Neither major, nor minor:

The Affective Fluctuating Third in Central-European Art Music ca. 1840–1940

Abstract

From the middle of the nineteenth century onwards, several composers have attempted to capture a phenomenon of unstable major and minor intervals in folk music. Looking at the transcultural impact of this representational drive, this paper focuses on one particular scale degree – the third – and on particular contexts where the modal fluctuation of the third subverts the traditional ethos of major and minor, inherited from the eighteenth-century art music. Bartók’s interest in the neutral third has received some attention from Olsvai (1969) and more recently Riskó (2015), but the affective meaning of this third within Bartók’s largely triadic harmony deserves more attention, even if of a speculative nature. Applying a circumplex model of affects (originally devised by Russell, 1980) to ‘Major and Minor’ from Bartók’s Mikrokosmos suggests the manipulation of traditional mode-related affect had additional consequences for the perception beginning, middle and ending of this short masterpiece. In the second part of this paper, a similar application of both formal and affective analysis will look at earlier works by Dvořák, Brahms and Liszt, where triadic harmony would normally invite a tonal analysis that would cover up the phenomenon of the fluctuating third and its transcultural affective impact. To narrow down the analysis to comparable cases, this part is limited to works by art-music genres that represent traditional Central European musics, all exhibiting an energetic and positive mood.

Introduction: between major and minor

This paper examines how the phenomenon of the fluctuating third in folk musics of Hungary and the Czech lands might be perceived and interpreted, in formal and affective terms, in a few select works by Central European composers ca. 1840–1940. It stems from particular portions of two previous studies of folk-music influence in Bartók’s music by Imre Olsvai (1969) and Kata Riskó (2015) respectively, which have speculated about how Bartók responded compositionally to the phenomenon sometimes (too restrictively) known as ‘Transdanubian third’, presumably because it was first
observed in a particular singing style of peasants in the region of Western Hungary.\(^1\) Olsvai was concerned with a direct regional influence and the formal means by which Bartók had adapted ‘the oscillation between minor and major thirds and minor and major sevenths, whether in a strophe or in several successive strophes [of Transdanubian folk songs]’. Riskó’s much more recent article takes a more critical look at primary sources and gives a clearer chronological correlation between Bartók’s fieldwork and composition. It shows that the kind of oscillation we see in these particular intervals in Bartók’s compositions sometimes anticipated his field research, stems from a number of field studies beyond West Hungary (e.g. in Bihar, now in northwest Romania), and at times could also relate to the influence of similar aspects in the harmony of Liszt and Debussy. Both articles are concerned with formal aspects of Bartók’s adaptation of folk-music elements, and despite a necessary degree of speculation, Bartók is one of the safest composer for studying musical transculturation of this sort, since as a pioneering ethnomusicologist as well as composer (along with Zoltán Kodály and László Lajtha), he left musicologists a treasure trove of extremely detailed transcriptions that can be painstakingly studied against his composition. By way of introduction, two examples from each of the abovementioned articles will make this point in a different way.\(^2\)

In Ex. 1, based on Olsvai’s first example (op. cit., 334–35), we see in the upper staff a cleaner and (for comparison purposes) rhythmically simplified version of Bartók’s meticulously handwritten transcription of a song he recorded in Tolna County in central Hungary in 1907 (‘As ürögi ucca sirikes’, ‘The Street of Urogi is straight’, catalogue no. MF 972b).\(^3\) The arrows point to the occasional


\(^{2}\) This paper will not deal with instances where composers briefly represent microtonal tuning in a folkloristic context (as in the case of the third movement from Enescu’s Sonata No. 3 Op. 25). Nor will it speculate about the more systematic way in which microtonality in oral cultures relates (or does not relate) to works of Central European avant-gardists who developed microtonality systematically – most prominent of whom was Alois Hába. It is intriguing and pertinent to my topic that Hába was reportedly inspired by his native Moravian folk music to sharpen some major-mode intervals and flatten minor-mode intervals to ‘heighten [their] expressive effect’ (Jiří Vysloužil. ‘Hába, Alois’, *Grove Music Online. Oxford Music Online*, accessed 6\(^{th}\) June 2016). However interesting, microtonality in art music takes us too far from an investigation that concentrates on fluctuating thirds as adapted to the hemitonic system.

\(^{3}\) I have also consulted the facsimile of Bartók’s original transcription, which is accessible online at the time of writing through the Hungarian Institute of Musicology’s *Béla Bartók: Complete Collection of Hungarian Folk*
sharpening or flattening of scale-degrees $^3$ and $^7$. The lower two staves reproduce his piano work No. 20 from the album ‘For Children’, Sz. 42 (orig. version, 1909), based on the same song, and published only two years after the original recording was taken.

Example 1: Top system: a simplified version of Bartók’s transcription of *As ürögi ucca sirikes*, MF 972b (1907); Bottom system: Bartók, *For Children* (1909), No. 20, bb. 1-12.

Olsvai observes the following:

The pitches of the original folk-song (neutral thirds and seventh marked by arrows) whose proper intonation cannot be rendered in a hemitonic system, are liable to be fixed by the authors at one height or another arbitrarily. Bartók does not resolve these neutral pitches in the common minor-like pentatonic scale (g-b flat-c-d-f), but he uses b1 [B-natural] in the middle of the melody and in this way he emphasizes the Trans-Danubian colour. 

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*Songs*, [http://db.zti.hu/nza/tamlap/BR_02653_01.jpg](http://db.zti.hu/nza/tamlap/BR_02653_01.jpg). The transcription is based on a sound recording that is available from the same repository: [http://db.zti.hu/nza/mp3/MH_0972b.mp3](http://db.zti.hu/nza/mp3/MH_0972b.mp3).

4 Olsvai, op. cit., 334–35.
We can see, in fact, that Bartók simplified the intervallic oscillations of the original song (as heard in the recording) by interpreting all recurrences of 7 as F-natural. This is true for the rest of the piece, so the overarching modality is Dorian, with occasional sharpening of the third. The first question to ask is whether the B-natural at the end of the first phrase is indeed ‘arbitrary’. The recording and transcription suggests otherwise, at least not as far as faithfulness to the source is concerned: Bartók interprets a slightly lower B as B-natural, and a slightly higher B-flat (in the ascending melody G-A-B-flat) as B-flat. This would be the logical solution for giving a flavour of this practice in a hemitonic system that does not allow microtonal tuning. But it is not merely a matter for logical conjecture: we are very fortunate to have a recording, transcription and a fairly straightforward artistic arrangement, all from the same person, which allows us to track both artistic and transcription-related decisions in such fine detail. The positive proof we have of a conscious attempt to translate the phenomenon of neutral third is uncommonly high in this case. We will not find in nineteenth-century compositions (and even in many other works by Bartók) such an easy access to the composer’s mind in this particular matter. The manner in which Bartók adapts this phenomenon, however, may help hypothesise earlier perceptions and transference of his phenomenon in art music.

Positivism and its limits aside, Ex. 1 raises a different question about the meaning and expressivity of major and minor, and here straightforward comparison to the source recording will not explain everything. In the recording, the singer’s voice is louder in the first phrase because the pitches are higher: this is reflected in the coupling of a phrase in forte answered by one in mf (later the second phrase is to be played piano). But in terms of pitch, the final B-flat in b. 11 of the piano piece could well have been B-natural to judge by the recording (the B-G motif is analogous to F-sharp-D from the first phrase). Bartók avoids this, instead opting for B-flat and thus correlating the bright or ‘harsh’ major with the louder dynamics, and the ‘soft’ minor with the soft dynamics of the second phrase. The same modal process is repeated in the second half of the piece with slightly different harmonisation. Clearly, Bartók did not consider it his duty to attempt a literal translation of the neutral third, but rather to give a taste of it in a way that would work well in a modern piano piece. But the expressivity of this piece is never understood only in terms of the source music it seeks to represent, but also in terms of its relationship to Western music art tradition. Heard that way, the modality of Ex.

For an intriguing discussion of how Bartók occasionally dramatised folk elements not found in the original recordings on which they were based, but otherwise related to folk-music practice, see David E. Schneider, *Bartók, Hungary, and the Renewal of Tradition* (Berkeley: University of California Press, 2006), 209–14.
I overturns the Picardy Third tradition of stabilising the minor mode through a parallel major-mode ending. Here it is the major third that is heard as a harsh deviation from a Dorian mode, a deviation that anticipates a stable completion in the manner of an ‘antecedent’ phrase.

My second introductory example is taken from Riskó (op. cit., 85): bb. 156–60 from the first movement of Bartók’s String Quartet No. 2 Op. 17 (1915–17). It depicts the superimposition of a minor-mode melody against major-mode chords, a different kind of modal practice akin to ‘blue note’ intervals in jazz, found in instrumental music in Transylvania. In such music, sometimes the melodic ‘blue’ note can be a neutral third. In any case, its modal independence from the accompanying chords creates gritty cross-relations. When adapted to art music, such cross-relations create dissonances that heighten the modal independence of the melody, in contrast to its common-practice subservience to harmonic control. Bartók knew this phenomenon well, and he talked about the adaptation of superimposed major and minor modes to art music in one of his Harvard lectures in 1943.6


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6 Béla Bartók, Essays, edited and translated by Benjamin Suchoff (Lincoln: University of Nebraska Press, 1976), 367–70.
Any discussion of this passage’s ‘affect’ is complicated by several factors. First, there is no ready answer to how the perception of a slow, soft minor-mode melody in legato, historically connoting some quality of sadness, might be changed by major-chord triads. Secondly, the whole passage is an oasis of stable tonality in a highly chromatic and even expressionistic string-quartet music. It completely breaks the style and stops the normal narrative of the movement. It is therefore senseless to judge this passage in isolation. The tranquillo, dolce character with pizzicato accompaniment does not attempt to imitate folk music as much as evoke a distant memory of it, in contrast to the high modernism of the rest of the movement. Here folk music and eighteenth-century tonality stand much closer together than the music in preceding passages, and it is difficult, therefore, to consider how the ‘traditional’ ethos of major and minor is changed in such a context.

The question of modal ethos in such examples is therefore not merely, or mainly, a question of being certain about the cultural origins of a certain modal practice in art music. It is mostly or all about contexts within art-music, on both formal and historical-stylistic levels. There are numerous ways in which one can theorise modal fluctuations in the ‘high classical’ repertoire, but for the sake of keeping comparative analysis within reasonable bounds for this paper, I shall mainly confine myself to three small-scale categories: (1) Picardy Third; (2) \( ^6-{\^5} \) melodic cadence or the more elaborate \( \frac{^7}{^6}/^6-{\^5} \) cadential line; (3) phrase repeats in the parallel mode (e.g. G minor followed by G major).\(^7\) The general musical language within which we find a certain passage is also crucial: it determines how we judge deviance from the expressive uses of major and minor inherited from the late eighteenth-century common practice. Without doubt, affect in relation to modality is more easily dealt with in Western compositions written in a more traditional harmonic idiom. That is why the latter half of this paper will consider nineteenth-century folkloristic compositions that evince some manner of fluctuating third, while acknowledging the problem of attributing such fluctuations to folk-music practice with any degree of certainty.

In my discussion of affect I shall refer to a circumplex model of emotion developed by Russell

\(^7\) It is not my intention here to deal with larger-scale mode switches, such as those associated with predictable modal structures in minor-mode movements. Nor will we explore the manner of markedly deviating into the opposite mode through the introduction of new themes (as, for example, in the first movement of Beethoven’s Op. 2 no. 3, after the transition section): the shadow of this Emfindsamkeit device is present in many Romantic folkloristic compositions, not least ones in slow tempo (see, for example, Liszt’s fifth Hungarian Rhapsody), but I find at present that it is unrelated or less related to the imitation or adaption of fluctuating thirds from folk-music traditions.
(1980), and subsequent theoretical adaptations to music by Juslin (2001) and Spitzer (2010). This model, which locates neighbouring affects on a two-dimensional grid, can throw an interesting light on the way a listener steeped in the tonal music of the late eighteenth century and early nineteenth century may hear major and minor in tandem with other musical parameters. All of the works examined here have a single, overarching affect, yet this affect is constantly inflected by busy, small-scale modal fluctuations: adapting some principles from the circumplex model may help shed light on the special role of major and minor in these instances.

There are obvious limitations to this study. Any suggestions of direct cultural transference of modal ethos is strictly avoided, since I do not know whether these fluctuations carry any semantic meaning or emotive charge in the source culture, nor have I found yet studies that attempt such a theory, or have the means to provide one myself. My method here is rather to show in the first instance where and how a fluctuating (or neutral) third is being adapted, and then interpret the (indirect) semantic consequences of this adaptation. The purpose of examining a few choice pieces is to provoke thinking about the historical possibility of modal transculturation, but it is not my intention to offer any further theory on this evidence.

Major and Minor through the Circumplex Model

The circumplex model of emotion is best known through the work of James Russell (1980). It proposes a continuum of affective states along a circle, ordered by their relative level of activation (arousal or energy) and valence (pleasantness/unpleasantness). Patrik Juslin (2001) adapted this model to associate specific combinations of acoustic cues, heard in performance, with specific affects. Michael Spitzer (2010) took a step further by using the circumplex model to chart the ongoing musical-dramatic development in particular compositions, in this case by Schubert. I have also used this model in a recent article to explore the anti-generic affective trajectory of Liszt’s Hungarian Rhapsody No. 17.

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9 See citations in previous note.

Theories do not go unchallenged and this one is no exception. Are anger and fear really that close, or is it a conceptual convenience of this particular model? Are gestures really easily received as theorists of gesture imagine? Does this model stand the test of empirical musical research? A separate pertinent problem is the abstractedness of modes and of harmony. Salient harmonic binaries such as major/minor and consonance/dissonance do not offer concrete gestures in themselves, and their affective meaning very much depends on cultural, historical and a particular combination with other musical parameters (articulation, dynamics, and so on). And yet, as I will demonstrate, genric materials, specific cultural contexts, and parametric limitations are entirely the point of this study. The application of a circumplex model to music – if limited to specific genres with no pretence to universal human perception – provides at least a more systematic understanding of the gradation of affect, which can provide a useful framework for discussing the relationship between gesture and affect. This will help demarcate, and thus interpret, more clearly, the affective meaning of the fluctuating third in a cultural context. It is not my purpose to defend the theory but rather to extract basic principles from this model that will be analytically helpful.

My point of departure is to offer a simplified version of Juslin model of acoustic cues, and add to it a schematic representation of major and minor as arrows denoting a ‘tendency’ towards either positive (major) and negative (minor) valence (Fig. 1). It is important to remember that the ‘happy/sad’ dichotomy was established more firmly with the rise of the style galant and then mature classical style, which made major the default mode, and minor a more special one. That said, even within these styles, modes cannot be said to be wholly ‘positive’ or ‘negative’ in themselves, but rather reinforce the direction of valence alongside other cues. For example, the ‘Sturm und Drang’ style in the music of the late eighteenth century is ‘stormy’ primarily due to the loud dynamics, fast tempo, sharp accents and melodic leaps, and so on – arguably more dependent on these acoustic cues than on the

11 Russell’s model (and a structural approach to emotion) was critiqued, and indeed criticised, in the field of psychology. For a comprehensive review and further evaluation of the circumplex model see Remington, Nancy A. et al., ‘Reexamining the Circumplex Model of Affect’, *Journal of Personality and Social Psychology*, 79.2 (2000): 286–300. Researchers in the area of music and emotion have also expressed some scepticism about a ‘dimensional’ model of emotions, particularly due to the problem of distinguishing between generic affects (and their attendant musical gestures) and what listeners actually felt. (One could counter, however, that an historically meaningful empirical approach is impossible in cases where the historical audience for which certain music has been originally created no longer exists). See Marcel Zentner and Tuomas Eerola, ‘Self-Report Measures and Models, in: *Handbook of Music and Emotion: Theory, Research, Applications*, ed. Juslin, Patrik N, and John A. Sloboda (Oxford: Oxford University Press, 2010), 188–221.
minor mode. Nevertheless, the occasional major mode in stormy passages does not invalidate the
generic role of the minor mode within this topos, just as (in the more energetic sphere of the
circumplex) major was essential for celebratory, or otherwise exuberant, expression. The mode
arrows in Fig. 1 should therefore be understood to mean generic tendencies.

For example, the first movement of Mozart’s famous Symphony No. 40 in G minor begins furtively, and is
punctuated by two outbursts, the second of which takes us to the transition to the relative B-flat major. The
translation of generic gestures in these first 22 bars into human emotions veering from, say, worry or anxiety to
outbursts of fearfulness (or perhaps anger?) are in any case arguable. But any such interpretation derived
primarily from the sharp shifts in dynamics, articulation (strong accents in the forte passages), and orchestration
(timbre). The modal vector plays a secondary role here, and one could argue that Mozart sets up this initial
major moment for the, equivalent, more developed transition event in the recapitulation, which inevitably draws
the harmonic progression back to G minor, thus reaffirms more strongly the ‘stormy’ topos through that mode.

At some point in the middle of the eighteenth century minor also became increasingly associated with an
older more learned style. Matthew Riley has recently conceptualised two symphonic subgenres that became
established in Viennese symphonies in the late 1760s (i.e. concomitantly with the more general rise of the
‘Sturm und Drang’ topos), the minor-key contrapuntal minuet and stormy finale. See Matthew Riley, The
Viennese Minor-Key Symphony in the Age of Haydn and Mozart (Oxford: Oxford University Press, 2014),
chapter 4.

This is not the place to elaborate about the complexity of these generic tendencies, or indeed how the meaning
of major and minor is blended and complicated in vocal and dramatic music. See for example the discussion of
the major/minor characterisation of the Queen of the Night in Mozart’s The Magic Flute in Robert S. Hatten,
Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert (Bloomington: Indiana
I have also added to Fig. 1 a representation of a flow from dissonance to consonance, experienced as tension and resolution/relaxation, or movement from higher activation and more negative valence (+A/-V) into lower activation and more positive valence (-A/+V). Of course consonance and dissonance occur in every kind of musical expression in tonal music, so the diagonal line needs to be imagined as movable and varying in length. The opposite direction is also possible (consonance to dissonance) but for the next analyses we are more interested in tension-resolution, especially where this is aligned with the minor mode ‘resolving’ into a (presumably more stable) major mode, in the manner of a Picardy Third, or more structurally, within an entire composition. Indeed, the late eighteenth century saw the rise of multi-movement works that narratively led from minor to major. As Floyd Grave argued, this was aligned with a contemporaneous aesthetic understanding of minor as
being somehow, affectively, incomplete.\(^{15}\)

Short pieces that emulated folk songs or music for folk dances did not have, however, complex narrative trajectories. Most often they communicated a single affect, sometimes in varying degrees of intensities, and this corresponded more closely to an earlier Baroque practice in art music. This is as true of twentieth-century pieces such as those found in Bartók’s ‘For Children’, as it is of earlier folkloristic works from the ‘long’ nineteenth century, notwithstanding differences in the harmonic style employed in portraying folk-music modality.

As already mentioned in relation to Ex. 1, Bartók’s translation of the natural third into hemitonic modality overturns the eighteenth-century tradition of the Picardy Third by creating a minor mode that is perceptively more stable – a perception reinforced by the repetition of the second half of the phrase (not quoted). It is quite clear that the major and minor modes are not equal, and it is even possible to argue that Bartók attempted here a single mode that is not exactly major or minor, or perhaps just an imaginative extension of the usual variance of the sixth and seventh degrees to the third. In other words, it is possible to hear the opening statement with its stark open fifth and (until the very last moment) avoidance of a third as a kind of unstable extension of the minor or Dorian mode, one that is then quickly ‘resolved’. We can therefore imagine a south-easterly journey along the eastern hemisphere of the circumplex, as both in terms of texture and dynamics a phrase that begins with stark, bright sonorities, mellows into sweeter and more tender ones.\(^{16}\) I do not experience the mellowing of tone as a ‘darkening’ affect, because the flattening of the third and sixth are first heard in the context of B-flat major, and it is that B-flat major which extends, in the first instance, an overarching (as I hear it) G-Dorian mode. Whether one hears a single variable mode or two, the movement towards a more positive valence defies the traditional major/minor dichotomy.

I do not mean to argue that every instance where Bartók varied a major and minor third – in music that endeavours to represent folk music in a strict way – we can be sure that he is conveying a practice


\(^{16}\) The circumplex model also reminds us that the affective change is quite small and restricted. In terms of tempo and articulation the music continues to express a positive, energetic character from beginning to end, and Juslin’s classification of acoustic cues suggests that most of the affective trajectory takes place somewhere within the northeastern quadrant of the circumplex.
akin to a neutral third, or that even if we think he does, then the resulting modality is necessarily very far, both formally and affectively, from familiar common-practice progressions. For example, in No. 6 of the same collection for children (based on another Hungarian folk melody that is repeated four times in different harmonisations), there is a very slight suggestion of the ‘Transdanubian Third’ in the way that B-flat changes to B-natural in the second phrase, and then in the opposite direction to B-flat in the third phrase. There is also a gradual dropping of dynamics, from forte (first phrase), through mf and p (second and third phrase respectively), to pp in the final iteration of the phrase. That final closing phrase also shows a more traditional ^7-^6-natural-^6-flat-^5 cadential line (Ex. 3). To my ears the repeat of the same subphrase over this familiar descending chromatic line in such hush dynamics invites a more familiar mode of listening and an eighteenth-century ethos of affect, a mood of wistful resignation that is further confirmed by the final tonic utterances in ppp and further diminuendo (bb. 54–57, not quoted).

Example 3: Bartók, For Children (1909), No. 6, ‘Country Dance’, bb. 45-53

The two examples from Bartók’s ‘For Children’ mix the world of piano pedagogy with ethnomusicological transcriptions, simplified peasant melodies with a modernist, post-classical aesthetic. The harmonic language – including the ‘meaning’ of major and minor – also wavers between classical Western traditions, neo-modality, and a particular reference to folk-music traditions. The last example was already more abstract in the sense that Bartók did not try to represent the fluctuation of the sixth as something that happens in the folk melody itself, but in the accompaniment he devised. The question of transcultural influence becomes more challenging in pieces that avoid quoting or inventing folk melodies in favour of deriving generic elements from the oral culture and then reordering them in an abstract way, thus also avoiding a direct representation of that culture.

No. 59 from the second volume of the Mikrokosmos, entitled ‘Major and Minor’, presents a wonderful case in point. The title is symptomatic of Vol. 2 of the Mikrokosmos, which presents several modes, technical challenges – including binary opposites in particular musical parameters such as ‘Staccato and Legato’ or ‘Crescendo-Diminuendo’ – alongside pieces said to be in a regional or national style (these are also quite abstract). In ‘Major and Minor’ Bartók charges the student with the task of playing an F-major penachord in the left hand against an F-minor one in the right, and vice versa.
Note that Bartók does not call this piece ‘major versus minor’: his neutral title suggests that one can either perceive independent melodic entities or bimodal-harmonic mixtures that are neither major nor minor. The thinking behind this piece seems to be primarily pedagogical.

But the didactic purpose of this work and its comparative abstractedness should not prevent us from perceiving how Bartók once again adapts the principle of the fluctuating third, albeit in a more sophisticated and less literal way. Indeed, there is no attempt at a direct imitation of mixed intonation of scale degrees in Gypsy bands or the wavering third in monophonic peasant singing. Yet some abstract representation of this phenomenon is clearly audible in the constant close succession of A-flat/A-natural, that creates an impression of a single mode ‘in-between’ F major and minor, as can be heard in the first two bars (Ex. 4a). We are not, in any case, ‘in’ the key of F major/minor. Rather, the modally mixed pentachordal material drives towards a finalis on C, with G playing a quasi-dominant function in relation to it, as I shall soon argue.

The piece comprises three phrases in loosely ABA form, where the harmony of the framing phrases can be likened to a minor-mode melody accompanied by major-mode chords. Bartók encountered such harmony in his fieldwork as an ethnomusicologist, and we have already seen a reference to it in his work as a composer in Ex. 2. We can hear another linear two-voice realisation of this harmony in No. 62 from Mikrokosmos II, ‘Minor Sixths in Parallel Motion’, which has a simpler, parallel-motion counterpoint. Phrase B (bb. 7-13) inverts the texture so that the minor pentachord appears in the lower part against a major-mode pentachord in the upper part. The brighter and harsher quality of sound in the middle section is the sonic (and one might add, acoustic) consequence of inverting the two modal parts (Ex. 4b).

What really opens up a window for a generic interpretation of affect, however, is the fleeting yet audible references to traditional, common-practice harmony. Minor superimposed on major allows Bartók to repeatedly use B-natural in the lower part as an implied leading tone to C. We repeatedly hear on the beat of each bar (three times, in bb. 3, 4 and 5 respectively), the melodic fragment B-flat-A-flat-G against the B-natural in the lower part (Ex. 4a). The tonal reference here is to a natural-minor melodic descent to G in the upper part, against a melodic minor ascent to C in the lower one, which is further confirmed by the closing four bars of the piece (Ex. 4c).

17 Of course there are modernist elements that de-familiarise this scheme: the accent on B-natural instead of B-flat, for example, or the melodic leap from F to C in the upper part: but this is not a pastiche of eighteenth-century harmony after all.
Example 4: Bartók, *Mikrokosmos II* (1926–39), excerpts from ‘Major and Minor’: (a) bb. 1–4; (b) b. 7; (c) bb. bb. 15–18.

Put differently, the treatment of dissonance in the middle section (phrase 2) is further removed from common-practice harmony than in the framing sections, and more grating in that way (Ex. 4b). The bright A-flat-C major centric sonority, and the concentration of the highest note in the upper Pentachord, A-B-C, both create a higher level of activation. But this greater activation assumes a more negative character precisely because of the grating dissonances between A-flat and A. The *finalis* of this phrase is G (b. 13, note quoted), the note that finally resolves the stubborn A-flat. The way the two modes combine suggest a chromatic Oriental pentachord or tetrachord, [F]-G-A-flat-B-natural-C. 18

When the third phrase returns, we are back to a mixture of diatonic modes. The intervals are also softer, as the minor melody returns to the top voice, and the voices move in canon, in parallel tenths. Then, as Ex. 4c has shown, the minor mode in the soprano finally becomes more prominent, and the combination of the two voices suggest an almost dominant-tonic cadence at the end of the work. This

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18 It is of interest that this piece comes immediately after ‘In Oriental Style’, which features the same pentachord transposed to G. The *finalis* of that piece is also on ‘5 (in this case D), just as in No. 59.
reference to common practice suggest a quasi-tonic-dominant-tonic structure (A\(^c\)-B\(^G\)-A\(^c\)), where the less stable and more dissonant middle section has its *finalis* on G.

It also suggests, therefore, a higher activation and more negative valence in the middle (an \(+A/−V\) trajectory), and certainly a more positive valence in the end, with high activation maintained, perhaps, due to rising dynamics (\(A+/V+\) countering the melodic descent and harmonic resolution). The somewhat neutral major-minor mode at the beginning (which then, from b. 3 onwards in phrase 1 becomes predominantly minor), loud dynamics, legato articulation, and slow tempo, meant that we start somewhere in the southern hemisphere of the circumplex, but not too far from the equator (horizontal axis). Whether individual listeners will hear the main affect as closer to tenderness, clouded by bittersweet cross-relations, or as being on the lighter spectrum of sadness or fear/worry (my own perception), or as starting in a fairly neutral emotion close to ‘0’ on both horizontal and vertical axes—in other words, where we fix in the circumplex the beginning and end of this journey—is open to subjective perception and can only be tested empirically by asking a good amount of listeners. One can hypothesise, however, that most listeners will hear a relative increase in activation and negativity (whether they express this as anger, anxiety, etc.) in the predominantly major but more dissonant middle phrase, and a more positive and energetic ending, all of which can be expressed graphically as a C-shaped, counter clockwise movement on the circumplex. It is interesting to observe that the affective trajectory is determined in the first instance by Bartók’s play with modal juxtaposition and through a veiled reference to both folk-music (from an unspecified region) and common-practice harmony. This piece utterly transforms the supposedly familiar yet manages to preserve some of the more traditional affects associated with major and minor, as well as consonance and dissonance.

**Nineteenth-Century Celebratory Folklorism (I): the case of Dvořák’s ‘Furiant’**

With nineteenth-century composers the task of relating harmony in their folkloristic composition to an eighteenth-century ethos of major and minor is much easier, because of the prevalence of a more traditional tonal syntax. It is also easy enough to pick folkloristic compositions where major and minor frequently alternate, and assume that these are meant to imitate the phenomenon of the fluctuating or neutral third. Although we cannot be positively certain of how well these composers knew of fluctuating modality in the oral musical cultures that surrounded them, there are indirect ways of testing the strength of that assumption. In the following pieces we will focus once more on the affective consequences of a dense juxtaposition of major and minor modes. For the purpose of creating a useful comparison, all the pieces I have chosen are in a fast tempo with melodic gestures that suggest vigorous dance movements. All of them, regardless of whether their ‘main’ key is major or minor, show a high variability of mode and are firmly in the A+/V+ quadrant.
The framing motto and opening phrase of Dvořák’s well-known ‘Furiant’, No. 8 of his Slavonic Dances Op. 4 (1878), presents such a quick succession of parallel major and minor (Ex. 5). Both phrases begin and end on the tonic, but not quite the same way in terms of mode and hypermetric placement of the tonic. One can see how gesturally this phrase relates to a classical antecedent-consequent structure, with emphatic V\(^7\) on the downbeat of both b. 3 and 4, to be complimented by a V\(^7\)–I cadence in bb. 7–8. The switch to the major mode adds vitality to this ‘consequent’ that can be experienced as a slight rise in activation and valence.


Many performances, whether in the piano duet or orchestral version, intuitively reinforce this positive affect of added vigour by playing the beginning of the ‘consequent’ phrase, and especially the G major chord, louder than the (already loud) opening. Table 1 gives a representative selection as an indication to the above, without presuming use this sample as conclusive evidence (to substantiate this small point more thoroughly would require research beyond the scope of this study). For easy access, I have included four performances that are currently available on You Tube. The numbers in the table represent loudness units derived from Geoffrey Peeters (2004).\(^{19}\) As can be seen from this particular selection, most performers played major chords more loudly to varying degrees, with the exception of Swalisch and the Israeli Philharmonic Orchestra, who do the opposite, though not consistently (see final repeat).

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Table 1: Loudness levels of the first G-minor chord vs. the first G major chord in two iterations of the refrain in Dvořák’s ‘Furiant’. Loudness units are based on Peeters (2004).

The first phrase, which bookends all other episodes, exceeds the tradition of the Picardy Third by extending the major mode to the entire consequent subphrase. It also still unconventional in 1878 for such a modal switch to occur right at the beginning of a piece, and then for the whole thing to be repeated at the beginning, and subsequently in the manner of a refrain. Dvořák, it seems, declares his

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20 https://www.youtube.com/watch?v=WlywT8fKVZA

21 https://www.youtube.com/watch?v=zYYRBVlEDr0

22 https://www.youtube.com/watch?v=0TyMyUNFVqg

23 https://www.youtube.com/watch?v=GBRnhw8HTc: The Prague Duo accentuate the second chord (syncopated note), so the second chord in each bar is often louder. But major chords are still relatively louder than minor ones. The full results of the analysis, including the second chord indicated in brackets, are as follows: b.1, g: 19.123 (20.297), b. 5, G: 20.083 (22.560); repeated: g: 18.683 (20.7752), G: 20.285 (21.029); b. 17, g: 19.231 (19.399), b. 21, G: 19.639 (18.341); repeated: g: 21.136 (21.338), G: 18.127 (21.019).
intention to create a minor-major modal complex from the very beginning, and this is as true on the level of individual phrases as it is of the unusual tonal structure of the piece.

The ‘Furiant’ has a doubled-up quasi-rondo form (Fig. 2). The phrase in Ex. 5 functions as a kind of refrain or mini-Rondo theme in between different episodes. The initial R-A-R-B-A’-C-R form (where ‘R’ stands for refrain) is followed by another coda-like episode in G major (marked D in Fig. 2). The same rotation of themes then repeats at b. 128 almost verbatim, but for an insertion of what is officially titled as ‘coda’ at b. 200, which is really 41 new bars of modulatory music followed by the same coda-like section D, now concludes with the G-major part of the refrain (marked R\textsuperscript{consequent}).

Convention would have us read this work ‘in’ G minor, with two rotations of the main four sections and the interspersed refrains. We may recognise a structural modulation to the relative B-flat major in bb. 33-64, a return to that key in R’, a parallel-major coda in section D, and then, with just a few progressions added, we can perceive the same tonal structure repeating. But a closer reading of the work points to a few interesting and complicating features. First, the initial shorter sections R-A-R-B are as modally mixed as the refrain itself. It is curious that ‘G minor’ gains a little more stability only through its relative major B-flat in the subsequent episodes A’ and C. Moreover, it is significant that no complete phrase begins and ends in G minor in the first rotation of themes; by contrast B-flat major (episodes C) and G major (episodes B and D) enjoy more extended and stable prolongations. In fact, on the surface G minor is largely absent (except for the first half of the refrain and weak closure of section A) until the section entitled ‘coda’ at b. 200 reverses the modal flow, so that finally, in b. 206 we hear extended music in G minor for the first time (bb. 206–13, not quoted).

The whole of section E (240–41), in fact, consists of new music in mostly minor keys. Its second half (b. 220ff) is dominated by A minor which finally functions as ii\textsuperscript{6} of G major (b. 241), leading to the resumption of the rondo-form rotation at the point of a stable close in G major (codetta + section D). Until then, section E as a whole is harmonically unstable, with striking chromatic progressions in
block major-mode chords succeeded by extended melodic periods in minor modes. Otherwise, the relative, and especially parallel major modes predominate throughout, preventing G minor from ‘settling’, thus reinforcing the affirmative character of the piece.

If we try to chart the course of this music on the circumplex, it is a safe choice to locate most of it in the ‘happy’ northeastern quadrant (Fig. 3). All sections except E are characterised by a single affect, with characteristic melodic gestures and articulation that remain stable throughout. Dynamics in these sections and within them are mostly stable too, terraced rather than gradual, with the exception of the long crescendo in C that leads to the climactic return of R at b. 65 (there is also rising activation due to rhythmic diminution in this section). Sections B and D, both in G major, are the quietest, smoothest and most stable in every sense. Section B adds a pedal point and dispenses with the wild dance leaps in favour of stepwise, even crotchets, albeit maintaining the staccato articulation. Section D introduces the most lyrical theme, in long note values (dotted minims) and legato stepwise motion, the faster staccato accompaniment only murmuring in the background. By contrast, section E presents an unmistakable topos of stormy music in minor keys. It is also the most diverse in terms of gesture, and continuous, rather than terraced, dynamics. The two halves of this section gradually die down, with the longest diminuendo in the second half followed by motivic fragmentation and gestures of uncertainty. This dipping in activation and valence is then corrected first in a positive direction of valence (section D), and then a sudden leap in activation, with the G-major R\textsuperscript{consequent} conclusion.

**Figure 3: Affective trajectory of the ‘Furiant’**

![Diagram of affective trajectory]

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Overall, the ‘Furiant’ presents a way of using a largely traditional i-III-i-(I) minor-mode structure, but allowing major modes to dominate its surface to such an extent that any affect associated with the minor mode becomes scarce. The way Dvořák holds back that mode is the reason for the effectiveness of the genuinely minor-mode section E: it is here that the strict folkloristic style is loosened in favour of a truly teleological yearning for a major-mode completion. The difference between section E and the other sections in the way major and minor are deployed exemplifies, within the same work, looser and stricter ‘folkloristic’ translations of an oral tradition of neutral or fluctuating third. It is the ‘stricter translation’ that ultimately subverts the traditional affective contrast between major and minor.

**Nineteenth-Century Celebratory Folklorism (II): Micro-Fluctuations in ‘Hungarian’ Pieces by Liszt and Brahms**

I have started purposefully with Dvořák in order to show a case where a transculturation of harmony and form, as well as affect, can be easily missed—notably if we use music theory to rationalise away an alternative tonal practice. A monocultural, formalistic approach to harmony in such music, though an important corrective to supposition about cross-cultural influence, should not result in an artificial reading of history that presupposes composers before the advent of ‘post-tonality’ and recording equipment were incapable of listening to their environment, or adapting strangely fluctuating thirds in some imaginative way to their own practice. I find it much more fascinating to discover traces of such listening and relate it, where possible, to real folk music. I have not attempted to trace Dvořák’s piece to a folk-music practice he may have known, however, nor do I expect (based on my previous research with Liszt) to find anything as concrete as the documentation left by Bartók, leading from the source straight to the composition. It is for another study to pursue what the piece itself plainly suggests. But sometimes, even without field recordings and transcriptions, the circumstantial evidence for cross-cultural harmony is pretty strong. This is particularly true, I think, when we look at cases where fluctuating thirds on a small or even micro-scale create the most unconventional harmonic effects. The next examples should give even a monocultural sceptic pause for thought.

In No. 9 of Brahms’ Hungarian Dances, the 1869 collection that had inspired Dvořák, we hear in b. 9-12 a rather curious progression (Ex. 6). It is structurally based on a normative progression from E minor to its dominant B through the relative major, G. However, Brahms throws this convention into modal flux as plagal cadences decorate each of these chords, creating at one point a chromatic progression (E-minor → C minor) as well as continuous and pungent cross-relations against a melody in a stable E minor mode. Note especially how G-sharp clashes with G-natural in b. 9 (this adds more
bite already created by a dissonant appoggiatura on the strong beat), and subsequently how cross-relations are formed through the imitative exchange between the middle and upper parts.

Of course these cross-relations can be explained within theoretical conventions, but it is their accumulation that is rather interesting. Brahms, I would argue, is reaching for something that resembles a Gypsy-band practice of unstable thirds. The Transcultural significance of what is happening here is not in the (quite inaccurate) representation of Gypsy-band harmonisation. More important is how this harmonic translation expands the expressive possibilities of major and minor. The E minor key already creates a more impassioned shade of joviality. Both conventional appoggiaturas and the unusual cross-relations create little spasms of negativity (-V), which adds a little bitterness to this overall energetic, positive, music. The unexpected chromatic thirds, mode shifts and cross-relations are jolting without being too dramatic, however (note the soft dynamics). They can be expressed as miniscule affective tendencies, as indicated in Ex. 6, whose accumulation tilts the overall trajectory in an +A/-V direction. Without these major-minor clashes, in other words, this music would not only be less interesting, it would be more naively happy and slightly less energetic.

Example 6: Brahms, Hungarian Dance No. 9 (1869), bb. 9–12

Of course there is room for scepticism about the relationship of this passage to an oral tradition of neutral or fluctuating thirds. Brahms could draw on such harmony from elsewhere. But it is not only the genre that invites transcultural listening, but also a curious fact that is particular to this piece. Liszt

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24 He is also subtly alluding to a parallel bass-melody movement, forbidden in normal voice-leading, and avoided here through the plagal cadences.
made his own arrangement of the same melody in 1853, following the success of his recently published Hungarian Rhapsodies, as part of No. 11 of a collection entitled ‘Ungarische Romanzero’. Liszt’s harmonisation is also full of modal micro-fluctuations of a variety even more extreme than Brahms’. Interestingly both composers approached this particular piece in a similar way, and importantly, we know Liszt’s version was never published in his lifetime.25 It is meaningful that neither composer could have known about the other’s work, or could have picked up such bold harmonisation from any Hausmusik edition (assuming that one existed, which I have not yet ascertained), which suggests that these two versions are independent responses to a common oral tradition of performing this tune—including a performance practice of fluctuating the third, and possibly other degrees.

Rather than making a phrase-by-phrase comparison of the two pieces (as I have done elsewhere),26 I will just refer to the striking modality in the opening of Liszt’s version (Ex. 7). Though this opening phrase begins and ends in F major, the dominant and subdominant are in the minor mode. Already at the beginning of this tune we hear cross-relations between V/C-minor and B-flat minor. But one particular, cheeky, dissonance, deserves special attention. It is the two Ds in the upper part in b. 54: what should have been a chromatic passing note between E-flat and D-flat (in the context of a ii–V7 progression towards the A-flat chord in b. 55) becomes a bimodal dissonance over both, and this is because the E-flat is already an appoggiatura over the B-flat minor chord — it never resolves. Again, such moments add activation and negativity to the sprightly ‘F major’ music.


Example 7: Liszt, Ungarischer Romanzero (1853) No. 11, Allegro, bb. 49–56.

Liszt could have easily avoided the ‘mistake’ in b. 54 had he resorted to a more conventional B-flat major, rather than minor, harmonisation. He pointedly did not, because part of what he tried to achieve here, in response to the Gypsy-band music he knew well, was a melody that is modally free from the underlying chords – a tall order for a composer working within art-music harmony of the early 1850s. And yet this was not Liszt’s earliest, nor most complete attempt to do so. As I have shown in an earlier study, examples of modal inflection in the context of parallel motion between bass, accompanying chords and melody (all of which clearly allude to Gypsy-band musical practice documented in modern studies) is already evident in the final section of Magyar Dallok No. 7 from 1843 (revised as Hungarian Rhapsody No. 4, 1853). The most impressive and thoroughgoing attempt to free the modality of the melody from the accompanying chord can be heard in the final section of Rhapsody No. 14, whose first version dates to Liszt’s tour of Transylvania in 1846. The clash of the melody in A minor against the major-mode chords moving in parallel motion in bb. 253–58 (not quoted) creates an especially fresh bimodal effect that can be directly attributed to an accompaniment practice of Gypsy bands in Transylvania. In fact, it can also be directly related to the minor-against-major moment from Bartók’s Quartet No. 2, quoted in Ex. 2. But whereas the affect in Bartók is complicated by several factors (first of which is that its harmonic stasis and relative

27 Loya, Liszt’s Transcultural Modernism, 102 and Ex. 4.10. See also ‘Modal Fluctuations and Inflections: Simultaneous and Successive Polymodality’ in ibid., 48–50.
consonance contrasts with the rest of the movement), Liszt’s *vivace assai* is unambiguously celebratory. The bimodal clash only adds vigour and energy to the music, and once again, it is perhaps possible to interpret this clash also as a slight veering towards a negative valence, making the music more impassioned, ecstatic, but less straightforwardly ‘happy’.

I would like to conclude however, with the second, ‘D-minor-major’ phrase from the same Rhapsodic section (Ex. 8). It not only imaginatively reflects the fast-pace change of mode that is sometimes heard in the playing of a skilful primás, but we actually have interesting evidence about its origins. We can trace the *vivace assai* from Liszt’s Rhapsody No. 14 to a manuscript from 1846 in which he first jotted down what he then called entitled ‘Koltói csárdás’ (‘Csárdás from Koltó’, Transylvania). There is an eye-witness account that he notated it immediately (or, we can safely assume shortly after) listening to, and even joining in with, a Gypsy band he encountered in Klausenburg (now Cluj Napoca in Romania) during his Transylvanian tour in 1846.\(^{28}\) This is not as positive proof as checking Bartók’s composition against a recording and his transcription of it, but by the standards of studying transculturation in the nineteenth century, it is quite good.

In the D minor-major (middle) phrase of the *Koltói csárdás* the succession of major and minor is quite minimalistic and a lot more intense, as befits the overall style of the *vivace assai*. And this early example, so close historically to the inherited major-minor harmony from the eighteenth century, which concentrates our attention precisely on how this kind of progression deviates from conventional rules for switching modes. The diatonic third of D minor constantly veers towards F-sharp. The melody descends in decorated steps from F to the tonic D every four bars (e.g. in bb. 225–28); when it reaches the tonic, D minor suddenly cadences in the major mode (b. 228). Here the change from minor to major is at the midpoint of the phrase, not really its end, which is hardly how Picardy Thirds function. Moreover, the F-sharp appears off-beat and involves a leap and sharp accent. This, as well as the speed at which this happens and the subsequent, just as brusque switch back to D minor, create strong cross-relation effects. The appearance of F-sharp in the high register at b. 236 doubles the third, creating an even harsher effect of cross-relations. Affectively it is not a moment of rest but of high activation and passion: angry, ecstatic, defiant, cheekily playful – pick your own descriptive category. I would simply suggest, that it is consistent with the +A/-V affective tendencies discussed in relation to previous fast-tempo examples from the nineteenth century.


Such isolated cases cannot lead to any firm conclusions but they do open up a route to further investigation within similarly limited music parameters, and give rise to two central points. First, it seems that composers were searching for new ways of creating tension and release, that are analogous to dissonance and consonance, not only in simultaneous, but also in successive bimodality. It would be important to theorise this further because of the important differences between this practice and traditional dissonance control. Secondly, a lot of the rapid mode switches to major are in dialogue with the Picardy Third tradition, overreaching its generic rules. Third, what is common to all of these examples is not the choice of mode to achieve a particular affect, but the use of a modal complex for this purpose. For example, the -A/+V direction in Dvořák’s ‘Furiant’ is mainly led by stable major modes, undermining the sense of an overarching G minor; in Bartók (Ex. 1), on the contrary, the same affective tendency is produced by reverting to a stable G Dorian, away from an initial G major. In both works, however, these modal switches merely inflect the overarching affect: their function is not
to create a radical contrast, but to temper or slightly vary the emotive character we already perceive at the beginning.

It might be good, at any rate, to start with the working assumption that practice of fluctuating thirds in folk music was familiar not only to the composers featured in this article, but many other composers from Central Europe, perhaps a great many if we include forgotten names. Let us also assumed that they many learned how to adapt such things not only through their own study, but by learning from other composers. Theorising this cultural complex will take a much bigger and more rigorous study. Here I have tried to query, through a few choice analyses, what I think is an overlooked strand of transculturation. How big is it?