School: Bath School of Music & Performing Arts

Researcher: James Saunders

Project Title: alternate between attention and ease

UOA: 33 - Music, Drama, Dance, Performing Arts, Film and Screen Studies

300-Word Statement

The piece explores cognitive load and how we remember associations between sets of unrelated elements dependent on the structure of their presentation and the inherent difficulty of the task. It focuses on the way intrinsic, extraneous, and germane cognitive load affects the response time to a series of cues given by two speakers to the orchestra. The two cueing players each have a set of 24 words and samples that are used to instruct the orchestra. The word and sample cues are related (e.g. the word 'cow' and the sound of a cow mooing), and each cue is linked to a major or minor triad, played by the orchestra (e.g. 'door' is A major). The cueing players develop sequences and associations between the cues, such as gun/dog or water/gate, to which the orchestra respond as quickly as possible. The resultant texture is a map of the speed of response of the individual orchestral players, with the cueing players making it harder or simpler for the orchestra to respond correctly. The conductor also has a set of cues that initiate noise drone samples and static noise sounds from the orchestra. The piece alternates between these two cueing systems to manage the cognitive load.

The research underpinning the composition translates theory from heuristics, game studies, and behavioural psychology to music. The role of group behaviours is explained in: Saunders, J. 2018. "Notating group behaviours". *Material Cultures of Music Notation*, Utrecht University, 22 April 2018 and: Saunders, J. 2018. "Group behaviours as music". *Sound and Participation,* Kask Miryzaal, Gent, 26 February 2018.

Commissioned by BBC Radio 3 and first performed on 7 May 2017 at Tectonics Music Festival by BBC Scottish Symphony Orchestra and Parkinson Saunders, conducted by Ilan Volkov. It was broadcast on BBC Radio 3 on 03.06.17.