Joshua Ballance, King's

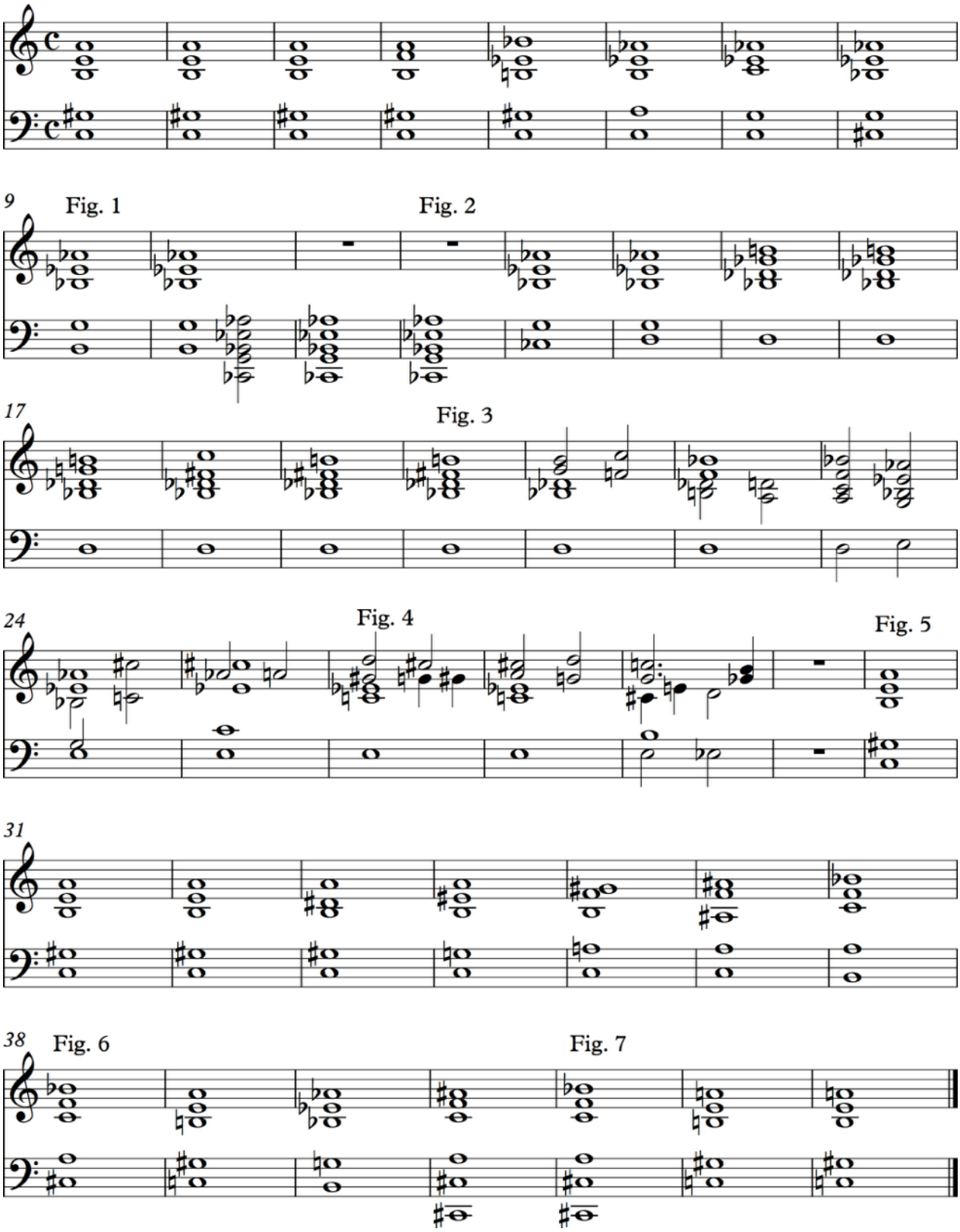
Schoenberg: *Farben*

Farben, the third movement from Schoenberg's Five Orchestral Pieces, is perhaps most typically associated with being an early example of *Klangfarbenmelodie*. However, this is not the sole matter of interest in this movement: beneath the wealth of orchestral sound-colours, the pitch organisation is just as fascinating and analytically rewarding. It is this area that the following analysis will concentrate on, both in terms of the techniques and processes that Schoenberg employs to structure elements of the music, and the potential formal ramifications of this harmonic and motivic framework.

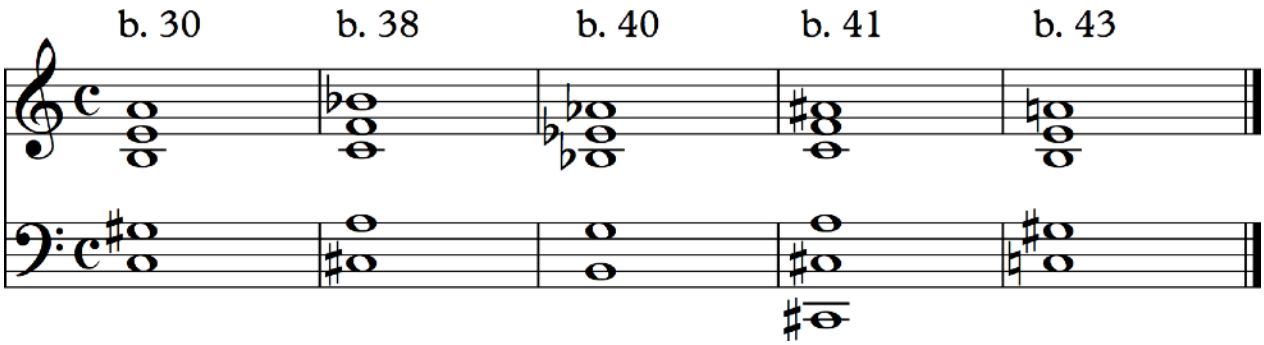
Running through almost the entirety of this movement is a strict 5-voice chorale (Ex. 1), spread across all sorts of instrumental combinations. At times, the orchestration is fairly consistent, allowing the voice-leading to be easily audible (e.g. the passage from the beginning up to Fig. 2); at other times the contrapuntal voices swiftly dart around the orchestra, with different instruments picking up different voices for just a few notes (e.g. the passage from Fig. 4 to Fig. 5). There is only one bar in which it is, arguably, absent: the bar before Fig. 5, where other motivic elements take over the entire domain. Nonetheless, this chorale forms the harmonic backdrop of the entire movement, and as such is a crucial part of any pitch-based analysis of this piece. It subdivides into three main sections: the beginning to Fig. 2; Fig. 2 to Fig. 5; Fig. 5 to the end. Whilst the outer two of these three sections are rigorously organised, the inner section demonstrates a degree of freedom in its construction, though still with important structural elements, and often tending towards the same opening sonority that pervades much of the outer sections. As part of this, whilst the rate of harmonic change in the outer sections is strictly set at one bar per harmony, it is rather freer in the central section, with different voices sustaining pitches for differing lengths of time.

Perhaps the most crucial technical feature of these outer two sections is the canon. A quick glance at the first section indicates that over the course of the first 11 bars, the harmony has simply shifted down by a semitone. The way in which Schoenberg achieves this, however, is highly methodical. Beginning in bb. 3-4, each voice in turn rises up by a semitone and down by a tone, effecting the overall transposition of a descending semitone. In the harmonic reduction (Ex. 1) this is easy to trace, with each successive voice moving a bar after the previous one. The order runs ASBarTB, which perhaps mirrors this motion of a small ascent followed by a larger descent. Once this process is exhausted, at Fig. 1, the harmony is held static for the remaining 2 bars of this section, only dropping by an octave in b. 10. The systematic nature of the harmony of this opening section is quite clear, then: it is structured around a clear-cut canon across all five parts, with the opening three bars of static harmony matched by the closing three bars, though this time on the new chord.

Turning to the final section of the movement, the same sorts of ideas are at work. As can be seen in Ex. 1, this section opens with the same chord that the piece began with, at the same transposition level. Again, this is sustained for three bars before it starts changing. This time, however, the motion is inverted: rather than ascending by a semitone and then descending by a tone, the voices descend by a semitone and then ascend by a tone, such that at Fig. 6, the point at which this process is completed, the chord has been transposed up by one semitone. This clearly creates a long-term harmonic symmetry across the movement, but Schoenberg does not view this symmetrical organisation as creating a sense of resolution. Instead, he transposes this chord down two successive semitones, all in strict parallel motion, before transposing it back up by a tone, and then down by a semitone. This final pair of transformations, from bar 40 to the end, is clearly the retrograde-inverse of the initial motion; the previous pair of semitonal transpositions, if understood in combination as a downwards transposition of a tone, effect a large-scale symmetrical pattern across this entire final section (see. Ex. 2), in which the inverse of the initial motive is presented first in normal order, then in retrograde. It is worth noting that whilst the initial part of this final section (Fig. 5 to Fig. 6) is constructed canonically, like the first section of the whole movement, the latter part of this section consistently transposes the entire chord in strict parallel motion.



Ex. 1: Five-Part Chorale



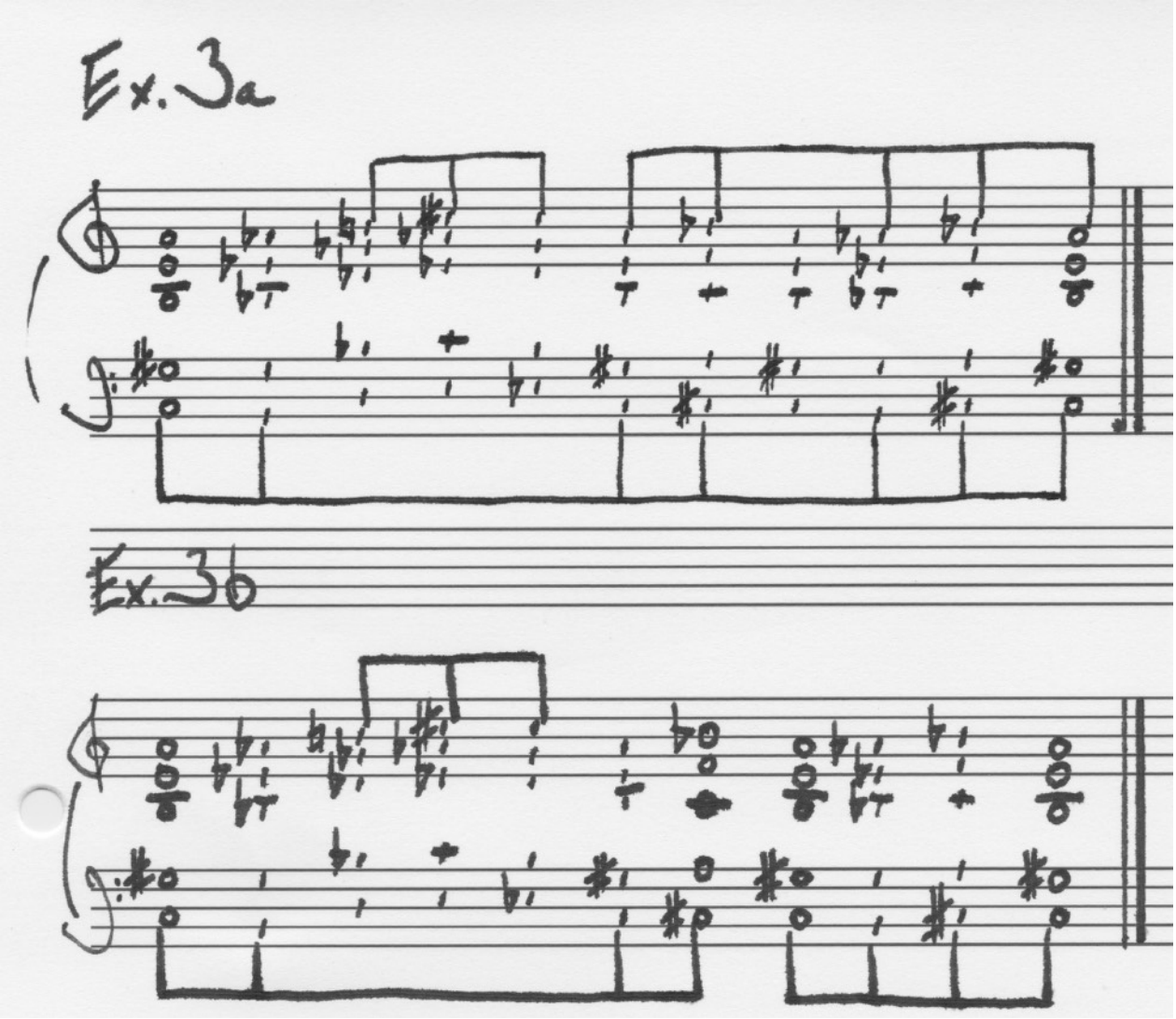
Ex. 2: Reduction of final section harmony

As mentioned above, the chorale in the central section of this movement is less rigorously organised than these outer two sections. Nonetheless, despite the denser texture, the chorale continues to have a functional role in articulating the form. An important part of this is the gradual acceleration of the harmonic rhythm: whilst it begins with one bar per harmony, as in the outer sections, it gradually speeds up, introducing minim movement and then crotchet movement towards the end of the section, which is clearly coordinated with the textural and motivic buildup that takes place at the same time. In terms of the voice-leading during this passage, it is again worth noting that, on the whole, the passage moves from one transposition of the opening chord to another transposition of it (the chord on crotchet beat 3 of b. 28 is the same chord). In fact, this same chord punctuates the section at various different points: bb. 12, 15, 19, 25, & 28.[1] As in the outer sections, there is a degree of large-scale tonal mapping here: after the initial move from the C ♭ -based transposition to the D-based transposition, the chord ascends by a tone and then descends by a semitone, thus working through the retrograde of the motion expressed in the first section of the piece, though at a different transposition level. In between these structural points, the motion is mixed in the way it is carried out: moving from b. 12/13 to b. 15, Schoenberg separates out the bass from the other four voices, moving this up by a minor third and then having the other four voices mirror this. From b. 16 to b. 19, rather than simply sounding static harmony (despite the fact that the initial chord is essentially prolonged through this passage), Schoenberg has the upper two voices produce a quasi-canon of an ascending semitone followed by a descending semitone. This is expanded from bar 20 onwards, where all voices except the bass rise canonically by a semitone and descend by a semitone: this is exactly the same technique as structured the opening section of the piece, but is somewhat undermined by the static bass throughout. From this point on, the harmonic motion is even less systematic, though there are appearances of the original motive in various parts at various points (e.g. A bb. 26-27; S bb. 27-28; T bb. 27-28 (excluding the C♯)).

From a harmonic perspective, it is perhaps the repeated occurrences of this chord across the movement as a whole that articulate the form more than anything else. Ex. 3a & 3b lay out the various different appearances of this harmony and the different structural levels on which these chords function: the difference between the two graphs presents two possible readings of the final section.[2] In one, the fourth-last chord is seen as merely a passing harmony of little structural relevance. The advantage of this reading, as outlined earlier, is that is indicates the symmetrical structuring of this final section. This reading has further ramifications, as it allows us to see the final five chords as operating largely in the same way as the first five chords: though chords 3-5 are at a different transposition level, there is nonetheless a sense of symmetrical-inverse organisation across these first five chords (descent followed by ascent is contrasted with ascent followed by descent, all with intervals never larger than a minor third). If we follow the reading in Ex. 3b, however, which views this fourth-last chord as structurally more significant, then we can group this underlying harmonic motion into two similar groups of four chords, but

[1] Often these chords are sustained into the following bars.

[2] In these graphs, beams between noteheads refer to full chords, not just the top or bottom voice of a chord. They have been restricted to single noteheads simply to aid clarity of the graphs.



which crucially have their final two chords in different orders. The implication of this reading is something of a more goal-oriented structure, whereby harmonic resolution is delayed until the very end of the piece.

In order to legitimately assess these possible interpretations, however, it is necessary to consider other elements of the structure: crucially, the motivic disposition. There are three main motives of significance in this movement: one is the semitone ascent, tone descent discussed extensively above; the second is the pair of two descending notes, typically a semitone or tone apart, with a short-long rhythm (often a semiquaver followed by some much longer note), first stated in b. 7 in the bass clarinet. The final motive of significance is the quasi-arpeggio figure, first introduced at Fig. 3 between the harp and flutes, which Schoenberg referred to as the 'jumping fish' motive. Clearly the introduction of these three motives is staggered, but it is worth looking at how they are then employed.

During the first section of the piece, as identified above (beginning to Fig. 2), the main concern is with the first two of these motives. The first has been covered above, but the second deserves some comments too: after the initial bass clarinet statement, it appears across 3 fifths at Fig. 1, settling on a B ♭ -F-C triad. This is then complemented by the basses, who sound a D-A-E triad.

Setting this against the harmony of the background chorale reveals only one note in common: B ♭ , interestingly at an octave's distance. Not quite the full chromatic, then, but close, with 10

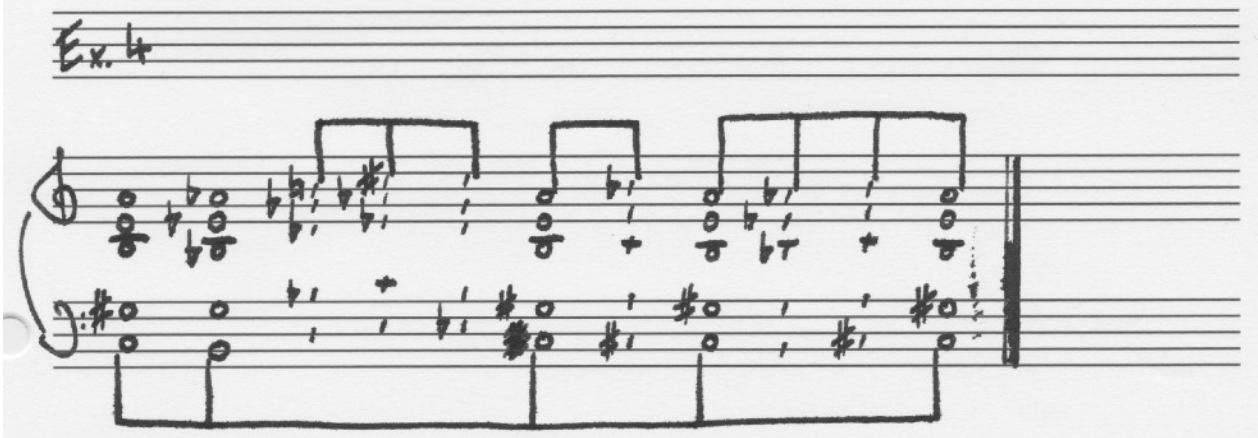
different pitch classes. The following music, from Fig. 2 to Fig. 3, employs neither of these motives, instead focussing on moving to a new harmonic region, after which the 'jumping fish'

motive is introduced with two successive statements, both times at the same transposition, but overlaying different transpositions of the opening chord.

Motivically, one of the most interesting passages of the entire movement is that which follows, however: from Fig. 4 to Fig. 5. Here, Schoenberg overlays the two initial motives in closer and closer succession, building up until, the bar before Fig. 5, these, coupled with a descending scale in the cellos, take over the entire texture. The final section, from Fig. 5 to the end, then reprises the motivic structure of the beginning to Fig. 4, first exploring the 'short-long' motive, and then the 'jumping fish', all the while over the chorale discussed above.

Having outlined this harmonic and motivic framework, the question that remains is what, from a formal perspective, to make of this: does it seem to fit any existing formal schema? Schoenberg himself made references to a fugue as an underlying structural model for this movement. The canonic opening certainly reinforces this, suggesting various entries of a subject (a rising semitone followed by a descending tone) in different voices. This does make sense of the motivic structure, and ties into Schoenberg's famously historicist thinking. There is, however, another alternative, that perhaps makes more sense of the interactions between the background harmony of the chorale and the overlaid motivic material: the sonata form. The advantage of this reading is it takes better account of the harmony of the chorale: crucially, the returns of the opening harmony at the opening transposition level at Fig. 5 and the bar after Fig. 6, underpinning the 'recapitulation'. This also points to a revision of Ex. 3a & 3b into Ex. 4, which takes account of this element of the interactions between the harmonic and motivic structure. Ex. 5 outlines the relevant divisions of the structure for both of these readings.

In conclusion, it would be obtuse to try and dogmatically argue for one or the other of these analytical readings: this piece is neither a fugue nor a sonata in any traditional sense. Nonetheless, elements of the pitch-structure do correlate to functional parts of both of these



Passage	Fugue	Sonata
Beginning to Fig. 2	Subject & Countersubject	First Group Exposition
Fig. 2 to Fig. 3		Transition
Fig. 3 to Fig. 4	Episode	Second Group Exposition
Fig. 4 to Fig. 5	Stretto	Development
Fig. 5 to Fig. 6+2	Final Entries with inversion/ retrograde of Subject	First Group Recapitulation
Fig. 6+2 to End		Second Group Recapitulation

Ex. 5: Potential Structural Divisions

forms. In particular, Schoenberg's repeated use of the same opening chord at different transpositional levels operates as something not dissimilar to different transpositions of a scale (i.e. tonal modulations), and the clear coordination of these changes with different motives does point to an understanding based on the forms outlined above. With this level of formal interpretation it is obviously impossible to definitively adjudicate, but the sonata form reading of the piece does seem to make convincing sense of both the order of events, and the interactions between the various transpositions of the chorale and the motivic play.