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## Organic Transcription as an Embodied, Artistic-Analytic Process

### ABSTRACT

#### Background

Organic transcription is a live process of drawing out musical structure as it unfolds in time, producing expressive, analytic art. The process encourages a deeply embodied kind of music analysis, which can be combined with other graphic and written analytical work, or stand as art made in response to art.

The process of organic transcription is named for the active engagement of the music by the analyst, who captures interpretive gestures on a drawing surface and refines them with repeated listening and reflection; as well, ‘organic’ can evoke the animated, loosely fractal, branched or limbed appearances some transcriptions take on, in response to music with compromised symmetries and recursive sub-division.

Organic transcription began as musical shorthand experiments, tracing formal processes for undergraduate theory and aural skills students of jazz and Western tonal music. Persistent patterns that emerged from this music seemed to leap off the drawing board and reach towards the writing of several authors on a range of subjects: recursive patterns as intelligent (Hofstadter 1985); learning as analogy-making (Lakoff and Johnson 1999; Hofstadter and Sander 2013); limitations of language (Langer 1942); interaction of words and pictures (Tufte 2001); similarities between aural and visual perceptual fields (Pinker 2002); organic and rhetorical metaphors for music (Bonds 1991); and, embodied knowledge (Lakoff and Johnson 1999).

#### Aims and Repertoire Studied

Translating or mapping between different ways of understanding has become the central aim of organic transcription, with embodiment of music as fundamental to the analytical act.

Figure 1 symbolizes the organic transcription process as a metaphorical and physical embracing of number, live growth, speech, and music. Each appears as a permutation of the same 5-stroke figure, to reveal a generalized, common form with the body and imprint a variation on the lively proportional kernel,  $2/2/1 + 1/2$ . This pattern,  $2/2/1 + 1/2$ , is at the conceptual core of organic transcription, and paces out two focal repertoires for study.



Fig. 1. The organic transcription process.

Jazz musicians playing on any AABA standard, where B has two sequentially related phrases, will feel the pacing of  $8/8/4 + 4/8$ , over 32 bars; moreover, since A phrases are often sentences, jazz standard repertoire tends to play out the  $2/2/1 + 1/2$  pattern on at least two durational scales in melody and lyrics alike.

Musicians trained in Western tonal repertoire, particularly of the classical and surrounding periods, experience ‘ $2/2/1 + 1/2$ ’ as the generalized rhetorical pacing of the classical sentence over 8 counting units: Statement (2), Response (2), Fragmentation ( $1 + 1$ ), and Cadence (2) (Caplin 1998). When fragmentation continues into the cadential ‘2’, the recursive potential of the sentence is felt, even celebrated with a trill, ornament, rest or fermata, alluding to infinite sub-division and its limit, continuity:

$$(2 \ 2 \ (1 + 1 \ (\frac{1}{2} + \frac{1}{2} \ (\frac{1}{4} + \frac{1}{4} \ (\dots = \frac{1}{2}))))))$$

Turning this recursive potential outwards leads to trailing number sequences that conjure transitional tails, developmental liquidations, prolongational tapering, looping turnarounds and tightening cadential knots:

$$\begin{aligned} &(2 \ 2 \ 1 + 1 \ 2(= \frac{1}{2} + \frac{1}{2} \ 1)) \\ &(1 \ 1 \ \frac{1}{2} + \frac{1}{2} \ 1(= \frac{1}{4} + \frac{1}{4} \ \frac{1}{2})) \\ &\dots \end{aligned}$$

Figure 2 points out both nesting and trailing behaviours. The enduring first theme of the Mozart Serenade K. 525, I, is seen here striking a pose on  $I-V^7$  feet, and signalling the arrival of its second theme with an exuberant, transitional arm.



Fig. 2. Mozart K. 525 Dancer #1.

## Methods

The organic transcription in Figure 2 maps harmonic polarities and metric pacing. Seven generalized drawing constraints were set: 1) Timeline: upwards; 2) Stroke: S, M, L = 1, 2, 4 counting units; 3) Harmonic function: I = left, V = right; 4) Rhetorical events: Statement = left, Response = right; 5) Stroke Nuances: curve or dot; 6)  $2/2/1 + 1/2$  on any time scale = 5-point sentential tree; 7) modulation to V = move off to right. (Original size:  $1' \times 2'$ ).

The strokes in Figure 2 evoke live growth, gestures of conducting or speaking, and footprints of sentential pacing together with the very stance and orientation of the analyst, to produce not only a portrait of the music, but also a self-portrait of the process of organic transcription.

Figure 3 demonstrates another kind of musical and visual liveliness. Generated in response to bars 1–20 of the Etude in C-sharp minor Op. 25 No. 7 by Chopin, this ‘magic mollusc’ seeks to convey a spitting out of its own essence at a moment of great wisdom and beauty (bar 18).

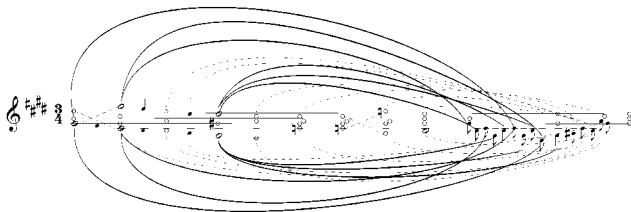


Fig. 3. Magic mollusc.

The crystalline seeding towards the right of the figure is a nostalgic melody, sounding the outer-voiced, structural framework of the piece thus far. In analytical terms, a mid-ground reduction is being played out as a foreground melody, as though the music is analysing itself. This behaviour was pulled out in free-hand organic transcription sketches, using ‘memory lines’ to reach back into the piece, and the image was tidied up with basic music software.

As a pictorial process, organic transcription can draw on the powerful visual tools of figure-ground relationship and colour to enhance an analysis.

The pair of panels in Figure 4 were created using a harmonic colour code, resulting in a painted skin of chord progression and key area — a backdrop or overlay against, or through, which the scroll of cursive motivic figures may be seen.



Fig. 4. Mozart K. 309, I, exposition and recapitulation.

## Implications

Representing intelligent behaviour in a musical structure is a focal challenge in the evolution of the organic transcription process. If embodiment of the music means seeking a kind of unity between the analyst and the art, then it is especially thrilling to experience a piece of music as ‘thinking’ and to try to create an intelligent design in response.

Behaviours akin to remembering, self-reflecting and self-reproducing may be said to occur within the numerical sequence,  $2/2/1 + 1/2$ , before it even dons music; musical expressions of this pattern, which exploit its recursive potentials, create particularly rich designs under organic transcription.

Returning to its pedagogical roots, organic transcription can bring an improvisational and compositional perspective to performers. Creating informative and evocative scores, which reflect the physicality of performance gestures, may assist a more complete internalization of the music, and bring a sense of regeneration, rather than recitation, to its performance. Theorists may add the process to their unique analytical palettes, perhaps finding new ways of drawing out their ideas about music.

## Keywords

Form, Harmony, Structure, Musical Rhetoric.

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