

Berton's Ludic Pedagogy and the Subdominant Otherwise: Tension and Compromise in the Early Paris *Conservatoire* Curriculum

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Paris's *Conservatoire de musique* was founded by special decree of the *Convention nationale* on the August 3rd 1795, a product of the final months of the chaotic Thermidorian regime. The *Convention's* politicians saw the *Conservatoire* as serving both an educational and a civic role within the fledgling French Republic: not only would the new institution provide musical instruction for future generations of French musicians, it would also be responsible for the celebration of national festivals, overseeing the musical activities of the *Garde nationale* (*Convention nationale* 1795a). The *Conservatoire* would be staffed with 115 of the country's most preeminent musicians and would offer instruction in a range of instruments, along with training in singing, speech, harmony, and composition (*Ibid.*). The administration of the new *Conservatoire* was hierarchical and bureaucratic from its inception, designed for the regimented execution of a highly prescriptive curriculum (Rubinoff 2017). The running of the *Conservatoire* would be overseen by a committee of five inspectors, chosen from among the composition faculty by the *L'Institute nationale des sciences et arts*, who would be charged with executing the decrees of the *Convention's* legislative body (*Convention nationale* 1795a). Indeed, the committee was to answer directly to the Minister for the Interior, ensuring that the institution was kept under tight governmental control, functioning as an instrument of state power.

This paper seeks to reexamine the music-theoretical tenets that emerged in the founding of the Paris *Conservatoire*, comparing the institution's highly prescriptive harmony curriculum with the varied musical and pedagogical practices of its teachers. This paper will focus on the life and work of Henri-Montan Berton, one of the members of the *Conservatoire's* harmony committee, exploring how his theoretical writings and compositions related to the *Conservatoire's* tightly controlled harmony curriculum. This paper will present an archeology of the subdominant chord, probing the different ways in which this particular sonority was conceived amongst the harmony professors at the *Conservatoire*. Contrasting Berton's own pedagogical writings with the first official harmony textbook of the *Conservatoire*, Charles-Simon Catel's *Traité d'Harmonie*, this

paper will examine the ways in which Berton's unique understanding of the subdominant chord clashed with the music-theoretical doctrine of the *Conservatoire's* prescribed curriculum.

Although largely unknown today, Berton was one of the most prolific opera composers of the Revolution, and a professor at the *Conservatoire* from its founding in 1795 until his death in 1842; he is, therefore, the ideal candidate for a study of the complex and oftentimes contradictory relationship between the *Conservatoire's* strict curriculum and the pedagogical and creative work of its professors. This paper attempts to forge a connection between classroom and opera house, examining the ways in which Berton's compositions for the *Opéra-Comique* and the *Théâtre Feydeau* seem to embody his pedagogical dictums, particularly with regards to the functional role of the subdominant chord within a diatonic tonal space. Despite musicology's growing interdisciplinarity, the history of music pedagogy and the history of operatic musical aesthetics can often seem siloed; yet, in the study of Berton's pedagogical and creative practices, the music-theoretical tensions at the Paris *Conservatoire* can seem to be played out on the city's operatic stages.¹

The Specter of Rameau: Tension and Compromise in the Standardization of the Conservatoire Curriculum

Barely a month after the founding of the *Conservatoire* in 1795, the *Convention* ratified the *Constitution de l'an III*, establishing the *Directoire*, a five-member committee elected by the upper house of the legislature, as France's executive body. The priorities of the new constitution reveal that, just six years after the Revolution, education and public order were at the forefront of the political consciousness, fueled by the desire for a republican democracy governed by those of intellectual and moral superiority. Drafted amidst the tumult of the Thermidorian regime, the new constitution was something of a compromise, designed to provide clear authority and structure within a democratic framework. A much more conservative document than the abandoned 1793 constitution, it eschewed direct democracy in favor of a bicameral model, designed to slow the progress of legislation and prevent the concentration of political power around any individual politician (*Convention nationale* 1795b). Furthermore, this new governing body would have powers to curb freedom of press and freedom of association in order to protect the interests of the Republic from popular uprising. The constitution's conservative bent was tempered by a stronger focus on education: the new document reaffirmed the right to public schooling and the right to form private education societies, and lent constitutional validity to the *L'Institute nationale des sciences et arts*. The

new constitution framed this pedagogical turn in terms of public betterment and social good, while the constitution's authors sold these reforms as promoting meritocracy, envisaging a republic where only the most moral, educated, and civically minded citizens would flourish under the law (*Ibid.*; D'Anglas 1795).²

In many ways, the founding of the *Conservatoire* mirrored the structures and goals of the *Constitution de l'an III*, the *Conservatoire* providing a public framework for the education of the Republic's musicians in the spirit of the constitution's educational reforms. The constitution's educational reforms were instigated, in part, to end the Catholic church's stranglehold over the education system, and, in part, to indoctrinate the youth in the political dogma of the Republic (Hunt 2004). Similarly, the *Conservatoire* would be a means of standardizing and controlling French musical pedagogy, bringing it in line with and, in service of, republican ideals. Indeed, prior to the Revolution, music education in France had been somewhat ad hoc, primarily provided either through the Catholic church or through private lessons (Rubinoff 2017; Wason 2008). Thus, the *Conservatoire* was founded in order to consolidate and systematize French music education, replacing the eclectic practices of the *Ancien-Régime* with a single, centralized institution providing high-quality training in all standard musical disciplines to students from all *départements* of France. In this spirit of centralization, two existing music schools, the *École Royale de Chant* and the *Institut Nationale de Musique*, which trained musicians for the *Opéra* and the *Garde nationale* respectively, were merged into the *Conservatoire*, thereby tethering the institution to public musical life in the city (Grandville 2014).

In centralizing, democratizing, systematizing and regulating French musical pedagogy, the *Conservatoire* attempted to emulate, in the musical sphere, the kind of meritocracy envisaged by the authors of the *Constitution de l'an III*. The *Conservatoire* would allow promising young musicians to receive formal, carefully structured musical training, regardless of background, thus ensuring that only the best musicians, with the most rigorous education, would serve the musical institutions of the new Republic. The *Conservatoire's* curriculum would set the standard for a decidedly French, decidedly republican music pedagogy, and, in the spirit of Enlightenment rationality, would set a clear touchstone for musical excellence within the Republic (Toplis 2005). Where musical quality was once tied to the taste and judgement of the King or the clergy, the *Conservatoire* sought to place the regulation of musical quality under the purview of experts, who would train future generations of musicians in best musical practice. The bureaucratic structure of the *Conservatoire*, designed for the tight

regulation of the curriculum, mirrored the multi-level legislative structure outlined in the constitution, the *Conservatoire's* five-member inspectorate analogous to the five-member *Directoire*. The committee of inspectors, in their "internal policing" of the institution, would not only decide on a fixed curriculum, but oversee its proper implementation and examination, the *Conservatoire's* strict chain of command functioning as a kind of quality-control mechanism (*Convention nationale* 1795).

In order to safeguard the uniformity and rigorousness of its teaching, the *Conservatoire* imposed a fixed curriculum throughout its formative, Revolutionary years (Mongrédien 1996, 22). This was in part achieved through the publication of a series of musical treatises, which outlined the theoretical principles of the *Conservatoire's* pedagogy. Between 1799 and 1814 the *Conservatoire* published some twelve individual treatises, including technical manuals for a variety of instruments, and instructional treatises in solfège and harmony (Rubinoff 2017). Many of these treatises were co-authored by multiple professors at the *Conservatoire*, and even those that had a single author had to be approved and signed-off by a committee of faculty members, a fact that was proudly published in the frontmatter of the treatises themselves. This very public process of peer review sent a clear message to readers: that the professors of the *Conservatoire* were unified in their pedagogical approach, sharing the same fundamental musical beliefs. Each treatise was presented as the product of a collective decision-making, each one unanimously sanctioned by the nation's most accomplished musicians.

The *Conservatoire's* official harmony treatise was Charles-Simon Catel's *Traité d'Harmonie* (1803), which was approved by a committee of fourteen composers, many of whom were among the most preeminent musicians of the day (Rubinoff 2017, 1).³ The united front presented by these composers in their approval of the *Traité* obscures the relative heterogeneity of the group: the composers at the *Conservatoire* varied widely in age, nationality, and musical style, a symptom of the musical cosmopolitanism of Paris at the time.⁴ Although the committee unanimously adopted Catel's *Traité* as the basis for the *Conservatoire's* curriculum, it seems that given the diversity of the faculty members, reaching a consensus was a long, drawn-out process.⁵ It cannot have helped that the stakes of the committee's decision were exceedingly high: the chosen treatise would become the flagship music theory textbook of the new Republic, defining a distinctly French musical style for generations of composers to come. The central point of contention in the committee's deliberations concerned the place of Rameau's harmonic theories in the future of French musical thought. Étienne Méhul, quoted in the foreword to Catel's *Traité*, noted that:

The commission . . . has heard the exposition of three new systems. . . . The first two, entirely opposed in their theoretical principles, have given rise to lively and useful arguments, but . . . did not meet the committee's objectives. Rameau's system was successively attacked and defended . . . Through this struggle of contrary opinions, spurred by the partisans or antagonists of the fundamental bass system, the commission, unable to distinguish the complete truth, suspended its judgement, when the work submitted for your sanction brought an end to all discussion, offering a complete system, simple in its principles and clear in its development. (Méhul in Catel 1803, 1–2)

Méhul reveals that Catel's treatise emerged as a compromise, intended to bring about consensus between the defenders and detractors of Rameau amongst the *Conservatoire's* professors. Indeed, from Méhul's hyperbolic description of the treatise, it would seem that this middle-ground, far from being an uneasy compromise, had produced a theoretical *tour de force*, remarkable in its clarity and exhaustiveness. Méhul's testimony shows that Rameau's fundamental bass system cast a long shadow over French music pedagogy, haunting the development of the curriculum at the *Conservatoire* and polarizing those who sought to standardize French music theory in the wake of the Revolution.

Catel declared in the *Traité's* introduction that, in spite of their outstanding differences, his music-theoretical predecessors were nevertheless united in their goal of discovering the truth of musical harmony (Catel 1803, 3). Catel claimed that his *Traité* approaches this shared objective through the simplest, most practical means, reducing harmony to its most fundamental elements. Catel's treatise sought to allow the composition student to grasp harmonic principles relatively quickly, without having to worry about their theoretical impedimenta. Catel claimed that he had included just enough theoretical information to allow students to extrapolate more complex contrapuntal principles from his textbook as they grew more advanced. At the heart of Catel's *Traité* was Rameau's theory of stacked thirds, undoubtedly chosen to appease the *Conservatoire's* pro-Rameau camp. However, Catel drastically simplified Rameau's theory, isolating it from the larger body of his work.⁶ This theoretically-streamlined approach must have departed far enough from Rameau's ideology to appease Rameau's detractors, striking a balance between the *Conservatoire's* warring camps.⁷ If Méhul's account is to be believed, the simplicity and clarity of Catel's method eventually won over the committee, despite its selective incorporation of Rameau's ideas.

Catel's *Traité* would prove a particularly uneasy compromise between the pro-Rameau and anti-Rameau factions on the *Conservatoire's* faculty, frequently criticized by both camps well into the early nineteenth century

(Wason 2008).⁸ However, Catel's treatise remained the foremost harmony textbook at the *Conservatoire* until the Bourbon restoration, shaping conceptions of harmony in the First Republic and the Napoleonic Empire in spite of its detractors.⁹ Kailan Rubinoff (2017) has described these early *Conservatoire* treatises as instruments for disciplining the bodies and minds of musicians in service of the political and aesthetic interests of the state. Indeed, although Catel's *Traité* was published after the *Constitution de l'an X*, it was very much a product of the *Directoire* era, reflecting a politics of public order and managerial republicanism. Historian Howard Brown (2007) argues that the *Directoire*, in order to deal with the political aftermath of the Terror, imposed a "security state" on the Republic, controlling its citizens through a mix of policing and surveillance. Catel's *Traité*, adopted by administrative decree of a *Directoire*-style committee, came to impose order on the *Conservatoire*'s pedagogy, controlling what was taught in its classrooms.

Situating the Subdominant: From Berton's Game to Catel's Treatise

In 1818, Henri-Montan Berton published a musical game. The *Jeu des Préludes Harmoniques* was intended to act as a beginner's introduction to harmony, designed to help very young students understand basic harmonic functions across a range of keys. The game itself consisted of a sheet of paper with a number of holes cut out of it (the *compas*, Figure 1), which was to be placed over another sheet of paper (the *boussole*, Figure 2) on which every chord, major and minor, was printed in ascending chromatic order. Below the *boussole*'s catalog of chords was printed another array of major and minor chords, also in ascending order, along with a two-octave chromatic scale. When the top hole of the *compas* was placed over an individual chord in the top array of the *boussole*, the remaining holes would reveal its seven scale degrees, along with its dominant and subdominant sonorities (see Figure 3). In the published edition there were two versions of the *boussole*, one for sharp keys and one for flat keys, and two versions of the *compas*, one major and one minor. The pedagogical premise of this game was remarkably simple: the teacher could ask the student to name, say, the seventh scale degree of G minor, and the student would adjust the *compas* and the *boussole* to reveal the G minor scale and its corresponding chords (Castil-Blaze 1825, 163; Berton 1842, 1).¹⁰

As a pedagogical tool, the *Jeu des Préludes Harmoniques* functioned on two levels: interactivity and tactility. The game presented tonality as a site of exploration; it allowed the student to move freely between harmonic possibilities, every shift of the paper bringing forth a new harmonic

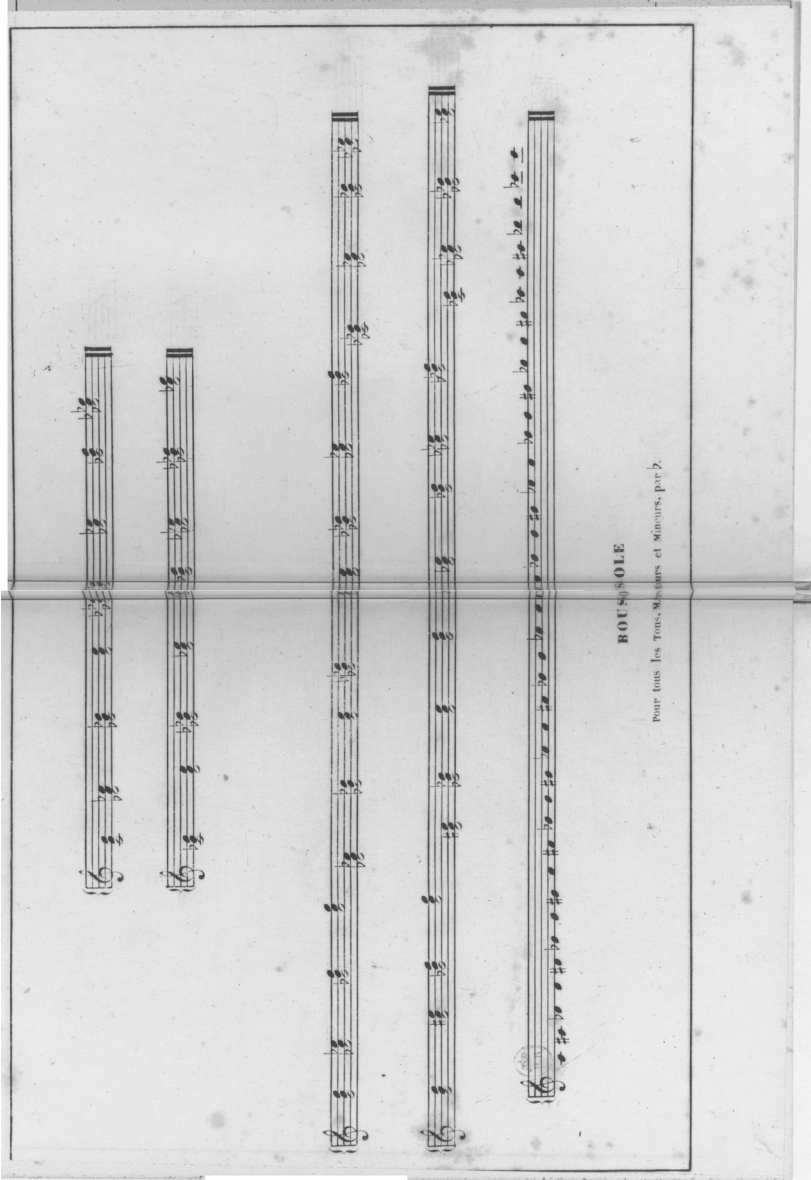


Figure 2. Boussole (Berton 1842).

The diagram, titled "COMPAS", illustrates the relationship between modes and scale degrees. It features a large arch labeled "TETRACORDE AUTHENTIQUE" on the left and "TETRACORDE PLAGAL" on the right, with a central "TONIQUE" (Tonic) marked with 'A'. Below the arch, the text "DE L'ECHELLE ou GAMME" is visible. The central text reads "Des Modes Majeurs dans tous les Tons par # et par ♭".

At the top, two sections titled "MODES" show major and minor scales in various modes. The top-left section, labeled "MAJEURS" and "Dans tous les tons Par #", includes modes EN (Ionian), MI (Dorian), LA (Phrygian), RE (Lydian), FA (Mixolydian), and SOL (Aeolian). The top-right section, labeled "mineurs" and "Dans tous les tons Par ♭", includes modes EN (Dorian), LA (Phrygian), RE (Lydian), FA (Mixolydian), and SOL (Aeolian). A "Dominante" (Dominant) is marked with 'B' and a "Sous-dominante" (Subdominant) is marked with 'C'.

At the bottom, a scale of degrees is shown from 1st to 8th. The 1st degree is labeled "1er degré au naturel" and the 8th is "8^{me} degré au naturel". Musical notation for each degree is provided, along with a "Sous-Dominante" marked with 'C'.

Figure 3. Figure 1 (the *compas*) superimposed over Figure 2 (the *boussole*) to reveal the scale degrees, dominant, and subdominant of the Eb major scale.

landscape. This sense of play, however, was undergirded by a sense of challenge, of quest: the student is tasked with moving the paper in order to answer specific questions about different keys. Thus, in the *Jeu des Préludes Harmoniques*, experimentation and utility went hand in hand: the game acted as an interface whereby the student could seek out discrete information within a fixed harmonic system by toying with various possibilities, encouraging discovery through trial and error.

In its spirit of harmonic exploration, Berton's game mirrors, at a very basic level, the act of composition, the movement of the *compas* from key to key, a physical embodiment of the process of modulation. The game presents harmony as inherently creative, mutable, and transient, marked by myriad combinations and permutations of harmonic movements. The *Jeu des Préludes Harmoniques*, then, reveals the inherent ludomusicality of the act of composition, showing that even the rigid harmonic doctrine of early-nineteenth-century pedagogy could be a site of experimentation. Berton's game construes the fixed harmonic relationships of the tonal system as affordances for personal creative practice, while also rendering these harmonic relationships tactile, allowing the student to physicalize abstract musical structures through the embodied act of moving the *compas*. The game could be understood as a kind of "digital analogy"—to use Roger Moseley's term (2016, 3)—marked by a discrete set of interchangeable data indexed onto the physical interaction between body and object. Brian Massumi (2002) distinguishes between the digital and the virtual, arguing that while the former constitutes a distinct set of codified possibilities (such as the fixed harmonic system of the *Jeu des Préludes Harmoniques*), the latter comprises the analog potentiality of the body. For Massumi, inventiveness and play are situated within this analog virtual, innately linked to physical movement and sensation. Thus, the tactile nature of Berton's game is the key to its pedagogical effect, allowing the student to learn and embody harmonic structure through creativity, embodiment, and play.

But what kind of harmonic structures are codified in the *Jeu des Préludes Harmoniques*? In Berton's game, the tonic, dominant, and subdominant are represented on a semi-circular arc, with the dominant and the subdominant positioned at each end, and the tonic dividing the arc at its peak (see Figure 1). In the game's accompanying text, Berton (1842, 3) explains that the subdominant, the tonic, and the dominant are the "three cardinal points of all forms of the scale," dividing it into two equal tetrachords: the plagal tetrachord, which connects the tonic and the subdominant, and the authentic tetrachord, which connects the tonic and the dominant (Figure 3). The two halves of the game's arc correspond to these two tetrachords, modelling this division of the scale. Berton (*Ibid.*, 3) goes

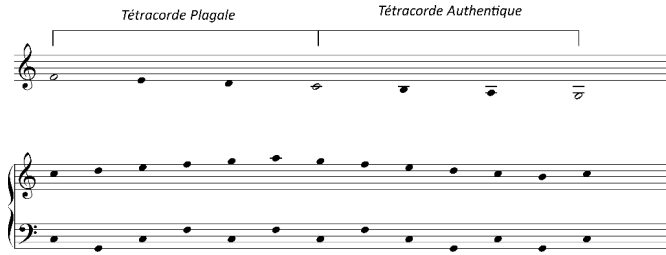


Figure 4. Melody Harmonization (Berton 1842).

on to explain that these tetrachords are the “regulators of all harmonic succession” and the “root of music’s two cadences,” the *cadence plagale* and the *cadence parfaite* or *authentique*.¹¹ For Berton, these two cadences alone can be used to harmonize all seven degrees of the scale, and can thus provide accompaniment to any melody; Berton provides an example of one such harmonization, accompanying a simple, stepwise melody with alternating plagal and authentic cadences (Figure 4).

It becomes clear from Berton’s writings, and from the sample harmonizations he provided, that, in Berton’s conception of harmony, the dominant and subdominant sonorities are considered as occupying the same level of hierarchy, insofar as they play an equally vital role in circumscribing a balanced, symmetrical harmonic space around the tonic. In other words, the dominant and subdominant are considered “equal” because, aside from the tonic, they are considered the most fundamental components of harmonic space; where Schenkerians might see all harmony as reducible to a tension between tonic and dominant, Berton sees harmony as reducible to two tensions, one between the tonic and the dominant, the other between the tonic and the subdominant, each as powerful in its pull as the other. Likewise, the plagal and authentic cadences are considered “equal” insofar as they constitute the fundamental components of all harmonic movement, accounting for the harmonization of all seven degrees of the scale.

Berton wrote at length on this triumvirate conception of harmonic space in his own three-volume *Traité d’Harmonie*, which was published just three years before the *Jeu des Préludes Harmoniques* and shortly after Catel’s treatise began falling out of use. Although Berton had been on the committee that approved Catel’s treatise, the fall of the Napoleonic Empire and the restoration of the Bourbon Monarchy brought with it new musical and pedagogical priorities for the *Conservatoire*, prompting a slew of new harmony treatises (Anton Reicha’s treatises being, perhaps, the most well-known). By this time, Berton was already a *Chevalier de la Légion d’honneur* and a ten-year fixture at the *Conservatoire*, allowing his new

treatise to gain some traction amid this upheaval. In his treatise, Berton (1815, 83) also addresses various other cadences, including half-cadences, evaded cadences, and deceptive cadences, which he describes as “derivatives” of either the plagal or authentic cadence.¹² He also details various suspensions, dissonances, and figurations which can be incorporated into these fundamental cadential motions, demonstrating further how complex melodies can arise just from these two cadential motions. In this way, the *Traité d'Harmonie* explains how Berton's two fundamental cadences, presented in elemental form in the *Jeu des Préludes Harmoniques*, can be spun out into larger, richer, more complex musical structures.¹³ Berton therefore provides proof of his assertion that these two cadences form the basis for all harmony by accounting for all other harmonic practices through processes of derivation, imitation, and ornamentation. The *Traité d'Harmonie* thereby provides a link between the simplified, playful pedagogical space of the *Jeu des Préludes Harmoniques* and the formal process of composition, showing how the harmonic landscapes conjured up through playing the game might be expanded out into a full-scale piece of music.

Berton's theories of harmony would not have been considered particularly radical in France at the turn of the nineteenth century; indeed, Berton's notion of a tripartite harmonic space was drawn, primarily, from the later writings of Rameau.¹⁴ In the *Génération harmonique* (1737), Rameau posits that the organization of harmonic space is essentially symmetrical, the tonic flanked by the dominant a fifth above, and the subdominant a fifth below. For Rameau (1737, 106), this symmetry is inherent to the harmonic series itself: *ut* is the third harmonic of *fa*, while *sol*, in turn, is the third harmonic of *ut*, and thus, the ratio between subdominant, tonic, and dominant is 1:3:9. For Rameau, this “triple proportion” forms the “natural” basis of all harmony, the diatonic scale emerging out of this proportionality, formed from the tetrachords which link the dominant and the subdominant to the tonic.¹⁵ Rameau goes on to argue that the dominant and the subdominant both have a strong pull towards the tonic, a pull that Thomas Christensen (1993, 186) likens to a gravitational field, pointing to Rameau's proclivity for the scientific theories of Isaac Newton.¹⁶ Rameau thus proposes two types of cadence, the *cadence parfaite*, the resolution of the dominant to the tonic, and the *cadence irrégulière*, the resolution of the subdominant to the tonic, both of which involve the movement of the fundamental bass by a fifth. In Rameau's harmonic syntax, the subdominant and the dominant are the only two sonorities which may move to the tonic; all other sonorities may only reach the tonic via a circle of fifths motion through these two poles (Verba 2016). Furthermore, Rameau claims that the tonic chord is the only chord which may be consonant, all

remaining chords containing some essential dissonance that prompts their resolution to the tonic (Verba 2016; Moreno 2004). In his harmonic syntax, these dissonances are implied even when they are not acoustically present, facilitating the gravitational pull of the harmonic space. In the case of the dominant, this dissonance is the seventh, which resolves down a step to the third of the tonic chord. In the case of the subdominant, Rameau proposes a dissonance of a sixth, which resolves up a step to the third of the tonic chord (Damschroder 2008). Rameau's justification for this dissonant sixth is grounded in his belief in the symmetry of the diatonic system: just as the dominant's dissonant seventh extends a minor third above the triad, so the subdominant's dissonant sixth extends (in inversion) a minor third below the triad (Lester 2008).¹⁷

Berton's *Jeu des Préludes Harmoniques* essentially takes Rameau's conception of symmetrical harmonic space *ex facie*, that is to say, that the student is asked to accept Rameau's tripartite division of harmonic space as true without explanation. Berton eschews the complex set of mathematical and acoustic "proofs" which mark Rameau's music-theoretical writings in order to present Rameau's ideas *tout court*. Where Rameau is preoccupied with the causal and generative links between acoustical phenomena (i.e. between harmony and melody), Berton is primarily concerned with the practical implications of Rameau's system, exhibiting the relationships between musical phenomena as static, two-dimensional, and straightforward.¹⁸ What Rameau presents as a deductive, speculative theory of the "natural" order of harmony, Berton (in presenting it in the form of a game) takes as a given, more concerned with its potential as a foundation for a playful, creative practice. However, for all that Berton's gloss on Rameau stripped back and flattened out the latter's conception of harmony, it did capture, to some extent, the symmetry, gravity, contingency, and transience of Rameau's system. Joel Lester (1993, 136), discussing Rameau's concept of the *double emploi*, argues that Rameau's excogitation of harmonic syntax is marked by a sense of "floating tonic," whereby the deployment of dissonances and the movement of the fundamental bass can destabilize the tonic sonority at any moment. The dissonances which Rameau saw as integral to the dominant and subdominant harmonies could be used to turn any chord into a pivot chord, thus prompting the subdominant-tonic-dominant to "float" to a new key:

A tonic when played may add a sixth and become a subdominant, then rising a fifth. Or a tonic may add a seventh and become a simple dominant, then falling a fifth.

The *Jeu des Préludes Harmoniques* could be seen as a physical demonstra-

tion of Rameau's "floating tonic": just as the subdominant-tonic-dominant axis floats from key to key as music modulates, so the *compas* literally floats across the *boussole* to unfold new sets of subdominant-tonic-dominant relations, unfolding a harmonic system comprised of ever-shifting, deeply contextualized chordal junctures.¹⁹ Furthermore, the fixed relationship between subdominant, tonic, and dominant on the tetrachordal arc of Berton's *compas* seems to simulate the gravitational field of Rameau's harmonic syntax: even as the *compas* moves across the various chords on the *boussole*, the magnetic link between these three chords never changes, their polar relationship remaining fixed.

In his *Traité d'Harmonie*, Berton only diverges from Rameau on a few key points, the most notable being in his conceptualization of the subdominant sonority. Berton rejects the notion that the subdominant carries an implied sixth dissonance, arguing that it contradicts what he saw as the "natural" laws of harmonic resonance:

It must appear, no doubt, somewhat reckless to attack the celebrated Rameau in his musical opinions; but despite the respect we pay to this celebrated composer, we believe that we have robust enough arguments to combat his error regarding . . . his chord with added sixth. . . . This innovation seems to us to have no purpose or utility, in that it is contrary to the system taken in nature, . . . which says that the form of all chords is given by the resonance of the harmonic *corps sonore*; that the approximation of these intervals gives a third and a fifth; . . . that the added sounds are called dissonances; that these dissonances are always, in relation to their fundamental sonority, intervals of a fourth, of a seventh, or of a ninth which . . . can never change their nature. (Berton 1815, 76)²⁰

For Berton, a sixth dissonance cannot furnish the subdominant triad (nor, indeed any other triad), as such a dissonance contravenes the harmonic laws which Berton understood as governing the vertical construction of chords. In Berton's harmonic taxonomy, the chord *ré-fa-la-ut* would, in C major, be considered a supertonic seventh chord, with *ré* as the fundamental bass (Rameau, as mentioned, would have taken *fa* as the fundamental bass). Therefore, the subdominant, in Berton's harmonic system, appears as a simpler, more consonant sonority than in Rameau's system, for unlike Rameau's subdominant, Berton's subdominant does not require an implied dissonance to prompt its move to the tonic.²¹ Berton's *Jeu des Préludes Harmoniques*, of course, completely circumvents the issue of "naturalness" by omitting any mention of the harmonic series, thus bucking the trend of much harmony pedagogy of the time: in playing the game, the student learns that the subdominant and dominant triads both have a pull toward the tonic, not through any scientific explanation, but through the embod-

ied experience of playing a game predicated on this relationship.

Not only does Berton's subdominant differ from Rameau's in terms of vertical sonority, but also in terms of the way its horizontal movement is classified. While Berton agrees with Rameau that there exist only two cardinal types of cadence from which all other cadential motions are derived, Berton replaces Rameau's *cadence irrégulière* with the *cadence plagale*. On the surface, this seems like a nominal distinction—after all, both cadences consist of the ascending-fifth movement of the fundamental bass from subdominant to tonic. However, Rameau's *cadence irrégulière* is a considerably broader category of harmonic motion than Berton's *cadence plagale*, partly owing to the fact that Rameau frequently changed the definition of the cadence over the course of his writings. At times, Rameau specifically defines the *cadence irrégulière* as constituting the shift from the subdominant (with an added sixth) to the tonic; at other times, he broadens this definition to include *any* movement of the fundamental bass up a fourth, including the half cadence (Mutch 2015, 77; Christensen 1993, 118). Berton cuts through this murkiness by distinguishing between the *cadence plagale*, constituting a move from subdominant to tonic, and the *cadence plagale imparfait*, constituting any other move of the fundamental bass up a fifth or down a fourth.²²

Berton's conception of the plagal cadence, borne of a revisionist take on Rameau's tripartite division of harmonic space, stands in stark contrast to Catel's characterization of the plagal cadence in his *Conservatoire*-endorsed *Traité d'Harmonie*. Catel (1803, 7) shuns Rameau's symmetrical subdominant-tonic-dominant axis, merely stating that the only relationship the tonic, dominant, and subdominant share is that they are the only three major chords within a major-key diatonic scale (a relationship which he sees as analogous to the relationship between I, V, and VI in a harmonic minor scale). This departure from Rameau's thought was a pragmatic move on Catel's part: as Moreno (2004) notes, Rameau's harmonic system, with its implied sevenths and apocryphal magnetic forces, requires a large degree of imagination on the theorist's part, imagination that would confound many a beginner pupil. Catel thus goes a step further than Berton, sparing the *Conservatoire's* students the mental gymnastics of hearing and comprehending Rameau's speculative music theory where Berton, in simplifying the subdominant's sonority, removing its hidden dissonance, still asks the student to hear the subdominant triad as having an abstract, implied pull toward the tonic *tout court*.

In addition to downplaying the role of the dominant and subdominant in carving out musical space, Catel (1803, 34) is also careful to distinguish cadences from mere harmonic progression, whereas Berton and Rameau

make no such distinction. Catel argues, contra Berton and Rameau, that cadences have a specific closing function, occurring only at the end of phrases as a point of repose.²³ He defines two principal types: the cadence to the tonic and the cadence to the dominant (the authentic and the half cadences, in modern parlance). The main form of cadence to the tonic is the *cadence parfaite*, which includes not only V⁽⁷⁾-I but also the vii⁰⁷-I and vii⁰⁷-i resolutions (although Catel notes that the latter are employed much more rarely). Catel also states that the cadence to the tonic can also occur via the subdominant, which, like Berton, he calls the *cadence plagale*. Catel's *cadence plagale*, in stark contrast to Berton's, can proceed either from a root-position IV chord, or from a ii⁶ chord in first inversion. However, Catel is quick to note that the *cadence plagale* is inferior to the perfect cadence, bringing much weaker structural closure (although he states that it is often used at the end of religious music). Catel's cadential categories are clearly pragmatically motivated; that is to say that Catel privileges the perfect cadence and the half cadence because these were the cadences most commonly employed by composers toward the turn of the nineteenth century to delineate structural close, mentioning the plagal cadence only for its occasional use in church music.²⁴ Berton, invested in Rameau's symmetrical harmonic axes and a much broader definition of cadence, places both plagal and perfect cadences on the same tier and instead demotes the half cadence, despite the relatively smaller role the plagal cadence plays in constructing musical form.

Not only does Catel diminish the role of the subdominant in cadential closure, he also discourages the use of the subdominant as a modulating key area. Catel describes two principal forms of modulation: modulation by descending fifth (flatwards) and modulation by ascending fifth (sharpwards). For Catel, the descending-fifth modulation is the simpler, more "natural" of the two, as it requires no pivot chord to move into the new key, only the addition of a flattened seventh onto the tonic (turning it into V⁷/IV).²⁵ However, Catel declares that this easier modulation is always secondary to the ascending fifth modulation: in any piece of music, he claims, the first modulation away from the tonic key should be an ascending fifth; descending-fifth modulations, if they occur at all, should follow afterward, subsidiary to the more powerful ascending-fifth modulations. Conversely, Berton (1815, 148) defines three types of modulation, all of which share equal status in his writings: modulation to the dominant, to the subdominant, and to the relative minor/major.²⁶ While Catel's approach to modulation reflects the overwhelming prevalence of dominant modulations in compositional practice, Berton's approach is more taxonomical, less concerned with outlining a hierarchy of modulating keys than it is with

simply cataloging them. As a result, the subdominant modulation is given more prominence in Berton's treatise than in Catel's, Berton awarding it equal status to the dominant modulation.

Although Berton was on the committee that unanimously approved Catel's treatise as the official textbook of the *Conservatoire*, it is clear that Berton's own views on harmony differed dramatically from Catel's. Berton appears to be more concerned with simplifying, clarifying, and updating Rameau's theories (which Berton was inculcated in from a young age) for use in the nineteenth-century harmony classroom, making Rameau's conception of harmonic space palpable for the student through ludic pedagogical methods. Catel, by contrast, aligns his treatise with compositional practice at the turn of the nineteenth century, picking and choosing from various theoretical traditions in order to reflect musical customs and norms. This pragmatic approach is most evident in Catel's treatment of the plagal cadence and the subdominant modulation, both of which he presents as weaker, subsidiary harmonic functions based on their scarcer use in music of the time. Catel draws selectively from Rameau's theories in order to appease the pro-Rameau faction on the *Conservatoire's* committee, but only insofar as they reinforce the practice-oriented goals of the textbook.²⁷ Conversely, Berton adopts Rameau's system as his default, carefully signposting for his readers where his theories diverge from Rameau's (as in the case of the subdominant's added sixth dissonance). Put simply, Berton's harmonic system is identical, *mutatis mutandis*, to the symmetrical tonal system in Rameau's later work, whereas Catel's system is a theoretical hybrid—not so much a cohesive theory, but closer to the modern-day music theory textbook in presenting a series of harmonic concepts most practical and useful in the broader musical life of the student.

The subdominant is a particularly fruitful lens through which to refract these various theoretical approaches, a chord that is elevated in Berton's neo-Rameauian theory, but performs a much more limited function in both Catel's *Traité* and in contemporaneous compositional practice. These different classifications of the subdominant reveal something of the anatomy of the Catel compromise, showing the extent to which Catel's *Traité* dared to break away from the entrenched theoretical traditions of the *Conservatoire's* pro-Rameau cabal. The deep-seated differences between the pedagogical approaches of Berton and Catel demonstrate that there was so much more at stake in the Catel compromise than mere nomenclature. In the founding of the *Conservatoire*, the very organization and functionality of the tonal system was put up for debate, and the widely varying positions within this debate show just how uneasily Catel's *Traité* reconciled the diverse pedagogical practices of the *Conservatoire's* faculty.

Composing Plagally: Berton's Subdominant from Theory to Practice

In Berton's theoretical writings, the subdominant is presented as being equal to the dominant within a diatonic musical syntax, serving a near-equivalent function. While the theoretical reasoning behind this equivalence is clear, a question remains: what might a commensurate treatment of the dominant and subdominant look like in compositional practice? Berton composed a number of arias that emphasized the subdominant at both background and foreground levels, arias in which a sense of plagality defines both the formal structure and the phenomenological experience of the music.²⁸ These plagally-accented forms were clustered in the period immediately following the Revolution, an incredibly fruitful time in Berton's compositional career. During this period, the composer saw considerable commercial and critical success at the *Théâtre Feydeau* and the *Opéra-Comique*, catapulting him into public consciousness and clinching his appointment to the *Conservatoire* in 1795. It was in this style-defining period of Berton's oeuvre that the composer seemed to most palpably reflect Rameau's tripartite division of tonal space in his compositions, bringing Rameau's decidedly *Ancien-Régime* theories to life on the Revolutionary operatic stage. Thus, while Catel's *Traité* sought to reflect compositional practice, Berton's compositional practice became a reflection of Rameau's theory, a testing ground for the harmonic concepts foundational to his teaching.

The fourth number from Berton's one-act comedy *Les Deux Sous-lieutenants*—which premiered at the *Opéra-Comique* in 1792—serves as a prototypical example of Berton's pronounced use of the subdominant.²⁹ The aria, “Adieu donc, toute notre élégance,” is in simple ternary form, a spritely galant allegro with hints of march *topos* to match the opera's military setting. After the orchestral introduction, the A section begins with a series of prolongational gestures which clearly establish the F major tonic. The tonic chord alternates twice with a dominant seventh in first inversion, and then twice with a subdominant sonority in second inversion (see Example 1).³⁰ As John Rice (2014) notes, this alteration of tonic and subdominant harmonies over a tonic pedal was a relatively common schema in galant music (he calls this particular schema the “Hertz”), and was often used in eighteenth-century opera in moments of great emotional poignancy. Although the subdominant and dominant chords here are presented in inversion, minimizing the movement of the bass, Berton would probably have understood an implied fundamental bass moving in fifths or fourths throughout the passage (as shown in Figure 5).³¹ Moreover, these fundamental-bass motions would have been viewed as cadences under

8 [Allegro non troppo]

A-dieu donc, a-dieu, a-dieu, tou-te not-re é-lég-an-ce, A-dieu, a-dieu, not-re ma-gni-fi-

[Allegro non troppo]

pp

13

cen-ce. Mes beaux jours sont dé-jà pa-ssé, Mon Lou-is

17

d'or sont dé-pen-sé. Mes beaux jours sont dé-jà pa-

p

poco f

Example 1. “Adieu donc, toute notre élégance,”
Henri-Montan Berton, mm. 8–17.

Reduction

Fundamental Bass

Figure 5. Fundamental bass for the opening of
“Adieu donc.”

Berton's broad definition, the "Hertz" schema understood as encompassing a plagal cadence despite the stationary bass line.

It is no coincidence, perhaps, that the cadential motions outlined in this passage correspond exactly to the two principal cadences featured in Berton's *Jeu des Préludes Harmoniques*, Berton's authentic and plagal tetrachords successively outlined through tonic's alternation with the dominant and subdominant harmonies respectively. It follows that this passage not only prolongs the tonic harmony, but firmly establishes a tripartite tonal space, placing the tonic sonority at the center of two tetrachordal axes, clearly spelled out in the movement of the fundamental bass. The subdominant here, despite its weak inversion, takes a near equal position to the dominant within the harmonic syntax, the result of which is a consequent phrase comprising entirely of plagal motion, balancing out the dominant-oriented antecedent. Berton places additional emphasis on the subdominant chord by expanding it over two bars each time it appears, breaking out of the four-bar hypermeter and stretching the plagally-oriented consequent phrase over six bars. During these subdominant expansions (which come after the dominant, in the same way that Berton sees, at a larger level, dominant modulation as always preceding subdominant modulation), the lower orchestra breaks out of its accompanying patterns, underpinning the hypermetrical dissonance with emphatic quarter-note rhythms, offset by a detached, syncopated arpeggio in the first violins (mm. 14 and 18). Meanwhile, the vocal line reaches down into its lower extremes, ushering in the subdominant chord with a low D (mm. 14 and 17), held for an entire bar. The low D on the subdominant chord constitutes a break from the patter phrases which accompanied the dominant chord in the consequent phrase, throwing more vocal weight onto the subdominant sonority.

Richard Kramer (2016) notes that Enlightenment music tended increasingly toward the "moment" as a site of heightened meaning and expression, noting various "chromatic moments" in late eighteenth-century music which fleetingly threw into question diatonic hierarchies. Perhaps one could theorize a kind of "plagal moment" in the music and pedagogy of Berton, in which a tripartite division of diatonic space is made palpable by a sudden textural and temporal emphasis on the subdominant chord. The "plagal moment," in bringing the subdominant to near equal status to the dominant, throws into question the primacy of the tonic-dominant relationship in tonal music, a relationship that, as Daniel Harrison (1994) notes, has been the prevailing harmonic paradigm in the history of Western music theory and composition. The "plagal moment" in the opening passage of "Adieu donc" constitutes the Rubicon between the dominant-centric harmonic space of the antecedent phrase and the symmetrical,

axial harmonic space espoused in Berton's theoretical writings. The plagal moment thus represents the phenomenological experience of breaching from a dominant-tonic harmonic space into a tripartite harmonic space via the addition of a pronounced subdominant chord, thus positioning the tonic as the gravitational center of a symmetrical harmonic axis.

The composing-out of a tripartite harmonic space in the opening passage of the A section of "Adieu donc" is, in many ways, a microcosm of the wider tonal organization of the aria, which seems to emphasize, at a background level, Berton's subdominant-tonic-dominant axis. The A section, which remains squarely in the tonic key, culminates in a clear cadence followed by a flurry of post-cadential activity and thematic liquidation (Example 2). At the tail end of this post-cadential activity, Berton introduces a flattened seventh (m. 36) which sets in motion a tonicization to the subdominant, the aria's secondary key area, and the key in which the B section begins. Remarkably, Berton establishes this new key area in much the same way he established the tonic key area at the beginning of the A section, alternating the new tonic first with its dominant, and then twice with its subdominant (mm. 37–44). Once again, Berton carefully sets out a tripartite division of harmonic space, this time by following the modulating perfect cadence with a "plagal moment" in the new key.³²

Having established a tripartite harmonic space in the subdominant key, Berton destabilizes the new key with a sudden lurch to the mediant, the B \flat sonority refunctioned as a Neapolitan chord in a brief tonicization of A minor (mm. 45–48). This A minor chord acts to wrench the music back into F major, the E \natural and C from the A minor chord eventually form part of a second-inversion C dominant-seventh chord, which leads the music back to the F major tonic. This progression, in which the tonicized mediant is retroactively heard as a projection of the tonic harmony, was particularly common in this era (Aldwell, Cadwallader, and Schachter 2011, 270) and is used here to transition from subdominant to tonic without the tonic sounding like the dominant of the subdominant. Having returned to the tonic key (m. 50), Berton immediately lands on the dividing dominant which brings about an end to the B section (mm. 51–59); the brief tonicization of this chord produces a "standing-on-the-dominant" effect (Caplin 1998, 13), drumming up anticipation for the reprise of the A section.

The tonal plan of "Adieu donc," partially graphed in Figure 6, outlines, at a macro-level, Berton's tripartite division of musical space.³³ The tonicization of the subdominant at the start of the B section represents a large-scale "plagal moment," plunging the listener back into the subdominant axis after the string of cadential V–I motions which end the A section. The subdominant, as the aria's secondary key area, seems especially emphasized

Current Musicology

32 [Allegro non troppo]

gan-ce, a - dieu, a - dieu, no - tre é - lé - gan-ce. II

[Allegro non troppo]

37

faut bien pru - dé-ment par - tir, bien pru - dé-ment par - tir, Et

42

dans un é - qui-pa-ge min - ce, Je vais re - ga-gner ma pro - vin - ce, Je dé-choir sans

47

me re - pen-tir. Un an-en-tier fut un an - de plai - sir, fut un an - de plai - sir, Je

52

vais au fond de ma pro - vin - ce, En re - por - ter le sou - ve -

55

nir. En re - por - ter le sou - ve - nir. A - dieu, a - dieu, a - dieu

Example 2. “Adieu donc, toute notre élégance,”
Henri-Montan Berton, mm. 32–59.

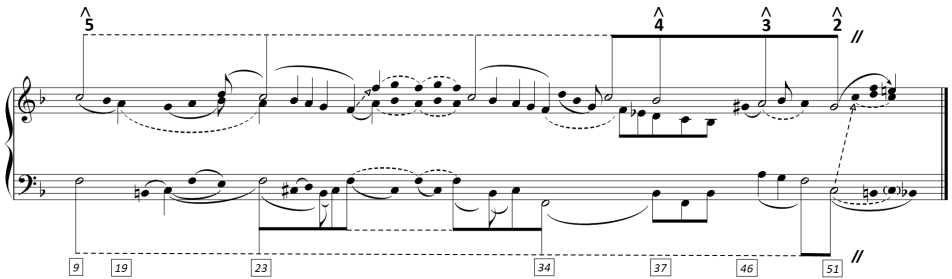


Figure 6. Graph of “Adieu donc,” from the beginning of the A section to the end of the B section.

at a formal level, as if to offset the ineluctable pull of the dominant. The B section itself, at the middleground, consists of a tonic chord bookended, on the one hand, by a large-scale subdominant tonicization, and, on the other hand, by a tonicized dividing dominant, forming a three-part harmonic structure that resembles the tetrachordal arc on the *compas* of the *Jeu des Préludes Harmoniques*.³⁴ Thus, the B section traverses Berton’s symmetrical harmonic space, moving from the subdominant to the dominant via the tonic, the tonic emerging as the gravitational center of a subdominant-tonic axis.

While large-scale movements to the subdominant were not uncommon during this period, what sets Berton’s aria apart is the way it seems to outline a tripartite division of musical space at both foreground and background levels: not only does Berton open both the A and the B sections by unveiling a subdominant-tonic-dominant axis in their respective keys, he also organizes the aria’s large-scale tonal trajectory around this axis.³⁵ It is not so much that Berton’s use of the subdominant in “Adieu donc” represents a radical or undocumented harmonic phenomenon, but rather, that the way Berton organizes tonal space in this aria, at all levels of composition, corresponds so closely with his own theoretical beliefs and pedagogical methods.³⁶ Indeed, when the suggested melody harmonization from the *Jeu des Préludes Harmoniques* is compared with the voice-leading at the start of the A section, the voice-leading at the start of the B section, and the overall tonal plan of the aria (Figure 7), it becomes clear that Berton’s belief that every note can be harmonized along a subdominant-tonic-dominant axis is reflected across many levels of his compositional practice.

The aria “Il est sous ta fenêtre” from Berton’s *Les Deux Sentinelles* (1791) shares a strikingly similar harmonic structure to “Adieu donc,” but stretched out over a five-part rondo form. In “Il est sous ta fenêtre,” Berton modulates to the dominant in the B section and the subdominant in the C

Harmonization of the Scale Degrees
in the *Jeu des Préludes Harmoniques*
(Transposed to F Major)

Opening of the A Section of
"Adieu donc"
(Reduction with Fundamental Bass)

Opening of the B Section of
"Adieu donc"
(Reduction with Fundamental Bass,
Transposed to F Major)

Tonal Organization of
"Adieu donc"

Figure 7. Comparison between "Adieu donc" and the *Jeu des Préludes Harmoniques*.

72
 toi_ d'en jou - ir. Je veux être un mo - del - le, je veux être un mo - del - le

82
 de plus lon - gueur a - mour. Je te se - rai fi -

91
 del - le, je te se - rai fi - de - lle

96
 au moins quin - ze grande jours.

Example 3. “Il est sous ta fenêtre,” Henri-Montan Berton, mm. 72–101.

section, interpolated by an A section that remains firmly in the tonic key. The harmonic structure of the C section of “Il est sous ta fenêtre” (Example 3) is almost identical to the B section of “Adieu donc”: a flattened seventh at the end of the tonic-key refrain sets in motion a tonicization of the subdominant; Berton then returns to the tonic via a tonicized submediant, before landing on a prolonged dominant (here preceded by a German sixth chord). The refrain of “Il est sous ta fenêtre,” much like the A section of “Adieu donc,” strongly features the subdominant (Example 4), which, as in

Example 4. “Il est sous ta fenêtre,” Henri-Montan Berton, mm. 52–65.

“Adieu donc,” comes after the tonic has alternated twice with the dominant.

Berton only includes this plagal passage in the two recapitulations of the refrain, cutting off the opening refrain after the tonic-dominant alternations and beginning the dominant modulation into the B section “early.” Due to the truncation of the opening refrain, the first subdominant chord is not heard until the first recapitulation of the refrain, making the plagal moment all the more unexpected. The result of this is a rondo form which remains very dominant-heavy through the first refrain and the first episode, but becomes increasingly plagally-oriented through the refrain’s recapitulations and the subdominant-modulating second episode; it is as if Berton introduces the dominant axis prior to introducing the subdominant axis, slowly unfolding his tripartite division of harmonic space over the course of a five-part form.

The first aria from Berton’s Revolutionary-themed opera *Agricol Viala* (1794), “Courage, courage, bon courage,” is in ternary form with a B section modulating to the subdominant and ending on a prolonged dominant, much like “Adieu donc” (see Figure 8).³⁷ However, in “Courage, courage,” the path from subdominant to dominant is much more convoluted: Berton follows the subdominant modulation with a prolonged B♭ sonority (marked with an *), which functions as a back-relating dominant to the subdominant; he then tonicizes the mediant before landing on the dominant via the dominant of the dominant. The tonicization of the

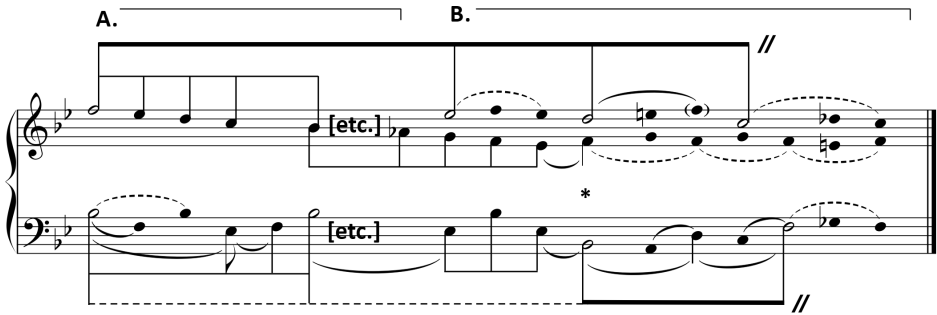


Figure 8. Graph of “Courage, courage,” from the beginning of the A section to the end of the B section.

mediant helps to retroactively construe the prolonged $B\flat$ chord as a tonic sonority, analogous to the tonicized mediant of “Adieu donc” and “Il est sous ta fenêtre”; it also allows for a smoother transition to the dominant prolongation due to the shared pitches between the chords. In “Courage, courage,” Berton charts a different route through his axial harmonic space, one that emphasizes the ambiguity and mutability of these fifth relationships: the prolonged $B\flat$ chord, which functions initially as a back-relating dominant to the subdominant, is retroactively understood as a return to the tonic, highlighting the $B\flat$ chord’s pivotal relationship within the symmetrical tonal space.

A similar sense of ambiguity emerges in the entr’acte to Act III of Berton’s *Aline, reine de Golconde* (1803), which also plays on the double identity of the three cardinal poles of the tripartite harmonic space (Figure 9). The G major sonority which opens the entr’acte is revealed, through the addition of a flattened seventh, to be the dominant of C major, setting in motion a so-called “auxiliary cadence” into the entr’acte’s tonic (Burstein 1988; Burstein 2005). Once landed in C major, Berton firmly establishes the key—in his typical, axial manner—by alternating the tonic sonority with a subdominant and a dominant chord. This C major sonority, with the addition of a flattened seventh, then becomes the dominant seventh of the subdominant. Berton seals this modulation to F major, again, by alternating the new tonic chord with the new dominant and the new subdominant. Finally, through a series of chromatic voice-leading procedures culminating in a second-inversion dominant-seventh chord, Berton returns to the tonic, in which he cadences.

In the entr’acte, as Berton moves along the tetrachordal axis from

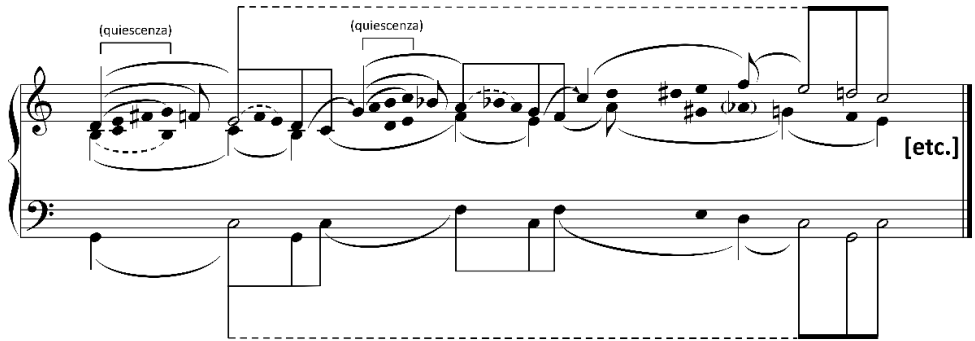


Figure 9. Graph of the Entr'acte to Act III of *Alina, reine de Golconde*, Henri-Montan Berton.

dominant to tonic to subdominant, he toys with the multiple identities these chords take on within the symmetrical harmonic space, each new tonic becoming the dominant of the next, an illustration of Lester's "floating tonic" principle in practice.³⁸ As with many of the other examples, Berton appears to outline his trilateral harmonic space at both a large-scale structural level and also locally within each key area. However, this entr'acte goes one step further by foregrounding the tetrachordal divisions of the scale Berton's axial tonal space entails: not only do various "diatonic quiescenzas" (Gjerdingen 2007, 228) spell out the pitches of the *tétrachord authentique*, the bass line moving from the subdominant tonicization to the tonic return (via the second-inversion dominant seventh) spells out a *tétrachord plagale*.³⁹

In light of ongoing debates around so-called "intentional fallacy" in music analysis, some might say that it would be spurious to suggest that Berton deliberately set out to organize these numbers around a decidedly Rameauian conception of harmonic space.⁴⁰ Berton wrote a great many arias that do not use the subdominant at all, either as modulating key aria or as an individual chord. Indeed, these plagally-oriented forms are a significant minority in Berton's corpus, clustered toward the beginning of his career. However, this paper offers four observations which gesture toward a self-conscious link between Berton's work in the classroom and in the opera house: first, that Berton wrote a number of pieces that prominently feature the subdominant at both foreground and structural levels; second, that in these plagally-oriented pieces the subdominant works, phenomenologically, to wrench the music away from the prevailing dominant-tonic axis, creating a "plagal moment"; third, that the result of these "plagal moments" is a harmonic landscape that bears uncanny similarity to the tripartite division of tonal space in Berton's Rameau-inspired *Jeu des Préludes Harmoniques* and *Traité d'Harmonie*; and finally, that these similarities can be elucidated through musical analysis, hinting at the possibility of

intentionality or causality. The analyses here, like all musical analyses, are anachronistic, and any theories they bring forth about Berton's compositional method are highly speculative.⁴¹ Yet, these analyses place Berton's compositional practice in dialogue with his pedagogical and theoretical work, revealing striking correspondences between Berton's use of the subdominant on the operatic stage and the privileged position the sonority held in Berton's pedagogical materials. They suggest the possibility that Berton's theoretical engagement with the later writings of Rameau came to influence the harmonic organization of his works, thereby proposing just one possible point of correlation between theory and practice, classroom and opera house.

Conclusion: Pedagogy, Practice, and Play

The founding of the Paris *Conservatoire* in 1795 was intended to bring standardization and meritocracy to French musical pedagogy. As a result, major compromises were reached in the setting of the *Conservatoire's* curriculum and textbooks, designed to synthesize the diverse pedagogical approaches of its professors and appease partisan groups among the staff. Catel's *Traité d'Harmonie*, approved unanimously by the *Conservatoire's* harmony committee, was one such compromise, written to bring an end to ongoing disagreements between the pro-Rameau and anti-Rameau factions on the *Conservatoire's* faculty. Yet, an examination of Berton's theoretical works reveals just how far Catel's treatise was removed from the actual pedagogical beliefs and practices of the *Conservatoire's* diverse faculty. Berton's plagally-oriented forms, and the plagal moments that comprise them, suggest that Berton's compositional practice flew in the face of Catel's theoretical principles, and that the points of disagreement between Berton and Catel were acoustically reflected in the way Berton grapples with harmonic space in his own compositions.

The Paris *Conservatoire* was founded at a particularly fraught moment in France's political history, when compromise, bureaucracy, and control had converged, uneasily, in French public life, the product of a short-lived, and ultimately ineffectual constitution. This paper suggest that, for all the rigidity of the *Conservatoire's* initial curriculum and the lengthy process of negotiation through which it was derived, there was much give and take in the creative and pedagogical work of the *Conservatoire's* professors. It suggests that the standardization of the French musical curriculum did not fully erase the fundamental aesthetic and intellectual differences which were supposedly quashed in the Catel compromise. Ultimately, although Berton was but one of many harmony professors at the *Conservatoire* at the time, an examination of his work adds depth and texture to the history of

the conservatory movement, demonstrating how the push to enforce and regulate a national musical curriculum through official educational institutions was undercut by the striking artistic individuality of those tasked with delivering these new “unified” curricula, and the divergent theoretical traditions which fed into their compositional and pedagogical practice.

That the specter of Rameau came to haunt the standardization of the *Conservatoire*'s curriculum is a testament to the rich and often contradictory intellectual lineages that Catel's *Traité* attempted to consolidate, while Berton's own revisions to Rameau's theories demonstrate that Rameau's musical thought continued to be negotiated, repurposed, and re-enlivened well into the nineteenth century. The *querelles* of eighteenth-century music, all the pamphlet wars and salon debates, were not laid to rest in the nationalization of French music education, but rather were institutionalized, emerging as underlying tensions within the *Conservatoire*. Indeed, Berton's life and work continually indexed the notorious *Querelle des Bouffons* well into the nineteenth century. His theoretical work was derived from the harmonic principles set out in Rameau's pamphlet *Observations sur notre instinct pour la musique* (1754), while his compositional activity was centered around the genre of partially-spoken *Opéra-Comiques* that emerged as a result of the *Querelle*.⁴² It follows that the plagally-oriented forms employed in Berton's early operas suggest an intersection of Rameau-inspired music theory and Italian-derived musico-dramatic form on the stages of the *Opéra-Comique* and the *Théâtre Feydeau* in the wake of the Revolution.

When set against his ludic pedagogy and the *Jeu des Préludes Harmoniques*, Berton's plagally-oriented forms seem to function on a similar level to his pedagogical game; both appear to render Rameau's harmonic principles palpable to the senses. Just as the *Jeu des Préludes Harmoniques* allows the student to touch and embody Rameau's subdominant-tonic-dominant axis, so Berton's plagal forms seem to offer the listener an acoustic realization of the same theoretical principles. Berton's game and Berton's plagal forms could thus be seen as two sides of the same coin, the same otherwise-gnostic theoretical system made either tactile or audible. In many ways, Berton's game provides a link between the disciplined, methodical process of learning harmony and the creative, individualized process of composition. In allowing the student to interactively engage with Rameau's harmonic principles, the *Jeu des Préludes Harmoniques* reveals the level of creativity and play required to transform theoretical knowledge into a musical work. In doing so, it also evinces a degree of creativity latent in musical pedagogy, demonstrating that music education, so closely oriented toward the creative act of music making, is always-already playful.

At a time when the *Conservatoire* was attempting to standardize and

regulate its musical curriculum, Berton's stubborn adherence to, and continued reimagining of, Rameau's theoretical principles in his pedagogical writings and compositional work demonstrates a degree of leeway, and, indeed, of creative play, that surrounded this period of regulation and control, both in the opera house and in the classroom.⁴³ The subdominant chord can be understood as a key site of play in Berton's life and work: before the publication of Catel's treatise, Berton experimented, in his operas, with musical forms that emphasized the subdominant, and, after the publication of Catel's treatise, Berton continued to toy with Rameau's conception of the subdominant in his theoretical writings, and encouraged his students to do so too through the *Jeu des Préludes Harmoniques*. This spirit of music-theoretical play proved inextinguishable, even in the face of a rigid, constrained harmony curriculum. Thus, Berton's ludomusicality opens the door to an institutional history of the conservatory movement that takes into account the creative pedagogical and compositional practices of its teachers.

Notes

The author wishes to thank Loretta Terrigno for posing the question which led to this study, and Ian Sewell and the editorial board of *Current Musicology* for their insightful comments and suggestions.

1. Joel Lester (2016) has discussed the difficulties of studying music theory pedagogy historically, noting that it is near impossible to know exactly what went on in the eighteenth-century harmony classroom. Irrespective of these difficulties, there has been a growing interest in the relationship between music pedagogy and music theory in the eighteenth century, particularly in relation to the partimento tradition. See, for example, Gjerdingen (2007) and Sanguinetti (2012).

2. The constitution's focus on public betterment was exemplified in Article 356, which asserted that the French judiciary should protect, above all, "the professions which affect the public morals, the security, and the health of the citizens" (*Convention Nationale*, 1795b). Furthermore, public primary schools, for example, would train their students in "reading, writing, computation, and morality," while a program of national festivals would "maintain fraternity among the citizens and attach them to the constitution, the fatherland, and the law" (*Ibid.*). One of the constitution's authors, Boissy d'Anglas (1795) told the *Convention* that "we should be governed by the best of us, you must make the French people . . . take the rank that their nature assigns them. . . . We should be governed by the best among us: the best are the most learned and the most interested in maintaining the law."

3. The committee included such prominent figures as Étienne Méhul, Luigi Cherubini, Jean-Joseph Rudolphe, Jean-François Le Sueur, Jean-Paul-Égide Martini, François-Joseph Gossec, Honoré Langlé, Jean-Baptiste Rey, Nicolas-Étienne Framery, and Henri-Montan Berton (Catel 1803). Jean-Paul-Égide Martini may be known to modern listeners for his song "Plaisir d'Amor," the tune to which was later used in Elvis Presley's "Can't Help Falling in Love with You". Also on the committee was the renowned naturalist Bernard Germain de Lacépède, who had become well regarded for his theories of musical aesthetics.

4. The committee comprised many composers of different nationalities who were at very different stages of their musical careers. The twenty-eight-year-old Catel was the young-

est member of the committee, a position he was most probably awarded through his close working relationship with Gossec and his Revolutionary compositions for the *Garde nationale*. Berton, the second-youngest composer on the committee, was also in his twenties when appointed to the *Conservatoire*, having enjoyed a string of successful premieres at the *Opéra-Comique*. The oldest composer on the committee, Gossec, was in his sixties when he joined the *Conservatoire's* faculty, and had made his name at both in *Opéra-Comiques* and in concert music under the *Ancien Régime*. Gossec hailed from the Austrian Netherlands (modern-day Belgium); Martini from Bavaria; Rodolphe had spent much of his career in Italy and Germany; and Cherubini was born in Italy but had worked in London before naturalizing in France. Many members of the committee had already written harmony treatises prior to the publication of the *Traité*: Framery had already written a number of practical and theoretical compositional tracts prior to the Revolution, while Langlé's 1795 *Traité d'harmonie et de modulation* was already a pedagogical staple by the time the committee adopted Catel's treatise (Darlow 2003; Langlé 1795).

5. In their foreword to the *Traité*, the committee declared that "after several sessions examining different systems of harmony, the committee adopted, at its meeting on the 10th of Ventose, the basis of the system conceived by Citizen Catel", hinting at the drawn-out process of group decision-making which culminated in the adoption of Catel's treatise (Catel 1803, 1). That many members of the committee already had their own long-established theories of harmony undoubtedly contributed to the arduousness of the decision-making.

6. Catel argued that the dissonant ninth chord (four thirds stacked on top of each other) formed the basis for all harmony, all other chords emerging from suspensions within this fundamental sonority. He drew this concept from Rameau (Wason 2008). For more on this theory, see Martin (2012).

7. Such battles and compromises were common across all areas of the *Conservatoire* as the administration sought to fix and standardize its curriculum; indeed, Rebecca Dowd Geofroy-Schwinden (2015) has shown that similar debates erupted around the *Conservatoire's* piano treatise, ideological tensions among the faculty bubbling over into outright conflict.

8. In the late 1810s, such tensions would spill over in the very public dispute between the Austrian-trained Anton Reicha and François-Joseph Fétis, who saw the former's *Cours de composition musicale* as a regression from Catel's textbook (Wason 2008; Groth 1983; Reicha 1818). Yet even Fétis was dissatisfied with Catel's *Traité*, going on to write his own treatise in 1844, the *Traité complet de la théorie et de la pratique de l'harmonie*, which simultaneously built on and criticized the work of Rameau and Catel to form a broader theory of tonality for the nineteenth century (Fétis 1844; Topis 2005). Fétis, in his preface to his later treatise, even critiques the consensus-building exercise that led to the adoption of Catel's textbook, scoffing that the committee could choose such a "purely empirical method" in order to please its partisans (Fétis 1844, 5).

9. The Bourbon restoration saw the further upheaval of the institution's curriculum; this is when Catel's textbook, allegedly, was dropped as the official harmony textbook for the *Conservatoire* (Wason 2008).

10. There are two editions of the *Jeu des Préludes Harmoniques*, the first of which has not survived. However, the first edition of Berton's game had made a significant impression on the music critic Castil-Blaze, who encountered the game while researching for his *Dictionnaire de musique modern*, and asked the composer's permission to publish a second edition in 1842. In his *Dictionnaire*, Castil-Blaze proclaimed that "Mr Berton has found a very ingenious means of teaching young pupils an introduction to the principal chords of all of the tones," and in his introduction to game's second edition, Castil-Blaze declared that

Berton's pedagogical method should be "agreeable to all musical amateurs and useful to all young students" (Castil-Blaze 1825, 163; Berton 1842, 1). As far as this author can tell, only the second edition survives, and, thus, it is the 1842 Castil-Blaze edition that is quoted from in this paper.

11. Note that Berton uses the terms *parfaite* and *authentique* interchangeably.

12. One of these "derivative" cadences, the *cadence imparfaite*, Berton considers an "imitation" of one of the two fundamental cadences. The *cadence imparfaite* shares the same intervallic motion as one of the two fundamental cadences; however, it does not constitute a motion to the tonic. For example, in the *cadence plagale imparfaite*, the bass either ascends by a fifth or falls by a fourth, but does not outline a subdominant-to-tonic motion (outlining instead, say, a motion from supertonic to submediant). Berton demonstrates how consecutively repeated *cadences imparfaites* form a circle-of-fifths sequence, and can thus be used as the impetus for harmonic transition.

13. Note that Berton's definition of a cadence is much broader than modern definitions. William Caplin (2004) makes a distinction between cadential function and cadential content, that is to say, cadence as delineating formal closure and cadence as a set of voice-leading practices. Caplin notes that Rameau, along with a number of other eighteenth- and nineteenth-century theorists, tended to think only in terms of cadential content, defining the cadences by their voice-leading motion and not necessarily by their formal function. Similarly, Berton views the cadence merely as any movement from one chord to another, not as a distinct point of structural arrival. Thus, in Berton's harmonic system, cadential motion is inseparable from harmonic motion, all chord progressions made up entirely of strings of cadences. Indeed, Berton's *Traité d'Harmonie* includes over 6000 such harmonic successions, painstakingly categorized (Damschroder 2008).

14. Indeed, it can be surmised from Berton's life-long advocacy for Rameau's later harmonic theories that the composer sat in the pro-Rameau camp of the *Conservatoire's* harmony committee. It is unclear how Berton became such an acolyte of Rameau's theories, nor, even, where Berton became so proficient in the ins and outs of Rameau's system. Berton may have acquired his knowledge of Rameau from his father, Pierre-Montan Berton, a composer, singer, and conductor at the *Opéra*. Pierre-Montan Berton was heavily involved in the revival of Rameau's works at the *Opéra* in the 1760s and 1770s, revising and re-orchestrating these older works to bring them in line with modern tastes (Sadler 1981, 68; Charlton 2000, 347). Although Pierre-Montan Berton was undoubtedly very familiar with Rameau's theoretical work, it is unclear whether he passed this knowledge on to his son: Henri-Montan Berton was largely self-educated due to his father's belief that music was a "natural" art that could not be taught (van Boer 2012, 80). It is most likely that Berton learnt of Rameau's theories from Jean-Baptiste Rey, an ardent follower of Rameau's theories who also sat on the *Conservatoire's* harmony committee, and who had given the young Berton intermittent musical instruction (Fétis 1868, 234; Grove et al. 1900, 237). It is clear that Berton became increasingly invested in distinctly eighteenth-century, distinctly French musical traditions as he grew older, seeing these antiquated national styles as an antidote to the modern, Italianate music of Rossini, a composer he despised (Berton 1826; Giroud 2010). Although Rameau is rarely credited, Berton's theoretical writings are packed with Rameau-isms, which are frequently presented as axiomatic, conventional wisdom that can be understood *sapienter* sat. Berton reveals his debt to Rameau in the last section of the accompanying text to the *Jeu des Préludes Harmoniques*, in which he evinces the basic tenets of the fundamental bass. Berton (1842, 7) explains that the intervals of the tonic, dominant, and subdominant harmonies can be reconfigured to produce various inversions. For Ber-

ton, these inversions all share the same, unchanging fundamental bass, which is implicit in their sonority regardless of inversion.

15. For more on Rameau and nature, see Cohen (2001).

16. This was a significant shift from the conception of harmonic motion in Rameau's earlier *Traité de l'Harmonie* (1722), in which the dominant-tonic relationship was emphasized. In this earlier treatise, cadential movement was understood as a relatively mechanical traversal along the circle of fifths.

17. Note that this is not a supertonic seventh chord, as in modern harmonic parlance; the fundamental bass remains rooted in the subdominant.

18. For example, where Rameau is interested in how harmony gives rise to melody, Berton merely presents the two phenomena as linked through a fixed musical grammar.

19. Jairo Moreno (2004, 91) also hints at this phenomenon, arguing that, in Rameau's theories, chords derive harmonic meaning by dint of their relationship to other chords. Rameau thus understands harmonic meaning as an aggregate of vertical sonority and fundamental bass movement. The *Jeu des Préludes Harmoniques* hinges on this notion of context-dependent harmonic meaning: the chords on the *boussole*, laid out in chromatic array, only acquire diatonic harmonic meaning when the *compas* places them in dialogue with each other. The student, when moving the *compas* across the *boussole*, is able to uncover a range of harmonic meanings by revealing different perfect-fifth relationships between chords.

20. To provide background to this quote, Berton's critique of Rameau appears in the context of a towering dictionary of chords, including various suspensions and inversions, all in relation to a ninth sonority, which Berton views as the primordial root of all harmony.

21. In Berton's system, there is still an elementary pull from subdominant to tonic; however, this pull is not motivated by dissonance, but rather by the movement of the fundamental bass from scale-degree four to scale-degree one within a given key. Thus, Berton's subdominant constitutes a shift away from Rameau's dissonance-consonance dialectic, seeing the plagal cadence as the gravitational movement from one consonant sonority to another.

22. According to Caleb Mutch (2015), the very notion of a "plagal cadence" only crystallized around the mid-eighteenth century, emerging in the work of theorists such as Blainville and Tartini as a subdominant-based alternative to the perfect cadence in certain modes. Berton synthesized this newer terminology into Rameau's older system, clarifying points of contradiction within Rameau's work.

23. In this sense, Catel's definition of cadence is much closer to Caplin's (2004) definition, which also views the cadence as performing an explicitly closing function, occurring only at an important point of structural repose.

24. In many ways, Catel's cadential taxonomy is much more closely aligned with Schenkerian definitions of the cadence than it is with Rameau's system, prefiguring Schenker's notion that the completion of the *Ursatz*, along with the interruption of the *Ursatz* around a "dividing dominant", determines musical form (Cadwallader and Gagné 2007; Burstein 2014; Schenker 1935). Catel, like Schenker, views the subdominant as serving a much more subordinate function than Rameau does, construing the plagal cadence as a much weaker form of structural resolution (Aldwell, Cadwallader and Schachter 2011; Stein 1983; Notley 2005; Caplin 2004); although Catel never goes as far as Schenker and his acolytes in doing away with the concept of a plagal cadence altogether.

25. The ascending-fifth modulation, in contrast to the descending-fifth modulation, requires the interpolation of a dominant seventh in the new key as a pivot chord, which must

be carefully prepared by the composer (i.e. V^7 of V is required in order to modulate to the dominant from I).

26. Berton's three principle modulations all involve the addition of only one accidental. Berton (1815, 149) calls modulations to more distant keys "transitions", stating that these distant-key modulations result from "double or triple modulations".

27. For example, Catel quietly adopts many of Rameau's ideas on dissonance treatment and suspension, yet his wholesale rejection of Rameau's conception of musical space suggests that these ideas were adopted in the name of diplomacy and convenience.

28. I have taken the term "plagality" from Caleb Mutch (2015) as a useful way of describing music that emphasizes subdominant to tonic motion.

29. Note that this paper will only be dealing with major-key subdominants. Minor-key subdominants are well beyond the purview of this short study.

30. Note that many modern-day analysts would not classify the six-four chord here as a subdominant harmony, viewing it, instead, as two non-chord tones decorating the tonic harmony (the so-called neighboring, or auxiliary, six-four). For example, Aldwell, Cadwallader, and Schachter (2003, 348) state that "accented six-fours—including cadential ones—depend on their chords of resolution; they do not function as inversions of a root-position triad." Similarly, Laitz (2016, 316) cautions the student to "remember that the pedal six-four chord contains the same pitches as the subdominant, yet we refrained from labelling it a IV harmony because of its neighboring motion in the upper voices." *Open Music Theory* (Shaffer et al. 2014), however, notes that the neighboring six-four can be classified either as part of the tonic harmony, or as a separate subdominant harmony. Both Rice (2014) and Hertz (1995) refer to this type of neighboring six-four chord as a subdominant sonority. It is important to note that there has been much music-theoretical debate around the status of the six-four chord more generally, particularly as to whether or not the cadential six-four can support the third scale degree of Schenker's *Ursatz* (Beach 1967; Beach 1990a; Beach 1990b; Cadwallader 1992; Lester 1992; Montagnier 2003; Mirka 2015; Temperley 2017). Therefore, the classification of a given six-four chord is very much context dependent. Given Berton's belief in a fundamental bass system, and that the six-four chords are clearly part of Rice's "Hertz" schema, I have opted to label the six-four chords here as subdominant harmonies.

31. It is important to note that, while the dominant appears with a seventh here, the subdominant has no added dissonances, in accordance with Berton's rejection of Rameau's essential sixth dissonance; it is also important to note that the subdominant here does not function as a predominant; Berton prefers II as a predominant harmony, saving IV for plagal alternations with the tonic.

32. In the B section's plagal moment, the subdominant is temporally emphasized by an acceleration of the harmonic rhythm: while the movement from the new tonic to the new dominant takes place in two-bar hypermeasures, the new tonic alternates with the new subdominant at one-bar intervals, matched by bursts of patter-like singing in the vocal line.

33. I have used Schenkerian analysis here as a kind of music-theoretical *lingua franca*, a relatively straight-forward means of conveying large-scale tonal forms to the modern reader.

34. Note that I am considering the tonicized A minor as a projection of the F major chord (as per Aldwell, Cadwallader, and Schachter (2011, 270)), and not a particularly important structural harmony in and of itself.

35. It was also not particularly uncommon for a B section in a simple ternary form to modulate to the subdominant, and to then end with a standing on the dominant (see, for

example Mozart, 1781, *Violin Sonata*, No.33, K.377, III). Composers of this time frequently modulated to the subdominant in the trio section of a minuet and it was frequently employed as a secondary key area in marches. For other subdominant modulations see: Mozart, 1791, *Piano Sonata*, No.16, K.545, I; Mozart, 1779, *Acht Menuette*, K.315, I, III, IV, V, VI, VIII; Wanhal, *Sonate militaire*, IJV.23, Allegro; Jadin, 1795, *String Quartet*, Op.1, No.2, II; Pleyel, 1796, *Minuet in C*, B.817; Schubert, 1818, *Drei Militärmärsche*, Op.51, D.733, I; Beethoven, 1813, *Drei Märsche*, Op.45, II.

36. Patrick Täieb (1992) notes that Berton was, indeed, employing some particularly radical harmonic processes, modulating in ways that pushed the boundaries of diatonic tonality and even prefigured the Romantic musical language of Berton's arch-nemesis, Gioachino Rossini (for more on Berton's animosity toward Rossini, see Walton 2007, 54–56. Berton's subdominant modulations, by comparison, are relatively conventional for the time. This is not to say that they are not worth studying, however: as Susan McClary (2000) has shown, musical conventions can be highly expressive in their own right, reflecting something of the identity and ideology of the composers who used them.

37. Also, much like the subdominant modulation of “Adieu donc,” the subdominant modulation of “Courage, courage” is reinforced by the alternation of the new tonic with the new dominant seventh (in first inversion) and the new subdominant (in second inversion), Berton setting up a symmetrical, tetrachordal tonal space in the new key.

38. There is the sense that these ascending-fourth modulations could continue around the circle of fifths *ad infinitum*; however, Berton confines the entr'acte to the three key areas of his symmetrical harmonic space, undertaking a labyrinthine chromatic maneuver in order to return to the tonic after his subdominant modulation. In the *Traité d'Harmonie*, Berton does, indeed, provide multiple examples of chord progressions which pass through the entire circle of fifths, including one progression which involves a string of dominant-seventh chords in a chain of descending fifths—remarkably similar to the tonal plan of the beginning of the entr'acte (Berton 1815, 133; Damschroder 2008, 68).

39. The “diatonic quiescenzas” Berton uses here are not strictly diatonic, as Berton uses a *vii*^{o7} in order to harmonize scale-degree seven.

40. For an example of one such debate, see: Taruskin 1979; Forte 1985; Taruskin 1986; Forte 1986; Haimo 1996a; Latham 1997; Haimo 1997; Headlam 1997; Agawu 2011.

41. Brian Hyer (1996, 93) has argued that studying historical music theories can, indeed, draw awareness to the anachronism of our modern-day analytical frameworks, “sorting what seems to be banal and familiar into strange patterns and odd configurations.” Indeed, one of the goals of these analyses is to allow the subdominant chord in Berton's music to be heard through fresh ears, to allow this otherwise-innocuous chord to take on a greater significance to the contemporary listener. When Berton's music is analyzed through the lens of his theoretical writings, it becomes possible to hear, in these plagal forms, the rich intellectual context in which Berton's music was situated, the academic tensions which dogged the early years of the *Conservatoire* rendered audible. Patrick McCreless (2000), too, has talked about the importance of placing our own modern-day structural hearings into our historically-informed analyses of arcane music, noting that our own analytic techniques can ground our historical speculations in our own aural experience of the music.

42. For more on the *Querelle des Bouffons*, and especially Rameau's role in this debate see: Charlton 2012; Verba 2016; Arnold 2017; Higgins 2012; Thomas 2006. For more on operatic debate in eighteenth-century France and also the later *Querelle des Gluckistes et des Piccinnistes*, see: Darlow 2013.

43. This paper, of course, is not attempting to paint Berton as some kind of music-theoretical rebel: Berton published his pedagogical writings after Catel's *Traité* was dropped as official textbook. This is merely to say that Berton remained ideologically committed to Rameau's thought despite it being regulated out of the *Conservatoire's* early curriculum. Some members of the *Conservatoire's* faculty did actively rebel against the institution's strict management, namely Jean-François Le Sueur, who published a scathing critique of the *Conservatoire's* vocal and composition instruction in 1801, a publication which would see him fired from his post (Le Sueur, 1801).

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