Equinox

For my final composition, I wanted to fulfil a long-held ambition of mine and write for my own instrument, the piano. Returning to the decision I made at the start of year to explore the issue of form in music, I sensed the suitability of selecting the instrument I know best to work within what is potentially a complex and formidable subject. I conducted what research I could into the topic, and the information I gathered served as a starting point for this piece.

My first avenue was Stefan Kostka's (2006) expansive compositional handbook *Materials and Techniques of Twentieth-Century Music*, which devotes on entire chapter to the subject of form. Presented with an overview of the developments of the twentieth century, my attention was first seized by the discovery of the fact that all forms which were birthed in the tonal and pre-tonal eras are in fact present within this later period. I reflected on the nature of these forms and considered the compositional possibilities that they each permit, and concluded that the principles of any form that I could recall could be translated so long as they were properly understood. Ternary form, for example, perhaps weathered the storm of the collapse of tonality best of all since its principles of statement, contrast and return can be applied in almost any context (p. 140). I kept basic compositional structures such as this in mind when conceiving of my piece.

Turning my attention to those forms and concepts which came into being within the twentieth century, I began to gain a sense of the types of questions I could ask in order to make best use of the task I had set myself. A small reference to the 'moment form' works of Karlheinz Stockhausen led me to this composer's 1960 work

Kontakte, comprised of sixteen self-contained sections which bear no functional relationship to each other whatsoever (Kramer 1978, p. 179). That the question of the types of relationships material should exhibit within a piece had been replaced with one which asks whether there should be any relationship at all indicated to me that there were more possibilities to my task than I had anticipated. I was aware that John Cage had similarly challenged the notion of functional relations in his chance works, and therefore sought his collection of writings *Silence* (1968). Cage's clear explanation of why form is necessarily an issue in the twentieth century put my task firmly into perspective:

> Schools teach the making of structures by means of classical harmony. Outside school, however […], a different and correct structural means reappears: one based on lengths of time […] Atonality is simply the maintenance of an ambiguous tonal state of affairs. It is the denial of harmony as a structural means (p. 63).

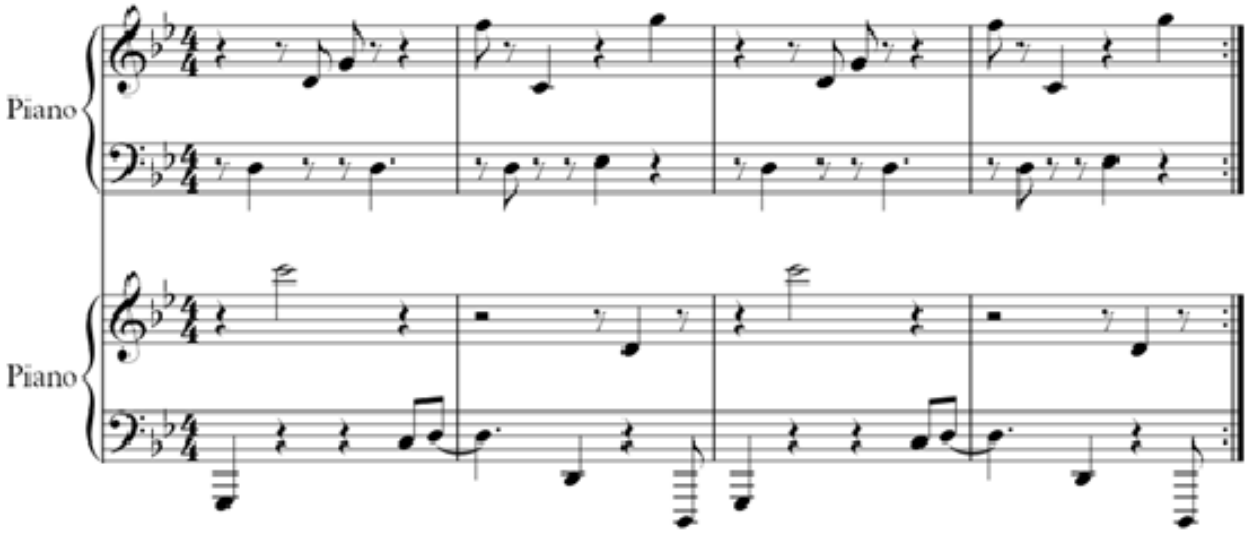
Curiosity led me to investigate the applications of isorhythm, and it was here that my concept began to take shape. Whilst isorhythm is not something extensively employed in twentieth century music, the instances in which does appear are varied and used to a wide range of ends. In Act III Scene 3 of Alban Berg's opera *Wozzeck*, a three-and-half measure rhythm based on two different whole-tone scales results in an uneasy polymetric sequence as Wozzeck, the protagonist, is attempting to explain why he has blood on his hands (Kostka 2006, p. 133). Olivier Messiaen's use of the technique differs: in the opening Liturgie de Cristal of *Quatuor pour la fin du Temps*, the divine character of the movement as set out by the composer in the preface is carried by two isorhythms split between piano and cello parts. Messiaen's means of evoking the eternal is the construction of a cycle which the listener will

never hear fall into alignment (the number of bars required for each cycle to reach their original alignments have no common factor, and would require 957 cycles of the piano rhythm to fall into alignment) (Pople 1998, pp. 17-27). The variation between parts that the technique permits in each of these cases was something that appealed to me, and I sensed something of a connection between Cage's ideal and the music which results independent of compositional decisions when two or more differing cycles run in tandem. However, I felt the short-term and long-term cycles demonstrated in these two examples to be at two extremes of a spectrum, and wanted to employ the technique in a different manner.

Synthesising the information I had gathered so far, I decided on a structure in which (albeit tonal) events are governed by occurrences of alignment, thus the cosmic title *Equinox*. The isorhythms I would construct would allow me a reasonable degree of compositional control, but the bulk of the material would be generated as a result of the rhythms unfolding. Given that my focus was on structure, I decided to give the piece a harmonically simple basis with the chord progression i, v, IV, I, i. The harmonic result is essentially a ternary structure, beginning in G minor, moving into a middle section in the parallel major before returning to the home key. The jump from minor to major between the first and second sections would allow for some interesting harmonic events.

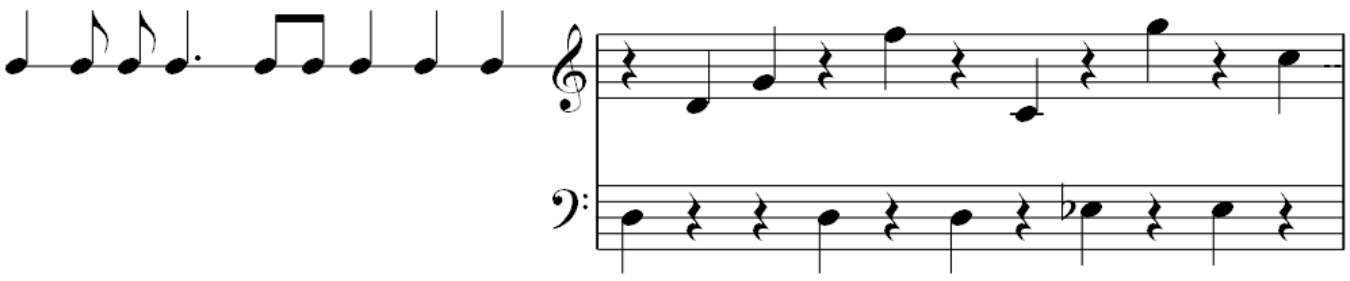
My initial ambition had been to compose the piece entirely on paper first, creating a mathematical outline which would govern every aspect and require me only to then notate the score. This proved to be a monumental task, and following a number of false starts, I decided to take on board the lessons I had learned from previous compositional failures and attempt a more reasoned balance between method and creative input. Beginning in G minor, I composed my first destination

and worked backwards to develop my first set of pitches and rhythms. The first alignment at bar 25 results in the following:

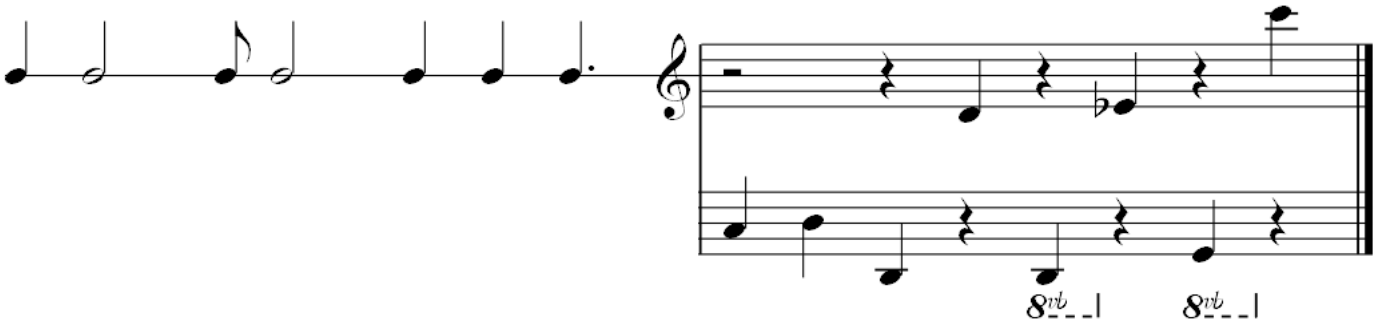


The melody is split between the two piano parts, and recalling the Frederic Rzewski work *The People United Will Never Be Defeated!* which I studied during my first undergraduate year, I used octave displacement to achieve a sound that I personally favoured but which also aids in obscuring any coincidental suggestions of the melody in the preceding bars. I backwards manufactured two isorhythms which are comprised of the following colour and taleae:

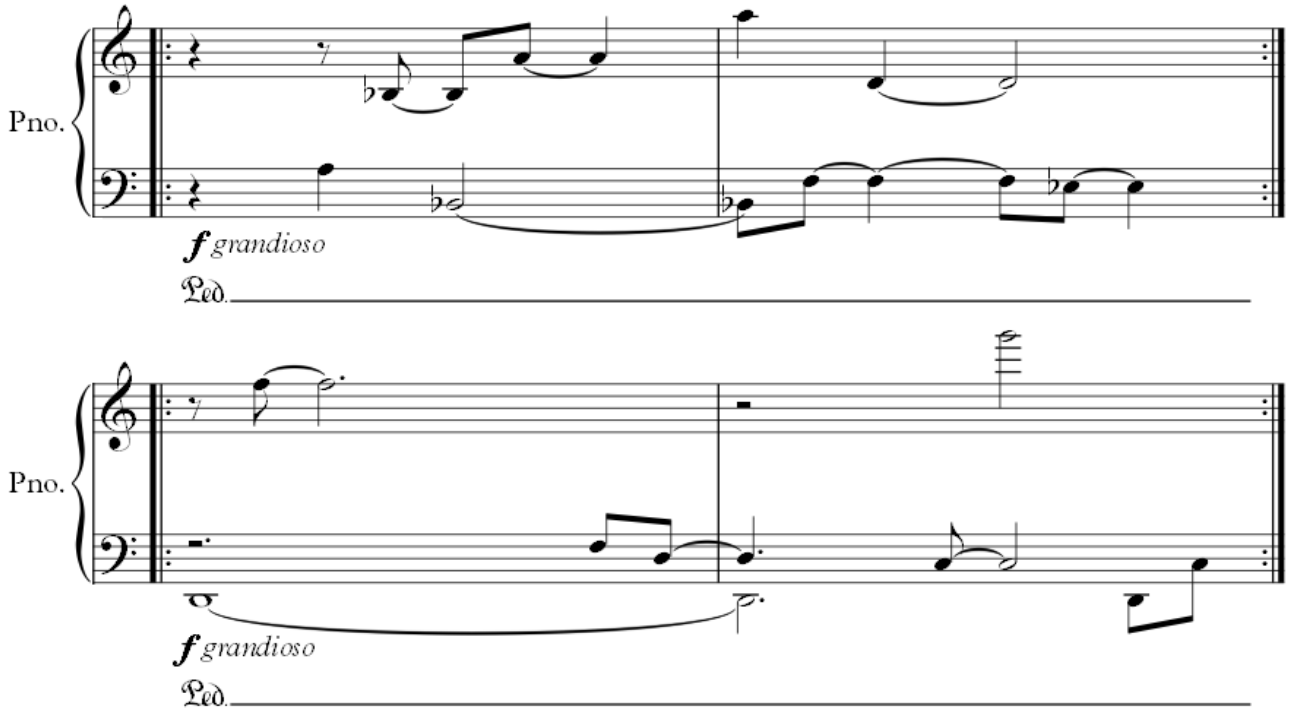
Piano 1



Piano 2

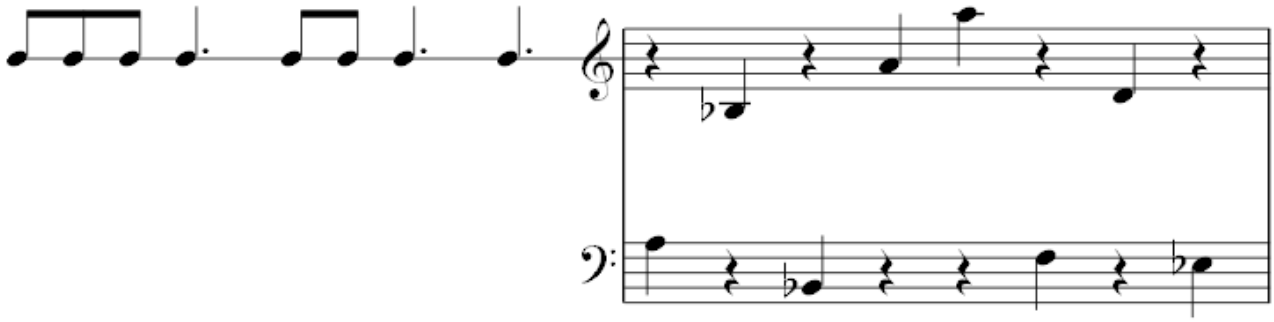


After a section in which I expand the aligned melody and establish the G minor tonality further, I moved to the v chord beginning in bar 35:

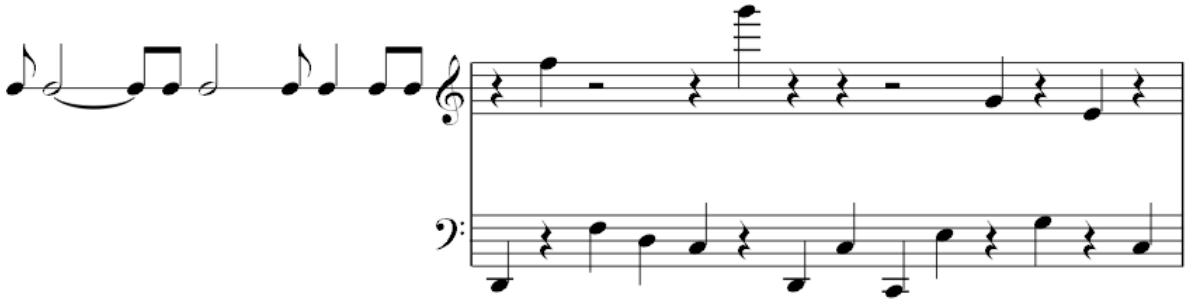


I followed the same procedure as before, only this time in the opposite direction, and the next cycle begins by forcing the melody out of alignment. My next set of pitches and rhythms are as follows:

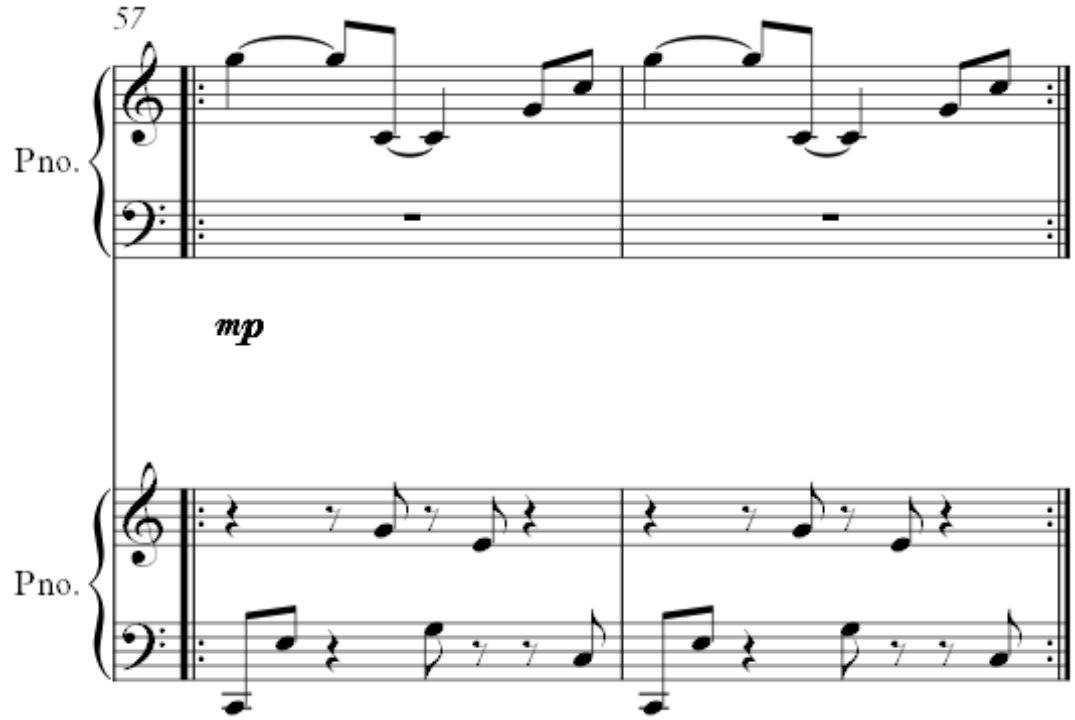
Piano 1



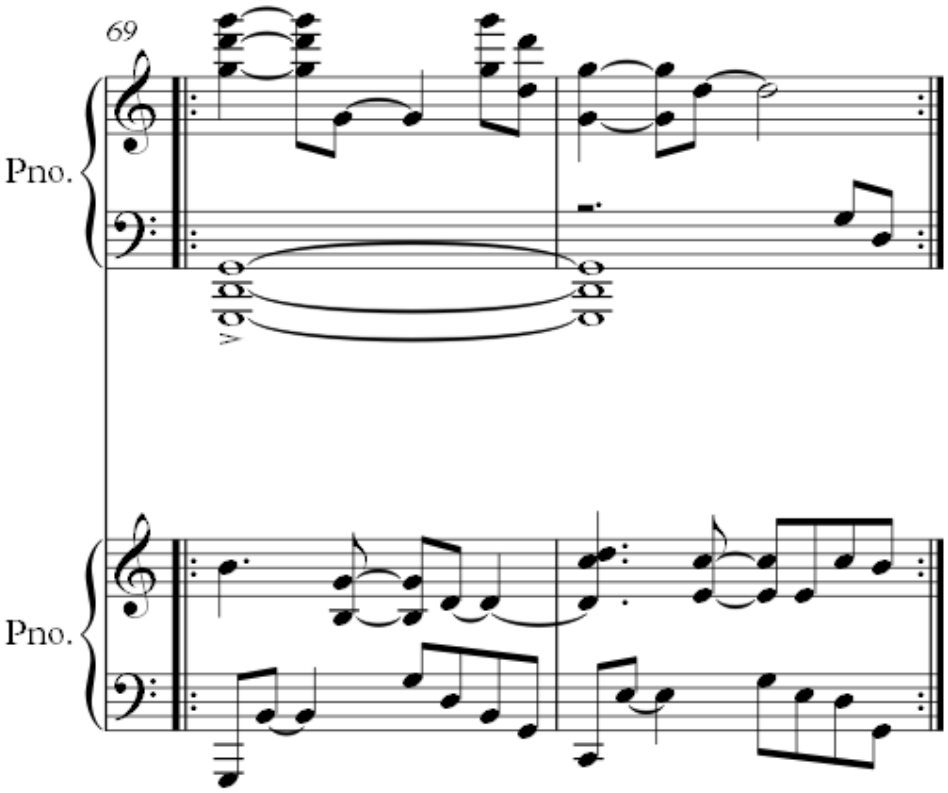
Piano 2



Piano 2 cycles through the pitches heard in the D minor melody until bar 47, at which point the full pitch sequence is revealed and a clash between minor and major begins. This process continues until bar 57, when a C major section begins. Here I have added freely-composed material built around a two-bar loop which occurred naturally as the cycles unfolded:

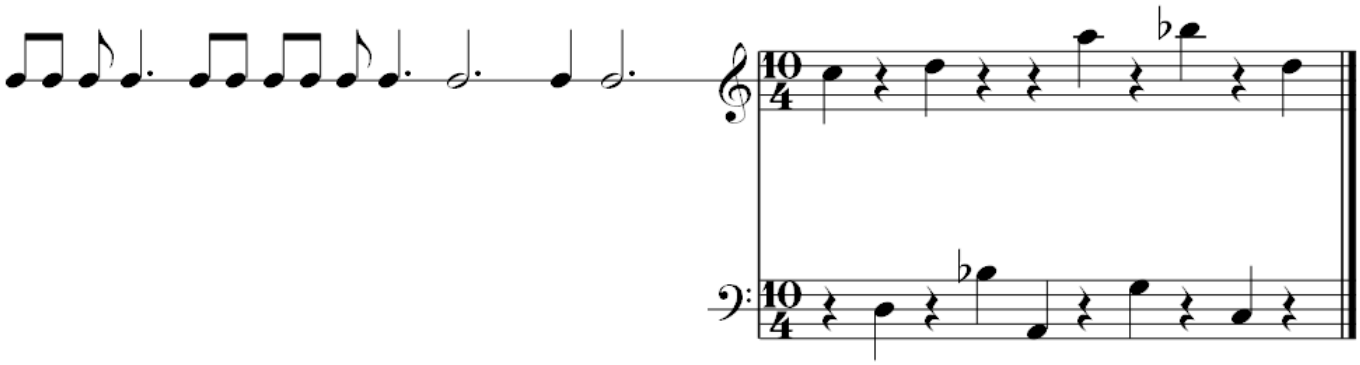


After transitioning to a G major chord in bar 69, I began the process of deconstructing the material I had established in order to return to the home key. I manufactured the potential for this to happen in the G major section:



The notes played by piano 1 are only those which are common to both G major and G major chords, and this therefore served as my pivot. After fading out piano 2, it re-enters in bar 101 in a new isorhythm based on G minor:

Piano 2



The fade out mechanism was something I experimented with in *Nausea*, and was pleased with the result. I find the feeling of music becoming distant before it reaches a conclusion satisfying, and in this scenario felt that it added a degree of drama to the gradual harmonic recolouring.

I did not feel that the isorhythm techniques provided quite enough interest to support an entire piece on their own, and therefore added a third part which acts as a 'narrator' to the events of pianos 1 and 2. Since my methods had so far produced very fixed material, I ventured to add a freer element to the piece. My solution was to adopt some features of a piece I had looked at previously in the year - Simeon ten Holt's *Canto Ostinato*. A work for two of four keyboard instruments, it is principally similar to Terry Riley's *In C*, but takes the possibilities of the open repetition form much further. The instances of open repetition towards the end of the piece draw on this piece, and I have added opportunities for improvisation throughout.

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