

PART II

**Musical explorations**



## 4 Ravel and the piano

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Ravel, that master of tender irony, has left in his wake two supreme ironies: of being viewed as archetypally French, and of his musical forms often being viewed as conventional.<sup>1</sup> French though he was, his temperament, humour, expression and technique are all distinct from French habits and stand out, by their incisiveness and bursts of raw sensuality, even from his contemporaries Fauré and Debussy. Besides the technical daring inherited from his Swiss-born engineer-inventor father, the foreign element that most strongly colours Ravel's character and music is the Basque-Spanish heritage of his mother. In a letter of 1911 to Joaquín Turina, written from Spain, Ravel signs himself off, 'A thousand friendly greetings from your (or my) motherland', and his letters from the Basque region or to relatives there are peppered with Basque phrases as well as Basque forms of place names.<sup>2</sup>

### Viñes and the early piano music

Ravel's closest and most influential childhood friendship, from the age of thirteen, was with Ricardo Viñes. A month older than Ravel, Viñes arrived from Barcelona with his mother in 1887 to study in Bériot's Conservatoire class (which Ravel joined in 1889); apparently it was the two mothers who first met, in 1888, with Mme Ravel delighted to discover a fellow-Spanish-speaker.<sup>3</sup> In their teenage years, Viñes introduced Ravel to the prose poems of *Gaspard de la nuit* and then, in 1907, introduced him to Manuel de Falla (just before Ravel repaid Viñes handsomely for that introduction to *Gaspard*); above all, it was Viñes whose brilliant and subtle piano playing first brought a whole series of piano masterworks to the public. How many of those works, Ravel's, Debussy's and others, would exist as they do without the enthusiastic stimulus of Viñes, and the knowledge that he could quickly assimilate whatever was put in front of him?<sup>4</sup> It was also Viñes who (as seen below) helped to maintain a current of musical stimulus between Debussy and Ravel in later years when the two composers were no longer in personal contact.

From his late teens comes Ravel's first surviving piano music, the unpublished *Sérénade grotesque* of about 1893. Its overtly Spanish idiom

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**Example 4.1** Ravel and Chabrier comparison(a) Ravel, *Menuet antique* (1895), bars 56–8

(b) Chabrier, *Pièces pittoresques* (1880), 'Menuet pompeux' (bars 74–6)

includes one idea strong enough to be reused twelve years later in 'Alborada del gracioso' (bars 7–8 and similar).<sup>5</sup> Already, the *Sérénade* shows that lifelong Iberic penchant for semitone clashes, notably in the main dance section from bar 15; almost exactly the same clash (F# against E#) announces the opening chord of its successor, the *Menuet antique* of 1895. This title is unabashed about its ancestry, for the second part of the piece's central section strongly echoes the equivalent moment in Chabrier's 'Menuet pompeux' (1880), a special favourite that Ravel later orchestrated (Example 4.1a and b).

Ravel was adamant that much though he admired Debussy, his own musical language came largely from Chabrier.<sup>6</sup> (Chabrier's idiom, too, is coloured by the influence of his childhood Spanish music teachers, even before his long adult visit to Spain.) Nonetheless, it is not hard to hear where Debussy's influence strikes: for example, the *Pavane pour une Infante défunte* of 1899 (Example 4.2a) revels in a succession of parallel ninth chords taken almost verbatim from Debussy's 'Sarabande' (Example 4.2b) – another piece which Ravel later orchestrated – as it had briefly appeared in print in a supplement to *Le Grand Journal* of February 1896.<sup>7</sup> Even there, though, Chabrier is not far away, for Act II of his opera *Le Roi malgré lui* (1887) features both diatonic and chromatic successions of ninths (Example 4.2c). As can be seen in Example 4.2d–e, Ravel's, Debussy's and Chabrier's chains of ninths all simply 'ellipticise' classical logic by taking

Example 4.2 Ravel, Debussy and Chabrier comparisons

(a) Ravel, *Pavane pour une Infante défunte* (bars 25–6)

*un peu plus lent*

(b) Debussy, 'Sarabande', 1896 version (bars 11–12)

(c) Chabrier, *Le Roi malgré lui*, 'Fête polonaise'

Harmonic logic

(d) Ravel–Debussy

(or minor)

(e) Chabrier

Example 4.3 Debussy, *Pour le piano*, 'Sarabande' (bars 63–5)

each resolution as read and replacing it with the next questioning ninth chord. Chabrier's example in particular echoes the rising chromatic sequence of sevenths in bars 61–2 of Chopin's *Nouvelle étude* in D $\flat$ , which again follows the logic of Example 4.2e. Such harmonic ellipsis quickly became an essential part of Ravel's musical thinking.

Another chain of parallel chords from Debussy's 'Sarabande', the more diatonic sequence shown in Example 4.3, also becomes an element as Ravelian as Debussian, as can be heard very clearly in Ravel's *Sonatine* of 1903–5 and his 'La Vallée des cloches' (cf. the bracketed falling fourths in Example 4.3). Ravel having been thirteen years Debussy's junior, it is easily assumed that he started by emulating Debussy before finding his own voice. Closer acquaintance suggests the contrary: that his understandable admiration for Debussy added an extra dimension, one that he assimilated and developed so quickly that it soon concealed its model and even started to stimulate the older composer.

### *Sites auriculaires*

This creative interaction is well illustrated by the famous 'Habanera' incident: Ravel is reported to have lent Debussy an unpublished manuscript of his 'Habanera' from *Sites auriculaires* (1895–7) for two pianos and then been annoyed when one of its most characteristic moments was echoed in Debussy's 'La Soirée dans Grenade' from *Estampes* of 1903 (Example 4.4a and b). Several more details are needed to complete the perspective. In April 1901, two years before 'La Soirée', Debussy composed his two-piano habanera *Lindaraja* but left it unpublished, perhaps embarrassed by a more extended, if patchy, resemblance (across bars 117–41) to Ravel's 'Habanera'. By 1903, with Ravel's 'Habanera' still unprinted, Debussy may simply have tired of holding back fertile ideas. Perhaps he also saw that the critical moment in 'La Soirée' in any case took its harmony equally from his own *Prélude à l'après-midi d'un faune* of 1892–4 (the piece's only

## Example 4.4 Ravel and Debussy comparison

(a) Ravel, 'Habanera' (bars 13–14)

(b) Debussy, *Estampes*, 'La Soirée dans Grenade' (bars 23–4)

anacrusis: Fig. 3) – a work Ravel loved unreservedly. Had Ravel overlooked this, or was he feeling territorial about the added Spanish rhythm? Even here, though Ravel could not have known it, Debussy had a prior claim, for the same harmony appears, attached to a *seguidilla* rhythm, in Debussy's then unpublished *Chanson espagnole* of 1883 (bars 4 and similar). Nonetheless, the fact remains that neither *Lindaraja* nor 'La Soirée' would probably exist in its present form without Ravel's input – not least because of the implicit link in 'La Soirée' to Debussy's new friend Viñes, who, at Ravel's urging, had introduced himself to Debussy in 1901.<sup>8</sup>

'Entre cloches', the less known companion-piece to 'Habanera', also has an exotic element not visible in the piece's published edition: Ravel's manuscript beams the opening bar's quavers 3 + 3 + 4, suggesting a Latin American flavour perhaps blended with elements of Basque *zortzico*.<sup>9</sup>

### *Pavane pour une Infante défunte*

Spain resounds equally in the *Pavane pour une Infante défunte* (1899), a mischievously ironic title possibly dreamt up together with Viñes (did they know Alkan's satirical *Marcia funebre sulla morte d'un papagallo?*), and chosen almost entirely for its euphony. In terms of spoken metre the title suggests a truncated alexandrine starting, typically for Ravel, in mid-phrase and with each mute 'e' unpronounced (in defiance of declamatory convention, thus anticipating the *Histoires naturelles*). The music reflects this, opening with a two-bar phrase that sounds as much like a consequent

as an antecedent because of the five-bar phrase that follows. As various anecdotes attest, the main challenge in performing this piece is to catch its sensuous tenderness while avoiding mawkishness or lugubriousness.

### Ravel's pianistic traits

The blatant major seventh that flits across our ears at the end of *Jeux d'eau*, matching the piece's opening, prompts a tally of how many of Ravel's solo piano pieces open or close (or both) with a prominent minor second or major seventh clash: *Sérénade grotesque* (ending), *Menuet antique*, *Jeux d'eau*, the *Sonatine* (ending); 'Noctuelles', 'Oiseaux tristes' and 'Alborada del gracioso' from *Miroirs*; 'Ondine' and 'Scarbo' from *Gaspard de la nuit* (1908); *Menuet sur le nom d'Haydn* (1909), every one of the *Valses nobles et sentimentales* (1911) and five of the six movements of *Le Tombeau de Couperin* (1914–17) – in sum, almost three-quarters of all his solo piano pieces, plus the two-piano 'Habanera' and the outer movements of the Concerto in G. (The rogue major seventh at the end of the 1905 Prix de Rome fugue underlines this Ravelian hallmark.) To obtain a comparable tally from Debussy we would have to count whole-tone clashes instead, though the few semitonal occurrences that do emerge revealingly echo Ravel – the start of 'Poissons d'or' in 1907 relative to the end of the *Sonatine*, and the preludes 'Le Vent dans la plaine' and 'La Sérénade interrompue' relative to 'Scarbo' and 'Alborada del gracioso' (plus a sudden flurry of semitone clashes in the second book of *Préludes*).

### *Jeux d'eau*

All this supports Ravel's famous protest to Pierre Lalo in which he defends the initiating role of *Jeux d'eau* (1901) in twentieth-century piano writing. Comparison of the last two pages of this work with those of Debussy's 'Pagodes' (composed a year after the publication in 1902 of *Jeux d'eau*) lends further weight: each piece presents a three-layered texture with stylised rippling arpeggios at the top, a slower-moving pentatonic melody in the middle and a bass line descending slowly stepwise to the tonic (like Debussy, Ravel had listened to the gamelans at the 1900 Exposition Universelle, as the second page of *Jeux d'eau* confirms). There is an equally telling difference: 'Pagodes' ends, as it began, with a relatively consonant added sixth as its blue note and a 'ritardando' into its final 'gong', in contrast to Ravel's more biting major seventh and unequivocal 'sans ralentir'. (The end of 'Jardins sous la pluie' provides further comment on this, letting the major seventh slide down to the fifth à la Chabrier as at the end



of Ravel's *Pavane*.) From this and many other examples, we may establish subtle distinctions between the two composers' approaches. Most appropriately, in a French Television interview of 1969 with Bernard Gavoty, the pianist Jacques Février, a lifelong friend of Ravel, differentiated between 'un poète voluptueux' (Debussy) and 'un classique sensuel' (Ravel).

Once again the influence worked in both directions, for the language of *Jeux d'eau* surely reflects the house performance Ravel heard in 1900 (with Debussy at the piano) of *Pelléas et Mélisande*.<sup>10</sup> At the same time *Jeux d'eau* shows its independence through ubiquitous details like the added piquancy of the dominant eleventh in bar 4 that drop by minor thirds (the whole-tone basis of each chord thus creates the maximum semitone clash against the next chord); by the Lisztian tritone cadences at bars 32–5 (a device Debussy was still to exploit cadentially, as at the end of *La Mer*); and by the cadenza's mixed C and F# triads (a favourite Ravel cocktail, traceable to the central part of Chabrier's *Bourrée fantasque*).

Like the *Pavane*, *Jeux d'eau* and its successors exploit Ravel's prosodic trait of adding asides, as it were, in the form of grace-note figurations that interrupt and fall outside the indicated metre. Related to this is his way of starting pieces or major musical statements as if in mid-phrase (like the truncated alexandrine of 'Pavane pour une Infante défunte'). An obvious example is the gruff opening cadence of the 'Rigaudon' in *Le Tombeau* – a descendant in this respect of Chabrier's 'Tourbillon'. Gentler examples like 'Ondine', 'Le Gibet', and even to some extent *Jeux d'eau*, leave us aware that the piece has started rather than is starting (any lingering by performers on the first note is thus counterproductive). Another simple way of starting in mid-phrase is to open with a harmonic clash. Prosodically, all this relates not only to the innovative vocal writing of the *Histoires naturelles* and *L'Heure espagnole*, but also to descriptions of Ravel's characteristic gestures when pronouncing witty asides.<sup>11</sup>

The other striking innovation in *Jeux d'eau* is its implied instrumental compass: Ravel's bass A in bars 49–50, 55 and 59 is an ersatz for the non-existent G# below the piano's normal range, as also happens in the finale of the Piano Trio. 'Une barque sur l'océan' explicitly notates this 'phantom' G# at bars 44 and 92 (see Peters Edition, also bars 39 and 41). 'Scarbo' (bars 15, 334 and 395–409) and the final bar of the Concerto in G stretch down to an implied G (or F\*). Astonishingly, a century later only one major piano maker, Bösendorfer, has met the challenge, probably not even with Ravel in mind. (One wonders, though, if Ravel knew some French pianos from the time of the 1851 London Exhibition, whose basses extended to that low G.)

Ravel also exploited what was available as much as he stretched beyond it, and his writing strongly reflects the Erard pianos that were his norm. Besides their lighter, shallower touch (facilitating lightly repeated notes

**Example 4.5** Ravel and Chabrier comparison(a) Ravel, *Miroirs*, 'Noctuelles' (bars 47–50)

(b) Chabrier, *Pièces pittoresques*, 'Idylle' (bars 20–2)

and sophisticated glissandos), a now rare quality is the distinct colour of each register (partly the result of Erards up to the 1900s or even later being straight-strung long after other makes had adopted cross-stringing). On most present-day pianos no special resemblance is evident between the opening page of *Jeux d'eau* and that of the 'Menuet' in the *Sonatine*; but play each on an Erard of the period, and their strings of sevenths in the tenor register immediately stand out. (For more on *Jeux d'eau*, see Woodley, 'Jeux d'eau: recordings of Cortot (1923) and Perlemuter (1973)': Chapter 10.)

### *Miroirs*

The instrument itself also accounts for some essential differences in flavour between Ravel's *Miroirs* and Debussy's contemporary piano *Images*: as is well documented, Debussy enjoyed writing for the more sensuous (but arguably less sensual) sonorities and deeper touch of the Bechstein, Blüthner and Pleyel.<sup>12</sup> Ravel's resulting jazzier bite is most evident in 'Noctuelles' (for example, bar 72) and 'Oiseaux tristes' (bar 20), as well as through the characteristic strings of sevenths in the central part of 'Noctuelles'. One of the most expressive moments of 'Noctuelles' also reveals the depth of Chabrier's influence, with rocking melodic fourths accompanied by simple note repetitions and a chromatic pendulum (Example 4.5a and b). The same relationship can be observed in the second system of the 'Pavane de la Belle au bois dormant' from *Ma Mère l'Oye*, originally composed for piano duet across 1908–10.

Besides the ubiquitous falling fourths that link all five *Miroirs*, 'Une

**Example 4.6** *Miroirs*: motivic connections

- (a) 'Une barque sur l'océan' (opening figure)  
 (b) 'Alborada del gracioso' (opening figure)  
 (c) 'Alborada del gracioso', central section (bars 73–4)

barque sur l'océan' and 'Alborada del gracioso' reveal a more specific melodic link lurking under varied rhythms (Example 4.6a–c). 'La Vallée des cloches' suggests an influence on Debussy's 'Et la lune descend sur le temple qui fut', from the second set of *Images* of 1907 (bar 6, relative to bar 12 of 'La Vallée').<sup>13</sup> There is some implicit documentation for this, for Viñes's diaries tell us of an afternoon *chez* Debussy in February 1906 when, after they had worked on the first series of *Images*, Debussy asked to hear Ravel's new *Miroirs*. (Some weeks later Viñes delighted Ravel in turn by playing him 'some Debussy'; this gives a possible gloss to the oft-remarked melodic affinity between 'Le Gibet' and the central part of 'Hommage à Rameau' of 1905.)<sup>14</sup>

Ravel's dissatisfaction with his orchestration of 'Une barque', despite the apparently orchestral nature of the original, contrasts strangely with his successful later orchestration of the brilliantly pianistic 'Alborada del gracioso' (see also Russ, 'Ravel's transcriptions of his own music': Chapter 6). Reasons are not hard to find. The rolling piano arpeggios of 'Une barque' lose much of their dynamism when orchestrated inevitably as tremolandos. Additionally, crescendos that take the piano from *pianissimo* to *fortissimo* or *fff* in two or three bars generally leave the orchestra little time to show its dynamic range (although bars 28 and 29 of the original are extended in the orchestral transcription). In short, the piece's form is so suited to the piano that orchestration really calls for some restructuring.

Ravel's orchestration of 'Alborada', undertaken twelve years later, answers this by almost doubling the length of the piece's final crescendo (bars 213–18 in the piano version). *La Valse* and *Boléro*, conceived with an orchestra in mind, corroborate this from the other side, for their long orchestral crescendos inevitably overstretch the piano's dynamic range in their solo or duo transcriptions. (To be fair to Ravel, those piano versions were primarily meant for domestic use or ballet rehearsal, unlike the unproblematic piano duo version of *Rapsodie espagnole*.)

Debussy's *L'Isle joyeuse* (1904) compares interestingly here in view of Ravel's reported (and pianistically apt) description of it as 'an orchestral reduction'. Yet Bernardo Molinari's later orchestration of the piece, based on Debussy's indications, disappoints for a similar reason to 'Une barque': that the piece's structure is essentially designed for piano. The pianistic repeated restarts of the concluding crescendos frustrate any attempt to achieve the same growth orchestrally. Comparison with the equivalent longer culminating orchestral crescendos in 'Jeux de vagues' or *Jeux*, never mind *La Valse* and *Boléro*, makes the point.

### Formal and octatonic developments

Ravel's 'An autobiographical sketch' draws attention to the underlying thematic sonata scheme ('without however submitting to the classical tonal scheme') of *Jeux d'eau*, an admission which provides a vital link to the even less conventional sonata sequences of later works. Most of Ravel's larger instrumental movements exploit this, notably *Gaspard*, the outer movements of *Le Tombeau* and most of his chamber works (besides the obvious sonata forms of the *Sonatine*). Increasingly, they combine development with condensed and re-ordered recapitulation, disguising formal outlines and often suggesting an element of arch form. 'Noctuelles' and 'La Vallée des cloches' provide transitional pointers here in the way that they openly combine sonata-type recapitulations with ternary form and arch form.

From the early 1900s, the octatonic scale also plays an increasing role in Ravel's vocabulary. Consisting of alternating tones and semitones, this scale embraces combinations like the C–F♯ triads of *Jeux d'eau*, as well as triads a minor third apart and major/minor mixtures within a key. For Ravel, it also provided a welcome alternative to the whole-tone scale, as an equally effective way of undercutting tonality and moving freely between keys, with the added bonus of generous semitone clashes. (Bars 157–8, towards the end of the 'Forlane' in *Le Tombeau*, neatly contrast whole-tone with octatonic colours; see Example 4.10c below.) Example 4.7a, one of many prominent octatonic structures in *Gaspard*, shows how typically this scale accommodates Ravel's appoggiatura-based harmony: each chord fits one distinct octatonic collection, while the passage's underlying functional logic becomes clear if we resolve the top two voices up a semitone (Example 4.7b). (The result could pass for César Franck, as it also could with just the top voice taken down.) An even more spine-tingling octatonic sequence comes from bars 23–4 of 'Le Gibet', overlaying a G<sup>7</sup> chord with triads of E, C♯ and B♭. (Had Ravel noticed a surprisingly similar com-

Example 4.7 *Gaspard de la nuit*: octatonic structures

(a) 'Scarbo' (bars 121–3)

121

*pp*

*sourdine*

*ppp* très fondu et bien égal de sonorité

Octatonic basis

(b) Harmonic basis

bination in the first movement (bars 91–2) of Chopin's Sonata Op. 35?)<sup>15</sup> Although Debussy's octatonic usage at that time tended to favour less dissonant sequences, as in 'Jardins sous la pluie' (bars 37–42) or 'Reflets dans l'eau' (bars 20–1), examples such as 'Des pas sur la neige' and 'Ce qu'a vu le Vent d'Ouest' do more closely reflect Ravel (compare bars 21–2 of 'Des pas sur la neige' with bars 26–7 of 'Le Gibet').<sup>16</sup>

### Form and motive in *Gaspard de la nuit*

The three towering pieces of *Gaspard de la nuit*, composed in 1908 and published in 1909, relate to various models, which they characteristically outbid in various ways. 'Scarbo' suggests a heady mix of Liszt Mephisto Waltz, Chopin Scherzo, Saint-Saëns's *Danse macabre*, Chabrier's *España* and Balakirev's *Islamey*, while 'Le Gibet' links to the tolling B $\flat$  in the 'Marche funèbre' of Chopin's Sonata Op. 35. 'Ondine' echoes, not least through its key, Liszt's *Waldesrauschen*, Debussy's 'Reflets dans l'eau' and 'Clair de lune' (both published in 1905), plus the expansive Nocturne No. 6 of Ravel's teacher Fauré. (Compare especially bars 79–80 of 'Ondine'

Table 4.1 Thematic sequence of ‘Ondine’

| Motive           | <i>a</i> | <i>b</i> | <i>b1</i> | <i>b2</i> | <i>c</i> | <i>d</i> | <i>e</i>       |
|------------------|----------|----------|-----------|-----------|----------|----------|----------------|
| Exposition (bb.) | 0        | 2        | 10        | 16        | 22       | 32       | 45             |
| Development      | –        | 42, 47   | –         | –         | –        | 52       | (45), 50, (57) |
| Recapitulation   | 89       | 80       | 84        | 88        | 72       | 66       | 57             |

The motives are closely interlinked: *a* accompanies *b* and *b1*; *b1* is derived from *b* (bars 5–6), *b2* from *b* (bar 4); *c* comprises two motives permanently linked together, the first of which (bar 22) is an intervallic augmentation of *b2*; and *d* repeats the second element of *b1*. Bar 88 also refers back texturally to bar 55. The opening incomplete bar is counted here, as in the Peters Edition, as ‘0’.

with bars 30–1 of ‘Clair de lune’, bearing in mind ‘les mornes rayons de la lune’ in the opening stanza of Bertrand’s poem.)

The basic texture of ‘Ondine’, however – a long entrancing melody spun out over rippling harmonies – looks back to models like Schubert’s *Impromptu* in G $\flat$  (D. 899 No. 3) and Chopin’s *Etude* Op. 25 No. 1 in A $\flat$  – until that sudden cackle of laughter on the last page gives at least Ondine’s game away. The laughter may also be Ravel’s, for the piece suggests a parody of Chopin’s *Etude* in A $\flat$  in the same special sense that several paintings of Edouard Manet (one of Ravel’s idols) are known to be parodies of classical masters.<sup>17</sup> Besides the textural affinity between the two pieces, the parallel becomes exact at the *appassionato* climax of each piece, where for a beat ‘Ondine’ (bar 66) quotes directly from Chopin’s *Etude*, a semitone higher (and with hands an octave farther out). The musical parallel continues, for Chopin’s *Etude* then gradually subsides with a texture of octaves echoing quietly across the right hand, just as ‘Ondine’ does at bars 75–8, before ending in a sudden flurry of arpeggios that equally suggest a ripple of laughter and a shower of spray.

‘Ondine’ and ‘Le Gibet’ push even Ravelian sonata form to the verge of unidentifiability. ‘Ondine’, really a sonata form by stealth, conceals its outlines by closely interlinking its themes, virtually reversing their final order of return, and dovetailing the development section into both the exposition and the recapitulation (see Table 4.1). Only in retrospect can it be seen that, by bar 47, a characteristic Ravel development section (alternating two operatically contrasted themes) is already under way, and that, in bars 57–65, development turns imperceptibly into recapitulation. The latter aspect is quietly underlined by the enharmonic tonic at bar 57, the only sounding tonic between the piece’s first four and last three bars. (Additionally, the added seventh at bar 57 links to the sevenths at both bar 14 and bar 2; bars 14–15 differ crucially from bars 2–3 by omitting the tonic except as a final passing note.) At the end, Ravel emphasises the arch

shape by embedding the piece's opening figuration: G $\sharp$ -A-G $\sharp$ -G $\sharp$ -A-G $\sharp$ -G $\sharp$ -A in the arpeggios of the last three bars.<sup>18</sup>

'Le Gibet' also masks its quietly climactic development section (bars 28–34, mainly exploiting the 'sigh' from bar 7), starting it within a crotchet of the piece's half-way point and then leading it straight into an abbreviated recapitulation of bars 12–24. A final recapitulation of bars 1–11 in reverse thematic order again leaves us with a strong sense of arch form. Surprisingly little attempt has been made to analyse this piece's ingenious tonal basis: essentially, how Ravel manages to keep us on tenterhooks for so long at such a slow tempo. A strong clue lies in Debussy's closely related prelude 'Voiles' of a year later, whose B $\flat$  bass ostinato sounds the same rhythm as the bell of 'Le Gibet', almost as if to set us on the scent. Since Ravel's piece is structurally the more recondite of the two, it makes explanation easier if we start with 'Voiles'.

The one clear tonality in 'Voiles' is E $\flat$  minor (the piece's pentatonic climax and the repeated cadences that follow), since the surrounding whole-tone passages *ipso facto* can define no key. Under the whole-tone surface, though, the arrival at E $\flat$  minor is firmly prepared, for the preceding two-and-a-half pages constantly reinforce the dominant seventh: B $\flat$  (bass pedal), D and G $\sharp$ /A $\flat$ . Even at the crucial cadence (bars 41–2), Debussy veils the tonality by holding it in second inversion (like the ending of 'Le Gibet'), and by chromatically splitting the 'leading-note', D, to E $\flat$  and D $\flat$ , rather than resolving it in the prosaic classical manner.

Ravel's ploy is a variant of this. Although 'Le Gibet' appears to divulge its E $\flat$  minor tonality from the outset by its key signature, the repetition of B $\flat$  and the first chord, where is the tonic chord? Where are any identifiable concords? A search soon reveals why and how this piece holds us in suspense (in keeping with its title). Ravel's tonal strategy here has two strands. The first is his constant use of appoggiaturas, a technique he later described relative to *Valses nobles*.<sup>19</sup> The first harmonic entry merely implies the piece's tonality (bar 3), leaving us waiting for the appoggiatura, F, to resolve up to G $\flat$ . Half a bar later G $\flat$  duly arrives, but the rest of the texture moves in parallel, thwarting the resolution. Each time the melody and texture return to home position (bars 4 and 5), back comes that unyielding appoggiatura, F. In bar 15 comes another chance, now with an upper A $\flat$  appoggiatura; again the subsequent parallel chord motion thwarts the resolution. This continuing quiet drama ends the piece in reverse: bar 46 returns us to the A $\flat$  appoggiatura, bar 47 resolves it to G $\flat$  but renders it ineffective by removing the rest of the tonic harmony and, when the latter returns in bar 48, the crucial voice has meanwhile continued down another degree to F. We are back where we started, and the piece fades out just as it faded in.

Example 4.8 *Gaspard de la nuit*, 'Le Gibet'

(a) Bars 6–7

(b) Bars 10–11

Ravel's second strand of tonal strategy, more Moorishly chromatic, is centred on  $F\flat$ , a semitone from the (implied) tonic and a tritone from the  $B\flat$  ostinato. Bars 6–7 emphasise both relationships, letting the  $F\flat$  bite into some of the piece's very few consonances (Example 4.8a – cf. also bar 32 of 'Scarbo').<sup>20</sup>  $F\flat$  goes on to haunt much of the piece, sometimes spelt as  $E$ , sometimes acting as a sort of 'second-degree' appoggiatura to  $F$  (as across bars 6–7 and 11–12, and then in reverse at bars 28–9). From this comes one of Ravel's subtlest coups at bars 10–11, which repeat bars 6–7 but with  $F\flat$  now added to the first chord of bar 10 (Example 4.8b). This new voice, moving in parallel with the others, results in two fleeting  $E\flat$  minor triads (bars 10–11) – but in contexts that rob the chord of its tonic value, forcing it into the role of appoggiatura to the following diminished chord. Ravel compounds this ironic reversal of classical functions by alighting for just one quaver on  $E\flat$  major – almost like a final ray of hope then dashed by the following minor and diminished chords.

Around this, like a ghost scene, unfold the motions of classical sequence. The first tonal excursion prepares a tonic cadence (via the dominant ninth at the end of bars 12, 13 and 14), only to be balked by the persistent  $A\flat$  (and  $F$ ) at bar 15. Bars 17–19 repeat the sequence a fourth higher, as if to move to the subdominant,  $A\flat$  minor, only for bar 20 to take off with other ideas above the  $A\flat$  bass resolution. Bars 35–9, as condensed recapitulation of bars 12–19, balance this by preparing implicitly a



Table 4.2 Thematic sequence of ‘Scarbo’

| Motive           | <i>a</i> | <i>a1</i> | <i>b</i> | <i>b1</i> | <i>c</i> | <i>d</i>      | <i>e</i>      |
|------------------|----------|-----------|----------|-----------|----------|---------------|---------------|
| Exposition (bb.) | 1        | 32, 110   | 52       | 65        | 80       | 94            | 121           |
| Development      | 314      | –         | 215      | –         | –        | 256, 318, 345 | 289, 303, 366 |
| Recapitulation   | 395      | 386       | 431      | 437       | 448      | –             | 477           |
| Coda             | 617      | 580       | 593      | –         | –        | –             | 586, 602      |

All motives are closely related by an abrupt rising semitone or tone, creating audible motivic continuity across transitions like bars 210–15 and 377–87. As in ‘Ondine’, development and recapitulation are so mixed that the labels above are more for convenient reference than for exact definition.

cadence to a dominant, B $\flat$  minor (Chopin’s ‘Marche funèbre?’), only to be balked again at bar 40 by our F $\flat$  that stubbornly refuses to resolve to F. On the way there, we hear the only other E $\flat$  minor triads of the whole piece, robbed again of their tonal function by the persistent bass C underneath. The whole structure is as uncompromising as the gallows, and if the analytical language above keeps veering towards the picturesque, it is because of how strongly the piece’s form acts out its story. It also gives an apt context to the strong echo of *Tristan und Isolde* at bar 12. (For more on ‘Le Gibet’, see Woodley, ‘Casadesus’s recordings of “Le Gibet” (1922 and 1951)’; Chapter 10.)

The form of ‘Scarbo’ is equally programmatic, acting out the poem’s recurring insomniac fantasy, combined with a progressive tightening of thumbscrews that gradually accelerates the piece to no less than twenty-seven times its opening speed!<sup>21</sup> Ravel’s expansive sonata form (see Table 4.2), more explicit than in ‘Ondine’ or ‘Le Gibet’, brings the piece to three powerful *Mephisto*-esque culminations, the first two a tritone apart on F $\sharp$  and C (bars 204 and 366). Only at the final one in B major (bar 563) is the tonal function of the previous two defined retrospectively (dominant and Neapolitan, or phrygian supertonic).

Those keys are carefully prepared by the second of the piece’s three main motives (Example 4.9a; bars 52–4), an idea that would unambiguously divulge the closing tonality were it not for the irritant of the mirrored semitonal appoggiaturas, G and F; if only they would resolve to F $\sharp$ ... 150 bars later, the exposition’s culmination at last achieves this resolution (Example 4.9b; bars 203–6) – only for the C $\sharp$  above it to split into C and D, restarting the process (Example 4.9c; bars 215–16). This, in turn, is finally resolved at the last climax (Example 4.9d; bars 561–3): the descending bass line picks up the same C and D as its last two notes, before resolving them this time downwards to B – only for the F $\sharp$  above to split into

Example 4.9 *Gaspard de la nuit*, 'Scarbo': motive b

- (a) bars 52–4
- (b) bars 203–6
- (c) bars 215–16
- (d) bars 561–3

(a) *un peu marqué*  
52

(b) 203

(c) *un peu marqué*  
215

(d) 561

Un peu moins vif

F and G, taking us back to where we were at bar 52. The bass approach to the final climax sums this all up: by following a complete octatonic octave descent of A–G♯–F♯–F–E♭–D–C–B, it first retraces the approach to the piece's first climax (A–G♯), continues down as if to the C of the second climax and finally sinks that extra 'dungeon step' to B.

All this can hardly have been lost on Debussy: his first book of *Préludes* makes repeated structural use of chromatic semitone splits of the type seen here in 'Scarbo', and his obvious harmonic fascination with *Gaspard* emerges equally from the quotation of bars 24–5 of 'Le Gibet' in bars 29–32 of the fourth of his *Six épigraphes antiques* of 1914.<sup>22</sup> Stravinsky's *Petrushka*, too, resonates with both the first and last page of 'Scarbo', in the former case via Ravel's explicit intention for the D♯ tremolandos to sound 'comme un tambour' – 'like a drum'.<sup>23</sup> (Anyone in doubt about Ravel's early impact on Stravinsky need only compare the end of 'Kashchei's dance' from *L'Oiseau de feu* with the end of *Rapsodie espagnole*.)

Another essential feature of 'Scarbo' is its mix of waltz and flamenco (most dramatic from bar 314). A stormier cousin of the fourth of the *Valses nobles*, the waltz in 'Scarbo' launches itself from the top of the second page (the 'quelle horreur' motive), followed by the flamenco or *jota* element from bar 51 (mixing rhythms from Chabrier's *España*<sup>24</sup> and the Scherzo of Chopin's Sonata Op. 35). Recognition of this alternation (with more waltz from bar 65 and new flamenco material from bar 94) is vital, for the *jota* material, far from being a speed test for repeated notes, continues the waltz tempo, and any dislocation of tempo between them shreds Ravel's larger-scale play on speed. The link to Chabrier reaches its focus at the dominant pedal that launches the approach to the final culmination. From bar 478 onwards Ravel's left-hand figuration comes note-for-note, at the same tempo, and in one case in the same key, from the equivalent points in a *jota* and a waltz: *España* (in Chabrier's two-piano arrangement) and the 'Fête polonaise' from *Le Roi malgré lui* (in Chabrier's piano reduction).<sup>25</sup> The links are so thematically and structurally close that Chabrier's excellent metronome indications in his two-piano version of *España* can work just as usefully for 'Scarbo' – 80 as the basic tempo (the first page's quaver and the second page's bar), with a slight kick up to 88 for the culminating crescendo (bar 477 onwards).

## Operatic and orchestral resonances

The dark-edged operatic humour that can then emerge from 'Scarbo' should not surprise us, especially given Ravel's love of Mozart. Even if *L'Enfant et les sortilèges* postdates all of Ravel's solo piano music, knowing

his operas is arguably as vital to playing his piano music as the equivalent in Mozart. ‘Scarbo’ opens and ends with a clear case, the rising semitone-plus-fifth that dominates the second half of *L’Enfant*, from the Cats’ duet (Fig. 97) onwards (to the supremely apt words ‘Où es-tu?’ at the start of the ‘Valse américaine’: Fig. 107). Among many other examples, both *A la manière* pieces of 1913 come to life as miniature operatic scenes; in ‘Laideronnette’ of *Ma Mère l’Oye* (from bar 33) we can almost hear Arithmétique from *L’Enfant*, jabbering ‘Quatre et quat dix-huit!’ (Figs. 80 and 93); and the ravishing Garden Scene of *L’Enfant* (Fig. 100 onwards) is the key to several of the *Valses nobles et sentimentales* – notably the seventh, the only one lacking a clear tempo marking, for which the closely related ‘Danse des Rainettes’ (Fig. 113 and Fig. 123<sup>–5</sup>) provides the excellent indication of ♩ = 208.

Reference between *L’Enfant* and the *Valses nobles* (acknowledging also the orchestral score and balletic scenario, retitled *Adélaïde, ou Le Langage des fleurs*), has another use, for, unlike even *Gaspard* – which almost plays itself from the score once its technical hurdles are mastered – the *Valses nobles* require a high degree of operatic and orchestral voicing, well beyond what a score can indicate.<sup>26</sup>

### Sophistication in *Le Tombeau de Couperin*

Probably the most vital orchestration for pianists is that of the ‘Forlane’ in *Le Tombeau de Couperin*, the suite in classical style (‘Prélude’, ‘Fugue’, ‘Forlane’, ‘Rigaudon’, ‘Menuet’ and ‘Toccata’) composed across 1914–17, then partly orchestrated in 1919 and subsequently produced as a ballet. Alfred Cortot went so far as to argue that this music found its definitive form only in Ravel’s orchestral score,<sup>27</sup> and comparison of the two (structurally identical) versions of the ‘Forlane’ quickly reveals the orchestral score’s more accurate indication of breathing, articulation and sometimes voicing, by means of added rests and shorter slurs. A more specific warning for performers concerns the metronome indications commonly printed in *Le Tombeau*: absent from early prints, they were apparently added after Ravel’s death by Marguerite Long.<sup>28</sup> Besides two obviously over-slow indications (for the ‘Fugue’ with its subtle glint of jazz, and the ‘Menuet’), her very fast indication for the ‘Toccata’ risks over-stressing both it and the performer, especially at the low dynamics which Ravel indicates for most of the piece.<sup>29</sup>

An interesting perspective here comes from one of the most popular toccatas in French piano repertoire of the time, Daquin’s ‘Le Coucou’. Besides the shared key of E minor, ‘Le Coucou’ provides a natural tempo (at the piano) that carries effortlessly across to Ravel’s ‘Toccata’. Extending

the link to Debussy broadens this perspective farther, for not only is E minor the key of one of Debussy's most popular toccatas, 'Jardins sous la pluie', but the opening bar of his 'Toccata' in *Pour le piano* also strongly recalls a repeated cadential gesture in 'Le Coucou' (bar 23). Incidentally, surviving second proofs of *Le Tombeau* (in the archives of Durand, Paris) show that the 'Prélude' was once entitled 'Prologue', that Ravel originally supplied then removed some fingering (shades of Debussy's *Etudes*), and that several of the tempo indications were added only at proof stage.

The apparently classical outlines of *Le Tombeau* form only a thin veil over its compositional sophistication. Is the opening key of the 'Prélude' E minor or G major? Bars 1 and 3 suggest the former, bars 2 and 4 the latter. The first-time repeat bars opt clearly for G major, yet the piece ends in E minor. The rest of *Le Tombeau* plays on this dichotomy (notably the opening of the 'Toccata'), resolving it only with the final triumphant E major of the 'Toccata'. (The orchestral suite adds a further twist by ending in C with the 'Rigaudon', retrospectively giving a different cadential value to the E minor and G major of the preceding movements.) Ravel matches this with similar plays on metre. If bars 1–2 of the 'Prélude' obviously follow a strong–weak or antecedent–consequent sequence, repeated in bars 3–4, what about the equivalent-looking bars 11–12? The *agent provocateur* here is bars 9–10: by attaching itself thematically to bars 7–8, bar 9 throws bar 10 (a reprise of bar 2) into an antecedent role towards bar 11 (a reprise of bar 1), and similarly bar 12 towards bar 13. The Suite is full of such touches, like the feint treble entry at bar 43 of the 'Fugue' that makes the real entry a bar later sound like a consequent, and this knife-edge ambiguity plays a constant part in holding our rhythmic and structural interest.

This whole technique involves a wider context. In 1975, Brian Newbould showed how the 'Pantom' of Ravel's Piano Trio follows the structure of Malayan *pantun* poetry.<sup>30</sup> Many French poets were attracted to this genre; a famous example is Baudelaire's 'Harmonie du soir' (a poem best known to pianists for its third line, 'Les sons et les parfums tournent dans l'air du soir'). The basis of a *pantun* poem is two-fold: each four-line stanza is made up of two contrasted couplets, and the second and fourth line of each stanza reappear as the first and third of the next stanza. The poem thus maintains two alternating strands of narrative (like Ravel's 'Pantom'), and the two 'consequent' lines (lines 2 and 4) of each stanza become antecedent lines in the next stanza, in a constantly dancing form. Ravel's technique in *Le Tombeau* consistently follows this second aspect.<sup>31</sup> (Additionally, a *pantun* often starts and ends with the same line – though not 'Harmonie du soir' – and this invites comparison with the major seventh that starts and ends *Jeux d'eau*, the mirrored start and close of

‘Ondine’ or ‘Le Gibet,’ or the identical start and close of the ‘Rigaudon’ in *Le Tombeau* and the finale of the Concerto in G.)

At first glance the eight bars that open the ‘Menuet’ of *Le Tombeau* seem a clear antecedent–consequent 4 + 4 sequence. But there is a cadential finality hidden in bar 4 that reverses the classical norm (in which the consequent provides the conclusive cadence, as in bars 1–8 of Mozart’s ‘Jupiter’ Symphony). Ravel plays on this at the close of the opening section of the ‘Menuet’ (bars 29–32), where the melody of bars 1–4 accordingly returns, but now as a closing consequent. As the recapitulation moves into the coda (bars 101–6), Ravel follows this through by quoting the antecedent–consequent melodic line of bars 1–6, but in a consequent–antecedent setting, thus gracefully carrying the music over the join into the coda.

The recapitulation of the ‘Menuet’ uses the same technique on a larger scale, by combining the last line of the ‘Musette’ (as consequent) with the opening melodic eight bars of the ‘Menuet’ (as structural antecedent). When Ravel did this almost twenty years earlier at the same point in the *Menuet antique*, the device was essentially a feint, heralding the obvious recapitulation; here the combined melodies are a structural *fait accompli*: we subsequently arrive, as we think, at the moment of recapitulation (bar 81), only to discover that we are already eight bars into it.

The ‘Forlane’, notated throughout in 6/8 metre, applies the same play within the bar, by opening with a first beat that can equally be heard as an upbeat to the accented dissonance on the half-bar; the phrasing and accentuation of the next seven bars maintain this ambiguity. Seven bars from the end (bar 156ff.), Ravel makes the point explicit by recapitulating the piece’s opening beat as a notated anacrusis; in between he exploits the ambiguity in ways that create a constant rhythmic intrigue. Ravel’s precedent here is the Couperin ‘Forlane’ that he transcribed, whose strong beat sounds throughout on the half-bar (for further comparison of these forlanes, see Kelly, ‘Musical engagement with the past’: Chapter 1). Ravel’s ‘Forlane’ does the same throughout the first and second episodes (bars 29–54 and 63–95, counting first- and second-time repeat bars consecutively, as in the Peters Edition).

Between those two episodes comes an abbreviated ritornello, consisting of the metrically ambiguous bars 1–8 of the ‘Forlane’ with one playful addition: halfway through the ritornello (bar 59) Ravel points up its inherent metrical ambiguity by adding an imitative left-hand entry at the half-bar. All this allows the metrical momentum of the preceding first episode (the strong beat sounding on the half-bar) to carry itself through effortlessly to the second episode. The second episode promptly adds variety by completing its short first part with a hemiola effect of two sounding units of 9/8 metre from bar 67, beat 2, through to bar 70, beat 1 (Example 4.10a). This

Example 4.10 *Le Tombeau de Couperin*, 'Forlane': metrical sophistication  
 (a) bars 66–71

(b) bars 92–101

## Example 4.10 (cont.)

(c) bars 155–62

decorative effect reveals its structural purpose at the end of the episode (Example 4.10b; bars 92–101): the momentum of the recapitulated hemiola now continues over into the ritornello, both bridging the transition and swinging the music back into synchronisation with the barline. Some pleasing ambiguity continues, not least because the music allows a continuing impression of 9/8 metre (from bar 92, beat 2) through to the left hand's imitative entry four bars later (bar 100). Thereafter, the music settles back audibly into 6/8, though without defining clearly which is the strong beat. Ravel lets this ambiguity persist through the final episode and coda, until the piece's last six bars (bars 157–62) finally settle the matter – by sounding clearly in 9/8 (Example 4.10c).

The 'Rigaudon' leads us a different dance again by alternating phrases of varying lengths with its opening two-bar cadential gesture. Everything sounds unpredictably irregular, and only a counting of bars reveals that, in fact, the larger bar groupings all conform to multiples of sixteen or twelve. The piece's central section varies this again, by giving left and right hand different bar groupings (the left hand clearly starts with two 4 + 4 + 8 groups, but not the right hand). The right hand's fourth bar in this section, for example, sounds equally as an antecedent to its fifth bar; its twelfth bar audibly links sequentially through to three bars later, though the starting point of the sequence is indeterminable; and on the heels of that sequence comes a pair of hemiola-like sounding 3/4 metrical units (bars 50–2). Most surprisingly, the totality adds up to an innocent-looking sixteen-bar



group (followed by another one with a different internal structure again). Subtlest of all, it proves impossible to divide each sixteen-bar group into viable smaller groupings.

These  $3/4$  metrical patterns can be compared to *pantun* in two ways. Firstly, they turn weak beats (consequents) into perceived strong ones (antecedents) and vice versa. Secondly, the embedded  $3/4$  patterns in the  $2/4$  background parallel the the three-line repetitions embedded in the couplet sequence of a *pantun*. The closest musical ancestor, though, is Chabrier, whose piano piece ‘Tourbillon’ runs in constant four- and eight-bar groups disrupted internally by hemiolas and other more irregular metrical divisions. Equally pertinent, Chabrier’s ‘Danse villageoise’ (from the same collection of *Pièces pittoresques*) opens with an eleven-bar phrase that is indivisible into viable smaller elements (for example, bars 1–4 initially suggest a four-bar group until bar 5 retrospectively turns bar 4 into its antecedent).

### Motivic and geometric extensions

A related rhythmic play informs the earlier ‘Alborada del gracioso’ from *Miroirs*, and helps explain an intriguing anecdote, according to which Ravel once showed Maurice Delage how the piece’s structure was ‘as strict as that of a Bach fugue’.<sup>32</sup> The piece’s first section opens out in three expanding paragraphs, bars 1–11, 12–29 and 30–70. Motive *a* begins the piece and almost immediately (at bar 5) forms an antecedent to the consequent motive *b* (Example 4.11a). Motive *b* then opens paragraph two as antecedent to the consequent *c* (Example 4.11b), which accordingly opens paragraph three as antecedent to the consequent *d* (Example 4.11c). Motive *d* in turn reappears immediately after the piece’s central section, as an antecedent to launch the recapitulation at bar 166 (Example 4.11d). This enchanting surprise, after several bars that lead us to expect a regular reprise in D major, is therefore built absolutely logically into the sequence.

Figure 4.1 (‘Motivic appearances’) shows the ingenious geometry of this sequence. The initial planting of motives as consequents (or as a structural close at bar 22), measured by constant completed units of  $6/8$  metre, sets in motion a sequence of numbers (5, 8, 13 and 21) that follow the Fibonacci series, as a close approximation of Golden Section.<sup>33</sup> The return of the motives as antecedents then sets off the same proportional sequence on a larger scale, following the numbers of the related Lucas series (11, 18, 29, etc.), and also involving the return of motive *a* as a structural close at bar 22. In this way, the beginning of paragraph three at bar 30 divides the whole extract by Golden Section, as does the entry of the

Example 4.11 *Miroirs*, 'Alborada del gracioso': motivic development(a) Motive *a* (antecedent), bars 1, 3 (5, 7)

Assez vif  $\text{♩} = 92$

*mf* *sec les arpèges très serrés*

Motive *b* (consequent), bars 6, 8

*f*

(b) Second paragraph

Motive *b* (antecedent), bars 12, 13

*p*

Motive *c* (consequent), bar 14

(c) Third paragraph

Motive *c* (antecedent), bars 31, 32

*ff*

Motive *d* (consequent), bar 33

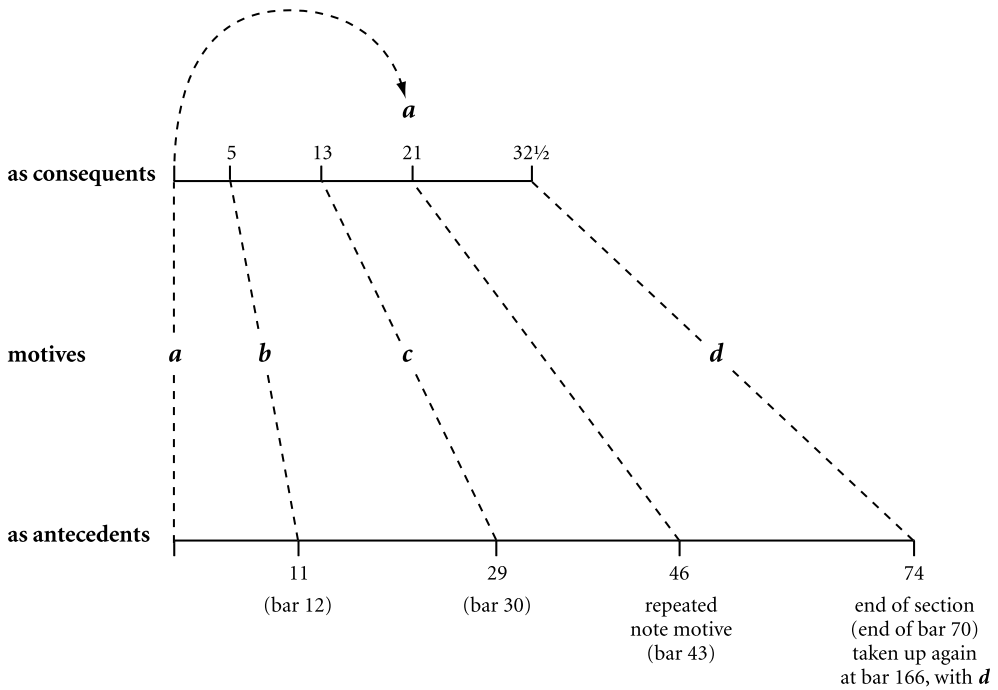
*mp*

(d) Recapitulation

Motive *d* (antecedent), bar 166

*ppp* *très sec et bien rythmé*

flamenco sub-episode at bar 43; the beginning of paragraph two at bar 12 marks a similar Golden Section (11 : 18 units) on the way to paragraph three. As it progresses, the sequence is compressed from the theoretical Lucas numbers of 47 and 76 to an actual 46 and 74 (and from a theoretical 34 to 32.5); far from invalidating the proportional logic, this makes dramatic sense of the piece's increasing urgency.<sup>34</sup> This proportional structure extends throughout the piece, and is even allowed for in Ravel's changed dimensions in the orchestral version; it also adds an interesting gloss to his repeated mention of a childhood liking for mathematics.<sup>35</sup>



Numbers refer to completed units of  $\frac{6}{8}$   
 'Fibonacci' series: 1, 2, 3, 5, 8, 13, 21, 34, 55  
 'Lucas' series: 3, 4, 7, 11, 18, 29, 47, 76

Figure 4.1 *Miroirs*, 'Alborada del gracioso': motivic appearances

How characteristic this is of Ravel's thinking can also be seen by comparison with 'Ondine' from *Gaspard*. As already seen in Table 4.1 above, motives *b1* and *b2* in 'Ondine' are consequent offshoots of *b* which promptly return as antecedents to launch new melodic waves. We begin to sense some of the ways in which Ravel, in 'Ondine', managed to spin out such a long, apparently seamless melody so resistant to cut-and-dried analysis.

### Ravel's later years

Ravel's lack of solo piano music in his last twenty years may be attributed to two main factors: firstly, his more traumatised post-war years were generally less productive than his supremely fertile first decade (characterised pianistically by *Jeux d'eau*, the *Sonatine* and *Gaspard*); secondly, he tended to focus his remaining energies on works for larger forces – of mixed

instrumentation – often including a dramatic or textual dimension: the concerted chamber music of the *Chansons madécasses*, the ballet projects of *La Valse* and *Boléro* and the operatic triumph of *L'Enfant*.

This absence of later solo piano writing prompts a brief mention of his two piano concertos composed across 1929–31. That he gave a single hand more notes to play in the Concerto for the Left Hand than both hands in the Concerto in G is no surprise; the contrasting characters of the two concertos also relate to two distinct threads of his earlier piano writing, the classical traits of *Le Tombeau* against the more romantic figurations of *Miroirs* and *Gaspard*. The rising waves of arpeggios in the first solo entry of the Concerto for the Left Hand, for example, recall 'Une barque sur l'océan' from *Miroirs* and even the early Sonata for Violin and Piano of 1897.

Pianists may note Ravel's careful beaming of the piano part at two strategic locations in the Concerto in G. In the opening page of the 'Adagio', Ravel's left-hand beaming in constant quaver pairs guards against any 'oom-pah-pah' effect (the gentle undercurrent of 6/8 metre here echoes a similar effect in Chabrier's song *Tes yeux bleus*). The other place is the first solo entry of the finale, where Ravel's beaming marks out exactly the melody the solo bassoon has to play when launching the movement's recapitulation 153 bars later – a factor that bears importantly on tempo.<sup>36</sup> This parallel – plus the four bars of introduction in each case before the solo takes off – disguises another structural coup, for although the movement's binary outline incorporates an entirely restructured second half (blending development into reprise), it still manages to divide exactly into 153 : 153 bars (at Fig. 14).<sup>37</sup> This becomes part of a larger geometry, for the finale's dimensions can be measured directly against the preceding 'Adagio', by a tempo equivalence of ♩ = 72 in the 'Adagio' to bar = 72–6 in the finale (taking Perlemuter's suggested tempo). Six bars of the finale thus correspond to one of the 'Adagio' – a suggestive figure since the finale's total of 306 bars is conveniently a multiple of six. If the total length of the finale is mirrored backwards from the end of the 'Adagio', by counting back 306 quavers or 51 bars, it takes us exactly to the main turning-point of the 'Adagio' at bar 58 (Fig. 4). Whether this was planned or fortuitous, it can do performers no harm to be aware of such a large-scale rhythm.

Vlado Perlemuter has often opined that a major reason why Ravel's piano music holds its place so well in the repertoire is its formal strength.<sup>38</sup> The more we observe the music, the more richly this observation resonates.