3 Ex Uno Plures

Strategies of Linear Expansion

KENNETH HESKETH

... by variations of size or colour – directional line ... speeds, velocities, accelerations, forces, etc. these directions together defining one big conclusion or many. ¹

One of the tasks set for young musicians when first introduced to aspects of composition is writing a *melody*: a single linear pitch and rhythmic succession that exhibits a graded ambitus and balanced contour, and with a coherent rhythmic profile. Of course, definitions of balance and coherence spring from the musical traditions a composer identifies with, as do approaches of achieving forms of narrative coherence. Monophony often constrains range and therefore registral choices, and as greater contrapuntal combinations are made available the single line may seem too limited in sheer sonic and dramatic impact. Yet even the single musical line provides a means to explore the implications of verticality, of formal organization, and of perceptions of time; when conceived for a specific instrument, the potential for variety of expression and dramatic impression is great. Constraints - registral, timbral, or physical - of the solo instrumental canvas need not dictate a diminutive response, the composer being fundamentally as free in duration and scale as when writing for larger instrumental combinations. Acquired insights from monodic instrumental writing can, and often do, feed further experimentation at greater degrees, whilst highlighting what is fundamental to a composer's language in expressive and technical terms.

How expressivity, musical logic, or narrative preference is made evident relies not only on invention and notation but on the mediation of the performer as communicator and commentator, negotiating between intention and realisation of the score as it is ultimately conveyed to the audience. The value of the performer's role in the composer's process should not be underestimated; an individual musician's ability, musicality, and experience are important resources and contributing factors to the motive force as composition takes shape. This chapter focuses on solo monodic writing as a vehicle to think through expansion, unfolding, and development. Musical dramaturgy, alongside properties of formal narrative, are

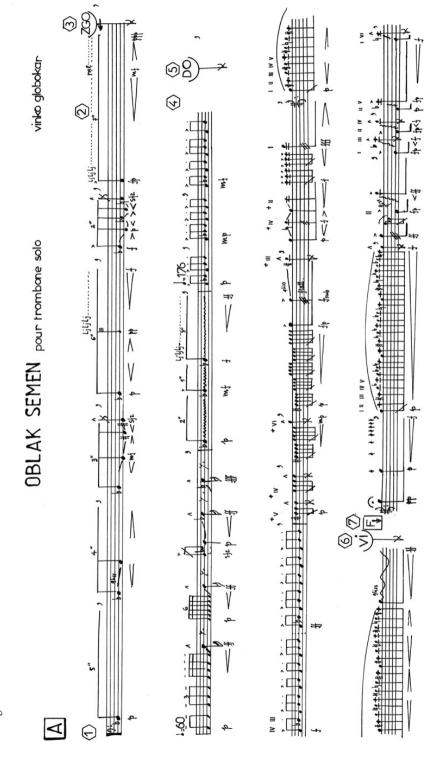
considered, as are provocations against normative approaches often found in solo instrument writing. We begin, however, with perceptions of individual instruments, their established uses, and new technical developments and reimaginings.

For (and against) Old, New, and New-Old

Instruments have an established history based on their technical abilities as well as the extant repertoire (one feeding the other). By exploiting those compositional traditions established around a particular instrument, a composer can be said to work for the established norms of that instrument: cantabile tone, stable intonation, and a potential for agility being amongst the typical expectations² that arose through composer, performer, and maker experimentation culminating in the nineteenth century. Throughout the twentieth century, players and designers researched and developed new ways of playing instruments, altering how they were heard and enlarging their expressive potential. Among the early publications that classified extended techniques for both monophonic and multiphonic production was New Sounds for Woodwinds (1982) by the Italian composer Bruno Bartolozzi, a pioneer in the development of extended techniques for wind instruments who established an early taxonomy for such effects. This emancipation of traditional capabilities led to a new range of sounds and techniques which we still designate as 'extended', though many are now fully established.

As composers of the mid-twentieth century continued to explore new attitudes to instruments, the sonorism movement of the 1950s formalised such experiments, and the growing influence of ancient and non-Western instrumental colours and tunings further stimulated the exploration of sound and expression that continues today. For instance, the expressive and extended timbral possibilities of brass instruments through extension of range, a wide variety of mute usage, valve effects, altered tunings, vocalisations, mouthpiece effects, and air sounds has been a notable focus in the music of composer and trombonist Vinko Globokar. An improvisor as well as a performer, Globokar in his compositions often includes theatrical/dramatic aspects, putting the performer literally at the centre of the compositional process. Beginning with the mouthpiece alone, his work *Oblak Semen* for trombone (1996) gradually reconstructs the instrument (Example 3.1). Vocal exclamations and physical movement interrupt dramatic overtone figures, glissandi, and double and flutter tonguing effects.

Example 3.1 Vinko Globokar, Oblak Semen (1996), fig 1–7. © 1996 Editions Durand. Reproduced by permission of Hal Leonard Europe BV (Italy). All rights reserved.



Not a theatre of the absurd, but theatre where water-filled buckets act as one of many mutes, and a highly gestural, interruptive language explores the nature of physical and musical communication. Additionally, in the wake of greater sonoric independence and colour usage in orchestral writing the percussion solo repertoire established itself, leading to an explosion of tuned and non-tuned percussion works shaped as much by rhythmic, harmonic, and timbral possibilities as by the influence of different cultures and traditions, such as Keiko Abe's work and pieces like Per Nørgård's *I Ching* (1982).

The influence of sonorism had a notable impact on the timbral explorations of Krzysztof Penderecki, an example of which can be seen in his *Capriccio per Siegfried Palm* for cello (1968) with its use of hammering (forcefully bringing down fingers of the left hand on the fingerboard) and bowing the tailpiece. Italian composer Salvatore Sciarrino in his *Sei Capricci* for violin (1976) brought an expanded use of string harmonics to the attention of many composers, and in doing so encouraged novel approaches to instrumental roles and narrative behaviour. The effect of Sciarrino's approach is what Lucia D'Errico calls a 'cultural memory of instrumental sounds' where 'a subtraction of instruments from themselves carves a violin out of a violin, a flute out of a flute'. In this way Sciarrino 'creates a void inside' the (mostly) acoustic instruments, exploring their natures through sonic and physical boundary modifications.

The collection of Luciano Berio's *Sequenzas* (1952–2002) and Mauricio Kagel's music theatre compositions are two notable examples of the experimentation begun in the 1950s and 1960s that reappraised composition for solo instruments, not only technically but on gestural, timbral, rhetorical, and phenomenal levels as well. Berio's sequenza cycle has influenced many subsequent works in its relationship between a gestural language looking both back and forward; a *new-old*, working with conventional associations, resolving the tensions between the creative demands of past and present, and employing instruments as a means of research and expression.⁴

Composers seeking to expressively extend the established role of instruments via electronic or physical manipulation in their work established new sonic landscapes that included extramusical elements and influences, philosophical or political perspectives, the autobiographical confession now casting the soloist as a personal amplifier of a specific persona. In Sofia Gubaidulina's work, the focus on sound and reverberation forms not only an important compositional determinant but projects religion and mysticism in sonic terms, directly casting the soloist as seer and symbolist. Alongside other technical features in Gubaidulina's work – such as golden

ratio proportions in rhythmic structuring in pieces like *Sieben Worte* for cello, bayan, and strings (1982) – timbre and resonance 'concentrates the mind', where the impression of 'being submerged in the centre of the sound [makes] the meditational attitude to sound . . . important'. Gubaidulina equates resonance of sound with a musical expression of mysticism (see *In croce* for cello and bayan (1979/1992)); in the decay of bells or timpani, and the influence of chant in ambitus and phrase lengths, we see her work exploiting both the meditational and ritualised as a form of 'incantatory' composition.⁶

The modification of the established 'accent' of an instrument's modes of sounding – rubbing, tapping sound boards, hitting strings with the palm of the hand or the fingertips, key clicks, teeth on reeds, the removal of brass slides, the use of breath, and so on – have become commonplace; but importantly, the perception of what and how one hears has affected not only the timbral surface but the composer's communicative impulse. Harmonic and rhythmic structures have long since become only one of many determining features for a composer, and this is particularly notable in works for solo instrument where timbre and time, the examination of the single sound, and the single static harmony are now equally familiar.

Kaija Saariaho's approach to timbre in her solo instrumental writing, through her studies and research at IRCAM as well as the influences of Gérard Grisey and Tristan Murail, has explored influences of electronic sound manipulation such as overpressure ('distortion'), *molto sul ponticello*, metallic/glassy harmonics ('high-pass filtering'), and rapid alternation between different single note sounds ('granulation'). This tendency is also evident in its guiding of form: 'when timbre is used to create musical form it is precisely the timbre which takes the place of harmony as the progressive element in music'.⁷

In Saariaho's *Sept Papillons* for cello (2000) the use of a variety of (now ubiquitous) playing modes establishes a palette of sounds, creating ethereal glistenings of timbre; the gradual changes from one sound or one way of playing to another (e.g. *sul tasto* to extreme *sul ponticello*), crescendos and diminuendos, overpressure bowing, and trill harmonics display a dynamic sound surface, the motivic recurrences underlining the importance of melodic linearity in her approach to the instrument. Formally, the reflexive forms (movements 1 and 4, 2 and 7, 3 and 5, 1 and 6, 5 and 7 sharing materials forming an interlinked arched formal structure with introduction) alternate between textural focus, emergent or suggestive melodic contour, and clear sustained pedal supporting a simple descending harmonic major scale. A few principal elements can readily be observed: The cello open

strings' (C, D, G, and A) fifths give tonal cohesion to the whole, being primarily centred around D and A (with C as the *subtonium*), and D harmonic major could be said to be the operative mode of the work. The recurrences of a trichord motivic element (F‡, A, B♭) further underline the classical logic and hierarchy behind the extended timbres of the work; the teleological direction of each individual movement further supports the formal linearity, with the bracing of the part to the whole via the 'daisy chaining' of the final gesture of a movement to the opening gesture of the next. A brief formal overview (Table 3.1) highlights interconnections in material, interval and tonal bounding features in pitch, and the moving to and from normal arco (it is interesting to note the absence of pizzicato – finger percussion and col legno, I would suggest, are used as surrogates).

Extended timbral palettes are a central feature in the work of Helmut Lachenmann, not measured against established instrumental norms but as aspects of an enlarged grammar of what instruments do and how they speak. In denying or obscuring the established expectations of instrumental sound parameters, this supranormal extended palette, alongside alternate tuning systems and more varied formal expression, categorises Lachenmann as writing *against*, and in doing so, his example further reoriented composers' perspectives on the nature of sound and formal argument. More recent examples of timbre and instrumental colours as central foci can be found in the work of Chaya Czernowin and Rebecca Saunders, for whom exhaustive research preceding composition focuses the means and potential of timbre, of sound, in instrumental behaviour,

Table 3.1 Kaija Saariaho, Sept Papillons (2000), formal overview.

Movement	Formal description – [open string/centric pitch]	Playing (timbral) mode
P1	Introduction [D]	NormSul PontN:SP-Sul Tasto:SP-N:SP-ST: SP:(over pressure):SP-ST
P2	Textural/harmonic field 1 ([0,3,4] tri- chord) [A]	ST-SP:SP-N:N-SP
P3	'Chant' [D] harmonic major	N-SP:SP-ST:N-ST-SP:ST-SP: SP- ST
P4	Recontextualising 1&2 (ABA) [G]	(over pressure): ST-SP:SP- N:ST-SP-N:SP:ST-SP-ST:SP-N:N- SP:SP-ST:SP-ST:SP-ST
P5	[0,3,4] trichord [A]	N-SP-N-SP-N:N-SP:N-SP:N- SP:SP-ST
P6	Finger percussion – subtonium [C] – finalis [D]	Finger perc.:Extreme Sul PontSP:ESP-SP-ESP:Finger perc.
P7	Textural/harmonic field 2 [D/A] [0,3,4] trichord (chromatic) descent to subtonium (C]	SP-N:N-SP:SP-N:SP-ST:N-SP:col leg.

unfolding for the listener the conventions by which it communicates meaning.

Rebecca Saunders notes of her work *Fury* for double bass (2005) that 'despite the choleric nature of the sound material, silence is regarded as the canvas upon which all sounds surface out of, and disappear into. *Fury* was conceived of as a melody, stretched to breaking point over the full eight minutes of this solo.' The 5-string bass, with scordatura of the 2nd string tuned down a semitone to C♯ and the 5th string tuned down to a low E♭, provides the player with the distinctive open-string tuned chord first implied in bar 11 and fully heard on the downbeat of bar 21. The incantatory rhetoric of the opening statement, one of fragmented introduction and gradual accumulation, allows the listener to concentrate fully on the instrument's timbral profile whilst simultaneously following the gestural nature of the unfolding narrative.

The New (New-Old)

A single sound or timbre is now a well-established source for musical argument and narrative as much as a harmonic/rhythmic progression or melodic contour. The search for new instrumental capabilities and palettes has led to a wider range of expressive forms, and whilst composers may have instigated this in the past, performer–composers, or those 'who operate with "creative marginality" – that is, at the margins or intersections of disciplines and traditions' – are often leading innovation today. Two notable examples of instrument innovators should be mentioned; the first being Eva Kingma, whose Kingma System quarter-tone flutes and alto flutes developed out of a request for an open-hole alto flute that could play glissandi, quarter-tone scales, and multiphonics.

Canadian-Greek composer Coreen Morsink's Andromache's Recitativo, Aria and Subtext for Kingma alto flute (2012) is a 'silent song' utilising sections taken from Euripides' Andromache, setting the sections of text silently (i.e. only the performer is aware during the performance of the exact musical prosody of the words). The flautist must attempt to dramatically realise the different character's words (Andromache, Hermione, and Thetis) as if an actor (Example 3.2). The varied technical, timbral, and dramatic demands seen in this extract are typical of the complete work. The timbral focus, including the 'pitch beating' of singing and playing, quartertone passage work, and dyadic multiphonics, lends inflection and greater authentic colour to the referenced Greek modes. Whilst such a passage

Example 3.2 Coreen Morsink, *Andromache's Recitativo, Aria and Subtext* (2010), bb.99–122. Reproduced with permission.



would be maddeningly difficult on a normal alto flute (though Morsink has prepared a traditional instrument version as well), the Kingma alto flute quartertone fingerings are stable and readily available.

The second innovator is oboist Christopher Redgate, who has effectively redesigned the oboe in conjunction with the oboe makers Howarth of London, allowing for greater trill work, consistent microtonality throughout the instrument, and fingering that allows the top $C(C_7)$ without using teeth on the reed. A greater number of multiphonics is also achievable on this instrument, and even though the oboe is naturally predilected to the production of multiphonics (Heinz Holliger's *Studie über mehrklänge* (1971) being an early and notable example of the lyrical potential of this particular sound), Redgate states that a total of 2,548 multiphonics are possible on his new instrument. A recent work written for the Howarth-Redgate oboe that

Example 3.3 Paul Archbold, Zechstein (2016), bb.57-9. Reproduced with permission.

Example 3.4 Zechstein, bb.76-9.



exploits and explores the extensive range of multiphonics discovered by Redgate is by composer Paul Archbold, titled *Zechstein*¹⁰ for solo oboe (2016). In the words of the composer, the piece is tranquil and contemplative, but as can be seen in the first extract, not without mobile technical demands (Example 3.3).

In this extract the accented tempered pitches act as markers in the surrounding stream of quartertone roulades, the timbral colour constantly' changing depending on the specific pitch. As Christopher Redgate states: 'It has been said that a performer cannot play quartertone fingerings at any speed – this is not quite the case – but it does take a great deal of dedication to practice complex passages sufficiently to perform at any speed.'¹¹

The final apotheosis of *Zechstein* shows how the often-strident quality of multiphonics can be turned to beauty in the hands of a master player and with an instrument constructed to allow such an effect to speak with greater expressive range. The second extract demonstrates the new potential of multiphonics on the Howarth-Redgate instrument (Example 3.4). By way

of clarification, the composer points out that the lines between chords are not smooth continuous glissandi but suggest an audible voice leading. Pitch and timbre change from chord to chord but not enough to break the continuity of colour and intensity.

Both Redgate and Rees, by commissioning composers and recording their works, make it possible for such innovations to become fully integrated components of twenty-first-century music making, demonstrating new expressive opportunities available to the composer and performer.

Mention should be made of the BACH.Bogen curved bow (Figure 3.1), which constitutes a development (or rather a return) not to an instrument itself, but to the string bow and the way in which one to four strings can be produced simultaneously, specifically through the design of the high arch of the bow patterned approximately after the Renaissance or early Baroque models. A lever mechanism at the frog end affects the tension of the bow hairs, which allows the bow to come into contact with all four (or more) strings if desired.

Dieter Schnebel's Fünf Inventionen for cello (1987) utilises the BACH.bogen to great effect amidst a range of theatrical, and vocal, simultaneously sounded counterpoint. A mixture of notationally determined, free, and suggestive provocations lend this work a rich timbral profile alongside a euphonious harmonic language where counterpoint is actualised in a particularly ear-catching way when first heard. Movements 1, 3, and 5 show this feature to best advantage, and the addition of spoken and sung vocal commentary, interruptive, provocative, or encouraging, lends further dramatic counterpoint to the physicality of the BACH.bogen's use.



Figure 3.1 The BACH.bogen curved bow, fully slackened by the lever release mechanism. Reproduced by permission of Atelier BACH.bogen.

Dramaturgy, Dualism, Dialectic, Density

The performance of an instrumental solo piece can be likened to an actor's soliloquy, where the performer reaches out to the audience as the direct recipient of emotional expression. The concept of the miniature has been utilised many times in solo pieces (character pieces, variations, or technical studies and hybrid combinations being numerous), but an interesting latertwentieth-century incarnation of the form can be found in James Tenney's Postal Pieces (1965–71), whose constructions are open to wide interpretation in approach to performance. Likened to Buddhist 'koans' (a paradoxical type of riddle intended to exhaust the novice's analytic intellect and egoistic will), Tenney's pieces are miniature in score size but not necessarily in duration. Many models can be found in the solo repertoire more traditionally organised through mixtures of iterative, discursive/recursive, strophic, or expansive (through-composed) designs. As an arena for the novel and provocative, linearity and continuity are often subverted in solo works to create new forms of narrative (with numerous forms of mobile or open form having been explored, the Berio Sequenzas being only one of many); yet ultimately, however elements of transmission (time, style, mode, causality, and logic) are conveyed, the organisation and interpretation of those elements is the province of dramaturgy.

Compositional dramaturgy may be understood as the organisation or assemblage of musical objects and events in time and space. It provokes questions on the nature of compositional objectives and their instrumental realisation for the performer and communication for the listener, ¹² and is of particular importance when writing for a solo monodic instrument being the sole focus of physical and sonic theatre. Dramaturgy is distinct from form, the product of design and the means by which coherence is sought. Primarily manifested through repetition (invariant), variation (alteration), or contrast (new or related variant), form is distinct from musical dramaturgy, which is to be understood as a *refractor*, bending constituent elements in dimension, focus, and importance. Two broad categories of dramaturgical approach can be outlined:

- *Dynamic*, characterised by a multipart form of contrasting structures, often utilising binary oppositions within a linear (teleological) or non-linear trajectory.
- *Static*, characterised by small levels of change concentrated around static, repetitious, or highly similar material often ambiguous in direction or temporality, silence being notable by its inclusion.

A formal trajectory that listeners instinctively navigate, namely the linear, teleological archetype, is a 'conceptual hierarchy' – larger structures being formed of smaller ideas recursively linked through repetition, referentiality, and ultimate return – such musical unification being widespread in solo pieces. However, simple shifts and inflections of musical temporality (e.g. dilation or extended silence), non-linear progressions, and perceptions of musical chronology are quickly undermined; dramaturgy does not necessarily seek cohesion or hierarchy, but the effective presentation of elements.

In many solo instrumental works, an element of particular focus is the musical gesture which centres around the recurrence and importance of a musical element, such as a cell, motive, harmony, rhythm, silence, timbre, or gesture. There is often a notable focus on individual gestures or a generalised gestural approach in solos, possibly in response to the instrument itself (for or against a type as noted earlier), perhaps to an encroaching cultural/aesthetic exhaustion towards pitch (vertical and horizontal motion) or the need to redefine/reorient timbral and temporal identities to express greater fluidity and less specificity. A more gestural language must rely on other means, particularly when pitch hierarchy and harmonic motion, or inflection of pulse or time cannot be easily sensed or intuited. The use of repetition in its various forms (e.g. in symmetry and transposition) becomes an important feature by which the interplay of formal structures and the creation of tension and resolution patterns are realised.

In Bryn Harrison's *Open 2* for clarinet (2001), dilation of interior time and the 'moving toward' of traditional form are challenged, through expectation, amplitude, and particularly cycles of repetition in which the simple and separate gestures of a single note and arpeggiated contour (up/down, though the ambitus changes subtly throughout) are given greater or lesser focus as the piece unfolds. The register in which the longer, bell-like note is heard, and the changing placement and shaping of the arpeggiated figure, creates a series of expectancies that are seldom carried through, yet remain architecturally taut across its duration. Harrison himself states that in 'exploring high levels of repetition . . . exact repetition changes nothing in the object itself but does change something in the mind that contemplates it'. ¹³ His style assumes a form of the 'cyclic ceremonial', where characters are distinct, and narrative continuity and formal patterns become independent of any immediately predictable teleology (Example 3.5).

What is immediately perceived in Harrison's work is the clear gestural binary between the long pitch of nuanced amplitude and varying shapes of the arpeggiated figure. The relationship between the oppositional binary

Example 3.5 Bryn Harrison, Open 2 (2001), bb.1–18. Reproduced with permission.

Open 2 Bryn Harrison

written for and dedicated to Andrew Sparling



and the more dialectic discourse can be judged by the levels of synthesis, transformation, and invariance over time. The linear progression of the dialectic exchange, the ongoing evolutions of musical materials whilst still maintaining initial forms, suggests a constant folding-in of material through ongoing alteration (an example being Berio's Sequenza VIII for violin (1976)). The binary opposition, a dualism that implies the presence of one object being dependent on the absence of the other, has cast its shadow over much compositional thinking from the twentieth century onward, particularly at a gestural level. Pierre Boulez' list of basic binary oppositions in his Leçons de Musique (2005) includes structure of the material/structure of the composition, certainty/uncertainty, repetition/

variation, free-form/strict form, figure/structure, and smooth time/striated time. ¹⁵ Of course, in real musical contexts such oppositions are seldom static or mutually exclusive; the confluence of different parameters, morphing between form and aspect, creates a thickness of texture, a multiplicity of events that can be termed density, experienced as harmonic verticality, or intense rhythmicisation of time.

Density

As a general definition, density can be viewed as the necessary presence of a (usually higher) number of simultaneous constituent musical elements within a period of time and speed. Vertical (simultaneous pitch) density can be implied horizontally through succession of pitch, and in the context of solo instrumental music can be seen in three (very loose) categories:

- Rhythmically dense: a segment (time-span) that contains many complex
 patterns of musical events at once (i.e. irrational/irregular rhythmic
 schema, polyrhythms) or a time-point that carries/implies several simultaneous attacks.
- *Melodically dense*: a segment that contains several melodies occurring simultaneously (heterophonies), often registrally febrile.
- Texturally dense: a segment that combines many varied, distinct playing modes and timbres in a way that cannot easily be simplified into smaller discreet moments.

The concatenation of a high number of superimposed and/or rapidly successive events, with concentrated textures, often suggestive of superimposed melodies, timbral and noise content, and an irregular (quasi-improvisational) rhythmic profile, is typical of new complexism. In an oppositional position to the dilation of time as expressed in Harrison's work, a recent example that combines all aspects of the preceding categories of density can be found in Jason Eckardt's *The Silenced* (2015), a monodrama for flute which the composer describes as 'a meditation on those who are muted, by force or by political, economic, or social circumstances, yet still struggle to be heard'. The constant intensification of event, gesture, and theatre fuses into a taut fluvial energy whose leaping register and rhythmic profile suggest multiplicities of voices rapidly changing in rhythm, ambitus, and form.

Interestingly, difficulties of expressive comprehension or narrativization encountered by many listeners when presented with multiple-element

superimposition/alternation is often mitigated by physical theatricality and/or use of poetic conceptions, 'something which engages both the eye and the ear' as John Cage put it.¹⁷ A sound surface and form that may otherwise immediately deny the listener is a potential invitation to narrativise, something that stimulates a narrative impulse. Vincent Meelberg suggests that, dependent on the nature of the music, overtly narrative music mimes speech, whereas non-narrative music mimes sound itself.¹⁸

Two brief commentaries follow, one an example of solo writing weighted towards clear conceptual hierarchy, the other towards a dialectic of oppositional gestures and dilated temporality. Composer Isabel Mundry, whose aesthetic grows from influences of figures like Hans Zender and York Höller, has spoken of her relationship toward composition as 'the capturing in sound of a moment (no matter how long)'. ¹⁹ 'Idea and intent, structural matters and compositional action', she notes, 'are three inseparable interlocking aspects; their temporality emerges from their relativity. In their particular relation lies the uniqueness of a composition. ²⁰ In her work *Le corps des cordes* for cello (2013), the expressive idioms expected from the instrument, such as lengthy melodies, arpeggios, or fifths, are closed in upon to the point that 'seemingly closed structures break open and unfamiliar sounds collapse'. ²¹ The registral separation, clear pitch centricity, binary oppositions, and strophic aspect of phrase organisation conforming to a conceptual hierarchy whose linearity survives local warping.

In the music of Pierluigi Billone, a contemporary of Mundry, considerations of time, silence, and extended timbral palettes echo aspects of Sciarrino and Lachenmann (with whom he studied) and are easily perceived in his Equilibrio - Cerchio for violin (2014) (Example 3.6). The scordatura used in the piece (I \rightarrow E, II \rightarrow F, III \rightarrow G, IV \rightarrow D) alters the very nature of the violin sound (less taut, rougher sounding), whilst the lower pitched and beating nature of double stops, and long sonic continua (drones) impede the immediate perception of time, and the use of unstable beating pitches and glissandi (long a feature of contemporary and non-European music) place this work in a different relationship to the tradition to that expressed by Mundry in her work. The localised movement and direction, less immediately dynamic than in Mundry's, alters the listener's expectations, but because of the use of established playing modes – and their more extreme, noise-oriented versions – the initially unpredictable non-linear narrative eventually acquires flexibility, forming islands of narrative order. As the composer states, 'everything is designed to give birth to a "musical voice" of the violin that can be different, and that generates "other constructional possibilities".22

H 片片 Example 3.6 Pierluigi Billone, Equilibrio-Cerchio (2014), opening. Reproduced with permission. (E) 1 Ì, нĦ ~/_§ Ħ რ ⊙ 6 ((() () () () કે 福 11 Port H 1 = 56.60 floasibile

Conclusion

[The] proportioned, winding line, is represented as a fine wire, properly twisted round the elegant and varied²³

As seen in the examples throughout this chapter, the composer's concept of – and relationship to – an instrument, borne of self-identification with a tradition or culture, is often the guide to the expressive and formal choices adopted in composition. By encouraging a flexible, informed, and wide-ranging questioning of compositional attitude to matters of synthesis, presence (or absence) of hierarchies of musical elements, their functions, and dramaturgical shaping, the ersatz and facile may be avoided and a wider awareness of approach that steers away from the clichéd and self-mannered can be cultivated.

Much that could have been discussed (or discussed further) has been attenuated due to considerations of space. The vertical-to-horizontal relationship of harmonic pitch-space, still an important goal for many composers when writing for a solo monodic instrument, must unfortunately receive short shrift indeed, but a constant in the works cited is the projection of harmonic order through demarcation of registral space, the implication of vertical depth arising from the projection of pitch through metaphorical high and low. As harmony lends a clarity to formal articulation, pitch choice at specific registers lends a particular harmonic colour and sonority to a region which, when composing for the monodic instrument, helps articulate hierarchy and harmonic rhythm in the pacing of events one to the next. The abundance of organizational methods available to help define logical relations and unity in pitch space (systematised, intuitive, or chance) are referenced in the reading list. A single rule of thumb regarding notation, particularly in graphic²⁴ score notation where the solo interpreter is placed at the centre of the creative process is all that can be offered here; particularly in explanations and communications facilitating a broader interpretative palette for the performer, musical invention should be harnessed by clarity of intention - even when the animating force is ambiguity and open choice - communicated by a form of notation suitable to convey ideas and concepts ultimately providing a space for the performer to harness their own creativity.

The joint ownership of musical creativity is not a new concept (in fact it is a very old one), and according to Roger Smalley writing in 1969, there is the need and opportunity for composers 'to broaden the range of their activities'. Nearly half a century later, composer, pianist, speaker, and

improviser Viola Yip wrote of how the (re)integration of composer and performer (and the opportunities for development of new directions in music) is still very much a considered goal.²⁶ Cellist Anssi Karttunen spoke of his own working relationship with composers, his sentiments echoing those of many contemporary performers:

The performer steps in to sort out the innovative from the impossible ... of [helping to try] out new ways of approaching an instrument. There are composers who may use completely new ways of using the instrument, [and] the solution for a seemingly impossible passage may be extremely simple, but one has to have experience to find it. On the other hand, other composers who write more 'absolute' music without thinking of the instrument . . . in this case one has to work very hard. There are times when a composer may trust a performer so much that he believes anything must be possible, and that raises some surprising problems. ²⁷

Perhaps the most helpful suggestion of this chapter's focus then is to always consider the performer(s): to be in ongoing discussion with them, not merely about technical demands or some new timbral technique, but with the very nature of the idea you intend to convey through them to the listener. Take pleasure in the discovery of emergent features, work towards knowingly consolidating the intentional but particularly the accidental. Risk taking and mistake making (by both composer and performer) have great potential to challenge normative working methods, and these approaches can be most immediately apparent and rewarding in composition.

Listening List

https://shorturl.at/ijqVW

Notes

- 1. Alexander Calder, *Abstraction-Création, Art Non Figuratif, No. 1* (New York: Alexander Calder Foundation, 1932).
- 2. See Karin Bijsterveld and Marten Schulp, 'Breaking into a World of Perfection: Innovation in Today's Classical Musical Instruments', *Social Studies of Science*, 34/5 (2004), 649–74.
- 3. Lucia D'Errico, *Powers of Divergence: An Experimental Approach to Music Performance* (Belgium: Leuven University Press, 2018).
- 4. Luciano Berio, *Remembering the Future* (Cambridge, MA: Harvard University Press, 2006).

- 5. Vera Lukomsky, "The Eucharist in My Fantasy": Interview with Sofia Gubaidulina', *Tempo*, 206 (October, 1998), 31.
- 6. The 'incantatory' style is based around traits found in neumatic chants (chants with reciting tones separated by short or extended melismas) and can be found in examples including the opening of Igor Stravinsky's *Sacre du Printemps* (1913), Pierre Boulez' *Le Soleil des Eaux* (1947), Henri Dutilleux's *Métaboles* (1959), and Pascal Dusapin's *I Pesci* (1989).
- 7. Kaija Saariaho, 'Timbre and Harmony: Interpolations of Timbral Structures', *Contemporary Music Review*, 2/1 (1987), 93–133.
- 8. Rebecca Saunders, (programme notes) *Fury* (2005), www.rebeccasaunders.net/fury (accessed 7 June 2021).
- 9. Mattei Dogan and Robert Pahre, *Creative Marginality: Innovation at the Intersections of Social Sciences* (Boulder: Westview Press, 1990).
- 10. The title refers to the Zechstein Sea, a large lagoon in the centre of the ancient super-continent Pangea that gradually evaporated during the last great global warming at the end of the Permian period.
- 11. Christopher Redgate, 'Guide for Composers: Microtones' (2019), www.21co.uk (accessed 12 March 2021).
- 12. Vincent Meelberg describes the illusory nature of perception by the audience:
 "[T]he reality is that the listener can grasp the music because s/he has distilled out of the music this structure. For his/her comprehension of the music, it is irrelevant whether or not this structure is the "true" musical structure (whatever that may be). Vincent Meelberg, New Sounds, New Stories: Narrativity in Contemporary Music (Leiden: University of Leiden Press, 2006).
- 13. Bryn Harrison, 'Time, Memory and Recursive Structures' (2015), www .brynharrison.com/writings (accessed 12 July 2021).
- 14. The dialectics of German philosopher Georg Wilhelm Friedrich Hegel are usually presented as 'problem → reaction → solution', where every idea suggests a potential opposite, but such opposites integrate or combine (rather than obliterate) to create a newness that preserves earlier states yet is distinct.
- 15. See Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987 [1980]).
- Jason Eckardt, 'The Silenced', Bandcamp (2020 [2015]) www.clairechase .bandcamp.com/track/jason-eckardt-the-silenced-2015-a-monodrama-for-solo-flute (accessed 12 March 2021).
- 17. John Cage et al., 'An Interview with John Cage', in Mariellen Sandford (ed.), *Happenings and Other Acts* (London: Routledge, 1995), 16.
- 18. Meelberg, New Sounds.
- 19. Isabel Mundry, 'Manifeste' (2022) www.manifeste2021.ircam.fr/en/person/isabel-mundry (accessed 7 June 2021).
- 20. Andreas Dorschel, 'Mundrys Nuancen', in Heike Hoffmann (ed.), *Salzburg Biennale 2015* (Salzburg: Salzburg Biennale, 2015), 62–4.

- 21. Charles-Antoine Duflot, (CD booklet) *Le corp des Cordes* (Munich: Oehms Classics, 2015) [OC765].
- 22. Pierluigi Billone, (programme notes) *Equilibrio.Cerchio* (2014), www .pierluigibillone.com/de/texte/equilibrio__cerchio.html (accessed 7 June 2021).
- 23. William Hogarth, *The Analysis of Beauty* (New Haven: Yale University Press, 1997 [1753]), 39.
- 24. See Thomas Metcalf, 'Graphical Data Sets as Compositional Structure: Sonification of Color Graphs in "RGB" for Clarinet and Piano', *Leonardo*, 54/3 (2021), 329–36.
- 25. Roger Smalley, 'Some Aspects of the Changing Relationship between Composer and Performer in Contemporary Music', *Proceedings of the Royal Musical Association*, 96/1 (1969), 73–84.
- 26. Viola Yip, 'Darmstadt 2014: The Composer-Performer', *Tempo*, 69/271 (2015), 69–71.
- 27. Anssi Karttunen, 'Discovering the Music around Me', *Finnish Music Quarterly* (June, 1999), www.fmq.fi/articles/anssi-karttunen-discovering-the-music-around-myself (accessed 7 June 2021).