# Shaping Music in Performance


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## Introduction

'Shaping music in performance' is a research project based at King's College London which is part of the nationwide AHRC-funded Centre for Musical Performance as Creative Practice (CMPCP). Its aims are to shed light on the notion of 'shape' used by performers, listeners, critics, composers and music scholars in a variety of ways. For instance, shape can refer to

- musical structure (pic_01),
- notation (pic_02),
- expression or
- body movements (pic_03);

it can be applied to

- a single note,
- a phrase (pic_04),
- a whole piece or
- even the complete works of a composer (pic_05);

shape can be seen as something which is already 'in' the music or as something which is added by a performer. And not only are musicians' approaches to shape manifold, – musical shapes seem to be ubiquitous too: Daynes (2010) found that 90% of a large sample of musicians think about shape when thinking about how to perform music.

## Goal

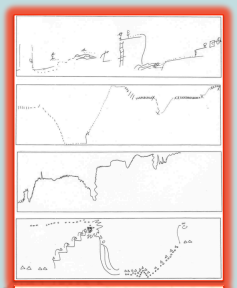
As part of my PhD research, I aim to clarify and investigate performers' and listeners' sense of shape in much more detail. For that purpose, I shall be carrying out psychological experiments designed to tease out the relations between elements of musical sound and people's perceptions/visualizations of them.

## Method

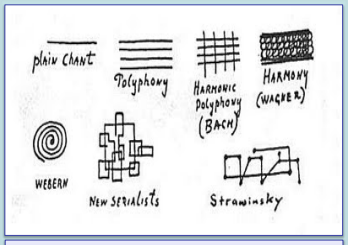
One way to get insight into people's sense of musical/ sound shapes is by means of visualization (pic_06[1], pic_07[2] and pic_08).

Whilst cross-modal psychophysical experiments in the 1970s and 80s mainly dealt with sine tones and forced choice responses (e.g., Walker, 1987), more recent studies have included whole musical compositions (Tan & Kelly, 2004) and free response paradigms (e.g., Reybrouck et al., 2009).

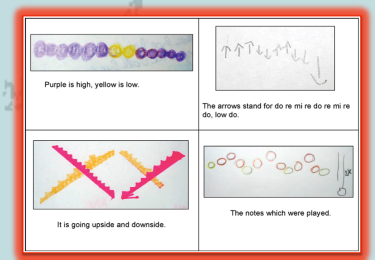
For my research, I envisage applying touch-sensitive drawing interfaces to allow measurements of parameters such as direction, speed and pressure.



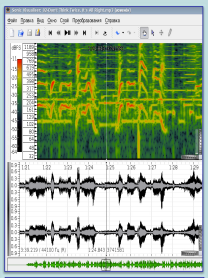
pic_06: Shape as 'Visualization' I




pic_05: Shape as 'Complete Works'



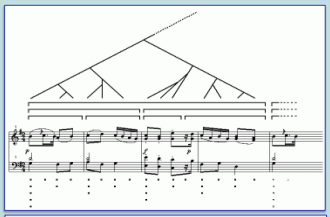

pic_07: Shape as 'Visualization' II



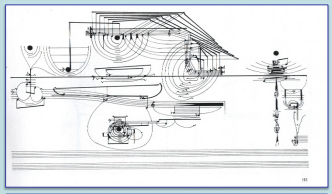
pic_08: Shape as 'Computerised Visualization'

## Visualization(s) of Music and beyond

So far, the majority of studies using free drawing responses were concerned with the cognitive development of children (for a good overview of the literature see Verschaffel et al., 2010). To my best knowledge, no one has ever investigated how (professional) musicians differ with regards to their visualizations of music. For instance, it will be valuable to see whether there are differences between various instrumentalists. Moreover, the new technology enables me to record the pressure applied when people draw which can be regarded as a measurement of tension. Thus, participants' drawings will not only reveal how they map music onto a visual domain, but can also be directly linked to their emotional responses to music.

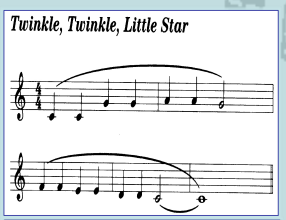


pic_01: Shape as 'Structure'



pic_02: Shape as 'Notation'

pic_03: Shape as 'Body Movements'




pic_04: Shape as 'Phrase'

1. taken from Tan & Kelly (2004)
2. taken from Reybrouck et al. (2009)

## Contact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## References


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