Conceptual Blending and Meaning Construction: A Structural/hermeneutical Analysis of the 'Old Castle' from Musorgsky's 'Pictures at an Exhibition'

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ABSTRACT

Conceptual blending is a cognitive theory proposing the combination of diverse conceptual spaces for the creation of novel blended spaces. Musical conceptual blending can be intra-musical, pertaining to the combination of diverse structural elements for the creation of new melodies, harmonies or textures, as well as cross-domain, involving the integration of musical and non-musical spaces for the creation of novel analogies or metaphors. The present paper presents a structural and hermeneutical analysis of 'Il vecchio castello' from Modest Musorgsky's 'Pictures at an Exhibition' in an attempt to disclose both the intra-musical (combination of modal, tonal and coloristic harmonic spaces) and the extra-musical (contextual, symbolic and programmatic aspects) conceptual blending that the work incorporates. The analysis reveals that the piece comprises seven strophes of a song form that emerge from a common melodic core, through the dynamic evolution of harmonic spaces from diatonic modality to impressionistic/coloristic chromaticism and with the combinatorial use of ten harmonization concepts. The reductional/prolongational analysis provides input for two distinct Conceptual Integration Networks, the first describing the intra-musical blending of melodic harmonization and the second proposing the cross-domain blending of the musical and pictorial input spaces into a blended hermeneutical space that projects the work's narrative/programmatic/emotional potential. The proposed analysis shows how musical structure promotes meaning construction through cross-domain mapping. This research suggests that conceptual blending theory as an analytical tool can promote a richer structural interpretation and experience of Musorgsky's work.

I.   Introduction

From a traditional musico-analytical perspective, Musorgsky's 'Pictures at an Exhibition' is a typical example of programme music. It refers to a series of paintings, and the imaginary affective exploration of their features. This programme, in keeping with 19th-century formalist distinctions between intrinsically musical features and extra-musical interpretations attached to them, is seen as somehow secondary and 'parallel' to the music.

In this paper we argue for a somewhat different interpretation, drawing on the theory of conceptual blending (Fauconnier & Turner 2003) and related work on metaphor & cross-domain mapping (e.g. Zbikowski 2002 & 2008, Spitzer 2003). Through a case-study analysis of the 'Old Castle', we explore instances of conceptual blending which go beyond the idea of a programme that is merely applied onto the musical work, and re-cast Musorgsky's composition as a dynamic, multiple-level integration of incongruous temporal, spatial and affective modalities.

A fundamental assumption for this investigation is the idea of a scored composition as an emergent structure, which can also be studied retrospectively. The ensuing analysis is therefore intended to provide a possible interpretation of how we listen to the 'Old Castle', how this process generates meaning that is neither purely musical nor exclusively pictorial or verbal, and how the elements that are central to this blended understanding of the work, are arguably themselves a result of structural blending.

A. Perspectives from Cognition and Philosophy of Mind: Conceptual Blending and Qualia

Fauconnier & Turner's Conceptual Blending theory (2003) is a step further from unidirectional theories of metaphor, most notably Lakoff & Johnson's (1980) Conceptual Metaphor Theory (CMT). CMT suggests that we map concepts across different domains, borrowing features from one source (e.g. painting) and applying them to a target (e.g. music), so that the attributes of the source domain are mapped onto those of the target (e.g. 'nuanced dynamics' or 'a dark tonality'). Blending, on the other hand, presupposes an equilateral, multi-directional relationship not only between different domains, but between *conceptual spaces*. These spaces may be contrastive or qualitatively different, and may only share some structural features between them. In that sense, we may also identify blends situated exclusively within the domain of music, e.g. between clashing chords or contrasting tonalities (Ox 2014, Kaliakatsos-Papakostas *et al* 2014), as well as blends combining properties of text, image and sound, e.g. in cinema or advertising (Cook 2001) or in recorded pop songs (Moore 2012).

Applications of conceptual blending in music analysis are still relatively few and rather general in nature. Cook (2001, see also an earlier attempt in Cook 1998) makes one of the first attempts to represent a music and moving image blend in his analysis of a Citroen car commercial, while Zbikowski (2002) provides one of the more detailed analyses to date of how text painting and programme music operate together on the basis of conceptual blending. While more recent authors (e.g. Schmidt 2012) have also proposed critical re-examinations of these analytical approaches, for the purposes of this paper, we will primarily rely on Zbikowski's paradigm, not only because it is the most analytically inclined example of current literature on blending in music, but also because of its closeness to the material under study (a complex programmatic work involving several layers of visualisation and meaning construction).

As 'the work' in this case is not merely a musical text, and the composer's relationship to the source material is more complex than the kind of one-directional representation or *ekphrasis* suggested e.g. by Bruhn (2000), we also refer to the qualitatively different, contrastive states that account for the piece's multiple dimensions as *qualia*. Though the properties of qualia have been the subject of extended criticism among consciousness theorists (most notably Dennett 1991), the idea of otherwise indescribable differences in consciousness between past and present, reality and dream, depiction and

interpretation etc. is a useful way to conceptualize the deeper-level structures that permeate the composition.

B. Musorgsky's 'Pictures' and the 'Old Castle'

Musorgsky's 'Pictures at an Exhibition' is a well-known piano suite, inspired from paintings and architectural drawings by Viktor Alexandrovich Hartmann (1834-1873), a close friend of the composer, put on display during a posthumous exhibition of 400 of his works in February and March 1874 in St. Petersburg. The suite comprises 10 pieces and 5 promenades that function as preludes and/or bridges. It was written in one creative burst in June 1874 (Russ 1992; Oldani; Brown 2002: 229-241).

The suite, according to Russ (1992: ch. 1; see also Taruskin 2010: vol. 3, ch. 12) incorporates Musorgsky's key stylistic elements: nationalism, populism, anti-romantic realism and conscious distance from mainstream (Germanic) concepts of musical form, motivic development and harmonic structure. A narrative dimension has been identified and commented upon in all of Musorgsky's 'musical pictures' (Russ 1992: 31, Tarasti 1994: ch. 8), as if the composer focuses on someone or something within the picture and creates a story about it through music, thus forging an indivisible duality of psychological state/musical structure for each piece.

The 'Old Castle' is the second piece of the suite, entitled by the composer in Italian as 'Il vecchio castello'. The original watercolor painting has been lost or sold during the exhibition (Brown 2002: 230), but according to Stasov's description (Frankenstein 1939: 282), it was a depiction of "a medieval castle, before which stands a singing troubadour". Bibliographic references to the piece (Russ 1992: 37-38; Tarasti 1994: 214, 227-229; Brown 2002: 235) stress its modal Russian character, its siciliana rhythmic pattern and its melancholic mood, but do not include full or partial musical analysis. We cite two of these references, since they indirectly reflect the present analytical approach (italics by the authors): Eero Tarasti, in his semiotic analysis (1994: 214), refers to the piece as Italian pastiche, where "the 'old castle' alludes to the past, a *heterotopic* place, 'elsewhere' with respect to the musical narration", and David Brown mentions (2002: 235) that "the melody that runs throughout the piece is his [the minstrel's] song, a *blend* of Italian siciliana with Russian melancholy".

C. Research Aims

In Conceptual Blending Theory (Fauconnier and Turner, 2003), elements from diverse, but structurally related, mental spaces are 'blended', giving rise to new conceptual spaces that often possess new powerful interpretative properties, allowing better understanding of known concepts or the emergence of novel concepts. Conceptual blending allows the construction of meaning by correlating elements and structures from diverse conceptual spaces.

The present research's aim is the exploration of conceptual blending between the musical and pictorial spaces embedded in the 'Old Castle'. The inquiry was triggered by the piece's implicit heterogeneity regarding its modal/tonal content, a feature that seems to grow and expand while the music evolves from beginning to end, while constantly revolving around a stable rhythmic pattern and a common melodic core. The analysis will therefore pursue an explication of the multi-directional metaphoric relation between music and picture through structural music analysis and cross-domain mapping, as well as a description of its dynamic evolution. For this purpose, multi-level ontologies in music will be employed in multi-level blending through the basic operations of composition, completion and elaboration (Zbikowski 2002: 80).

II. Music Analysis

The piece can be considered, in accordance with Russ's description (1992: 37), an Italian "serenade ... [that] turns into a Russian song without words", where a diatonic modal melodic core unfolds differently in each stanza, evoking different harmonizations. The analysis that follows focuses on harmonic and prolongational structure, making references to rhythmic and textural aspects. Our choice for using prolongational analysis and revealing quasi-Ursatz schemas may seem at first inappropriate for music that consciously avoided mainstream harmonic and developmental theories and practices (Russ 1992: 9). However, the specific piece affords the application of such a methodology, albeit in an idiomatic way, due to its linear texture (see also Puffett 1990 and Russ 1990 for prolongational analyses of 'Catacombs' and 'Nursery').

A. Form and compositional concepts

The piece is in strophic song form, with a short introduction and seven stanzas of unequal length, as shown below:
Introduction (b. 1-8)
Stanza 1 (b. 9-18)
Stanza 2 (b. 19-28)
Stanza 3 (b. 29-37)
Stanza 4 (b. 38-50)
Stanza 5 (b. 51-69)
Stanza 6 (b. 70-95)
Stanza 7 (b. 96-107)

Ten main compositional concepts can be identified, employed in various combinations by Musorgsky for the composition of the seven stanzas:

1. Drone of tonic in the lower voice (omnipresent and constant throughout the whole piece)

2. Siciliana rhythmic pattern and subpatterns: ♩ ♪ ♩ ♪ | ♪. ♪♪ ♪♪♪, etc (the main pattern for the tonic drone and related subpatterns for the melody)

3. Diatonic modal harmony (diatonic voice-leading, free non-functional use of triads for melodic harmonisation in the context of the diatonic modes)

4. Diatonic tonal harmony (functional use of chords for melodic harmonisation in the context of major-minor tonality, diatonic voice-leading, tonal cadence schema: iv-V^7-i)

5. Chromatic tonal harmony (use of more dissonant chords, chromatic mixture, tonicizations, chromatic voice leading)

6. Chromatic coloristic/impressionistic harmony (free use of chromatic sonorities without tonal harmonic function)

7. Modal interchange (change of mode while keeping the same pitch center) and hyper-modulation (change of pitch tonal space)

8. Parallel harmony (diatonic or chromatic/real chord planing)

9. Scale of sensory dissonance (conscious use of intrinsic dissonance level for the choice of chords)

10. Fragmentation of musical texture (use of unconnected snippets / mosaic texture)

These concepts can be categorized –with categorical overlapping– as rhythmic (1, 2, 10), harmonic (1, 3, 4, 5, 6, 7, 8), textural (8, 10) and cognitive/schematic (9, 10).

B. Analysis of the seven stanzas

In this subsection an analysis of each stanza is presented, focusing on the compositional concepts employed and illustrated with two-level prolongational graphs.

Introduction and Stanza 1 (b. 1-18). The left-hand introduction and the first melodic stanza are purely diatonic, with their pitch content coming from the G# Aeolian mode, and with characteristic descending voice-leading (5-4-3-2-1 for the intro and 8-7-6-5-4-3 for the melody). The intro segment is also repeated as a codetta (fig. 1).

The concepts employed are: tonic drone, siciliana rhythm, modal harmony (G# Aeolian, descending diatonic voice leading).

Figure 1. Score & prolongational analysis of Intro and Stanza 1.

Stanza 2 (b. 19-29). The second stanza starts similarly in the G# Aeolian mode, but 3 bars later the use of A natural denotes a modal interchange towards the G# Phrygian. The parallel $^6_3$ chords that introduced the modal interchange continue, creating a tonicization of the C# minor chord. This is subsequently used as a iv harmonic degree in G# minor tonality, leading to a V^7-i (fig. 2). Thus, although the main melodic line is the same (8-7-6-5-4-3), a hyper-modulation from the modal to the tonal system occurs (fig. 2).

Concepts employed: tonic drone, siciliana rhythm, modal harmony (G# Aeolian – G# Phrygian, descending voice-leading 8-7-6-5-4-3), tonal harmony (G# minor,

cadence iv-V^7-i), modal interchange, hyper-modulation, parallel harmony (diatonic $^6_3$ chords).

Figure 2. Score & prolongational analysis of Stanza 2.

Stanzas 3, 4. (b. 29-37 & 38-50). The exploration of diatonic modes based on G# continues in these two almost identical stanzas (their only difference is that the fourth stanza includes the intro segment as a codetta). The stanza begins in G# Phrygian (A natural), interchanges to G# Locrian (A, D natural), returns to G# Aeolian and concludes in G# minor tonality. The expanded modal interchange concept introduces a mode not used in the Middle Ages, the Locrian, conveying a more Russian/19th-century profile to the stanza's modality (fig. 3).

Concepts employed: tonic drone, siciliana rhythm, modal harmony (G# Phrygian – G# Locrian – G# Aeolian, descending voice-leading 6-5-4-3), tonal harmony (G# minor, cadence iv-V^7-i), modal interchange, hyper-modulation.

Figure 3. Score & prolongational analysis of Stanzas 3 and 4.

Stanzas 5, 6 (b. 51-69 & 70-95). Stanza 5 begins in G# Aeolian, but then, when the melody ascends chromatically from G# to D#, chromatic harmony is employed for its harmonization. Initially, two tonicizations take place in A#

major and C# major (through secondary diminished 7th chords). Subsequently, the two last melodic steps (Cx-D#) are harmonized with intrinsically dissonant non-functional chromatic sonorities (D#-F#-A#-Cx, E#-G#-D#), before reaching C# minor through an embellishing non-functional chord (E-G#-Cx), and finally arriving at a functional stable harmonization of D# (D# major chord). These non-functional coloristic/impressionistic chords have diminishing sensory dissonance levels, a parameter exploited by the composer in the transition from tension to relaxation: [D#-F#-A#-Cx] - [E#-G#-D#] - [E-G#-D] - [E-G#-C#]. The stanza closes with a cadence to G# minor tonality (iv-V^7-i), that also completes the background melodic voice-leading (5-4-3). This stanza greatly expands the concept of hyper-modulation, incorporating four distinct harmonic systems (modal, diatonic tonal, chromatic tonal, impressionistic), each pertaining to a different tonal pitch space / historical era (fig. 4).

Figure 4. Score & prolongational analysis of Stanzas 5 and 6.

Stanza 6 is almost identical, but with an extra element: the fragmentation of the musical texture by employing snippets of the previous stanzas (b. 87-95), having as a result the absence of the cadential pattern V^7-i at its end: the unresolved V^7 of b. 86 is prolonged until b. 95 (fig. 5).

Figure 5. Reductional analysis of Stanza 6.

Stanzas 5 and 6 incorporate almost all the compositional concepts: tonic drone, siciliana rhythm, modal harmony (G# Aeolian), chromatic tonal harmony (vii^{o7}-I, chromatic ascending voice leading, brief tonicizations), coloristic harmony (D#m^{7M}-E#m$^{7/-5}$), diatonic tonal harmony (G# minor, cadence iv-V^7-i), hyper-modulation, sensory dissonance scale, fragmentation.

Stanza 7 (b. 96-107). The last stanza returns to the initial melodic material, albeit with more chromaticism (chromatic voice-leading, altered diminished 7th chord for the tonicization of iv). Michael Russ (1992: 38) argues that this is a coda, but we will disagree, because this part contains the structural ending of the work, the only complete iteration of the piece's melodic core: the descending voice-leading schema (8-7-6-5-4-3-2-1) (fig. 6).

Concepts employed: tonic drone, siciliana rhythm, modal harmony (G# Aeolian), chromatic tonal harmony (descending chromatic voice-leading, altered chords), diatonic tonal harmony (G# minor, iv-V^7-i), perfect cadence with structural closure, hyper-modulation.

Figure 6. Score & prolongational analysis of Stanza 7.

C. Summary of compositional features

The preceding musical analysis has revealed that the 'Old Castle' is essentially the result of seven different evolutions of a common modal melodic core –namely a descending voice-leading linear structure–, through the dynamic evolution of harmonic spaces from diatonic modality to diatonic/chromatic tonality and impressionistic/coloristic chromaticism, with the combinatorial use of ten compositional concepts. The harmonic evolution is supported by the omni-present common element of the siciliana tonic drone, and occurs linearly, starting with diatonic modality in the 1st stanza, culminating with the use of all four spaces in the 6th stanza (through hyper-modulations) and closing with the tonal cadence in the 7th stanza and the completion of the melodic schema.

III. Conceptual Integration Networks

This section attempts to put the analysis results in context, drawing on Zbikowski's representation of conceptual blending in music. So, two different Conceptual Integration Networks (CINs) will be constructed, each with its own generic, input

and blended spaces, and with reference to Fauconnier & Turner's (2003) typology of single-scope and double-scope blending networks.

A. "Intra-musical" structural blending

CIN 1 (Conceptual Integration Network 1) proposes that the piece's evolutionary musical structure is a result of the intra-musical blending of harmonic spaces through the concept of hyper-modulation. So, the Generic Space, to which both input spaces relate, is *Music-Song*; it is defined by parameters of melody, rhythm, harmony, hierarchy and musical texture. Input Space 1 is *Melody* (properties: modes/scales, structural pitches, melodic/linear cadences, interval succession/voice-leading, implied harmony, rhythm) and Input Space 2 is *Harmony* (properties: diatonic modality, diatonic tonality, chromatic tonality, coloristic harmony, hyper-modulation, parallel harmony, pedal notes/drones, harmonic rhythm). The combinations that the two input spaces afford yield the Blended Space, i.e. the musical structure of '*Il vecchio castello*', as an evolutionary succession of seven different melody/harmony amalgams produced by the combination of four harmonic spaces (fig. 7).
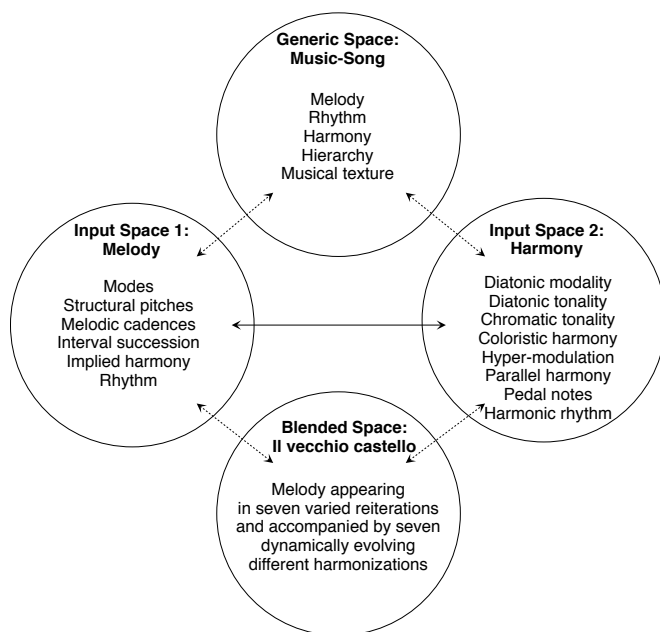
Figure 7. CIN 1: "Intra-musical" structural blending.

B. Cross-domain conceptual blending (meaning construction)

CIN 1 could be seen along the lines of Fauconnier and Turner's (2003) single-scope blending, where the re-framing of a concept (melody) through a different set of relations (harmony) results in changing instantiations of the concept. CIN 2 (Conceptual Integration Network 2) proposes a double-scope blending of the musical and pictorial input spaces into an integrated conceptual space, which projects the work's narrative and emotional potential and further promotes novel meaning construction. As Turner (2003) notes, double-scope blending is one of the most creative cognitive features associated not only with the conceptualization of everyday reality, but particularly with the formulation of artistic and scientific concepts. Double-scope networks

involve the simultaneous elaboration of two contrasting input spaces, and the running of two previously unrelated scripts as one blend. Being in one place, in one time, and fully perceiving and interacting with the features of this place and time, while also simultaneously recollecting and exploring another place, at another time, is a typical example of double-scope blending.

The Generic Space for CIN 2 involves *Contrasting Ontological States*, and it can be split into four contrasting generic sub-spaces: *Temporality*, *Spatiality*, *Affect* and *Qualia*, each producing a separate sub-CIN. Input Space 1 is the *Pictorial Space*, Input Space 2 is the *Musical Space* (or one of its constituents), and the Blended Space is '*Il vecchio castello*' as a perceived programmatic musical work.

CIN 2a: *Contrasting Temporality* (fig. 8). This CIN describes the contrasting temporality embedded in the piece, as a result of the contrasting harmonic spaces employed and the contrasting epochs they correspond to in the pictorial space (contrast between the depiction of the medieval castle in the past and its reception in a 19th-century 'present').
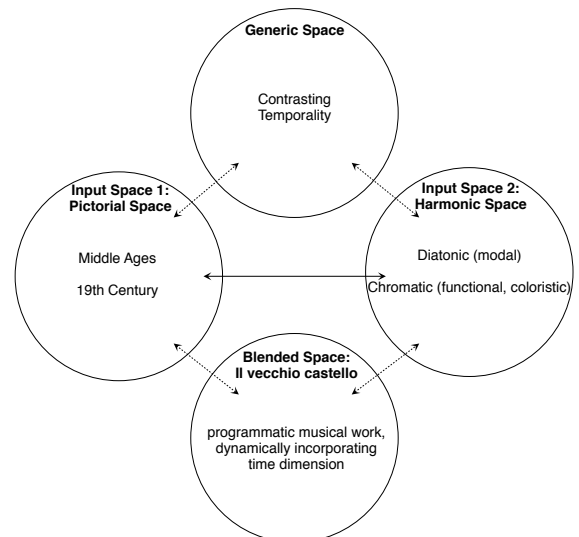

Figure 8. CIN 2a: Cross-domain blending - Temporality.

CIN 2b: Contrasting Spatiality (Geographic/national marker). This CIN (fig. 9) describes the embedded contrasting spatiality, expressed at the pictorial space by the depiction of an Italian castle observed in a Russian gallery and at the musical/melodic space by an Italian siciliana melody/rhythm implanted with Russian folk character and corresponding modality. Moreover, the Italian element is declared in Musorgsky's original Italian title, and the Russian vernacular element has been associated with a type of melismatic peasant song known as *protyazhnaya* (Russ 1992: 51).
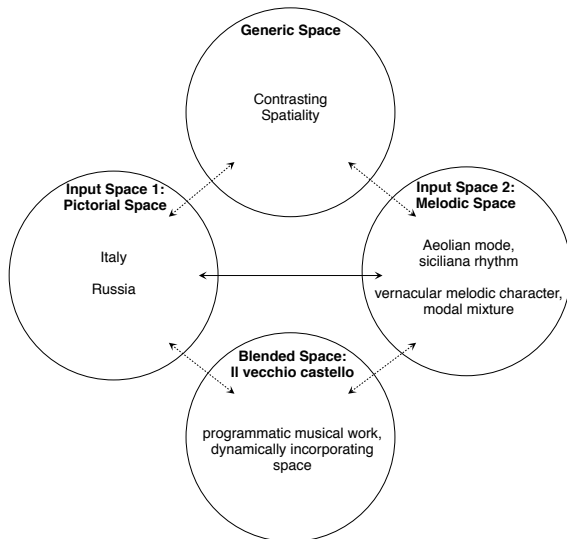
Figure 9. CIN 2b: Cross-domain blending - Spatiality.

CIN 2c: *Contrasting Affective States* (emotion). This CIN (fig. 10) describes the contrasting affects (emotions) that may be evoked by the blending of the pictorial and musical input spaces. 'Love' (expressed in pictorial space by the singing troubadour) can be experienced as 'Nostalgia for love', under the influence of the musical space, where a serenade gradually turns into a melancholic folk song.
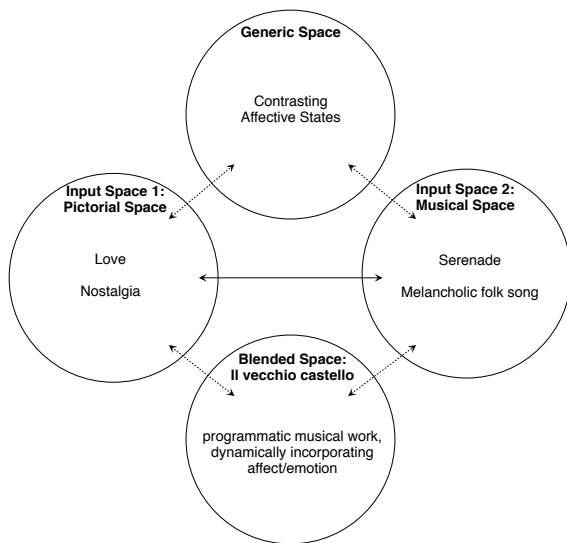

Figure 10. CIN 2c: Cross-domain blending - Affect.

CIN 2d: *Contrasting Qualia*. This CIN describes the different instances of subjective, conscious experience (formulated as *qualia,* after Goguen 2004) embedded in the music in latent form. The contrasting qualia, in this case, refer to two different kinds of psychological/consciousness states, which can be inferred in input Space 1 (pictorial). They are the state of real-time conciousness, and the state of dream/fading recollection, corresponding to the idealized "real" past and the imaginary "dreamy" present. These states are reflected in Input Space 2 (musical) as the juxtaposition of normal rhythmic flow of melody/form and fragmentary array of snippets or the contrast of simple strophic and dynamically evolving song form.
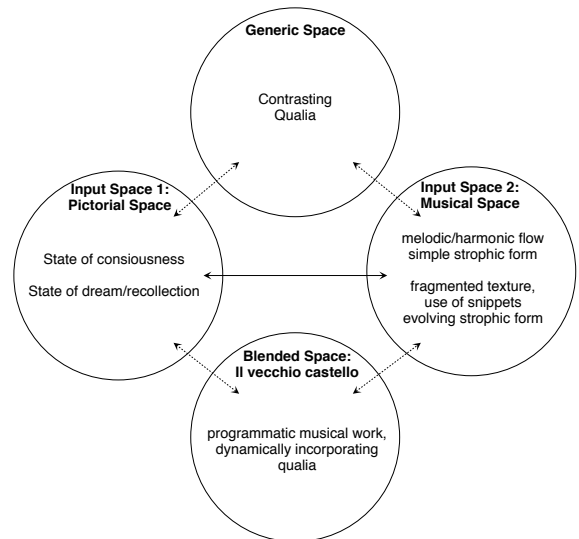
Figure 11. CIN 2d: Cross-domain blending - Qualia.

Overall, CIN 2 (Conceptual Integration Network 2) proposes meaning construction through double-scope conceptual blending and emerges as the union of its four constituent sub-CINs described above. This collective, multiple-scope, multiple-level CIN suggests that the contrasting ontologies embedded in the musical structure trigger contrasting ontologies in the projected "perceived/imagined" pictorial space, and that this cross-domain integration elicits a richer aesthetic experience for the listener.
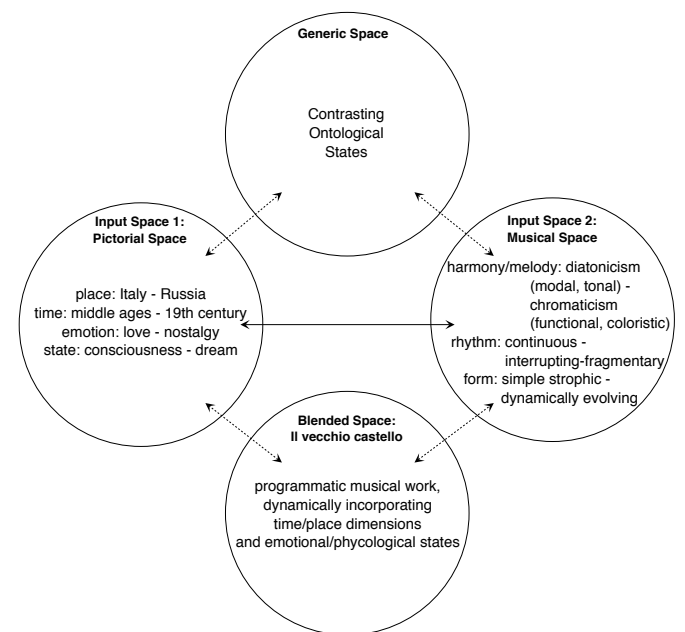
C. Figure 12. CIN 2: Cross-domain blending.

D. Dynamic evolution

Moreover, a dynamic evolution of conceptual blending takes place as the piece progresses from the first stanza to the last, as if following a narrative path, through which the "real", representational drawing of the Italian castle with the love-singing troubador gradually becomes a "dreamy" abstraction of an old castle, vaguely remembered and evoked

in another time and place. This occurs due to the blending operation of *elaboration*, which denotes an imagination-triggering process that stems from musical structure and constructs emergent emotions and meaning (fig. 13).
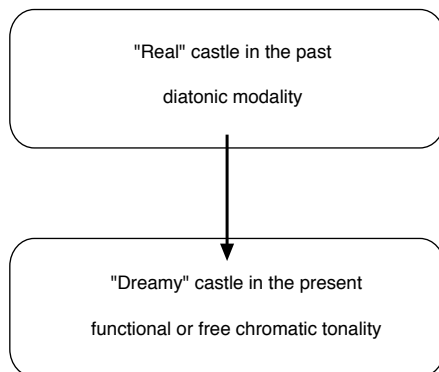

Figure 13. Dynamic evolution of conceptual blending.

IV. Meaning Construction - Conclusions

Conceptual blending in this case involves the use of harmonic, melodic, formal, textural and schematic elements that are not compatible with a simple depiction of a medieval castle. Through blending and cross-domain mapping, music precipitates the listener to "see" or imagine the castle gradually lost into the vortex of time, misty, dreamy, in an obscure place, and with the feeling of chivalrous love gradually transformed into melancholic nostalgia as the music unfolds.

Consequently, the *old castle* that one might see in the painting is very different from the '*old castle*' that our imagination creates while experiencing Musorgsky's piece, and this transcendence to a much richer aesthetic experience is feasible through the blending of the pictorial and musical conceptual spaces.

In effect, as we move from simple cross-domain mapping between music and image, onto the single-scope binding of melody and harmony (CIN1) and higher-level, double-scope blending functions (CIN2), it is possible even to explore the work as a process of cognitive integration (between melodic and harmonic elements, visual and auditory references) and dis-integration between contrastive, qualitatively different temporal, spatial and affective states. According to Bache (2005) dis-integration is one of the most important features of higher-level blending. We elaborate and "make sense of" blends only by consciously focusing on the differences between input spaces and thus acknowledging the terms on which a metaphor operates.

A present-day listener is thus able to conceive of Mussorgsky's 'Old Castle' as an imaginary castle, a wordless song, a nostalgic reverie, a musical landscape, or all of these at once. This begs a bigger question regarding the levels of mediation (Stefanou 2004) involved in this metaphorical concept construction, from Hartmann's sketches up to Mussorgsky's score, and even more so, a performance of it. Further extensions of the present research could engage with the dimension of performance, and its role in the complex blending procedures suggested here. While it has not been possible to do so within the limited confines of this research, a focus on performance and listening would probably significantly enrich the Conceptual Integration Networks proposed above, and also help situate the analysis in terms of embodied meaning.

Finally, a broader issue could be raised by the very conceptualization of the work's features and the choice to represent them in two distinct types of networks. By distinguishing intra-musical from cross-domain conceptual blends, we do not wish to imply that meaning and structure are exclusively associated with one space or other. Quite on the contrary, we think that CIN1 and CIN2 could themselves become part of a multiple-scope blend, exposed by this categorization, and involving so-called intra-musical and extra-musical features. This separation is in itself the result of a conceptual metaphor (Spitzer 2003), by which "music" is equated with structure, and seen as a central locus, outside of which various other domains are tangentially involved in the production of secondary meaning. Hopefully, in this research we have also opened up a space for further problematization and relativization of the conceptual metaphor of intra- and extra-musicality, and further research can elucidate the particular terms on which it operates.

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