

Introduction

In the nineteenth century Western art music advanced towards a peak of sonorous magnificence, perhaps reached in 1848 at Paris when Hector Berlioz conducted an ensemble of 1,022 performers.¹ The guitar, however, continued to sound at the level of a small continuo group for an Italian opera of the 1640s.² During the 1800s the guitar's reputation was deeply affected, often for the better, by its evocation of past sonorities that the ear was prepared to relinquish but the historical imagination could not bear entirely to forgo. Various attempts were nonetheless made to strengthen the sound by external and internal changes, some of them well received in their day, but no increase in the size or depth of the guitar's body, no change in the pattern of the internal bracing and no addition of extra strings fundamentally enlarged its scope. Not suited to the new concert halls in which provincial towns and cities invested much of their civic pride, the guitar fared no better amidst the din of the music halls either, according to the guitarist and vaudeville comedian Ernest Shand (1868–1924).³ The editor of Shand's compositions finds that 'interest in the instrument was all but gone' by the 1890s when Shand was unable to make a living from his composing, playing and teaching.⁴

Do we actually know that interest in the guitar had drained away by the end of the nineteenth century in England? Part of the answer to that question lies with what qualified Victorian observers report, and it might be supposed that none was better equipped than Ernest Shand. A gifted soloist and composer for the guitar, Shand studied with Madame Pratten (1824–95), the outstanding guitar teacher of the day, and wrote a conspectus of contemporary guitar playing in 1895 for a niche magazine,

¹ M. Austin, ed., *Hector Berlioz: Mémoires* (Paris, Éditions du Sandre, 2010), 367.

² J. Spitzer and N. Zaslav, *The birth of the orchestra: history of an institution, 1650–1815* (Oxford, Oxford University Press, 2004), 7.

³ S. Yates, ed., *Ernest Shand: guitar music from late-Victorian England* (Tennessee, Classical Guitar Study Editions, 2022), 18.

⁴ *Ibid.*, 11.

albeit one principally intended for aficionados of the banjo. Although it is a fairly discursive piece, Shand is prepared to be succinct where necessary:

I am convinced that there is one great thing that would serve as an incentive to those who would play this beautiful instrument, and that is, to hear it played in public more often. *One never hears it now as a solo instrument.* It is heard with banjo and mandolin bands, but only, of course, as an accompaniment, a few ordinary chords strummed on it, neither interesting to play or to hear [emphasis added].⁵

This picture of a complete collapse in the art of solo playing by 1895 raises a number of questions. Was the predicament of guitar-accompanied song, which Shand does not mention, just as discouraging? Was the situation the same among both professionals and amateurs?⁶ What qualifies as performance in public? Much of this book will be concerned with finding answers to the first two of those questions. With reference to the third and a public context for performance, Shand may be thinking only of the London scene with its fashion for ‘At Home’ entertainments and private parties employing professionals such as he aspired to be. Yet there was also a provincial scene, one where even solo music was still being played on the guitar, at the time when Shand wrote his piece, in settings that may be called ‘public’ for there was a paying and sedentary audience. The players in question were mostly enthusiasts, unknown to guitar history and probably unknown to Shand, but that does not mean that they necessarily lacked talent. In 1894 Miss Lybbe played two pieces by a great master from the first half of the century, Leonard Schulz, at a Brighton concert with ‘exquisite taste and skill’.⁷ In the year when Shand’s article on the state of guitar playing

⁵ Quoted from Yates, *Ernst Shand*, 272.

⁶ The senses of the word ‘amateur’ in Victorian English were richer than those in common parlance today. On one hand, the distinction between those who played for their own pleasure and those who played for remuneration was well understood, and it increasingly implied, during the course of the nineteenth century (1) a negative view of amateur talent that survives particularly strongly in modern English ‘amateurish’ and (2) a positive view of professional talent, often assumed in the Georgian period to be possessed by lowly persons of poor education and of no interest once they had put their instruments away. On the other hand, the word ‘amateur’ also retained the positive eighteenth-century sense of a person pursuing a liberal interest, in an informed manner, as a natural expression of their education and social position. This is the usage, for example, found on the title pages of *Twelve National airs with Introduction and Variations for the Guitar* by Leonard Schulz, arranged ‘either as useful studies or for public performance by the more experienced Amateurs of the guitar’. See Page, ‘Amateurs and Professionals’, and literature there cited, in C. Page, P. Sparks and J. Westbrook, eds., *The great vogue for the guitar in Western Europe* (Woodbridge, Boydell and Brewer, 2023), 77–92.

⁷ *Brighton Gazette*, 24 May 1894. She chose numbers 1 and 2 (*Andante espressivo* and *Rondo, tempo di polka*) from *The last compositions of Leonard Schulz*, probably published in 1891. The player will be one of the two daughters of that surname name listed in the census of 1911 in the Sussex

appeared, Miss Florence Willord gave a solo entitled 'Air Tyrolean' at the social event of a Warwickshire Institute⁸ and Miss Sydenham rendered Madame Pratten's composition 'Lord Raglan's march' at a village-school concert in Sulhamstead, Berkshire.⁹ The latter was a standout solo offered by a member of the guitar and mandolin band that provided most of the music for the evening. The following year, Mr. Edgar Taylor performed 'Spanish fandangoes' which were 'artistically played' and enthusiastically received by the members of a Kent Cricket club,¹⁰ while Miss Violet Gaskell was encored for a 'particularly clever' rendering of Madame Pratten's 'O Susannah' with variations at Brighton.¹¹ It is beside the point that these performances, and the pieces chosen, must often have fallen short of the standards that Shand set himself, or that the number of solo performances just cited does not quite reach half a dozen; they could easily be supplemented with references to solos by other players, including some individuals who were well known to Shand such as Ada Tulloch or Arthur Froane. Shand's disappointment at being unable to make a career as a performer, teacher and composer for the guitar has influenced his assessment of how well a solo practice is faring, even though hardly anyone save Madame Pratten and perhaps Henry Lea (1801–83) had been able to make the kind of living to which he aspired, or at least not in England.

In exile from the orchestra for faults that aficionados presented as virtues – such as the intimacy and softness of its voice – the guitar considered as a solo instrument stimulated a wide range of conflicting responses from ardent admiration to frosty disdain. This touched upon some highly sensitive questions about the scale of sonority, the density of texture and the extent of compass that had come to be associated with true musical value. A dossier of conflicting opinions can therefore be assembled for the guitar, some of which come close to raising the existential question of whether there should be guitars at all. One critic may claim that the days of the guitar are numbered while another sees it being 'more taken up',¹² just as one may describe the performances of Giulio Regondi (?1823–72) with breathless admiration while another thinks his solo playing perverts the instrument's true nature as a vehicle for

Registration District of Steyning. They were then aged forty-six and thirty-nine and supported by their mother, who lived on private means.

⁸ *Warwickshire Herald*, 28 March 1895.

⁹ *Reading Mercury*, 18 May 1895. Miss Sydenham is probably Winifred Alice Sydenham whose father was a jeweller and silversmith. Census of 1891, Berkshire Registration District of Reading.

¹⁰ *Harborne Herald*, 9 May 1896. ¹¹ *Brighton Gazette*, 5 December 1896.

¹² *The Era*, 24 July 1870; *Eddowes's Shrewsbury Journal*, 13 October 1886.

accompaniment.¹³ The suspicion lingers that these are expressions of personal preference, sometimes perhaps of prejudice, posing as generalisations about fashion and the taste of the times: micro histories of the guitar presented as macro histories.

These considerations raise questions about what to believe and whose testimony to trust among the many different sources that are available. This book has been guided by the conviction that a principal source for understanding the guitar's social and musical history during the Victorian period is provided by the newspaper record, specifically the reports of both professionals and amateurs performing solo pieces or (much more often) songs. When these reports are read in bulk, indeed in their hundreds, their prose begins to separate, before an experienced eye, into layers of terse and syntactically fossilised record on one hand and a discourse of evaluation on the other where the number of rhetorical conventions in play is larger and more fluid. The matters of record may include the title of the song or solo, the name of the player or singer, the nature of the place where the performance occurred and the good cause served, if there was one. The evaluative writing, which at its most elaborate is slowly working towards a professionalised conception of a critic's responsibility to the public,¹⁴ may encompass the quality of the performance, the reception it received, the size and mood of the audience and the success or failure of the event. Today, the task of becoming an experienced reader of such material is greatly facilitated by the ability to search vast amounts of material with electronic data mining of the British Newspaper Archive, for example, but is also in a sense made much harder, for it encourages the searcher to snatch the gold from the pan and ignore what the silt may reveal about the context of the find. (See further Appendix A, 'Using the Newspapers'.) Fortunately, the reports of performances are often laid out on the page of the newspapers in a manner that marks a clear division between what might be called the affective sections of the report and the documentary section, the latter set apart as a list of items and performers, almost invariably cued by an explicit marker such as 'The programme was as follows' or something similar. To be sure, these lists, which may often fail to reflect last-minute changes of plan, have an affective dimension of their own. They are partly there to gratify the performers, who expected to be mentioned in an accurate manner, and to express a pride in the vigour of

¹³ *Birmingham Journal*, 13 April 1861.

¹⁴ See P. Watt, 'The rise of the professional music critic in nineteenth-century England', in Golding, *The music profession in Britain*, 110–27.

local musical life by showing those in other towns or villages what they missed.

These reports of musical events encourage a positive view of the guitar's later-Victorian fortunes, both as a solo and an accompanying instrument, by tracing it to many different contexts of social and musical life. They include the concerts that were arranged in corn exchanges and Church of England school-rooms, in the assembly rooms of public houses during the dinners of friendly societies and political meetings, in the music-halls and open-air meetings during election time, the common street and even the workhouses and hospitals. The newspapers also reveal a rising tide of solo playing and guitar-accompanied singing by amateurs, professional musicians and popular entertainers between the 1860s and the close of the century.¹⁵ A search for the concatenation 'guitar solo' in the British Newspaper Archive, for example, yields figures for 1890–9 that represent an increase of some magnitude over those for 1870–9. (We shall return to the question of the meanings that the expression 'guitar solo' could then bear.¹⁶) This rate of growth exceeds the pace at which new provincial weekly newspapers, liable to contain relevant information, were founded. There are numerous references to named pieces of solo guitar music to be found here, some of which may not survive in any form, such as 'Shazada', 'Beau sourire' or 'Ximenes march', while some others are only known from pianoforte versions like 'Jessie's dream', 'Elsa gavotte' and 'Peacefully dreaming'. A substantial number of the other solos named, most notably 'Lord Raglan's march', are the work of Madame Pratten. Most of the Victorian guitar method-books contain simple pieces of solo music

¹⁵ In recent years, as interest in the nineteenth-century guitar has grown apace, such word-searchable databases of nineteenth-century European and American newspapers have proved a vital resource. See for example G. Penn, 'Mauro Giuliani a Vienna: nuovi documenti', *IF* clxix (January, 2015), 30–53, clxx (April, 2015), 30–51 and clxxi (October, 2015), 45–61; J. Savijoki, 'So that the soul would dance in you': the guitar in Finland before the twentieth century (Helsinki, Sibelius Academy, 2019); P. Pouloupoulos, 'The guittar in the British Isles, 1750–1810', unpublished doctoral dissertation, University of Edinburgh, 2011; Jelma van Amersfoort, 'Guitars, music and culture in the Netherlands, 1750–1810', unpublished doctoral dissertation, University of Southampton, 2023; R. Calandruccio, 'Ferdinando Carulli: un aggiornamento biografico tra dati storici e ipotesi a 250 anni dalla nascita', *IF*, cxc (2020), 25–42, cxci (2020), 36–53, cxci (2021), 7–19, cxci (2021), 33–57, cxci (2021), 5–22, and cxci (2021), 36–52; N. Confalone and G. Leclair, 'Ogni dito un Liszt! 1840, un anno cruciale nella carriera di Emilia Giuliani', *IF*, clxviii (2014), 36–53; T. Takeuchi, 'Rediscovering the Regency lute: a checklist of musical sources and extant instruments', *EM*, xlv (2018), 17–34; R. Aleixo, *La guitarra en Madrid (1750–1808) con un catálogo de la música de ese periodo conservada en bibliotecas madrileñas* (Madrid, Sociedad Española de Musicología, 2016); B. Lewis and R. Coldwell, *In Search of Sagrini* (DGA Editions, 2021).

¹⁶ See below Chapter 4, 114.

designed to develop the novice's dexterity including waltzes, arrangements of opera favourites and popular airs, but the newspaper reports of solo performances sometimes use expressions of admiration quite outside their customary rhetorical range, such as 'remarkably clever',¹⁷ which suggest more advanced music. The solo contributions to amateur concerts by guitar players were often encored; when Miss Lilian Ramsden played 'Lord Raglan's march' during a concert of 1897 'so persistent were the calls for a repetition that she played the latter part of it over again'.¹⁸ Guitar-accompanied songs were often greeted in this way.

References to guitar-accompanied singing in the newspaper record are more abundant than to solo playing and are therefore harder to control. To bring a substantial number of them to order, a document has been prepared as an open-access and online complement to this book.¹⁹ Since 670 named individuals singing 784 specified songs to the guitar during 1,405 separate performances are recorded there,²⁰ the data are extensive enough for changes in the quantity of material, decade by decade, to be significant. The number of events involving guitar-accompanied song, by both amateurs and professionals but mostly the former, increases continuously during the last four decades of Victoria's reign. For 1860–9 the total recovered runs to 38 instances; by 1880–9 it has reached just over 200 and by 1890–1900 it has nearly attained 400.

Most modern accounts of the guitar's wider European history in the nineteenth century have tended to treat accompanied song as an ancillary and minor art, even to the point where some deny that those who played only to accompany were 'guitarists' in any meaningful sense of the term. Today, however, that approach is liable to leave the modern historian working against the grain of much that was actually happening in Victorian guitar playing. Enrico Capacio's method of 1881 declares that the guitar is 'generally used' for accompanying a voice,²¹ while William Ballantine announces that he has given the art of accompaniment 'special

¹⁷ Used in relation to a performance by Mr A. R. Turner, *Pateley Bridge & Nidderdale Herald*, 5 May 1888.

¹⁸ *Huddersfield Daily Chronicle*, 22 January 1897.

¹⁹ <https://digitalcommons.du.edu/sbs/vol8/iss1/4/>. For the article that this list accompanies, see Page, "An attractive and varied repertoire": the guitar revival of 1860–1900 and Victorian song', *SbS*, viii (2022), <https://digitalcommons.du.edu/sbs/vol8/iss1/3/>.

²⁰ The open-access list is most unlikely to include *every* relevant item of information to be retrieved from the digitised record, for search engines (to say nothing of searchers) are fallible. Moreover, it would be mistaken to assume that these were the only such performances given; newspapers may seem to be the nearest thing the Victorians possessed to the digital media that now record so much of private and public life, but the comparison has its limits.

²¹ E. Capacio, *New method for the guitar* (London, Lafleur and Son, 1881), 1.

attention' in his method of 1886–9.²² The manual that Madame Pratten's biographer, Frank Harrison, considered to be her masterpiece, *Learning the guitar simplified* of 1874, announces on the title page that it is 'Required for beginners for playing accompaniments to songs'.²³ A vocal air had a text to arrest the volatility of attention and clarify the emotional territory the listener was being invited to enter. A self-accompanying singer was therefore well placed, all things being equal, to command a measure of sustained attention whereas newspaper reports show that even experienced writers regularly sent out to review concerts might struggle to hear intricate solo playing upon the guitar in an intelligent and analytical manner. Some, indeed, were left craving the satisfactions of vocal melody that the sound and look of a guitar seemed ineluctably to arouse; a reviewer who heard the great master Giulio Regondi play his arrangement of the overture to *Semiramide* in 1869 reported that it was all very fine, but he would have been glad to hear 'a ballad with the guitar accompaniment as well'.²⁴

The ecologies, so to speak, of solo playing and accompanied song nurtured players in rather different ways. For an ambitious art of solo guitar playing to flourish it was necessary for conscientious players to sense that they were promoting a practice entrusted to them by distinguished forebears: one they found so stimulating that it inspired them to make creative innovations which they passed on to their pupils. In short, there had to be a *tradition* of solo playing. The pupil–teacher networks required to sustain such a tradition were fragile in England, however, and those which had existed during the great vogue for the guitar of 1800–40 were mostly broken by the middle of the nineteenth century.²⁵ Some of the foreign guitar-teachers active in London during the 1820s did advertise themselves as pupils of noted masters such as Fernando Sor and Ferdinando Carulli,²⁶ both of whom were living at the time, but those students did not achieve influence or distinction in their turn. No generation of soloists arose to name them as a mark of professional competence.

The art of singing to guitar accompaniment, however, did not look back to past masters and could even dispense with face-to-face teaching. In any

²² W. Ballantine, *Ballantine's guitar tutor* (London, The Author, 1886–9), Preface.

²³ See Chapter 5. ²⁴ *Bath Chronicle*, 4 February 1869.

²⁵ Page, Sparks and Westbrook, *The great vogue for the guitar in Western Europe*.

²⁶ See *The Times*, 4 July 1829, where Dr Aviles Pizarro announces himself as a former pupil of Sor. In 1820 Signor Bertoli, a prolific arranger of opera airs and songs, identified Ferdinando Carulli as his master (*Morning Post*, 25 January 1820), and so did a French governess in 1827, eager to inform her English readers that her master was 'one of the most celebrated players on the guitar in Paris' (ibid., 27 June 1827). That same year a certain Mr H. Huyghe announced himself as a pupil of Matteo Carcassi (ibid., 14 May 1827).

household where there was a desire to sing on the part of someone who recognised what the guitar could bring to their efforts, that art might flourish. Players who could read staff notation might find that a published guitar method told them most of what they needed to know about chord shapes for the left hand and arpeggio patterns for the right. Over time, a sense of basic harmonic syntax could be instilled in them by the chordal resources of their instrument, enabling them to make impromptu song arrangements of their own with increasing success as they developed an ear. Both in this and in some more literate form, the art of guitar-accompanied singing was practised by Victorian amateurs to a degree well beyond what the material surviving in musical notation, printed or manuscript, has the power to suggest. Moreover, ‘musical notation’ in this context does not only mean the staff but also fingerboard diagrams, pitch letters or *solfège* syllables to indicate the roots of chords, chord boxes and other homemade devices (Figure 1.4). William Ballantine’s guitar tutor of 1886–9 is one of various Victorian guitar methods that give the chords of greatest moment to players who wish to perform simple accompaniments using both staff notation and fingerboard diagrams – a late example of a longstanding practice. In the light of recent work on nineteenth-century forms of musical performance in England that required a fluent ear and well-stocked memory (such as the art of the ballad singers) or which were conducted by circumventing standard forms of musical notation (as in the use of Tonic sol-fa for choral classes) a history of the guitar in Victorian England not exclusively wedded to scores of any kind may even begin to seem mainstream.²⁷

Four in five of the players found singing to guitar accompaniment named on the open-access list mentioned above are women.²⁸ It has long

²⁷ O. C. Jensen, *The ballad-singer in Georgian and Victorian London* (Cambridge, Cambridge University Press, 2021); E. McGuire, *Music and Victorian philanthropy: the tonic Sol-Fa movement* (Cambridge, Cambridge University Press, 2009). See also P. Watt, D. B. Scott and P. Spedding, eds., *Cheap print and popular song in the nineteenth century: a cultural history of the songster* (Cambridge, Cambridge University Press, 2017).

²⁸ It would be unsafe to suppose that the terms Miss and Mrs consistently indicate marital status. See A. L. Erickson, ‘Mistresses and marriage: or, a short history of the Mrs’, *History Workshop Journal*, lxxviii (2014), 39–57. A survey of amateur pianists shows a similar predominance of young women. See M. Burgan, ‘Heroines at the piano: women and music in nineteenth-century fiction’, in N. Temperley, ed., *The lost chord: essays on Victorian music* (Bloomington, Indiana University Press, 1989), 42–67; P. Cave, ‘Piano lessons in the English country house 1785–1845’, unpublished doctoral dissertation, University of Southampton, 2013; R. A. Solie, *Music in other words: Victorian conversations* (Berkeley, CA: University of California Press, 2004), especially 85–117, ‘Girling at the parlor piano’; E. Morgan, ‘“Pertinacious industry”: the keyboard etude and the female amateur in England, 1804–20’, in K. Hadjiafxendi and P. Zakreski, eds., *Crafting the woman professional in the long nineteenth century: artistry and industry in Britain* (Burlington, Ashgate, 2013), 70–87. See also Thompson, *The rise of respectable society*, 194–5 (on the Victorian

been known that many amateur players of the guitar in the nineteenth century were female, though it may be asked whether a body of data has hitherto been gathered, at least in relation to England, of a scope that allows a numerical expression of their predominance to be given. More arresting is the finding that the incidence of both solo playing and guitar-accompanied singing mounted at a time when women were increasingly enjoying a measure of freedom from certain conventional constraints upon their clothing, their socialising and their educational opportunities. The guitar was the one parlour instrument traditionally associated with female amateurs which not only offered a full harmonic support to a voice but was also easy to carry out of the front door. It could be spirited away from domestic constraints to a concert in a parish schoolroom, to the hustings at election time and even to a boating trip with an eligible young man, if a friend were present (Figure 0.1). For the female amateur singer with a guitar, as for the female cyclist, a freedom beckoned during the last decades of the century:

Daisy Orde . . . arrived from the station, to my mother's outspoken dismay, riding one of those most unwomanly machines [a safety bicycle] . . . Her skirts were so audaciously short that you could see her gaitered ankles . . . Daisy was the most



Figure 0.1 *Sorrow and song* (1893) by Edmund Blair Leighton.
© Bristol Museum, Galleries and Archives. Bridgeman Images.

parlour and its piano) and for a photographic record of pianofortes in some Victorian homes, Cohen, *Household gods*, 84, 94 and 132 (two examples on that page).

beautiful creature we knew, with a warm, thrilling voice, and an exuberant gaiety. She sang 'Clementine' to a guitar and made pastoral portraits of all the family . . .²⁹

By collating the newspapers with census documents and trade directories the players who come to light as self-accompanying singers may be traced to the households of a leather merchant, a bicycle-seller, a master smith, a plumber, a gas fitter, the owner of a music warehouse, a magistrate and a clergyman. The newspapers also show that those who played the guitar to earn all or part of their livelihood formed as polychrome a variety of characters as a two-penny sheet of cut-out figures for a toy theatre. Among the more conventional were those with an Italian operatic training who used their guitar for a song or two then turned to other forms of accompaniment for the rest of the programme. Some drew the guitar into a world of costume, counterfeit and disguise including the self-accompanying vocalists working alone as 'minstrels', full or part time, sometimes garbed in the national dress of what was ostensibly their homeland. Others performed in public-house concert rooms, sometimes in Spanish dress (Figure 3.1) or as comedians specialising in quick-change routines, character-acting and impersonations. Still more were actors who could add a guitar-accompanied song to any farce in which they were currently appearing, while others were threadbare street singers with cheap guitars bought from hawkers in the common thoroughfares. Finally, the last quarter of the century produced an efflorescence of female players who accompanied their own singing and hovered at the boundary between amateur and professional performance, which they might eventually cross, either alone or with a guitar and mandolin band behind them and occasionally in costume.

The banjo craze of the 1880s, followed by an intense vogue for the mandolin in the next decade,³⁰ gave extraordinary prominence to two instruments whose histories, towards the close of the nineteenth century, run parallel in some respects to that of the guitar. Yet although those two instruments, in earlier forms, had a history in England reaching back into the 1700s, the late Victorian boom they experienced between 1880 and 1900 was not a *revival* in the sense of something remade in the light of precedent. That was to be the distinctive and late Victorian trajectory of the

²⁹ L. E. Jones, *A Victorian boyhood* (London, Macmillan, 1955), 62.

³⁰ For the banjo vogue see, for example, Adburgham, *A Punch history of manners and modes*, 129, which notes that the satirical magazine *Punch* first noticed the banjo boom in 1883. In Jerome K. Jerome's celebrated comic novel of 1889, *Three men in a boat*, banjos are described as 'all the rage this season; everybody has got them up the river'. Compare *Morning Post*, 28 November 1888 (banjos 'rapidly becoming fashionable'). For the mandolin see Sparks, 'A Considerable attraction' and Sparks, 'Clara Ross'.

guitar, still possible at a time when the vogue for the instrument of approximately 1800–40 was only one or two generations back and was not forgotten. The banjo was as brashly modern in the 1880s as safety bicycles or the game of lawn tennis; exuberantly transatlantic, it was also deeply rooted in Anglo-American popular culture as the favoured stringed instrument of blackface minstrelsy, a position the guitar never achieved with any consistency.³¹ As for the mandolin, its earlier life as a gut-strung instrument in the 1700s was largely forgotten.

³¹ See Carlin, *The birth of the banjo*; Vorachek, 'Whitewashing blackface minstrelsy', and Winans, *Banjo roots and branches*.