

A “Naked Violin” and a “Mechanical Rabbit”: Exploring Playing Relationships in Ravel’s Sonata for Violin and Cello (1922)

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1. Introduction

As much of the world was locked down during the COVID-19 pandemic of 2020, musicians began to explore new ways of making music “together”. Although unable to play in the same spaces, unable to listen and interact in real time without latency, and without sufficient audio presence or fidelity to permit the kind of sonic interweaving that is the very basis of chamber music, a panoply of new approaches emerged. As this chapter was on my desk as the pandemic hit, I was struck by the notion that Ravel might have found himself very much at home in a world where freedoms of interaction that we usually take for granted are removed. In this chapter, we will see how Ravel’s restriction of possibilities enables a special kind of performance “play”.

Among the earliest of the collaborative lockdown videos was a shortened version of Ravel’s *Boléro* (1929) made by musicians of the Orchestre National de France and posted on YouTube on 29 March 2020 (Orchestre National de France 2020).¹ The choice of *Boléro* is not mere happenstance, and many other videos of it appeared in the following weeks.² The repetition of the 16-bar theme presents an ideal platform for introducing specific players/instruments, both one by one and in groups; the clever “design” of the adjunction of instrumental colour across the piece means that enough remains intact for it to work effectively, even when truncated and without the players being able properly to listen to one another.

One could argue that what is missing in these lockdown *Boléros* is the very thing that Ravel’s design facilitates: in a live performance, the players pay special attention to the *handing over* of the musical impetus from one section to the next. (The sharing of musical impetus is an important focus in Maria Krivenski’s chapter, which explores technology-mediated music making in this volume.) This handing over of material requires the kind of listening and responding that we might expect in chamber music

¹ The whole video is under five minutes long (including the introductions from the players). The arrangement is by Didier Benetti, solo timpanist of the orchestra and also a composer.

² The constant percussion ostinato serves as an inbuilt “substitute” for the clicktrack that is usually used in multitracked performances, such as those on YouTube.

and is what most holds my attention when listening to a live performance. However, the evidence of the lockdown films indicates that Ravel has succeeded in creating a “game” for musicians in which the “rules” are so clearly established that there is sufficient inherent pleasure to be gained from participating in it, or observing it, even if certain critical aspects of its potential are left unrealised. Ravel’s own sense of the “game” or “gamble” taken in *Boléro* can be gauged from his response to conductor Paul Paray’s questioning of whether he would “like a go” during a visit to the casino in Monte Carlo: “I wrote *Boléro* and won. I’ll stick there” (Nichols 2011, p. 302).

For Ravel, musical games seem to have been fundamentally important, as set out by Vladimir Jankélévitch in his influential and provocative monograph on the composer. At the beginning of a section entitled “Challenge”, Jankélévitch writes that

Ravel’s audacity expresses itself in two ways—firstly in a liking for difficulties overcome and an obstinate search for effort, and secondly in the spirit of artifice. Roland-Manuel, who penetrated more deeply than anyone else into the secrets of Ravel’s art spoke of the “aesthetics of imposture”. It seems preferable to say “aesthetics of challenge”, for a challenge implies a *tour de force* and an iron will. This side of the challenge is both Cornelian and Stoic. Having found that beautiful things are difficult, Ravel then played at creating artificially the exceptional, thankless and paradoxical conditions which re-establish the hardness that is beauty; since he did not experience the romantic conflict between vocation and destiny, he invented, for he had no natural difficulty in expressing himself, artificial obstacles which caused him a second type of clumsiness; he fabricated for his own use gratuitous prohibitions and arbitrary orders, voluntarily impoverished his own language and tried all types of limitations, distortion and stridency in order to prove with certainty how much an artist’s effort can achieve Every composition by Ravel represents . . . a certain problem to be solved, a game in which the player voluntarily makes the rules of the game more complicated. (Jankélévitch 1959, pp. 68–69)

What kinds of games has Ravel created in the Sonata for Violin and Cello (hereafter “the Duo”), and how do we as players interact with them? One of the drivers for writing this chapter was discovering violinist Hélène Jourdan-Morhange’s *Ravel et nous*, in which she offers not only a first-hand account of Ravel as a person, but also detailed recollections of their work together on several pieces composed during the 1920s, including the Duo and the Sonata for Violin and Piano (1927)

(Jourdan-Morhange 1945).³ Unlike most 20th-century texts on music published in journals or newspapers, her book focuses closely on personal experiences in ways that feel sharply prescient to a writer in the 21st century, given the recent swerve to first-person narratives in artistic research and a broader scholarly interest in self-reflexivity and auto-ethnography.⁴

In this chapter, I aim to use some of her observations as jumping-off points for exploring ways in which Ravel's *Duo* provides a window for revealing how listening and interaction can take shape in chamber music performance. A core idea is that some of the "restrictions" typical of Ravel's conceptual and notational precision are in fact centrally important to enabling play. In absolute terms, there may be fewer freedoms for the performer in this repertoire than in much other chamber music but, as we shall see, the restrictions enable a special kind of focus on highly refined inflections of timbre and intonation, thus heightening physical and listening awareness in the moment. For me, it is this access to a heightened sensibility that constitutes the greatest pleasure in playing Ravel's music. These heights are not easily attained, and scale of recognizing and addressing the challenge is part of the pleasure of any fleeting success in grappling with it.

Jourdan-Morhange opens her chapter discussing her work with Ravel on his chamber music with the following extended "cautionary note", containing an observation by the music critic Émile Vuillermoz that sets Ravel against Debussy in a way that, by 1945, would have become something of a commonplace:

Having had the inestimable privilege to work in every detail on the *Sonata*, the *Duo* and the *Trio* with Ravel, I would like to pay tribute to his memory by indicating as faithfully as possible the wishes and preferences he expressed during the daily work on these pieces. Artists who have not been able to rehearse with the master will be grateful to me, I think, for pointing out the small errors which, from virtuoso to virtuoso, slip into performances; they risk losing the author's intentions, in addition to their integrity, [and] the velvetiness of their original freshness.

I know that each performer must make a personal contribution to the interpretation of a masterpiece, but Ravel's music is a great exception.

³ The *Sonata* for Violin and Piano is dedicated to Jourdan-Morhange, but she was not able to premiere it, as she had the *Duo*, owing to early-onset arthritis.

⁴ The growing importance of first-person narratives was captured in a conference attended by a large international audience in 2018, titled "Beyond 'mesearch': autoethnography, self-reflexivity, and personal experience as academic research in music studies" (Institute of Musical Research, Senate House, London).

As Vuillermoz has aptly written: “There are many ways of performing [d’*exécuter*] Debussy, but there is only one way of playing [de *jouer*] Ravel.”⁵

Ravel’s focus is so perfect that the slightest “nudge” of the needle disturbs the entire mechanism of the watch. In general, Ravel found that the indications written on the score were not read scrupulously enough.

—Is there a highlight? he asked, ironically, of “the bow” which lingered complacently on a voluptuous note.⁶ (Jourdan-Morhange 1945, pp. 179–80)

The word choices in Vuillermoz’s observation are interesting and important: “executing” (performing) vs. “playing”. At first glance, perhaps these choices are also surprising to a contemporary reader: the “execution” he proposes for Debussy recalls for us Stravinsky’s infamous use of the word in the last of his “Poetics” lectures in a way that is much more closely allied with what we might expect for Ravel (Stravinsky 1947b). Roy Howat, for example, contrasts Debussy’s frequent profusions of instructions (as, for example, at the start of the prelude “*Des pas sur la neige*”)⁷ with Ravel’s much more laconic approach, citing the most intense and hushed moment of “*Le gibet*” (bar 28) from *Gaspard de la nuit*, for which Ravel indicates “*sans expression*” (Howat 2009, p. 209). Howat also observes that many of Ravel’s colleagues quoted his pleas to “play my music, not interpret it” (ibid., p. 210). Although all responses to musical scores necessarily require interactions that are effectively “interpretative”, it seems clear that Ravel’s expectations, or hopes, of musicians in this regard were quite distinctive. Whereas Debussy is often *explicative*, aiming perhaps to engage us in aspects of the design process, Ravel tends towards the presentation of musical “facts” without explication, aiming perhaps more towards a process of *discovery* through

⁵ Jourdan-Morhange notes that this quote is taken from *La Revue musicale*, 1925.

⁶ Translations of all the passages quoted from Jourdan-Morhange’s book in this chapter are mine. “Ayant eu l’inestimable privilège de travailler dans leurs moindres détails la *Sonate*, le *Duo* et le *Trio* avec Ravel, je voudrais rendre hommage à sa mémoire en indiquant le plus fidèlement possible les volontés et les préférences qu’il exprima pendant le travail quotidien de ces morceaux. Les artistes qui n’ont pu répéter avec le maître me sauront gré, je pense, de leur signaler les petites erreurs qui, de virtuoses en virtuoses, se glissent dans les interprétations; elles risquent de faire perdre aux intentions de l’auteur, outre leur intégrité, le velouté de leur fraîcheur première.

Je sais que chaque exécutant doit apporter sa contribution personnelle à l’interprétation d’un chef-d’œuvre, mais la musique de Ravel est une grande exception. Comme l’a si justement écrit Vuillermoz: «Il y a plusieurs façons d’exécuter Debussy; il n’y en a qu’une de jouer du Ravel».

La mise au point chez Ravel est si parfaite que le moindre «coup de pouce» à l’aiguille dérange tout le mécanisme de la montre. De façon générale, Ravel trouvait qu’on ne lisait pas assez scrupuleusement les indications écrites sur la partition.

—Y a-t-il un point d’orgue? demandait-il, ironique, à «l’archet» qui s’attardait avec complaisance sur la note voluptueuse.»

⁷ The heading *Triste et lent* is followed by the following text accompanying the left-hand ostinato: “(Ce rythme doit avoir la valeur sonore d’un fond de paysage triste et glacé)”. As Howat notes, “even the parentheses are a nuance in themselves, conveying an added aura of intimacy” (Howat 2009, p. 209).

“simply doing” what it says. Although it is possible that the audible “outcomes” of some of their instructions might have a lot in common, the process is critically different.

In a 21st-century context, it is possibly easier to see how Debussy is encouraging a kind of “co-creativity”—triggering the imagination of performers as they listen to and shape the music—than it is for Ravel. However, if I propose that Vuillermoz’s “one way of playing Ravel” might be able to produce more than a single kind of musical outcome, and that Ravel’s restriction of possibility establishes a kind of mindset for the *playing* of his games rather than strictly controlling the results, we may begin to draw out what is special about his games, why performers love playing them, and why Jourdan-Morhange might have thought it would be useful to share some of her experiences for other musicians. As Jankélévitch suggests above, the “game” does not belong only to the composer.

2. Ravel’s Sonata for Violin and Cello

[In] the *Sonate en Duo* for violin and cello, [there is] tortuous badinage in which two voices in counterpoint pursue each other, catch each other and lose each other again, without the support of any accompaniment; here, Ravel undertakes to “shape a whole symphony using only his thumb and first finger”,⁸ and he compensates for the rarity of the notes and the poverty of the chords by the mercurial mobility of the two parts which manage to be everywhere at the same time. (Jankélévitch 1959, p. 70)

Jankélévitch uses several phrases here that have potentially negative connotations: the *poverty* of the chords, the notion of a *tortuous* badinage, and the implication of the *absence of the support* of an accompaniment. Here, the piece is presented as an example of Ravel’s compositional virtuosity in response to a self-imposed challenge. In contrast, the challenges Jourdan-Morhange identifies are both personal and instrumental, and belong “behind the scenes”. Hers is, of course, the perspective of a player rather than a philosopher, and perhaps she would have agreed with Jankélévitch in grouping the sonata with *Tzigane* and the two piano concertos as pieces “dedicated to the glorification of display” (Jankélévitch 1959, p. 86):

A rather rebarbative character at first meeting, the *Duo* hides its treasures, but it treats the violin rather harshly. The composer permits the instrument no charming, facile seduction: it is naked, the poor violin! Stripped of its halo of vibrations it seems stripped of decent attire. The “pure” violin is

⁸ (Vuillermoz 1923, p. 160).

not pleasant, it must hide the hardness of its open strings and the hollow of its chest under make-up; with the assistance of the artist it becomes tender or passionate . . . Dare I call the violin a great courtesan?

In the *Trio* Ravel gave the violin the most cat-like manner, here he wanted it to be vindictive; whereas the cello is demonic. Ravel, who loved challenges, assigned it the most “tenorising” tessitura, and our poor cello climbs the treble scales like a little squirrel . . .

But all of this is the secret behind the scenes—good work should give the impression of ease, of gay abandon. (Jourdan-Morhange 1945, pp. 187–88)⁹

Given the sophistication, the difficulty, and the technical “finish” of the instrumental writing in the Duo—and the overriding need for the “impression of ease”—Jourdan-Morhange’s characterisation of the violin as “naked” is worth exploring in detail. Why does this piece feel exposed, and what is being exposed? If the violin—the “instrument”—has been stripped of its clothing, or its make-up, what does this mean for the player?

Before attempting some answers to these questions, it is helpful to place the Duo in context.

The first movement of the Duo appeared in a collection of pieces published as part of a special Debussy memorial edition of *La Revue musicale* (1920). Whereas Stravinsky’s offering¹⁰ can be seen as a homage to Debussy’s frequent use of juxtaposition and intercutting of structural layers, Ravel’s Duo movement seems to point specifically to a short ostinato at the end of the second movement of Debussy’s String Quartet (Debussy 1894) (Example 1). The Debussy connection is potentially revealing here. The picking out of this little ostinato is possibly a nod to Debussy’s extraordinary and influential handling of repetition in that movement, which clearly prefigures some of Ravel’s own music. Debussy’s Quartet was also unquestionably a

⁹ “Personnage un peu rébarbatif à la première rencontre, le *Duo* cache des trésors, mais il traite le violon assez durement. L’auteur ne lui permet aucune séduction au charme facile; il est nu, le pauvre violon! Dépouillé de son halo de vibrations, il semble dépouillé de ses décents atours. Le violon pur n’est pas plaisant, il lui faut cacher sous des fards la dureté de ses cordes à vide et le creux de sa poitrine; avec le secours de l’artiste il devient tendre ou passionné . . . Oserai-je traiter le violon de grande courtisane? Ravel, qui dans le *Trio* a su lui donner les manières les plus chattes, a voulu qu’il demeurât, ici, vindicatif; quant au violoncelle, il est démoniaque. Ravel, qui aimait les gageures, lui a assigné les tessitures les plus «ténorisantes», et notre pauvre violoncelle, de monter à l’échelle de l’aigu comme un petit écureuil. . .

Mais, tout cela, c’est le secret des coulisses, l’œuvre bien mise au point doit donner l’impression de facilité, de gaie désinvolture.

¹⁰ The chorale that concludes the *Symphonies d’instruments à vent* (Stravinsky 1947a) in a version for piano.

model for Ravel’s Quartet (Ravel 1905b).¹¹ Perhaps more significantly, when the Duo was published in full in 1922, as the *Sonate pour violon et violoncelle* (and dedicated to the memory of Debussy), the choice of “Sonata” as a title seems to point specifically to Debussy’s late music and his unfinished set of six sonatas for some rather recondite combinations: Debussy’s violin sonata was originally to have included a cor anglais, and he had projected sonatas for “oboe, horn and harpsichord”, and “trumpet, clarinet, bassoon and piano”, as well as a large “Concert”.¹²

Example 1. Debussy String Quartet (Debussy 1894) ii, bb. 163–168, Éditions Durand.

An especially prescient precursor for Ravel’s Sonata for Violin and Piano (Ravel 1927) can be found in Debussy’s Cello Sonata (1915), which is the first of the canonic string-piano sonatas to almost completely eschew shared musical material in the instrumental dialogue. Debussy gives very different music to the cello and piano

¹¹ The music critic Pierre Lalo, for example, (admittedly no supporter of Ravel) commented on the “incredible resemblance” between the two quartets in an early review (Orenstein [1975] 1991, pp. 39–40).

¹² Debussy’s autograph list of the proposed set is held in the Bibliothèque nationale: F-Pn, Rés. Vmc Ms 51.

right from the beginning, and although Ravel begins more traditionally in the Sonata for Violin and Piano, with the instruments exchanging material (as they appear to do in the Duo), the recapitulation of the first movement leaves the piano to do all of the thematic work on its own, freeing the violin to produce a long cantilena, unfolding from the bottom of the instrument gradually to its high treble. This melody is beautifully prefigured in the piano's bass before the recapitulation "proper" begins with the arrival of the tonic, at which point the melody passes to the violin.¹³ For our understanding of the Duo, what is important to register is a very specific kind of sensitivity to instrumental character, played out in the assignation of *roles*.¹⁴

The version of the Duo's first movement published in 1920 (Example 2) reappears note for note in the final version of 1922, but this belies some important changes. Most of these are added instrumental details—the opening cello harmonic and violin up-bow, for example—but there is also a new large-scale acceleration and deceleration through the central part of the movement, returning to the opening tempo at the recapitulation, which is markedly different in expressive tenor in ways that recall Debussy's practice.¹⁵ (Performers may find it helpful to note that the presence of the "*expressif*" indication for the reappearance of the cello's opening melody in the recapitulation was already in place in 1920.) However, the most telling change is that a radical decision was made to present two quite different parts rather than a shared performance score.¹⁶ Kodály's Duo for the same instruments (written in 1918 but not published until 1922), typically reinforces the traditional hierarchy of the parts by presenting the violin above the cello in both instrumental parts, although the engraver has gone to considerable effort to produce small versions of the "second part" in each case (Kodály 1922). Ravel's Duo, by contrast, presents two very different parts with the "other" line *above* the main staff in both cases—and in smaller print.

¹³ This "handover" is very rarely managed as a quasi-seamless transition, and I hope the observations on gameplay later in this chapter might encourage further exploration of the possibilities here.

¹⁴ It seems relatively common today to assume that the violin-cello duo was something a little unusual. In fact, there are well over 400 published examples from the late 18th and early 19th centuries, with Pleyel and Reicha making particularly important contributions, alongside a smaller number from great virtuosos, including Léonard, Romberg, Servais, and Vieuxtemps. However, Ravel's Duo radically reinvents the relationship between the violin and the cello.

¹⁵ Debussy was clearly attracted to Chopin's idiosyncratic handling of sonata forms, as, for example, in the first movement of the Cello Sonata op. 65, in which the harmonic and thematic elements of the recapitulation are not aligned. In *Monsieur Croche the Dilettante Hater*, he writes: "Chopin's nervous temperament was ill-adapted to the endurance needed for the construction of a sonata: he made elaborate 'first drafts'. Yet we may say that Chopin inaugurated a special method of treating this form, not to mention the charming artistry which he devised in this connection. He was fertile in ideas, which he often invested without demanding that hundred percent on the transaction, which is the brightest halo of some of our Masters" (Debussy [1921] 1962, pp. 6–7).

¹⁶ This form of presentation is exclusive to the final published version. Manuscript sources are all laid out traditionally: violin staff on top of cello staff, and both parts the same size. See Bärenreiter BA9417 (2013) for a detailed discussion of sources.

The implication is clear: the traditional registral placement of the two instruments should not be read as indicating their musical relationship or hierarchy—or role. The opening of the violin part, which contains the more unusual presentation, is shown in Example 3. We begin to see here what Jankélévitch is pointing towards by noting the absence of the “support” of an accompaniment, and the “mercurial mobility” of the parts.

Duo pour Violon et Violoncelle

Allegro ♩ = 120

VIOLON

VIOLONCELLE

sur re

Example 2. Ravel *Duo pour Violon et Violoncelle* (Ravel 1920) bb. 1–15, *La Revue musicale*.

A la mémoire de Claude Debussy

SONATE

pour Violon et Violoncelle

VIOLON I MAURICE RAVEL

Allegro. ♩ = 120

VIOLONCELLE

VIOLON

sur Ré

1

Example 3. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) i, bb. 1–24 (violin part), Éditions Durand.

Early in Ravel’s life, his friend the poet Tristan Klingsor had noted that “This ambitious dreamer liked to give an initial impression of being occupied with the surface of things” (Nichols 1987, p. 13), recalling perhaps Oscar Wilde’s *Dorian Gray*:

It is only shallow people who do not judge by appearances. The true mystery of the world is the visible, not the invisible. (Wilde 1890)

At a “superficial” level, Ravel often makes use of perhaps the most obvious instrumental feature of the violin–cello relationship: the cello can play every note the violin can—so material is frequently shared—but the cello can also play in places the violin cannot, so some material can never be shared. Ravel’s recognition of what can be shared is coupled with an exceptional level of compositional artifice in relation to open strings, shared resonances and harmonics that can be seen as a *revelation* of “surface”, or perhaps the kind of “medium specificity” that the modernist art critic Clement Greenberg and Enlightenment polymath Gotthold Lessing might have advocated¹⁷ (Greenberg 1960 and Lessing 1984).

Ravel’s “ear” for instrumental colour is well known. Jourdan-Morhange recounts a telling anecdote that foreshadows my discussion below:

A single note [in the *Berceuse sur le nom de Fauré*] had “caught” him in passing and he said to me:

—How do you get a G-string sonority on the high *f* [*f*¹?] on the *chanterelle* [E-string]?

And I could have massacred the opening of the *Berceuse* without him noticing; at each new hearing he waited for the “note-demon” which represented for him the pinnacle of happiness: the revelation of an unknown sonority!¹⁸ (Jourdan-Morhange 1945, p. 183)

In writing for these two instruments in the Duo, Ravel appears to have seized on the idea of using the two instruments’ open strings as the starting point for the design of the whole piece. The first movement begins with the resonance of the open A- and E-strings of the violin (coupled with the cello’s natural harmonics at the same pitches) and works its way up and down the open strings of both instruments. The first and third movements end with harmonics: a high A-major ending in movement i, and a low modal ending with a bare *a-e*¹ fifth in movement iii. The second and

¹⁷ The pairing of these two figures indicates that the notion of “medium specificity” has a long history. Lessing’s writing concerns the interpretation of the “Laocoön”, a famous Hellenistic sculpture (c. 1st century BCE).

¹⁸ “Une seule note l’avait «accroché» au passage et il me disait:

—Comment faites-vous pour avoir une sonorité de quatrième corde sur ce fa aigu de la chanterelle?

Et j’aurais pu massacrer le début de la *Berceuse* sans qu’il s’en aperçût; uniquement, à chaque nouvelle audition, il attendait la note-démon qui représentait pour lui le summum de la félicité: la révélation d’une sonorité inconnue!”

fourth movements end with the cello's low C providing the bass: clearly C-major at the end of movement iv, but rather less conclusive in the "surprise" ending to movement ii. In fact, the more one looks, the more obvious it becomes that the open strings provide the "frame" almost everywhere, and that Ravel inflects them with major/minor shadings (drawing on the Debussy ostinato) and other chromatic/bitonal passages to provide tonal and timbral contrast. I find being able to make use of all of these open sonorities strangely thrilling and exciting: they allow a kind of *immediate* contact with the instrument that is rarely extended for so long. This sense of immediacy comes from the need to respond much more directly to the instrument itself because the flesh of the left hand cannot be used to help "shape" the sound.

The cross-resonances of the fifth-tuned strings of the violin family are a fundamental part of the "raw" sound of these instruments, and it seems more than likely that it is their wide use here that lies at the heart of Jourdan-Morhange's observation that the violin is "naked" in the Duo. Like most string players, I was taught from an early age to find ways of avoiding open strings—except in special cases—because of the "harder" sound they produce, and the non-availability of left-hand "tools" (vibrato principally, but also point of contact with the flesh/bone of the fingers) for blending these harder colours with other notes. In high-level string playing, open strings can find a place almost everywhere, of course (as they do in historically informed performance practice), but balancing them with the surrounding material and developing a "knack" for using the different colours are crucial. This is where the "nakedness" turns towards the player, perhaps, rather than the instrument. Generic expressive tools ("clothing" or "make-up", in Jourdan-Morhange's language) cannot be used in melodic material around open strings without creating contrasts that could obstruct the melodic flow, so the player's expressive arsenal is sharply exposed.

The complex sympathetic resonances of the open strings with stopped pitches across the entire range provide an important basis for the "innate" sound of the instruments in the violin family. This is especially the case for the cello, because of the freer vibration of the lower/longer strings, made more palpable by the fact that many of the sympathetic vibrations are clearly visible at close range. (For example, playing a *c* on the G-string causes the C-string to vibrate visibly in two parts, as if it had been touched at the second harmonic.) It is perhaps surprising that we need to go back to earlier writings on string pedagogy to find this discussed in detail. The 20th-century preference for continuous vibrato has possibly obstructed players' awareness of the significance of these sympathetic vibrations and it has been less discussed in recent years, except, perhaps, in relation to microtonality (Benjamin 2019). Jean-Louis Duport's *Essai sur le doigté du violoncelle, et sur la conduit de l'archet*—the first core text for modern cello playing—has an extended chapter on "vibrations and their

coalition" (Duport 1852). It begins with a claim that understanding these is central to producing a "true" sound:

The subject of this chapter is, I fear, beyond my powers; for, in order to treat it fully, a knowledge of natural philosophy and mathematics is required, while I simply understand music. But so thoroughly convinced am I, that an acquaintance with the relation existing between the vibrations is necessary *for obtaining a true intonation and producing a pure tone* [emphasis mine], that I shall state what I have learned through a long familiarity with the four strings of the Violoncello and endeavour to demonstrate, or rather, to make evident to anyone who may place his fingers on that instrument, whether the sounds he produces are true or false. (Duport 1852, p. 134)

To produce these resonances perceptibly, it is interesting to note the evenness the production must be given according to Duport (Example 4).¹⁹

The beginning of the Duo appears, on the surface, to be a typical "my turn–your turn" chamber music dialogue, but the relationship between the open string and harmonic colours, in the first statement in particular, points to a conception that the two parts work *almost as if they were one instrument*, assaying a material that gradually opens itself up to reveal different constituents.²⁰ The opening a^1 – e^2 pairing across the two instruments allows a curious blending, despite the distinction of roles, and this exerts a provocative power in its closing down of certain instrumental possibilities—which are then opened up, by contrast, in the chromatic passages that appear as episodes. Jourdan-Morhange points to the challenges of balancing the different sonorities of the two instruments, which she curiously characterises as "tenor" and "bass":

In general, Ravel never found the arabesque accompaniments of the cello sufficiently "projected" [*en dehors*]: the cello, always tempted to accompany, does not realise, in fact, that its modesty is detrimental to the whole if it attenuates the harmonies which most often form the pillars of the building. (Jourdan-Morhange 1945, p. 182)

In the first *Allegro*, the violin first of all accompanies; its sound must remain "within" [*en dedans*] (remember that it sounds more than the cello, even in

¹⁹ The notation here assumes the practice of the period of playing these notes an octave lower than notated.

²⁰ For a player familiar with Debussy's String Quartet, there is also a sense that the beginning is not *ab initio*, but the picking up of a thread from somewhere else (the ostinato discussed above, slightly varied).

piano [dynamics]) to leave the cello the ability to present the theme without emphasis.²¹ (ibid., p. 185)

The exposition's transpositions of the ostinato follow the pattern ea, ad, dg, gc—specifically picking up all of the open strings across the two instruments. The recapitulation goes one step further, adding a new modal inflection to the reprise of the opening to include an accompaniment on all four of the violin's open strings, with a brief unison between the two instruments on the violin's open *g* to effect the handover.²² The chromatic insertions between these sections provide a kind of colour dialogue with the open-string pillars of the structure.

It would be possible to build a detailed picture of the whole piece showing the ways in which Ravel uses the natural resources of the instruments as the core elements of his structural design. In this chapter, I focus instead on the kinds of gameplay that some of these compositional decisions open up for the players.

In my chamber music teaching at the Royal Academy of Music, I find it useful to distinguish between two different kinds of “listening”. I call these “monitoring”, which is a kind of checking or confirmation that uses relatively little mental processing power but needs to be distributed quite widely, and “actual listening”, which demands much more mental attention and is alive to colour and the potential for volatility in a quite different way. The need for the distinction emerged from improvisation classes I taught for undergraduates, mostly with no prior experience in improvisation, from the mid-1990s to the early 2010s. In these classes, it became clear that identifying different kinds of listening was essential to help musicians find ways of generating transitions to move from one note, section, or grouping to another. One could argue that part of the “secret” to effective chamber music making lies in developing strategies for distributing these two modes of attention. It seems fundamentally impossible to listen to everything, which raises the question of how to decide *where* to listen. I have written elsewhere about chamber music listening strategies, and the potentially central role of the instrument in this process (Heyde 2019), but it seems that Ravel activates some very specific games in the Duo, where “listening” and

²¹ “En général, Ravel ne trouvait jamais assez «en dehors» les accompagnements en arabesques du violoncelle: celui-ci, toujours tenté d’accompagner, ne se rend pas compte, en effet, que sa modestie porte préjudice à l’ensemble s’il atténue les harmonies qui forment le plus souvent les piliers de l’édifice Dans le premier *Allegro*, le violon tout d’abord accompagne; sa sonorité doit rester «en dedans» (ne pas oublier qu’il sonne plus que le violoncelle, même dans le *piano*) pour laisser au violoncelle la faculté de présenter le thème sans emphase.”

²² Although he does not even mention open strings, Elliott Antokoletz largely shares my reading and observes that the opening cello theme “initially belongs exclusively to the anhemitonic pentatonic framework (A–C–D–E–G)”; he later adds that the cyclic interval content is extended in the ostinato (at the recapitulation) to C–G–D–A–E, and that the exposition's transpositions of the ostinato follow the pattern EA, AD, DG, GC (Antokoletz 2011).

“monitoring” must be intermixed with a kind of predictive imagination. This need for prediction is perhaps why it feels more like gameplay than a lot of other chamber music.

Here follow several scales. By playing that of G, on the second string, we may observe all the sounds which are susceptible of coalition of vibration .

SCA L E
of G Major
on the 2^d String .

Fingering .

3 Resonances . 2 Reson . 1 Reson : 2 Reson : 2 Reson : 2 Reson : 1 Reson : 3 Reson :

SCA L E
of C Major
on the 1st String .

Fingering .

2 Resonances : 3 Reson : 2 Reson : 1 Reson : 3 Reson : 2 Reson : 2 Reson : 2 Reson :

SCA L E
of D Major
on the 1st String .

Fingering .

3 Resonances . 2 Reson : 1 Reson : 3 Reson : 2 Reson : 2 Reson : 1 Reson : 3 Reson :

SCA L E
of G Major
on the 1st String .

Fingering .

3 Resonances . 2 Reson : 2 Reson : 2 Reson : 3 Reson : 1 Reson : 2 Reson : 2 Reson :

I should not speak of the coalition of vibrations, if I regarded it merely as an object of curiosity; but I believe that a knowledge of it is of the greatest utility in acquiring a just intonation and producing a pure tone: for, if the finger be not put exactly in the right place, there will neither be a double nor a triple resonance. It is also necessary, that the string on which we play be taken with the bow in such a manner that it may vibrate very clearly and equally . To accomplish this, the bow must be drawn or pushed in a perfectly straight line, and with the greatest equality of force or lightness, or with a gradual augmentation or diminution of the pressure; for if it moves by jerks, the vibrations coming in contact with one another will lose all their clearness, and only disagreeable sounds will be obtained . It is certain that this coalition renders the sounds which it produces, more full, sonorous and agreeable; the vibrations, as it were, mutually assisting one another . Of this, I shall now endeavour to adduce an evident proof .

Example 4. Duport *Essay on the Fingering of the Violoncello* (Duport 1852), p. 142.

3. Playing Games

I have selected just a few examples from the Duo where the open strings or shared sonorities that I have identified as especially important in this piece play a critical role. In thinking about how to explain the ways in which these games work, the way my dog Margot plays in our “ball walks” up and down the woodland hill in my local country park has provided some clues. Rather than focusing on goals (catching the ball, for example), my Parson Russell Terrier loves the scramble of the chase. The different topographies of the park have prompted a natural evolution of different kinds of kicking and throwing games, each associated with its own place:

“chasing” the ball along the long paths, “finding” it in the long grass, “marking” it closely to avoid it being kicked in the tight spaces, and “running with” the ball at the same pace down the hill.²³ In all of these games, the mapping of *predicted* to *actual* events in real time is clearly the most exciting element, and if I even reach towards the ball with the thrower, she will immediately start running in the direction of the predicted throw, monitoring from the corners of her vision the arrival of the ball from the rear, and adjusting her trajectory accordingly. The timeframe for the predicted arrival is surprisingly tight, and if the ball does not appear, the brakes are applied and the game has to be reinitiated. A throw or kick that is not within the parameters that have been established (unwritten “rules”) does not count and may be ignored.

The reader is likely to be wondering at this point why or how this is relevant, and the answer goes back to Vuillermoz’s notion of “playing” rather than “performing” Ravel. It is because Ravel’s control of resource is so refined that we can engage in a kind of predictive imagination that allows us to “play” in quite specific ways. Often, we will fail, as I suggest below, but perhaps this is not as dangerous as it may sound: Lionel Messi also misses. Two elements of Roger Caillois’s definition of the essence of play in his influential *Man, Play and Games* (first published in French in 1958) are critical here. The first is that it is *uncertain*: “the course of [the activity] cannot be determined, nor the result attained beforehand, and some latitude for innovations [is] left to the player’s initiative” (Caillois [1958] 1961, p. 9). The second is that it is *governed by rules*: “under conventions that suspend ordinary laws, and for the moment establish new legislation, which alone counts” (Caillois [1958] 1961, p. 10).²⁴ Although I have selected a mid-century context, and picked out the elements of play that I see as most critical for the games Ravel enables, the notion of “rules” is critical in almost all definitions of play and is picked up in a more generic and contemporary context by Todd and King in their chapter in this volume: “Let’s Play!...” Here it is the extreme specificity of what Todd and King call “baselines” that is most interesting.

Jourdan-Morhange warns the violinist to play “within” (“*en dedans*”) at the very opening, noting that it will sound “louder” than the cello, even in a *piano* dynamic. Part of the challenge here comes from the implication of open strings in Ravel’s writing. If the violin’s a^1 and e^2 are played as open strings, there will be a brightness or “glint” to the sound, against which the cello’s opening harmonic e^2 will naturally sound more veiled and distant: rather than “loudness”, Jourdan-Morhange

²³ My dog has been profoundly deaf since birth. We have a repertoire of mutually understood signs and gestures, but I have wondered during the writing of this chapter whether the “restriction of resource” has been a factor in the evolution of our games, even though they may look to all intents and purposes like the games “any dog” would play.

²⁴ Caillois does not address musical performance in *Man, Play and Games*. The play that is explored in this chapter straddles many of the categories introduced in his classification system: *ludus*, *agon*, *alea*, *mimicry*, and *illinx* (Caillois [1958] 1961, p. 36).

is describing “presence”.²⁵ Where is the game? Firstly, the violin needs to “decide” whether to play the a^1 and e^2 as open strings after all. Even in first position, the violinist has a fourth finger to “cover” these pitches²⁶ and there is quite a natural fingering that would have the first note “open” but the e^2 stopped by the fourth finger. If this fingering were adopted, we would need to know to what extent the fingers are cautious of damping the E-string, which is free to vibrate sympathetically with the stopped e^2 *but only if it is left free—and if the stopped note is given with sufficient stability and bow travel to excite it*, as suggested by the quotation from Duport given earlier. The final g^1 of the ostinato looks as if it should be played on the D-string, and given the implication that three times as much bow length is needed for this note as for the three preceding crotchets, this will likely excite a sympathetic vibration with the open G-string at the second harmonic.²⁷

For the cellist, waiting to begin an awkward and dangerous opening,²⁸ this game allows two attempts to “catch” what is happening before you have to “get on the bus”.²⁹ Depending on the colour and volume of the various pitches in the violin’s two statements of the ostinato, the cellist’s first note might be picking up the sympathetic vibration of the E-string against a slightly vibrated fourth-finger e^2 , or it could be set *against* the glint of the open e^2 . To match that glint, the cellist might put some “top spin” on the bow (giving just a little more speed to the bow than strictly necessary, in order to bring out some upper partials and increase presence), or might instead try to establish a kind of inverse presence for the opening melody by exaggerating the *flautando* character of the harmonic and maintaining that through the line. As observed above, the relationship between ostinato and melody here raises interesting questions about figure and ground to which there are no straightforward answers. Although it is clear that the cello has the “melody” at the opening, characterizing the ostinato as an “accompaniment” (i.e., as ground to the cello’s figure) is problematic. If we take Jourdan-Morhange’s advice seriously, it seems important that the violin does not dominate the cello in the opening of the Duo, but beyond that, there are a large number of options to explore at the level of micro-detail. The violinist needs to “predictively imagine” the cellist’s melody and provide a “counterpoint” for it.

²⁵ Harmonics are often indicated *flautando*, and they naturally have fewer upper partials in the sound.

²⁶ Because of the greater distance between the notes on the cello, we are “missing” this fourth finger option in first position.

²⁷ The presence of the open g is developed as part of Ravel’s reprise strategy.

²⁸ I think of the fingering approach here like a pianist, borrowing an analogy William Pleeth used to use in my cello lessons when he wanted to avoid certain natural cellistic habits, which caused loss of clarity at the beginnings and ends of notes.

²⁹ This rehearsal metaphor probably dates back to the use of the “Routemaster” double-decker buses in London. These double deckers had an open rear platform that allowed passengers to “hop on” or “hop off”—even when the bus was moving. The metaphor captures the notion that the cello’s entry cannot disrupt what is already in progress but must adapt and “join in”.

The cellist must listen to the violinist's ostinato and invent a colouristic "angle" in order to respond to it. Potentially, the opening is most interesting if the relationship between figure and ground is left suspended, suggesting Caillois's *illinx*, which he also describes as *vertigo* (Caillois [1958] 1961, p. 36).

The cellist also has to find a way of balancing the opening harmonic with a transition to stopped notes which usually takes place on the third note (the second e^2). The final dynamic hairpin of this opening statement needs to be executed corporately, and the beginning of the cello's statement of the ostinato on d^1 also needs to be a neatly placed 9-8 resolution under the violin's open a^1 and stopped f -sharp¹. In this complex ecosystem of interactions and interrelationships, the balancing of the open sonorities and stopped ones is exceptionally difficult, and when Jourdan-Morhange describes the "violin" as naked, I hope it is now clear that this refers as much to the player as to the instrument. The ostinato requires the player to "commit" to what comes out of the instrument the first time, increasing the sense of unpredictability that is inherently part of the gameplay. I am always grateful to my regular violinist partner in this piece, Peter Sheppard Skærved, for being so willing to accommodate me in this opening—as he knows how difficult it is—and for being so generous in the ways he picks up the baton at bar 17, whatever form it takes!

Understanding the difficulty of walking this tightrope (Caillois's *illinx*) is perhaps impossible without actually playing it, but a feeling for the significance of the kinds of challenges it presents, and of Jourdan-Morhange's impression of "nakedness", can be illustrated by examining the fingering on a violin part scanned and uploaded to IMSLP (Example 5) (Ravel 1922b). The anonymous violinist who marked this part has refused to engage in the game described above, instead placing the ostinato on the D-string and G-string, which will have the effect of darkening the sound and making the balance with the cello "easy", at the price of losing sympathetic resonances and the "natural, hard" colours.³⁰ Critically, the cellist will have much less to "play" with here: the range of possibilities in that first harmonic is reduced rather than opened. By "clothing" the violin in this way, the danger of misspeaking, of unevenness, is mitigated, but so is the expressive potential and the opportunity to present a complex ground-figure relationship.

The recapitulation (Example 6) is initiated with a single-note handover which looks like it should help manage a seamless transition from the cello's quavers to the violin's replacement of the opening ostinato with a new one using all of the open strings. IMSLP's anonymous violinist "accepts" the lower three of these but places a fourth finger on the e^2 s—perhaps a strategy for safety or protection. What Ravel

³⁰ Sympathetic resonances, although possible, will be very hard to excite audibly with this fingering—at least in a *piano* dynamic.

suggests in this single quaver is not easy. The cellist is usually in a high position (established four bars after Figure 10), and over the next eight bars, the tempo returns from *Assez Vif* to the opening *Allegro*. Colouristically, the violin's open strings at Figure 11 will be much brighter/harder than the preceding cello material, not least because of the cellist's high position, and the slowing of tempo also encourages a habitual defocusing of timbre or loss of high partials, when as much brightness as possible is needed to manage the transition (to avoid a sudden change of colour at the arrival of the open strings). Because the *g* is doubled, both players need to be very careful that it is not emphasised, but elided. In fact, most performances "fail" here (including my own!), but on the occasions that it really works, it is the most extraordinary effect and worth any number of slight mishandlings. Because of the increased presence of the violin at this reprise owing to the use of all of the open strings, the *expressif* indication in the cello is very welcome, as is the absence of a harmonic for the opening note, affording it an "easier" presence. This time, there is no moment of preparation for the cellist, who must predictively imagine the violinist's open E-string, with which the beginning of the melody is in unison.

VIOLON **MAURICE RAVEL**

I

VIOLONCELLE *Allegro. ♩ = 120*

VIOLON

Example 5. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922b) bb. 1–12 (violin part), Éditions Durand.

11

1er Mouvt

p *expressif*

Example 6. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) i, bb. 168–185 (cello part), Éditions Durand.

One of the core challenges that runs through much of the second movement is another variant of the "handover" game, usefully summarised by Jourdan-Morhange, who suggests that these two very different instruments must be able to be made to sound sufficiently similar so that the material can pass between the two without "gaps":

The *spiccati* must be sufficiently equal in rhythm and sound to pass smoothly from violin to cello We were going crazy! Ravel did not admit the

slightest fissure between the dissimilar sonorities of the two instruments. So ... we were arguing!³¹ (Jourdan-Morhange 1945, p. 180)

There is a kind of “quasi-hocketing” that recurs through the sonata in different forms that recalls, for me, my dog “running *with* the ball” (i.e., not catching or holding it, but matching pace with it, again recalling Caillois’s *illinx*). In these games, the relationship between figure and ground is often in play, as we can see at Figure 5 of movement i (Example 7). It may seem obvious that the violin “leads” here, as it is initially given a single-string melody on the beat; however, playful voicing of the cello, which has the “bass” (naturally heard as a foundation), and real care to make the rhythmic relationship between the two instruments completely even can usefully create a feeling of suspension between the two instruments, and it is only after Figure 7 that this “running with” the material resolves into a stable relationship.

Example 7. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) i, bb. 61–119 (cello part), Éditions Durand.

³¹ “Il faut que les *spiccatis* [sic.] soient assez égaux de rythme et de sonorité pour passer sans heurts du violon au violoncelle ... Nous devenions fous ! Ravel n’admettait pas la moindre petite fissure entre les sonorités pourtant si dissemblables des deux instruments. Alors ... nous nous disputions!”

The third movement plays with a number of meeting points or handovers that need to be anticipated in order to avoid obstructing the beautiful long cantilenas, as, for example, in the passing of the melody from the cello to the violin at Figure 1—and, even more beautifully, in the use of the cello to complete the little interlude between the two halves of the violin melody in the fourth bar of Figure 1 (Example 8). At Figure 3, the two instruments are set “against” one another with the harmonic a^1 clash (a^2, e^3 in the violin) against the b -flat¹/ b -flat², which passes from the violin to the cello almost seamlessly (Example 9). Additionally, Figure 10 in the last movement (Example 10) presents another handover that should be, it seems, almost imperceptible (note the dovetailing of the join).

Example 8. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) iii, bb. 1–17 (cello part), Éditions Durand.

Example 9. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) iii, bb. 18–32 (cello part), Éditions Durand.

The image shows a musical score for two systems. The first system consists of two staves (violin and cello) with measures 9 and 10. Measure 9 is marked with a box containing the number '9'. Above measure 9, there are markings 'pizz.' and 'arco'. The violin part starts with a forte (*f*) dynamic, while the cello part starts with a piano (*p*) dynamic. The second system continues with measure 10, marked with a box containing the number '10'. The violin part has a mezzo-forte (*mf*) dynamic marking below it.

Example 10. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) iv, bb. 96–114 (cello part), Éditions Durand.

4. Harmonics and Intonation

Perhaps the most telling of the predictive listening games required of the players in the Duo can be found at the end of the third movement. Ravel’s challenging handling of harmonics here will lead us to a wider discussion of how he uses instrumental colour and the different kinds of listening and prediction that are required. In the last bar (Example 11), the violin provides a stopped *a* (220 Hz) as the bottom of a perfect fifth with the cello’s harmonic e^1 , produced on the C-string. Even if one tunes the four strings of the instrument with equal temperament, this harmonic will be almost a “fifth-of-a-tone” flat.³² I always assumed I tuned my instrument in “just” fifths in order to ensure perfect intervals between each of the strings (even when playing with piano, against which the lower strings will be progressively more and more out of tune) but upon checking this in detail on repeated occasions, I find that my natural tuning seems instead to be geared to maximise resonance across the instrument rather than to produce absolutely perfect fifths. Although my fifths are not quite “just”, they are slightly wider than equal-tempered fifths, resulting in the C-string being (on average) between six and eight cents flat in relation to an A 440 Hz reference.³³ The e^2 produced by the fifth harmonic on the C-string is thus

³² On a stringed instrument, the second, fourth, sixth, and eighth natural harmonics are, for practical purposes, “in tune” with the fundamental (the first harmonic). The fifth harmonic is approximately one fifth of a tone flat, and the seventh harmonic is approximately one-third of a tone flat. Above the eighth harmonic, things become significantly stranger, especially on the cello’s C-string, partly because of the innate physics of harmonic relationships, but also because of interactions with the thickness of the string and the fact that the nodal points have a “thickness” in themselves.

³³ To my ear, this tuning sounds simply “better in the instrument” than an equally tempered one, even when playing with piano, and the significant pitch difference between the piano and the cello on the open C-string can be “covered” (especially in louder dynamics) with a little extra “top spin” on the bow.

significantly *more* than a “fifth-of-a-tone” flat. The lower strings of the violin, if tuned similarly, will mitigate this a little, but not enough for it not to be a “problem”!



Example 11. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) iii, bb. 74–82 (cello part), Éditions Durand.

In different contexts, this intonation discrepancy might not be important (as we will see later), but here there is an enormous challenge for both players to “pre-imagine” the last perfect fifth a good 20 cents flat: this is because of the parallel fifths between the cello and violin in the last three bars, some of which must be tuned “from” the upper note (the violin’s G-string, which cannot be altered), and because the open string means that vibrato is not an option. The violinist needs to “guess” exactly how the cello’s e^2 will sound, as adjusting the bass after the event would sound disastrous, and in any case, the cello then needs to confirm it an octave lower on the second beat. In order to avoid this ending simply sounding “wrong”, the pair of fifths in the penultimate bar needs to be bent progressively downwards. I can think of little in the repertoire that is as exposing as this, but the satisfaction in having this extraordinary sonority appear is quite magical.³⁴

With only two players and a lot of rehearsal time (as noted by Jourdan-Morhange), Ravel was clearly willing to gamble on a successful outcome here without giving any quarter to the players. The refinement of his awareness of what it might be possible for players to achieve in different circumstances, and his feeling for how many different ways a “harmonic game” could be played, can be demonstrated with a few other examples from the period. In the Piano Trio (Example 12), the cello climbs to its 10th harmonic on the C-string, carrying the listener with it along the way. There is no need to “predict” in this case, and the effect is quite natural. The seventh harmonic (*b-flat*¹), which will sound approximately a third-of-a-tone flat, is strategically supported with an augmented chord, leaving some room for latitude in intonation, and, although the cello’s final e^2 will not agree with the piano’s e^1 and e^2 , we “accept” it because we hear it as the resting point at the end of a journey.³⁵

³⁴ In many recordings, it seems that players simply “cheat” by tuning the C-string a little higher at this point, which makes most of the “challenge” that I have described disappear. To my ears, that outcome sounds prosaic.

³⁵ The intonation discrepancy is also aided by the extra “distance” provided by the low piano C_1 which gives the impression of being the fundamental.

Example 12. Ravel Piano Trio (Ravel 1914) i, bb. 108–117, Éditions Durand.

Ravel's second opera *L'enfant et les sortilèges* (composed between 1917 and 1925, thus "on his desk" at the time of the creation of the Duo) presents a much more radical handling of high partial harmonics (Example 13). This is expressively extraordinary and vivid but lacks the "play" required in the chamber examples. Rather than leading the ear as in the Trio, or demanding the kind of predictive listening expected in the Duo, it seems Ravel takes full advantage of the "otherness" of the high string partials, both in timbre and intonation. In an orchestral context, the oboes and the solo double bass are well separated, and if there is a challenge to the individual musicians to "listen" here, it is so great that it cannot really be met. Following an intonation torture test in parallel perfect fifths and fourths in the two oboes (all but impossible to tune accurately, and, with the spare colour and potential "sourness" of the intonation, possibly a direct characterisation of the rebellious, "difficult" child), the double bass enters on the seventh harmonic, a full third-of-a-tone flat. The double bass's timbre here feels as if it belongs to an entirely different world. The *f*^l does not belong to the oboes' modality, and, in every performance I have heard, the microtonal relationship between the two contrasted colours is bizarrely arresting. Whether we hear this as prefiguring the magical world that will shortly be revealed, or as a "sharpening" of the evocative impact of the oboes through contrast, I find it interesting that it is perhaps most effective when the intonation "gap" between the oboes and the double bass is *least sensitively managed*. It seems clear that Ravel has gauged what is likely to happen in an orchestral context with exceptional prescience.

Tranquillo $\text{♩} = 112$

Soli

2 HAUTOIS

1 CONTREBASSE

p

2 Hautb.

1 C. B.

Une pièce à la campagne (plafond très bas), donnant sur un jardin. Une maison normande, ancienne, ou mieux: démodée; de grands fauteuils, houssés; une haute horloge en bois à cadran fleuri. Une tenture à petits personnages, bergerie. Une cage ronde à écureuil, pendue près de la fenêtre. Grande cheminée à hotte, un reste de feu paisible, une bouilloire qui ronronne. Le Chat aussi. C'est l'après-midi.

L'Enfant, six ou sept ans, est assis devant un devoir commencé. Il est en pleine crise de paresse, il mord son porte-plume, se gratte la tête et chantonne à demi-voix.

RIDEAU 1

2 Hautb.

1 C. B.

sul SOL Solo

f

Example 13. Ravel *L'enfant et les sortilèges* (Ravel 1925) bb. 1–14, Éditions Durand.

Just after the completion of *L'enfant*, in the *Chansons madécasses* for soprano, flute, cello, and piano, we find Ravel again exploring the partials from the 10th harmonic downwards on the cello, leading to a handover that absolutely depends on predictive listening (Example 14). I recall very clearly “my discovery”, when first playing this piece as a teenager, that the c^1 in bar 9—the second of the stopped pitches in the cello, and implicitly on the G-string—can have almost exactly the same timbre as the flute’s bottom c^1 .³⁶ I remember asking the flautist to play this with me in alternation several times, just so that we could “feel” the potential. In this single-note handover, the initial bitonal dialogue between the two instruments is brought “around” in a kind of Möbius strip: the holding over of the cello to overlap with the flute in bar 10 is clearly designed to assist in blending the colours, but it requires quite a bit of “help” from the players. While writing this chapter, I listened to a number of recordings and was very disappointed to find that this particular “ball” seems very often to have been dropped, or possibly simply to have gone unnoticed—or that a sound edit has been made that breaks continuity. Without an extra bow sneaked in under the singer’s entry, there is not enough “air” in the cello sound to make the illusion work,

³⁶ It is interesting how vivid this recollection is, over 30 years later. This is partly because I recognised at the time that it was Ravel who must have “discovered” this relationship, but rather than “explaining” it for me, he had left the clues for me to discover it afresh.

and the flute needs to re-enter a little carefully to avoid the new entry feeling like a cinematic “cut” rather than a dissolve, or transition. Perhaps even more than the Duo example, this reveals how necessary it is that everyone “understands” the game if it is to play out.

The image shows a musical score for Ravel's *Chansons madécasses*, specifically the piece "Il est doux...". The score is arranged for Flute, Violoncello, Canto (Soprano), and Piano. The tempo is marked *Lento*. The piano part has a tempo marking of quarter note = 50. The vocal line includes the lyrics: "Il est doux de se coucher durant la chaleur sous un ar. bre touf. fu, et d'at. ten. dre que le vent du soir a. mè. ne la fraîcheur." The score features various musical notations such as triplets, dynamics (p, pp), and articulation marks.

Example 14. Ravel *Chansons madécasses* (Ravel 1926) iii, “Il est doux ...”, bb. 1–12, Éditions Durand.

A relatively recent Kreutzer Quartet rehearsal discussion is instructive for drawing out how these kinds of very specialised games need to be “made” to work, and how we might “voluntarily” interact with them. Bars 61–63 of the third movement of Ravel’s String Quartet have a little cello cadenza under the phasing out of the preceding material in the three upper strings (see Example 15a). The c^2 on which the cello ends—not the high point dynamically, which is already interesting—is passed to a natural harmonic c^2 on the viola’s C-string and then to the second violin, at the same pitch, who carries this over as the beginning of the new melodic line at Figure 6. Our rehearsal stopped to explore the issues and ask questions: although it is quite obvious that this is, at root, a “simple” passing of the baton from the cello to the second violin, there are a few “obstructions” to it. What is the viola’s role? Why are the viola and second violin entries accented?³⁷ Most importantly, why does the viola have a harmonic? To me, this seemed like a compositional miscalculation. My hunch was that the handover would work much more effectively with the viola stopped at the same pitch, thus effectively providing a “bridge” between the sounds of the cello and violin.

The image displays two systems of musical notation. The upper system consists of four staves: Violin I, Violin II, Viola, and Cello. It features complex rhythmic patterns, slurs, and accents. The lower system consists of two staves: Cello and Double Bass. It includes the tempo marking 'Pas trop lent (♩ = 60)', dynamic markings like 'pp' and 'p', and the instruction 'pizz. espressif'. The text 'ôtez la Sourdine' appears above the Cello staff and below the Double Bass staff.

Example 15a. Ravel String Quartet (Ravel 1905a) iii, bb. 60–65, Éditions Durand.

³⁷ This is especially an issue as Ravel has otherwise helpfully overlapped each of the entries by a quaver.

It turned out that I was at least one step behind Ravel, who had tried exactly that at an earlier stage of the process. Example 15b presents the third set of editorial proofs, in which Ravel makes the change to the harmonic in the viola, but of course, there is no explanation of *why*. In fact, the cello and the violin are possibly closer in timbre on this particular pitch than the viola, which may have occurred to Ravel during rehearsals, so one strategy might have been to drop the viola entry altogether. What we are left with feels more like a kind of magic trick, in which the viola “ghosts” the cello’s c^2 in a kind of sleight of hand, while the violin then ducks in, unexpectedly, to take over. This helps make sense of the little accents which draw attention to the various steps. Whether or not that is what Ravel intended, the insight offered by the proofs’ revision was a trigger for significant creative license in finding a game that we could play effectively.

Example 15b. Ravel String Quartet, 3rd proofs (Jan 19, 1905) iii, 60–65, G. Astruc³⁸.

5. Discovery and Invention

I hope that the very different responses to these harmonic passages make it clear that there is a great deal that is not “indicated” in Ravel’s notation. A necessity for scrupulousness may be all that is really behind Vuillermoz’s “only one way of playing Ravel”, but while a scrupulous approach to the notated text may get us through the door, once we are there, it is up to us to “recognise” the game, and then to find, or invent, ways of playing it. In this, Jankélévitch’s observation that the

players “voluntarily make the rules of the game more complicated” seems especially perceptive (Jankélévitch 1959, p. 69).

Where, then, does Ravel’s “mechanical rabbit” (Jourdan-Morhange 1945, p. 186) fit into the picture? This was the image he offered to cellist Maurice Maréchal for the beginning of the last movement (Example 16) in their work together leading up to the premiere of the Duo. It is an image that we might see as typical Ravelian, combining his love of toys and his fascination with mechanisms of all kinds, but it strikes me as a slightly odd choice for this movement which opens out very quickly to the full-blooded *ff* iteration in the violin in the seventh bar of Figure 1 (supported by all four open strings of the cello in block pizzicato). In many respects, this movement contains the most traditional chamber music of the whole piece, and the dialogue-like exchanges between the instruments are handled with extraordinary harmonic vividness and a textural density that, in Jourdan-Morhange’s words, “often gives the impression of a genuine quartet” (*ibid.*, p. 186).

IV

The image shows a musical score for the cello part of Ravel's Sonata for Violin and Cello, Example 16. The score is in 2/4 time, marked 'Vif, avec entrain. ♩ = 152'. It features a cello line with various dynamics (p, mf, f, ff) and articulations (pizz., ten.). The score is divided into two systems, with a first ending bracketed and numbered '1'.

Example 16. Ravel *Sonate pour Violon et Violoncelle* (Ravel 1922a) iv, bb. 1–21 (cello part), Éditions Durand.

Listening and viewing several performances of the Duo filmed or streamed in recent months, a likely reason for this whimsical description dawned on me: rather than being a goal in itself, it could have been a means for closing down something that Ravel did not want—recall the “*sans expression*” in “*Le gibet*” noted by Howat above. I have written elsewhere about the kinds of suggestions, provocations, and indeed “instructions” introduced by composers in rehearsals that they do not want to add to the score, concerned perhaps that their function is circumscribed by specificities of personnel, time, or context that would make them superfluous in the long run (Bayley and Heyde 2017, pp. 91–92, and Bayley and Heyde 2017, pp. 89–90). I found myself also recalling the kinds of “negative instructions” composers introduce with a view to forestalling certain “bad habits” that they expect, but which can become unhelpful when habitual practice changes. A “*sans presser*” indication, for example, in Debussy’s *La cathédrale engloutie* is not observed by the composer himself in his

piano roll recording, suggesting that sometimes these indications are also even “notes to self” (Debussy 1913).

What struck me in the performances of the Duo filmed or streamed during the recent months was the danger of the cellist *over-playing* these opening bars, which are on the resonant lower strings, encouraging a rather full-blooded delivery. Ravel’s stepped crescendo only begins with the violin’s entry at Figure 1, so the opening seems to be expected to be kept in check. Not only did these performances begin too loudly, but there was a lot of agogic shaping of the material, which was made dramatic and interesting from bar to bar in ways that distracted from the emergence of the larger shape. Ravel’s “mechanical rabbit” seems ideally judged to put a lid on both of those tendencies, and I was keenly aware that no player who had heard it would let the beginning grow so fast, or play so boldly. Its whimsy seems thus to be playfully judged as a personal game between the composer and a specific player, but one which could, perhaps usefully, be more widely shared.

What we see everywhere in the Duo—both in the notation of the score and in the evidence from the rehearsal work passed down to us by Jourdan-Morhange—is a special kind of appreciation of the instrumental–personal interactions that generate exciting chamber music, which can only come from really close listening, extensive “road testing”, and a nuanced understanding of the ways in which people play with one another. Approximately a century after its composition, the kinds of games Ravel is proposing still seem fresh, and the rather quirky language that Jourdan-Morhange uses in her accounts of working with him seem strangely evocative of our own time. Throughout the writing of this chapter, I have been struck by the way that I have shifted gear, in ways that seem natural to me, between anthropomorphizing the instruments and instrumentalizing the players, which Jourdan-Morhange also does in ways not covered here. Ravel’s games seem to be particularly interesting in the way that they engage personal “choices” with instrumental “facts”.

Johann Wolfgang von Goethe’s famous letter to composer Carl Friedrich Zelter of 9 November 1829 introduces the frequently repeated idea, in reference to string quartet playing, of “four reasonable people conversing”, which has often been taken as an archetype for chamber music. But I am always more struck by the end of his sentence, where he describes becoming acquainted with the “individuality” of the instruments (Irving 2001, p. 178).³⁹ For Ravel, this *individuality* seems to have been a kind of door that he was always seeking to unlock. In allowing us as players to open it, he provides material not only for some strangely thrilling gameplay but also for a

³⁹ “Whenever I was in Berlin, I would seldom miss Möser’s quartet evenings. For me, such artistic presentations were always the most intelligible forum for appreciating instrumental music, in which one heard four reasonable people conversing, as it were, believed their discourse to be profitable and became acquainted with the individuality of the instruments” (Irving 2001, p. 178).

heightened awareness of the curious intimacy we have with our instruments and instrumental selves.

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