. 49. Türk, Clavierschule, ch. 1, para. 75. 50. Op. 18 no. 6/iv - Allegretto quasi Allegro: dotted crotchet = 88Op. 59 no. 2/iii – Allegretto: dotted minim = 69 51. Joseph Kerman, The Beethoven Quartets (New York, 1967), p. 72. 52. H. Bertram Cox and C. L. E. Cox, Leaves from the Journals of Sir George Smart (London, 1907), p. 114. 53. Brian Schlotel, 'Schumann and the Metronome', in Alan Walker (ed.), Robert Schumann: the Man and his Music (London,

1972), p. 116, n. 3.

54. Sandra Rosenblum, 'Two Sets of Unexplored Metronome Marks for Beethoven's Piano

Sonatas', Early Music 16 (1988), p. 58.

55. William Malloch, 'Carl Czerny's Metronome Marks for Haydn and Mozart Symphonies', *Early*

Music 16 (1988), p. 72.

56. Ibid., p. 62.

57. Joachim and Moser, *Violinschule*, Eng. trans., vol. III, p. 10.

58. *30 berühmte Quartette* (edn Peters, 1918), Vorwort.

59. Joachim and Moser, *Violinschule*, Eng. trans., vol. I, p. 144, § 2, 'Of Grace-Notes and other Embellishments'.

60. Spohr, *Selbstbiographie*, Eng. trans., vol. II, p. 69.

61. Vallat, Etudes d'histoire, p. 159.

62. J. G. Prod'Homme, 'The Baron de Trémont: Souvenirs of Beethoven and Other

Contemporaries', *The Musical Quarterly* 6 (1920), pp. 366–91.

63. Spohr, Violinschule, p. 246.

64. Dedication of *Sei Quartetti Opera X* (Artaria).

65. Baillot, L'art, pp. 156-62.

66. Spohr, *Selbstbiographie*, Eng. trans., vol. I, p. 31.

67. Jacob Augustus Otto, *A Treatise on the Structure and Preservation of the Violin and All Other Bow-instruments*, 2nd edn; Eng. trans. John Bishop (London, 1860), pp. 22–3, note.

68. Cox and Cox, *Leaves*, pp. 108–10.

69. See A. Ehrlich, *Das Streich-quartett in Wort und Bild* (Leipzig, 1898).

7 Extending the technical and expressive frontiers

1. See Ken Smith, 'Spicing up the Harmonies', *The Strad* 108 (1997), p. 27.

2. In his *Per la musica moderna e contemporanea* (Milan, 1977) Paolo Borciani makes a bold and laudable attempt 'to bring a modicum of order into a field where' he admits, 'anarchy reigns supreme' (Preface, p. V). See also Howard Risatti, *New Music Vocabulary: A Guide to Notational Signs for Contemporary Music* (Urbana, University of Illinois, 1975); Gardner Read, *Music Notation* (2nd edn, Boston, 1969).

 In Sadie (ed.), *New Grove Dictionary*, 2nd edn, vol. VIII, p. 651, s.v. 'Feldman, Morton'.
 H. Wiley Hitchcock, *Ives: a Survey of the Music* (Brooklyn, 1977), p. 62.

5. In James McCalla, *Twentieth-century Chamber Music* (New York, 1996), p. 203.

6. Elliott Carter, String Quartet No. 2, Prefatory Note.

7. Carter, String Quartet No. 4, Prefatory Note.

8. Supplement to the score published by Chester.

9. Ligeti, String Quartet No. 2 (Mainz, Schott, 1971), p. 18.

10. Alfred Schnittke, String Quartet (1965/66), Preface.

 Carter, String Quartet No. 2, Prefatory Note.
 Ferneyhough himself speaks of 'dense webs of organisation . . . becoming deliberately absorbed into a flickering interplay of surface gestures'.

13. Ives required each instrument to play alternately in a different rhythm much like a mensuration canon of the late fourteenth century.

14. See Else Stone and Curt Stone (eds.), *The Writings of Elliott Carter* (Bloomington, IN, 1977), pp. 274–9.

15. See 'Extra-musical Influences', pp. 169–71, and 'Music Theatre', pp. 171–2.

16. Performance notes as preface to the score, Edition Peters no. 7118.

17. Berio (*Sincronie*) also introduces symbols for various bowing considerations involving the contact-point of the bow on the string. See 'Variable Contact-point', pp. 165–6.

18. Carter, String Quartet No. 2, Prefatory Note.

 In Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. X, p. 631, s.v. 'Habá, Alois'.
 Ibid.

21. Patricia and Allen Strange, *The Contemporary Violin: Extended Performance Techniques* (Berkeley, Los Angeles and London, 2001), p. 163.

22. Alvin Lucier, *Navigations* (Frankfurt, 1991), in Strange and Strange, *Contemporary Violin*, p. 164.

23. Ferneyhough (*Sonatas*) is one of a few composers to make a distinction.

24. Lucien Capet (*La Technique Supérieure de l'archet* (Paris, 1927)) wrote: 'the omission of the left-hand vibrato (at certain moments in the musical life of a work) is a means of discovering the abstract and inexpressible beauty of universal august art'. Quoted in Werner Hauck, Eng. trans. Kitty Rokos as *Vibrato on the Violin* (London, 1975), p. 22.

Carter, String Quartet No. 5, Prefatory Note.
 Carter, String Quartet No. 2, Prefatory Note.
 Ruth Crawford Seeger, Quartet No. 3, score.

28. This effect is discussed in detail in J. C. Schelleng, 'The Physics of the Bowed String',

Scientific American 87 (1974), pp. 87–95.
29. The LaSalle Quartet, who premiered the work, failed to make this effect convincing.
30. See George Perle, 'The Secret Programme of the Lyric Suite', *Musical Times* 118 (1977),

pp. 629-32, 709-13, 809.

31. A numerology underlying the entire work is reflected in the chanted numbers and in the work's arch structure, with its emphasis on 1, 7

and 13. The numerology revolves largely around the numbers 7 and 13, in various guises: sections may last 7 or 13 seconds, they may be 7 or 13 bars long, they may contain 7 or 13 notes, etc. 32. Stanley Sadie and H. Wiley Hitchcock (eds.), *The New Grove Dictionary of American Music* (4 vols., London, 1986), vol. I, s.v. 'Carter, Elliott'. 33. In Cobbett (ed.), *Cobbett's Cyclopedic Survey of Chamber Music* (2 vols., London, 1929–30; rev. 2/1963 (3 vols.) by C. Mason), vol. III, p. 182.

34. Paul Griffiths, *The String Quartet: a History* (London, 1983), p. 195.

35. In Dominic Gill (ed.), *The Book of the Violin* (Oxford, 1984), p. 151.

36. In the helicopters, each player can only hear himself through headphones; the players cannot hear each other.

8 The origins of the quartet

 Georg August Griesinger, *Biographische Notizen über Joseph Haydn* (Leipzig, 1810).
 Modern translation by V. Gotwals, *Haydn: Two Contemporary Portraits* (Madison, 1968), p. 13.
 See David Watkin, 'Corelli's Op. 5 Sonatas: "Violino e violone *o* cimbalo"?, *Early Music* 24 (1996), pp. 645–63.

 Edward J. Dent, 'The Earliest String Quartets', Monthly Musical Record 33 (1903), pp. 202–4.
 Charles Avison, An Essay on Musical

Expression (2nd edn, London, 1753), pp. 141–2.
Eugene Wolf draws attention to this repertoire in *The Symphony 1720–1840*, Series A, vol. I, *Antecedents of the Symphony* (New York, 1983), pp. xv–xxix.

6. Wilhelm Fischer (ed.), *Denkmäler der Tonkunst in Österreich*, vol. XXXIX, *Wiener Instrumentalmusik vor und um 1750* (Vienna, 1912).

7. For a discussion of this broad repertoire see James Webster, 'Towards a History of Viennese Chamber Music in the Early Classical Period', *Journal of the American Musicological Society* 27 (1974), pp. 212–47.

 U. Lehmann (ed.), Das Erbe Deutscher Musik, vol. XXIV, Ignaz Holzbauer (1711–1783). Instrumentale Kammermusik (Kassel, 1953).
 An edition prepared from the five manuscript sources is given in Musica Antiqua Bohemica, vol. LXXI (Prague, 1969).

10. Karl von Dittersdorfs Lebensbeschreibung (Leipzig, 1801), Eng. trans. A. D. Coleridge (London, 1897), p. 90.

9 Haydn, Mozart and their contemporaries

1. For example, Mark Evan Bonds notes that many critics of the time were at least as inclined to stress the equality and interweaving of voices in the symphony as in the quartet. See 'The Symphony as Pindaric Ode', in Elaine Sisman (ed.), *Haydn and his World* (Princeton, 1997), pp. 144–6.

2. See Elaine Sisman, 'Learned Style and the Rhetoric of the Sublime in the "Jupiter" Symphony', in Stanley Sadie (ed.), *Wolfgang Amadè Mozart: Essays on his Life and Music* (Oxford, 1996), pp. 218–21.

3. Hans Keller, *The Great Haydn Quartets: Their Interpretation* (London, 1986), p. 6.

4. Leonard Ratner, for instance, writes of 'the imaginative distribution of important melodic material'. *Classic Music: Expression, Form, and Style* (New York, 1980), p. 126.

5. See Ludwig Finscher, Studien zur Geschichte des Streichquartetts, I: Die Entstehung des klassischen Streichquartetts. Von den Vorformen zur Grundlegung durch Joseph Haydn (Kassel, 1974), p. 285, and Paul Griffiths, The String Quartet: A History (London, 1983), p. 22. 6. A fine recent discussion of all issues connected with 'conversation' may be found in Hans-Joachim Bracht, 'Überlegungen zum Quartett-"Gespräch", Archiv für Musikwissenschaft 51/3 (1994), pp. 169-89. For more on French associations with the concept, see Barbara R. Hanning, 'Conversation and Musical Style in the Late Eighteenth-century Parisian Salon', Eighteenth-Century Studies 22/4 (1989), pp. 512-28.

Of course, the cultural implications of the term are inappropriate; apart from anything else, North Germany was one of the few parts of Europe where quartet writing was hardly cultivated at the time. However, the label is a useful shorthand way of referring to an important possibility of quartet style.
 For instance, Johann Ferdinand Ritter von Schönfeld noted in a musical almanac of 1796 that Haydn's quartets were 'full of bewitching harmonies'. *Jahrbuch der Tonkunst von Wien und Prag 1796*, in Sisman, *Haydn and his World*, p. 299.

 Mary Hunter, 'Haydn's London Piano Trios and his Salomon String Quartets: Private vs. Public?', in Sisman, *Haydn and his World*, pp. 103–30, especially pp. 105–9.
 Joseph Kerman makes a similar association with Fried in 'Beethoven Quartet Audiences: Actual, Potential, Ideal', in Robert Winter and Robert Martin (eds.), *The Beethoven Quartet Companion* (Berkeley and Los Angeles, 1994), p. 26.

11. See Warren Kirkendale, *Fugue and Fugato in Rococo and Classical Chamber Music*, revised and expanded 2nd edn, trans. Margaret Bent and the author (Durham, NC, 1979), p. 76. Several of the fugal finales of Ordoñez also end, exceptionally, with *perdendosi* markings. This is the case with Op. 1 no. 1 in A major, and Kirkendale draws attention to the 'calando e sempre più piano' that is found at the end of the fugue in the Quartet Eb1; *Fugue and Fugato*, p. 76. 12. William Drabkin, *A Reader's Guide to*

Haydn's Early String Quartets (Westport, CT, 2000), p. 11.

13. This is also noted by Philip G. Downs in *Classical Music: The Era of Haydn, Mozart and Beethoven* (New York, 1992), p. 149.

14. Giorgio Pestelli, *The Age of Mozart and Beethoven* (Cambridge, 1984), p. 134. Pestelli's phrase, it should be noted, refers to the polythematic construction of Boccherini's discourse.

15. Cited in Christian Speck, *Boccherinis Streichquartette: Studien zur*

Kompositionsgeschichte und zur gattungsgeschichtlichen Stellung (Munich, 1987), p. 191 (my translation).

16. With Gassmann such canons are often first encountered in the dominant area of a movement. Nicole Schwindt-Gross points out that this was a common device of the time. See *Drama und Diskurs: Zur Beziehung zwischen Satztechnik und motivischem Prozeβ am Beispiel der durchbrochenen Arbeit in den*

Streichquartetten Mozarts und Haydns (Laaber, 1989), p. 44.

17. See Mara Parker, 'Friedrich Wilhelm II and the Classical String Quartet', *The Music Review* 54/3–4 (1993), pp. 161–82.

18. Dexter Edge points out that there were in fact several public playings of quartets in Vienna, although two of these were promotional concerts organised by the publisher Torricella in conjunction with the publication of sets by Hoffmeister and Pleyel. Edge, review of Concert Life in Haydn's Vienna: Aspects of a Developing Musical and Social Institution by Mary Sue Morrow, Haydn Yearbook 17 (1992), p. 130. 19. See Horst Walter, 'Haydn gewidmete Streichquartette', in Georg Feder, Heinrich Hüschen and Ulrich Tank (eds.), Joseph Haydn: Tradition und Rezeption. Bericht über die Jahrestagung der Gesellschaft für Musikforschung, Köln 1982 (Regensburg, 1985), pp. 17-53. 20. See Philippe Oboussier, 'The French String Quartet, 1770-1800', in Malcolm Boyd (ed.), Music and the French Revolution (Cambridge, 1992), p. 74. This included of course arrangements, of which one type, the quatuor d'airs variés, even achieved its own identity in its working of popular theatrical tunes of the day. 21. Kofi Agawu, 'Prospects for a Theory-Based Analysis of the Instrumental Music', in Sadie (ed.), Wolfgang Amadè Mozart, p. 129. 22. Griffiths, The String Quartet, p. 57. 23. Julian Rushton, Classical Music: A Concise History from Gluck to Beethoven (London, 1986), p. 108.

24. For an account of Hoffmeister's structure see Hartmut Krones, 'Beobachtungen zur Sonatensatzform im Streichquartettschaffen einiger Zeitgenossen Joseph Haydns', *Haydn-Studien* 7/3–4 (1998), pp. 339–40.

25. Cited by Roger Hickman in the Preface to his edition of Kozeluch String Quartets, *Recent Researches in the Music of the Classical Era*, XLII, (Madison, 1994), p. vii.

26. Some or all of these may have been written by 1777, before the composer moved to Sweden to work in the service of Gustav III.

27. Cited in Speck, *Boccherinis Streichquartette*, p. 187.

28. See for example Drabkin, *Haydn's Early* String Quartets, p. 2, and James Webster, *Haydn's* 'Farewell' Symphony and the Idea of Classical Style (Cambridge, 1991), pp. 341–7.

29. See W. Dean Sutcliffe, *Haydn: String Quartets Op. 50* (Cambridge, 1992), for example pp. 71–2 and 94–5.

30. See Christian Esch, 'Haydns Streichquartett Op. 54/1 und Mozarts KV 465', *Haydn-Studien* 6/2 (1988), pp. 148–55.

31. See Wilhelm Seidel, 'Haydns Streichquartett in B-Dur Op. 71 Nr. 1 (Hob. III: 69): Analytische Bemerkungen aus der Sicht Heinrich Christoph Kochs', in Feder, Hüschen and Tank (eds.), *Joseph Haydn: Tradition und Rezeption*, pp. 3–13.

32. Cited in Horst Walter, 'Haydn gewidmete Streichquartette', in Feder, Hüschen and Tank (eds.), *Joseph Haydn: Tradition und Rezeption*, p. 25 (my translation).

33. See Rohan Stewart-MacDonald, 'Towards a New Ontology of Musical Classicism: Sensationalism, Archaism and Formal Grammar in the Music of Clementi, Hummel and Dussek, and Parallels with Haydn, Beethoven and Schubert' (diss., University of Cambridge, 2001), pp. 174–7.

10 Beethoven and the Viennese legacy

 Alexander Weinmann, Johann Traeg: Die Musikalienverzeichnisse von 1799 und 1804 (Beiträge zur Geschichte des alt-wiener Musikverlages, II/17) (Vienna, 1973), pp. 69–70.
 See J. Yudkin, 'Beethoven's "Mozart" Quartet', Journal of the American Musicological Society 45 (1992), pp. 30–74.

 It has provoked a variety of interpretations.
 See Lewis Lockwood, 'A Problem of Form: The "Scherzo" of Beethoven's String Quartet in F major, Op. 59, no. 1,' *Beethoven Forum* 2 (1993), pp. 85–95; and the following response, Jonathan Del Mar, 'A Problem Resolved? The Form of the Scherzo of Beethoven's String Quartet in F: Op. 59, no. 1,' *Beethoven Forum* 8 (2000), pp. 165–72.
 James Webster, 'Traditional Elements in Beethoven's Middle-Period String Quartets' in Robert Winter and B. Carr (eds.), *Beethoven*, *Performers, and Critics* (Detroit, 1980), pp. 94–133.

5. Translation from W. Senner, R. Wallace and W. Meredith (eds.), *The Critical Reception of Beethoven's Compositions by His German Contemporaries* (Lincoln, NE and London, 2001), vol. II, p. 53.

 Letter (original lost), October 1816; Emily Anderson (ed. and trans.), *The Letters of Beethoven* (London, 1961), vol. II, p. 606.
 Joseph Kerman, *The Beethoven Quartets* (London, 1967), p. 175. Kerman's comment relates to the beginning of the second movement but can be applied more generally.

8. For an exploration of the role of the cello see William Drabkin, 'The Cello Part in Beethoven's Late Quartets', *Beethoven Forum* 7 (1999), pp. 45–66.

9. Warren Kirkendale, *Fugue and Fugato in Rococo and Classical Chamber Music*, revised and expanded 2nd edn trans. M. Bent and the author (Durham, NC, 1979), p. 250.

10. For a probing exploration of movement types and cycle structures, and much else, in Op. 127, Op. 132 and Op. 130, see Daniel K. L. Chua, *The 'Galitzin' Quartets of Beethoven. Opp. 127, 132, 130* (Princeton, 1995).

11. The pedantic heritage that informs the fugue is revealed in Kirkendale, *Fugue and Fugato*, pp. 258–68.

11 The Austro-Germanic quartet tradition in the nineteenth century

 Max Kalbeck, Johannes Brahms (Berlin, 1904–14, 3/1912–21/R1976), vol. I, p. 165.
 See also Chapters 12 and 13, and for example, Association française pour le patrimoine musical (ed.), Le quatuor à cordes en France de 1750 à nos jours (Paris 1995), and Joël-Marie Fauquet, 'Chamber Music in France from Luigi Cherubini to Claude Debussy', in Stephen E. Hefling (ed.), Nineteenth-Century Chamber Music (New York, 1998, R/2003), pp. 287–314.
 Quartettsatz is nothing more than the German for 'quartet movement', which has been adopted in English-speaking countries as well (it is also called simply 'the Satz').

4. For more detailed discussion of these and the later Schubert quartets, see Stephen E. Hefling and David S. Tartakoff, 'Schubert's Chamber Music,' in Hefling (ed.), *Nineteenth-Century Chamber Music*, pp. 39–101.

5. Walter Gray, 'Schubert the Instrumental Composer', *Musical Quarterly* 64 (1978), pp. 488 and 492–3.

6. Concerning the topical associations of the descending tetrachord, see Ellen Rosand, 'The Descending Tetrachord: An Emblem of Lament', *Musical Quarterly* 65 (1979), pp. 346–59.

7. For further discussion of this topical tradition see Timothy L. Jackson, 'The Tragic Reversed Recapitulation in the German Classical Tradition', *Journal of Music Theory* 40 (1996), pp. 61–111.

8. Otto Erich Deutsch, The Schubert Reader: a Life of Franz Schubert in Letters and Documents, Eng. trans. Eric Blom (New York, 1951), p. 339; see also Sadie (ed.), The New Grove Dictionary 2nd edn, vol. XXII, s.v. 'Schubert, Franz', p. 668. 9. Further on this, see Hefling and Tartakoff, 'Schubert's Chamber Music', pp. 79-81. 10. The theme comes from the entracte before act IV of Rosamunde; while no copies of the play are known to survive, a long review of it reveals that in the fourth act Rosamunde appears among her flocks in an idyllic valley, having been previously released from arrest brought on by false accusation (see Deutsch, The Schubert Reader, p. 312, and Neue Schubert Ausgabe VI/5, Streichquartette, vol. III, pp. x-xi).

 See Jonathan Bellman, *The 'Style Hongrois' in the Music of Western Europe* (Boston, 1993), especially ch. 7, and Hefling and Tartakoff, 'Schubert's Chamber Music', pp. 72 ff.
 See Hefling and Tartakoff, 'Schubert's Chamber Music', pp. 85, 132–3, nn. 117–20.
 Peter Gülke, *Franz Schubert und seine Zeit* (Laaber, 1991), p. 212.

14. Carl Dahlhaus, 'Sonata Form in Schubert: The First Movement of the G-Major String Quartet, Op. 161 (D. 887)', Eng. trans. Thilo Reinhard, in Walter Frisch (ed.), Schubert: Critical and Analytical Studies (Lincoln, NE, 1986), pp. 1, 8. Dahlhaus proceeds from Theodor Adorno's notions of musical epic, novel, and remembrance discussed in his Mahler: A Musical Physiognomy [1960], Eng. trans. Edmund Jephcott (Chicago, 1992). 15. Two additional late quartets from 1856-7 (WoO 41-2) remain unpublished; the second of these was Spohr's last completed composition; see Clive Brown (ed), Selected Works of Louis Spohr, vol. IX, Chamber Music for Strings (New York, 1987), p. vii.

16. *Allgemeine musikalische Zeitung* 12 (1809/10), col. 515.

17. Louis Spohr, *Lebenserinnerungen*, ed. Folker Göthel (Tutzing, 1968), I, p. 119.
18. Clive Brown, *Louis Spohr: A Critical Biography* (Cambridge, 1984), p. 44.
19. For example, in the first movement of Op. 4 no. 1, the move to a third-related tonality (Eb) for the second subject is probably inspired by Haydn's Op. 76 no. 3, Op. 77 no 2, and Beethoven's Op. 18 nos. 1 and 3. In the first movement of Spohr's Op. 4 no. 2, the pedal-point closing material in the exposition and recapitulation is derived from several Mozartian models, probably including the first

movements of the 'Dissonance' Quartet, K. 465, the D major Quartet, K. 575, and the first movement of the Divertimento for string trio K. 543, whereas the turn to major for the conclusion of the movement stems from Haydn (Op. 74 no. 3). In the Poco Adagio movement of Op. 4 no. 2, the transition to the reprise (bb. 52ff.) is borrowed from the similar passage (bb. 39 ff.) in the Andante cantabile of Mozart's 'Dissonance' (cf. also Brown, p. 45). Both the treading repeated crotchets and the unusual half-diminished supertonic chord (b. 14) in the scherzo of Op. 4 no. 2 stem from the minuet of Mozart's A major Quartet K. 464 (esp. b. 42). The fugato material in the rondo finale (bb. 46 and 153ff.) follows a Viennese custom dating from the time when Haydn (contemporaneously with several other composers) incorporated fugues into the finales of his Op. 20; the tradition continued in Haydn's Op. 55, Mozart's K. 387, and Beethoven's Op. 18 no. 1. Spohr admits in his autobiography that in seeking to develop his compositional talents he made 'many imitations of Mozart's masterpieces' (Lebenserinnerungen, vol. I, p. 127).

20. Brown, A Critical Biography, p. 44.

21. Cf. also ibid., p. 52.

22. Allgemeine musikalische Zeitung 19 (1817), col. 154.

23. Brown, A Critical Biography, p. 93. 24. Neue Zeitschrift für Musik 32 (1850), p. 209, cited by Brown, A Critical Biography, p. 315. 25. See Brown, A Critical Biography, pp. 97-9. 26. Carl Dahlhaus, Nineteenth Century Music, Eng. trans. J. Bradford Robinson (Berkeley, 1989), pp. 168-78, especially pp. 169-70. 27. Neue Berliner Musikzeitung 13 (1859), p. 345, cited by Brown, A Critical Biography, p. 341. 28. Sadie (ed.), The New Grove Dictionary, 2nd edn, vol. XXIV, p. 202. s.v. 'Spohr, Louis'. 29. See R. Larry Todd, 'The Chamber Music of Mendelssohn', in Hefling (ed.), Nineteenth-Century Chamber Music, p. 170, and Sadie (ed.), The New Grove Dictionary, 2nd edn, vol. XVI, s.v. 'Mendelssohn, Felix', pp. 404-6. 30. Johann Christian Lobe, 'Conversations with Felix Mendelssohn', Eng. trans. Susan Gillespie, in R. Larry Todd (ed.), Mendelssohn and His World (Princeton, 1991), p. 193.

31. Robert Schumann, 'Trios für Pianoforte mit Begleitung (1840)', in Martin Kreisig (ed.), *Gesammelte Schriften über Musik und Musiker von Robert Schumann* (Leipzig, 1914), vol. I, p. 500.

32. For a brief discussion of this piece, see Todd, 'The Chamber Music of Mendelssohn', in Hefling (ed.), *Nineteenth-Century Chamber Music*, p. 174. 33. Although Beethoven's Op. 132 was apparently performed in Berlin in 1826, it was not issued by the Berlin publisher Schlesinger until September 1827; however, Schlesinger had also published music by Mendelssohn and may have allowed him access to a manuscript of the work (see Maynard Solomon, Beethoven (2nd rev. edn, New York, 1998), pp. 416-17, and Thayer's Life of Beethoven, rev. and ed. Elliot Forbes (Princeton, 1967), p. 970). 34. See, for example, Joscelyn Godwin, 'Early Mendelssohn and Late Beethoven', Music and Letters 55 (1974), pp. 272-85, and Todd, 'Mendelssohn's Chamber Music', pp. 185-8, who provides a fuller discussion of this quartet. 35. Letter of c. February 1828, in Adolf Fredrik Lindblad, Bref till Adolf Fredrik Lindblad fran Mendelssohn . . . och andra (Stockholm, 1913), pp. 20; see also Todd, 'Mendelssohn's Chamber Music', p. 185.

 See also Friedhelm Krummacher, Mendelssohn – der Komponist: Studien zur Kammermusik für Streicher (Munich, 1978), pp. 161–7.

37. Lindblad, Bref, p. 20.

38. Todd, 'Mendelssohn's Chamber Music', p. 188.

39. Beethoven's 'Harp' Quartet, Op. 74 (also in Eb) is often said to have provided the model for Mendelssohn's first movement, but the connections do not extend beyond two rhythmic gestures in the slow introduction and some showy arpeggio passagework for the first violin in the coda (bb. 212ff.); see also Krummacher, *Mendelssohn – der Komponist*, pp. 166–8, who observes that the main theme of Op. 127, albeit in 3/4, is closer in *ambitus* and texture to Mendelssohn's principal melodic idea than any of the material in Op. 74. (Op. 127 had been in print since 1826.)

40. See 'From the Memoirs of Ernst Rudorff, trans. and ed. Nancy B. Reich, in Todd (ed.), *Mendelssohn and His World*, pp. 259ff., especially pp. 265–9 (quotation from 268).

41. The finale of Schubert's Piano Trio in Eb major, Op. 100, published in 1828, is an unusual block-like form that quotes extensively from the work's haunting C minor slow movement (see Hefling and Tartakoff, 'Schubert's Chamber Music', pp. 119–20). Mendelssohn's tarantella-style triplets (especially in bb. 44–9 and 157–64) seem to recall the finale of Schubert's 'Death and the Maiden' Quartet; although it was not published until 1831, Mendelssohn might have obtained a manuscript copy.

42. However, Krummacher (*Mendelssohn – der Komponist*, pp. 476 et passim) argues that

Mendelssohn was simply drawing conclusions from his earlier engagement with Beethoven and, taking Beethoven for granted, distancing himself to find his own *modus operandi*. 43. Letter of 17 February 1835 in *The Letters of Fanny Hensel to Felix Mendelssohn*, ed. and trans.

Marcia J. Citron (Stuyvesant, NY, 1987), 174 and 490 (translation modified).

44. See Todd, 'The Chamber Music of Mendelssohn', p. 190.

45. Todd regards the scherzo as 'the summit of Op. 44' and provides a useful analytical discussion of it ('The Chamber Music of Mendelssohn', p. 190).

46. The shape of the movement is perhaps closest to what James Webster terms 'A|BA form' in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XXIII, p. 690, s.v. 'Sonata Form'.

47. The history of the *furiant* in the early nineteenth century is not entirely clear (see Sadie, *The New Grove Dictionary*, 2nd edn, vol. IX, pp. 350–1, s.v. 'Furiant').

48. For example, in the finales of the Bb String Quartet Op. 67 and the Clarinet Quintet Op. 115.

49. See Friedhelm Krummacher, 'Mendelssohn's Late Chamber Music: Some Autograph Sources Recovered', in Jon W. Finson and R. Larry Todd (eds.), *Mendelssohn and Schumann: Essays on Their Music and Its Context* (Durham, NC, 1984), pp. 82–4.

50. At the time of his death Mendelssohn was apparently working on another quartet, for which a set of variations in E major (Andante sostenuto) and a scherzo in A minor survive. These movements were subsequently combined with two earlier isolated movements for string quartet, a Capriccio in E minor (1843) and an early fugue in Eb (1827), and published as the String Quartet Op. 81 in 1850.

 Gustav Jansen (ed.), Schumann: Briefe, Neue Folge, 2nd edn (Leipzig, 1904), no. 450.
 Schumann, 'Rückblick auf das Leipziger Musikleben im Winter 1837–1838', in Gesammelte Schriften, vol. I, p. 380.
 John Daverio, 'The Chamber Music of Robert Schumann', in Hefling (ed.), Nineteenth-Century Chamber Music, p. 215; Jansen (ed.), Briefe, Neue Folge, no. 101 (30 June 1839). See also Nicholas Marston, 'Schumann's Monument to Beethoven', 19th Century Music 14 (1991), pp. 248–53.

 54. Daverio, 'Chamber Music', pp. 216–17; John Daverio, *Robert Schumann: Herald of a 'New Poetic Age'* (Oxford, 1997), pp. 247–9.
 55. Schumann, 'Erster Quartettmorgen' (1838), in *Gesammelte Schriften*, vol. I, p. 335. 56. Max Hecker (ed.), Briefwechsel zwischen Goethe und Zelter 1799-1832, 3 vols. (Frankfurt am Main, 1987), vol. III, p. 246. 57. Schumann, 'Zweiter Quartettmorgen' (1838), in Gesammelte Schriften, vol. I, pp. 338-9, and 'Streichquartette' (1842), Gesammelte Schriften, vol. II, p. 75. 58. Schumann, 'Streichquartette', Gesammelte Schriften, vol. II, pp. 75-6, and 'Preisquartett von Julius Schapler' (1842), Gesammelte Schriften, vol. II, pp. 71-2. 59. Schumann, 'Zweiter Quartettmorgen' (1838), in Gesammelte Schriften, vol. I, pp. 338-9, and 'Streichquartette' (1842), Gesammelte Schriften, vol. II, p. 75. 60. Schumann, Gesammelte Schriften, vol. II, pp. 71, 75.

61. See Daverio, Robert Schumann, 252, and Daverio, 'Chamber Music', p. 218. Daverio also suggests that the juxtaposition of A minor and F major is derived from the first-movement exposition of Beethoven's Op. 132. But sonata forms based on third relations date back at least to Beethoven's Piano Sonata, Op. 31 no. 1, whereas third-relations between movements of a quartet crop up in Haydn, Opp. 74, 76, and 77, as well as Beethoven, Op. 18 no. 3. 62. The fifth of these units is extended to ten bars in a full close on the tonic (b. 75). 63. Bb. 101ff. in the exposition approximate bb. 177ff. and 207ff. in the development; bb. 117ff. approximate bb. 145ff. and 193ff. On sequential block developments, see Joel Lester, 'Robert Schumann and Sonata Forms', 19th Century Music 18 (1995), pp. 206 et passim. 64. Paul Griffiths (The String Quartet (New York, 1983), p. 121) suggests that such a 'heroically orthodox procedure' may reflect the influence of nineteenth-century textbook formulations of sonata form. 65. See Daverio, 'Schumann's "Im Legendenton" and Friedrich Schlegel's Arabeske', 19th Century Music 11 (1987), pp. 150-63. 66. Schumann's metronome marking of crotchet = 126 is precisely the standard pace of this dance; see Sadie (ed.), The New Grove Dictionary, 2nd edn, vol. IX, pp. 481-2, s.v. 'Galop'.

67. It has long been assumed that the motto motive is a musical cipher for Schumann's wife Clara, and indeed the work is popularly known as the 'Clara' Quartet. This is, however, a fictitious assumption for which there is no authentic substantiation. (I am grateful to Schumann specialist John Daverio for confirming this via personal communication.) 68. The broad ABABA slow-movement design has precedents in Schubert's sonatas. While Beethoven's Adagio ma non troppo in the Eb Quartet Op. 74 may have provided inspiration, that movement incorporates a contrasting 'C' section and varies both melody and accompaniment of its principal subject at each recurrence. Schumann's dialogue between first violin and viola in this Adagio molto recalls the

Andante of Mozart's Quintet in C K. 515,

essentially a love duet for those two instruments.

69. Daverio, Robert Schumann, p. 253.

70. Bach's Sixth French Suite may have provided the model; see George Grove (ed.), *A Dictionary of Music and Musicians*, 4 vols. (London, 1879–89), vol. IV, p. 414, s.v. 'Schumann, Robert'.

71. Anthony Newcomb, 'Schumann and Late Eighteenth-Century Narrative Strategies', *19th Century Music* 11 (1987), pp. 170–4.

72. Schumann, *Gesammelte Schriften*, vol. II, pp. 301–2.

 Kalbeck, Johannes Brahms, vol. II, p. 440.
 Richard Heuberger, Erinnerungen an Johannes Brahms: Tagebuchnotizen aus den Jahren 1875 bis 1897, ed. Kurt Hofmann (Tutzing, 1971), pp. 60–1.

75. See also Michael Musgrave, *The Music of Brahms* (Oxford, 1994), p. 111, and Walter Frisch, *Brahms and the Principle of Developing Variation* (Berkeley, 1984), p. 110. On the origins of the Op. 51 quartets, see Musgrave and Robert Pascall, 'The String Quartets Op. 51, No. 1 in C minor and No. 2 in A minor: A Preface', in Musgrave (ed.), *Brahms 2: Biographical, Documentary, and Analytical Studies* (Cambridge, 1987), pp. 137–43.
76. Malcolm MacDonald, *Brahms* (New York, 1990), p. 210; see also Donald Francis Tovey, 'Brahms's Chamber Music', *The Main Stream of Music and Other Essays* (New York, 1949), pp. 251–2.

77. Frisch, *Brahms*, p. 111; on the influence of Schubert, see James Webster, 'Schubert's Sonata Form and Brahms's First Maturity', *19th Century Music* 2 (1978), pp. 18–35; 3 (1979), pp. 52–71.
78. Schubert's *Quartettsatz* was first published in 1870, edited (anonymously) by Brahms, who had owned the autograph manuscript since at least 1867 (see *Johannes Brahms Briefwechsel*, vol. XIV: *Breitkopf & Härtel*, *Bartolf Senff*... [et al.] (Berlin, 1920), p. 146). Further on the *Quartettsatz*, see above, pp. 229–30.

79. The descending viola line is completed via register transfer to $b\natural^1$ in bar 7 (second violin). The tetrachord was frequently embellished by passing chromaticism, as it is in later passages of Brahms' first movement.

80. See, for example, Allen Forte, 'Motivic Design and Structural Levels in the First Movement of Brahms' String Quartet in C minor', *Musical Quarterly* 69 (1983), pp. 471– 502, reprinted in Musgrave (ed.), *Brahms 2*, pp. 165–96, as well as Peter H. Smith, 'Brahms's Recapitulatory Overlaps', *19th Century Music* 17 (1994), pp. 241–3.

81. On the 'omnibus', see Robert W. Wason, Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg (Ann Arbor, 1985), pp. 15–19, and Hefling and Tartakoff,

'Schubert's Chamber Music', p. 86.

82. See also Smith, 'Brahms's Recapitulatory Overlaps', pp. 243–7.

83. See also Musgrave, *The Music of Brahms*, p. 115 *et passim*, and MacDonald, *Brahms*, pp. 211–13.

84. Kalbeck, *Johannes Brahms*, vol. II, p. 445. An explicit linking of the two mottos is reserved for the coda (bb. 301–3, second violin leading).

85. Schoenberg treats this movement as a *locus classicus* of developing variation in 'Brahms the Progressive', *Style and Idea*, ed. Leonard Stein, Eng. trans. Leo Black (New York, 1975), pp. 429ff.

86. Especially the slow movements of the G major String Quartet (D. 887), the Bb major Piano Trio (D. 898) and the C major String Quintet (D. 956). Brahms, however, adds the learned touch of canon at the fifth for first violin and cello.

87. See Margaret Notley, 'The Chamber Music of Brahms', in Hefling (ed.), *Nineteenth-Century Chamber Music*, pp. 256–8.

88. Further on this topic, see Arnold Whittall, 'Two of a Kind? Brahms's Op. 51 Finales', in Musgrave (ed.), *Brahms 2*, p. 155.

89. See also MacDonald, *Brahms*, pp. 214–15, and Musgrave, *The Music of Brahms*, pp. 114–16; the 'Rondo alla Zingarese' of the G minor Piano Quartet Op. 25, although in 2/4, also moves in three-bar phrases.

90. Griffiths, The String Quartet, p. 131.

91. MacDonald, Brahms, p. 250.

92. Musgrave, Brahms, p. 179.

93. MacDonald, Brahms, p. 251.

94. George Henschel, *Personal Recollections of Johannes Brahms* (Boston, 1907, R/1978), pp. 50–1.

95. See, for example, Griffiths, *The String Quartet*, p. 132.

96. In Cobbett (ed.), *Cobbett's Cyclopedic Survey* of *Chamber Music* (London, 1929, R/1963), vol. I, p. 449.

97. Dahlhaus, *Nineteenth-Century Music*, pp. 2, 334ff.

98. See Walter Frisch, 'The Brahms Fog: On Analyzing Brahmsian Influences at Fin de Siècle', in Frisch (ed.), *Brahms and His World* (Princeton, 1990), pp. 81–99, especially p. 91. 99. Griffiths, *The String Quartet*, p. 156.100. Dahlhaus, *Nineteenth-Century Music*, p. 339.

101. John Daverio, 'Fin de Siècle Chamber Music and the Critique of Modernism', in Hefling (ed.), *Nineteenth-Century Chamber Music*, p. 364.

12 Traditional and progressive nineteenth-century trends: France, Italy, Great Britain and America

1. For a detailed discussion, see Michelle Garnier-Butel, 'La naissance du quatuor à cordes français au siècle des lumières', in *Le quatuor à cordes en France de 1750 à nos jours* (Paris, 1995), especially pp. 25–6, 50–1, 57.

2. See, for example, Brigitte François-Sappey, 'Les quatuors à cordes dans le premier tiers du XIXe siècle', in *Le quatuor à cordes en France de 1750 à nos jours* (Paris, 1995), p. 77.

3. See Jeffrey Cooper, The Rise of Instrumental Music and Concert Series in Paris, 1828–1871 (Ann Arbor, 1983) and Joël-Marie Fauquet, Les sociétés de musique de chambre de la Restauration à 1870 (Paris, 1986).

4. Jérôme-Joseph de Momigny, *Cours complet d'harmonie et de composition* (Paris, 1806), vol. II, pp. 693–4. Reicha (1770–1836) was himself a prolific composer of chamber music and wrote for numerous combinations of instruments, including the string quartet.

 In Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XX, p. 905, s.v. 'Reber, Napoléon-Henri'.
 In Cobbett, *Cobbett's Cyclopedic Survey*, vol. II, p. 148.

 In Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XXV, p. 403, s.v. 'Thomas, Ambroise'.
 Ibid., vol. VII, p. 47, s.v. 'David, Félicien'.

 David, Ydi, Yi, p. 47, 53. David, Fendell.
 See R. Hayes, 'Onslow and Beethoven's Late Quartets', *Journal of Musicological Research* 5 (1985), pp. 273–96.

10. See V. Niaux, 'Les quatuors à cordes de George Onslow', in B. Crozier (ed.), *Le Quatuor à cordes en France de 1750 à nos jours* (Paris, 1995), pp. 63–74.

11. See Vincent D'Indy, *César Franck* (Paris, 1906), pp. 167–70. D'Indy gives a detailed analysis of the work in Cobbett (ed.), *Cobbett's Cyclopedic Survey*, vol. I, pp. 426–9.

12. In Cobbett (ed.), *Cobbett's Cyclopedic Survey*, vol. II, p. 325.

 See J. Barrie Jones (ed. and trans.), Gabriel Fauré: a Life in Letters (London, 1989), p. 202.

14. Cited by Florence Nash in the booklet for the CD by the Stanford Quartet, Music and Arts CD-823.

15. Paganini's three string quartets in D minor, Eb major and A minor (*c.* 1815), dedicated to the

King of Sardinia and left in manuscript, are available in an edition by Federico Mompellio (Rome, 1976).

16. Ferruccio Busoni, *Collected Letters*, Eng. trans. and ed. Antony Beaumont (London, 1987), p. 26.

17. Ibid., p. 101.

 Ellerton was actually born John Lodge and adopted the additional name in the late 1830s.
 Dunhill achieved little of note in string quartet composition, but he founded (1907) a series of chamber concerts devoted to the works of British composers and was the first recipient of the Cobbett Chamber Music Medal (1924).
 Ireland's two Brahmsian string quartets of 1897 were suppressed throughout his lifetime.
 See Stephen Banfield, 'British Chamber Music at the Turn of the Century: Parry, Stanford, Mackenzie', *The Musical Times* 115 (1974), pp. 211–13.

22. Parry, Professor of Music at the University College, Aberystwyth and later at University College, Cardiff, composed the hymn tune 'Aberystwyth', the male-voice partsong 'Myfanwy' and the opera *Blodwen*.

23. *Cobbett's Cyclopedic Survey of Chamber Music* remains a monument to his outstanding contribution to chamber music.

24. For example, the American Musical Fund Society (1852), the American Music Association (1856) and the Metropolitan Music Association (1859), all in New York.

25. In addition to his quartets in C minor and A minor, Fry also left several incomplete works in the genre.

26. In Cobbett (ed.), Cobbett's Cyclopedic

Survey, vol. I, p. 237.

27. Ibid., vol. II, p. 529.

28. François-Joseph Fétis, *Biographie Universelle* (2nd edn, Paris, 1866–70), vol. I, p. 149.

13 Nineteenth-century national traditions and the string quartet

1. Both Smetana's string quartets are strongly autobiographical, although only the first, 'From my Life', has an explicit programme.

 Tchaikovsky's Third Quartet in Eb minor was dedicated to the memory of Ferdinand Laub, and Arensky's A minor quartet was dedicated: 'à la mémoire de P. Tchaikovsky'.

 See Richard Taruskin, *Defining Russia Musically* (Princeton, NJ, 1997), p. 199. Glinka also wrote a set of piano variations on the song.
 See David Brown, *Mikhail Glinka – A Biographical and Critical Study* (London, 1974), p. 53.

5. See Francis Maes, *A History of Russian Music from Kamarinskaya to Babi Yar* (Berkeley, CA, 2002), p. 172.

6. See *ibid.*, p. 172.

7. See David Brown (ed.), miniature score of Borodin's String Quartet no. 1 in A major (London, 1976), introduction.

8. Ibid.

9. Ibid.

 See Maes, A History of Russian Music, p. 72.
 Brown (ed.), miniature score of Borodin's String Quartet No. 1, introduction.

 See Maes, A History of Russian Music, p. 72.
 David Brown, *Tchaikovsky: to the Crisis –* 1840–1878 (2 vols., London, 1992), vol. I, p. 217.
 Ibid., vol. I, p. 298.

15. *Ibid.*, vol. II, p. 61.

 See Maes, A History of Russian Music, p. 193.
 See Knud Ketting, liner notes to Niels Gade, String Quartets, BIS-CD-516, The Kontra Quartet.

18. By Asger Lund Christiansen; a premiere of this edition was given in 1963 by the Copenhagen String Quartet with whom Christiansen was the cellist (see Ketting, liner

notes). 19. A quartet in D minor was written, along

with a fugue for the same combination, during his studies in Leipzig and then subsequently lost. Grieg himself described the work as derivative of Schumann, Gade and Mendelssohn (see John Horton, *Grieg* (London, 1974), p. 9).

20. See Edward Lockspeiser, *Debussy* (London, rev. edn, 1963), pp. 235–6, and Roger Nichols (ed.), *Debussy Remembered* (London, 1992), pp. 99 and 166.

21. Notably Gerald Abraham in Gerald Abraham (ed.), *Grieg: A Symposium* (London, 1948), p. 8, and Nils Grinde, in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. X, p. 408, s.v. 'Grieg'.

22. See Finn Benestad and Dag Schjelderup-Ebbe, *Edvard Grieg, mennesket og kunsteren* [Edvard Grieg, Man and Artist] (Bergen, 1962), pp. 189–90.

23. Abraham (ed.), *Grieg*: A *Symposium*, p. 8.

24. List derived from David Fanning, in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XVII, p. 895, s.v. 'Nielsen'.

 See Charles M. Joseph's very useful consideration of Nielsen's string quartets: 'Structural Pacing in the Nielsen String Quartets', in Mina Miller (ed.), *The Nielsen Companion* (London, 1994), pp. 460–1.
 Ibid., p. 462.

27. in Sadie (ed.), *The New Grove Dictionary*, 2nd edn, vol. XVII, p. 891.

28. See Erik Tawaststjerna, *Sibelius vol. I: 1865–1905*, Eng. trans. Robert Layton (London, 1976), p. 24.

29. Ibid., pp. 47-8.

30. Robert Layton, *Sibelius* (London, 1965), p. 6.

31. Tawaststjerna, *Sibelius vol. I:1865–1905*, p. 55.

32. Robert Layton recounts that there were reports of Sibelius working on two quartets when he was composing the Fourth Symphony. See Layton, *Sibelius*, p. 139.

33. See ibid., p. 140.

34. Donald Francis Tovey, *Essays and Lectures on Music* (London, 1949), pp. 307–8.

35. In a letter to Eusebius Mandyczewski in Milan Kuna (ed.), *Antonín Dvořák:*

korespondence a dokumenty; korespondence odeslana [Antonin Dvořák: Correspondence and Documents; Correspondence Sent], vol. IV (Prague, 1995), pp. 112-13. It is also interesting that in this letter, to the editor of the Schubert complete edition, there is no reference to Schubert, who is considered by many commentators to be a major influence on Dvořák at an early stage; see Jan Smaczny, 'The Schubertian Inheritance among Czech Composers in the Mid-Nineteenth Century, in Internationales Franz Schubert Institut, Mitteilungen 21/ Sondernummer (Tutzing, June 1998), pp. 61-75; also Jan Smaczny, "Biding His Time" - Schubert among the Bohemians', in Brian Newbould (ed.), Schubert Studies

(Aldershot, 1998), pp. 153-65.

36. The only other instance of a folksong quotation is in the incidental music to Samberk's play *J. K. Tyl*, Op. 62 (B 125) where the use of the melody 'Na tom nasem dvore' is prompted by the text.

37. The Andante religioso was used again in the first version of the string Quintet in G major Op. 77 (B 49), and further arranged for string orchestra as the Notturno Op. 40 (B 47), also for violin and piano (B 48a), and piano four hands (B 48b).

38. See, for example, the first movements of the Piano Trio in $B\flat$ major Op. 21 (B 51) and the second Piano Quintet in A major Op. 81 (B 155).

39. A convincing conclusion to the work by Jarmil Burghauser is to be found in the Dvořák complete edition, vol. IV/5 (Prague, 1982).40. The quartet was unpublished during Fibich's lifetime, but the polka movement was frequently played as a separate item.

František Bartoš (ed.), *Bedřich Smetana ve vzpomínkách a dopisech* [Bedrich Smetana: in Reminiscences and Letters] (Prague, 1939), p. 142. All Czech translations are by the author.
 Ibid.

43. *Ibid.*, pp. 142–3.

44. A private performance was given in Srb-Debrnov's house in April 1878 with Dvořák playing the viola part. See John Clapham, *Smetana* (London, 1972), p. 68, n. 1.
45. See Milan Kuna, 'Dvořák's Slavic Spirit' in David Beveridge (ed.), *Rethinking Dvořák: Views from Five Countries* (Oxford, 1996), pp. 146–7.
46. Dvořák entitled these arrangements of Cypresses, B 152 (originally composed 1865), 'Echo of songs'.

47. Not least the Te Deum Op. 103 (B 176), composed just before Dvořák set out for the United States. Pentatonic writing is apparent in Dvořák's music from his earliest efforts (String Quartet No. 1) to his later maturity. The 'American' style, as described in the text, could also appear in works written well before he had any idea that he would one day be working in New York, notably the scherzo of the Terzetto in C major Op. 74 (B 148).

14 The string quartet in the twentieth century

1. This chapter can only be selective in the repertory that it covers. For information about the wider repertory the reader is referred to Ian Lawrence, *The Twentieth-Century String Quartet* (London, 2001), which catalogues more than 10,000 works with details of publishers and recordings.

2. Arnold Schoenberg, 'Brahms the Progressive', in Leonard Stein (ed.), *Style and Idea: Selected Writings of Arnold Schoenberg* (London, 1984).

3. Ibid., p. 402, Ex. 3.

4. Arnold Whittall, *Schoenberg Chamber Music* (London, 1972), p. 7.

 Hans Werner Henze, liner notes to recording of string quartets, Wergo, WER 60114–50.
 Ibid.

7. For more extended discussion of this work, see Carola Nielinger-Vakil, 'Quiet Revolutions: Hölderlin Fragments by Luigi Nono and Wolfgang Rihm', *Music & Letters* 81 (2000), pp. 245–74.

8. As well as the four numbered quartets, Bridge also composed some works in the medium with descriptive titles, including *Scherzo Phantastick* (1901), *Phantasie Quartet* (1905), *Three Idylls* (1906) and *An Irish Melody* (Londonderry Air) (1908).

9. Peter Evans, 'Chamber Music I', in Stephen Banfield (ed.), *Music in Britain: The Twentieth Century* (Oxford, 1995), p. 240.

10. Arnold Whittall, *The Music of Britten and Tippett: Studies in Themes and Techniques* (Cambridge, 1990), pp. 108–9.

11. Ibid., p. 31.

12. For an extended analytical discussion of this movement, see Derrick Puffett, 'The Fugue from

Tippett's Second String Quartet', *Music Analysis* 5 (1986), pp. 233–64.

13. Whittall, *The Music of Britten and Tippett*, p. 90.

14. Elizabeth Maconchy, liner notes to 'The Complete String Quartets Vol. I', Unicorn-Kanchana, DKP(C) 9080.

15. Ibid.

16. Preface to score.

 For further discussion, see Wolfgang Schwinger, *Krzysztof Penderecki: his Life and Work* (London, 1989), pp. 128–9.
 There are also works by Cage for unspecified or variable forces which could be performed by a string quartet. A most obvious possibility would be 59¹/₂" for any four string instruments (1953).

19. David Schiff, *The Music of Elliott Carter* (London, 1983), p. 197.

20. Ibid.

21. See ibid.

15 The string quartet as a foundation for larger ensembles

1. Cobbett (ed.), *Cobbett's Cyclopedic Survey*, vol. I, p. 136, where he clearly regards Boccherini as the first composer in the mature classical style. 'Spohr, writing of Baillot, remarks: "He plays Boccherini's quintets frequently and with pleasure. It is curious . . . to note how his interpretation makes one forget the mediocrity of the works." 'See Cobbett, *Cyclopedic Survey*, vol. I, p. 141.

2. Karel Padrta's recent thematic catalogue of Franz Krommer's works (Prague, 1997) reveals a large body of quartet-based material, including thirty-five string quintets, eight flute quintets and two oboe quintets.

3. Eduard Hanslick, *Geschichte des Concertwesens in Wien* (2 vols., Vienna, 1869–70), vol. II, p. 397.

4. George Grove, A Dictionary of Music and Musicians (London, 1889), vol. IV, p. 426. Of many favourable responses to the work, one of the most illuminating came from Theodor Helm, who witnessed the first performances in 1892 of both Bruckner's Eighth Symphony and Brahms' Clarinet Quintet. Describing the latter as masterly, he nevertheless wrote in the Deutsche Zeitung of 28 December: 'What does even the most beautiful "chamber piece" signify a genre that is effective only in a small space and therefore addresses itself to narrow circles - in comparison with a symphony like the latest by Bruckner, whose thrillingly all-powerful tonal language . . . is capable of inspiring thousands upon thousands who have ears to hear and a heart to hear what is heard.'

5. Florence May, *The Life of Brahms* (London, 1905), vol. II, pp. 249–50.

 Walter Frisch, Brahms and the Principle of Developing Variation (Berkeley and Los Angeles, 1984), p. xiii.

7. Schumann's step-brother-in-law Woldemar Bargiel studied with Rietz and Gade at the Leipzig Conservatoire from 1846, some four years after its foundation by Mendelssohn. His Octet dates from student days, and achieved a considerable success. The octet established itself as an occasional genre at the hands of Gade, Svendsen and Raff, to be followed in the twentieth century by Eugene Goossens, Shostakovich and Milhaud, amongst others. Shostakovich's Octet Op. 11 is an inventive and experimental student work. Extraordinarily, Milhaud's Octet Op. 291 is made up of simultaneous performance of his Quartets nos. 14 and 15.

8. Other Romantic composers for this combination include Cherubini and Joseph Miroslav Weber. The list also contains a number of later British composers, including Imogen Holst, Ethel Smyth, Arnold Bax and McEwen and the Swiss Frank Martin. Amongst works for related ensembles is the sextet for three violins, viola and two cellos by Eugene Goossens.

9. *Allgemeine musikalische Zeitung* 22 (1820), p. 239. For musical illustrations of this quintet, see Brown, *Louis Spohr: a Critical Biography*, pp. 88–92.

10. In Brown's commendably forthright appraisal of Spohr's chamber works, he includes the Piano Quintet of 1845 as one of those works which to some extent show evidence of creative exhaustion.

11. The Musical World 28 (1853), p. 443.
12. Michael Musgrave (*The Music of Brahms* (Oxford, 1985), p. 92) admits that Brahms may have found Spohr's Sextet a possible stimulus, while claiming that Spohr offered no model, even though Brahms admired him and would have known much about him from Joachim and his acquaintances at Detmold. The role of counterpoint in Brahms' developing language is an important point of difference between the two composers.

 Eduard Speyer, Wilhelm Speyer der Liederkomponist (Munich, 1925), p. 67.
 Musgrave, The Music of Brahms, p. 92.
 Ibid.

16. The string quintet with two violas was cultivated by a variety of later composers, notably Ysaÿe, Vaughan Williams, Bax, Martinů, Milhaud and Sessions, amongst many others. Occasional later writers for this combination include works by such diverse figures as Reger and Milhaud.
 Alec Robertson, *Dvořák* (London, 1945), p. 189.

Frank Howes, *The English Musical Renaissance* (London, 1966), p. 59.
 See Colin Lawson, *Brahms: Clarinet Quintet* (Cambridge, 1998), pp. 84–5.

21. Arthur Bliss, *As I Remember* (London, 1970), p. 91.

22. Stephen Banfield, *Gerald Finzi* (London, 1997), p. 201. Many works for woodwind and strings remain little known outside specialist circles, such as oboe quartets by Arnold, Lennox Berkeley, Cooke, Françaix (for cor anglais), Jacob, Moeran and Rawsthorne. The bassoon repertory includes quintets by Reicha, Almenraeder and Vogt, a

mid-nineteenth-century sextet by Gustav Satter (with two cellos) and later quintets by
Holbrooke, Hans Lange, Françaix, Searle, Villa
Lobos and Vintner. Post-war flute quintets include an example by Walter Piston.
23. Basil Smallman, *The Piano Quartet and Quintet: Style, Structure and Scoring* (Oxford, 1994), p. 12.

24. The genre of the piano quartet established by Mozart gave rise to many distinguished successors, such as Beethoven, Weber, Mendelssohn, Schumann, Brahms, Dvořák, Fauré, D'Indy, Chausson, Taneyev, Strauss, Reger, Martin ů and Copland.

25. Smallman, *The Piano Quartet and Quintet*,
p. 47. Schumann's majestic, lyrical quintet was followed by a more energetic and contrapuntal Piano Quartet Op. 47, also in Eb.
26. Smallman (*ibid.*, p. 111) remarks that

'D'Indy's Quintet, for all its merits, reveals a romantic ripeness of style which, by 1924, had already turned largely to decay.'

27. Smallman (ibid., p. 104) notes the Brahmsian style in England of Parry and Stanford; in Italy, Sgambati and Martucci; in Scandinavia, Sinding and Sibelius; in Russia, Arensky and Taneyev; in Switzerland, Frank Martin; and in Spain, Granados and Turina. Other composers for quintet (in alphabetical order) include Bacewicz (1952, 1965), Badings (1952), Amy Beach (1909), Bridge (1904-12), Busch (1927), Castelnuovo-Tedesco (1932, 1951), Enesco (1895, 1940), Fricker (1971), Ginastera (1963), Goossens (1918), Granados (1898), Gubaidulina (1957), Hahn (1923), Hoddinott (1972), Hovhaness (1927/R1962, 1953/R1963), Korngold (1920), Leighton (1962), Malipiero (1957), Medtner (1950),

Migot (1920), Milhaud (1951), Novák (1904), Persichetti (1954), Pfitzner (1908), Pierné (1917), Rawsthorne (1968), Reizenstein (1948), Riegger (1951), Rózsa (1928), Rubbra (1947), Saint-Saëns (1855), Schmidt (1926), Schmitt (1910), Scott (1925), Sorabji (1920), Suk (1893), Szell (1911), Tcherepnin (1927), Toch (1938), Vierne (1924), Widor (*c.* 1890, 1896), Williamson (1968). 28. Smallman (*ibid.*, p. 132) notes that Martin ů provides the strings with his most idiomatic writing, his piano parts light and open in texture and never dominating in the manner of certain contemporaries.

29. Ibid., p. 141.

30. Alexander Ivashkin and Gidon Kremer, 'Masterclass: Schnittke's Piano Quintet', *BBC Music Magazine*, May 2001, pp. 48–9.