

# GLASS

*For Brass Band and Percussion.*

**By Simon Dobson.**

The *Glass Bead Game* is a Novel written in 1943 by Swiss born author Herman Hesse. The novel surrounds the lives of the Joseph Knecht, the Magister Ludi (master of the game), and his monk-like colleagues who live, research and play the game at the famous old school of Waldzell in Castalia; a utopian society in the far future. Heralded as the zenith of wisdom and learning the community of students and teachers live a simple, hermetic and almost spiritual existence either in contemplative study or in exulted and feverish learning. The peak of this civilisations collective being and the highest art it produces comes in the form of the *Glass Bead Game*.

According to the book the game had humble beginnings; possibly starting when one music student sang a theme and another replied with a 2nd subject. A simple call and response. Over centuries of study and discipline this slowly grew to encompass (at its highest and most exulted level) all of human art, creativity and endeavour. It is a kind of academic calligraphy that attempts to find the most eloquent and succinct threads between all of art, literature, music, mathematics and the sciences. The game is a winner-less expression and an abstract synthesis of *all things* in attempt to find meaning, patterns and links between seemingly unrelated topics. Since the actual rules of the game are hardly mentioned in the book, the game has become a fascination to many in the real world.

At first I was going to be composing a piece about Joseph Knecht and the programmatic side of his story that unfolds in Hesse's pages, but whilst researching and planning one day, upon suddenly realising that I was sat surrounded by obscure and ancient texts on sacred geometry, sonnets by Shakespeare, Bach chorales, manifestos by Nietzsche and Goethe, texts by Pythagorus and Plato I realised that I wasn't trying to write a piece about the book, I was actually trying to play the game.

My work takes the shape of one continuous piece split into five 'Moves'. I say moves, rather than movements as once I realised I was trying to play the game, I was making moves as a dice or card player does, rather than writing separate movements. A move in the *Glass Bead Game* in its most simple form can be explained thusly: 'subject 1 is to subject 2, as subject 3 is to subject 4'. For example:

"Tonal music is to Serial music

As

Gravitation and attraction is to the perpetually expanding universe"

**OR**

"Human observation of the natural principals of structure and growth are to the observations of space an the design of buildings in architecture

As

The observation of the periodicity of movement of the sun, fixed stars and visible planets are to the organisation of time and the design of calendars"

The Magister Ludi, the most capable and imaginative player of the *Glass Bead Game*, played/ drew/wrote the most beautifully eloquent games that traversed entire genres of thought and philosophy. However, I am not a master (nor never could be) and so since I myself am essentially making up my own musical way of playing the game, I am portraying five seemingly disparate subjects that I have tried to link in the way that Hesse' characters might have; through research, reason and strict analytical/musical thinking. My work contains themes, motifs and rhythmic/ harmonic structures that traverse the entire work, however they are often meant to be hidden.

### **Move 1. - The Monochord as a Model of the World.**

The monochord is an ancient musical and scientific laboratory instrument. It is a single stringed resonating instrument and can be used to illustrate the mathematical properties of musical pitch according to Pythagorus. The harmonic series plays a large part in this move(ment). As one of the earliest astrologers Pythagorus and Kepler based their knowledge of the world and the heavens on the ratios between exact pitches within the harmonic series. This movement begins with a single theme being uttered for the first time before (as the game evolves) answer after answer is added.

Theme after theme encroach upon each other until after a climax ...

### **Move 2. - Variations in the formation of snowflakes.**

Pythagorus' work is fundamental to the composition and understanding of Euclidian geometry, whos rigorously defined shapes and solids are present everywhere in our everyday natural world. The same forces and ratios that applies to the monochord also govern objects and beautiful and ephemeral as snowflakes. This move(ment) is based on 6-note 'hexacords', and often a line is shared six ways. We hear ice crystals growing and I tried to create a feeling of reverence for the natural world.

### **Move 3. - "Architecture is like frozen music" (Goethe c.1802-3)**

I started to see repeating patterns in the language that described the fundamentals of both th natural world and architecture that we see around us. Goethe once said "Music is liquid architecture; Architecture is frozen music" and this fitted my next 'move ' well. I used as my inspiration Zaha Haddids 'JS Bach Chamber Music Hall' which was built for the Manchester International Festival in 2009 solely as a space inn which to perform solo Bach performancos. Th buildings' shape and flow combined with my use of the choral from Bach - Cantata BWV 2 - 'Ach Gott, vom Himmel sieh darein' (The heavens are telling of God in glory) attempts to create physlcul parallels between the music and the architecture as well as serve to show Bach s own mystical view of the heavens.

#### **Move 4. - Kepler 22-b**

One of the first thinkers to begin to transition from the world of Astrology to the world of Astronomy was Johannes Kepler. In his book "Harmonicas Mundi" (The Harmony of the World) Kepler discussed the 'third law of planetary motion' in terms of a musical choir using the ratios of a monochord to describe the movement of the planets. In the present day Keplers work has been honoured with a telescope to discover habitable planets outside of our own solar system, or second Earths. The most famous of these is known as Kepler 22-b. During this movement we feel the unfathomably vast concept of discovering a new earth and the excitement that might hold! We are now truly in the realm of proper cosmology.

#### **Move 5. - The Kalachakra Mandala**

The Kalachakra Mandala is a beautifully ornate and complex depiction of cosmology and the heavens painstakingly rendered in coloured sand by monks of the Buddhist faith, which is itself a self proclaimed branch of Cosmology. I first discovered this though the documentary 'Wheel of Time' by German film maker Werner Herzog. The move(ment) starts with Buddhist chant and rhythms and finally at the centre of the mandala is Nirvana and this is the state I try to portray at by the end of the piece.