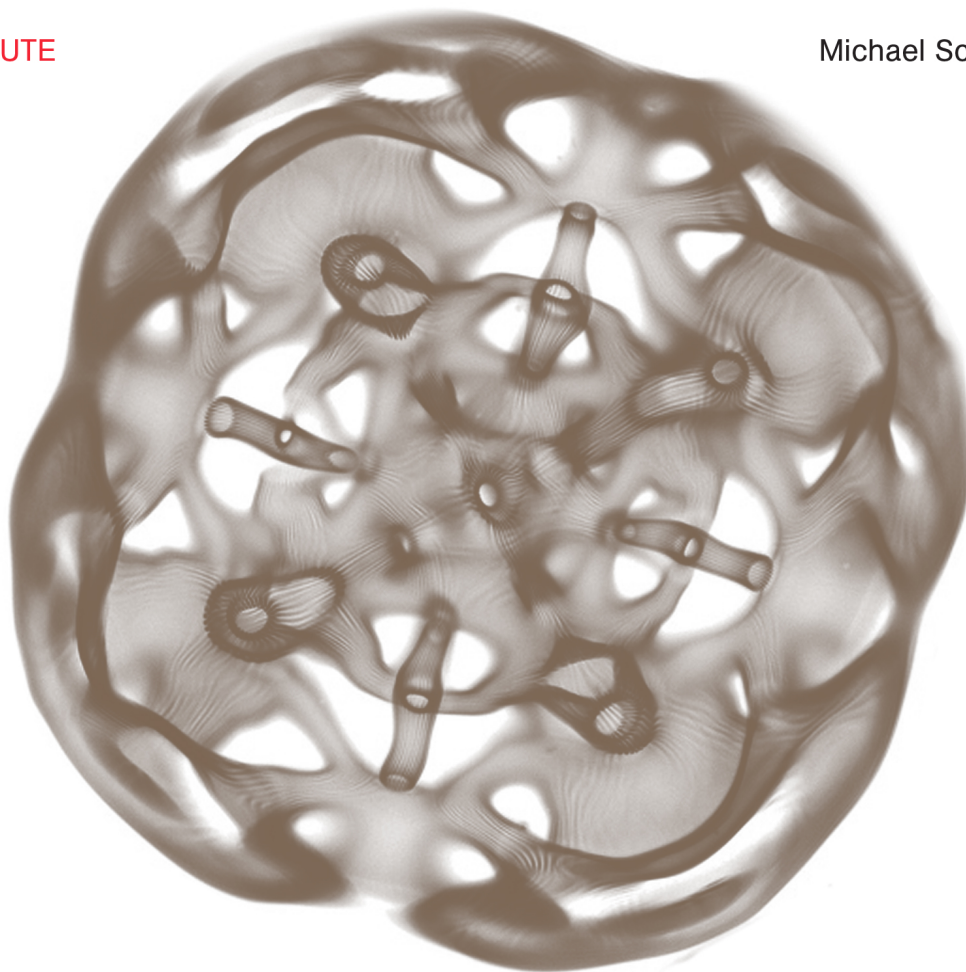


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Of Arnold Schoenberg's *Klavierstück* op. 33a, “a Game of Chess,” and the Emergence of New Epistemic Things

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ARTISTIC RESEARCH AND EXPERIMENTATION: GAMES, RULES, AND THE OPPORTUNITIES OF THE UNSOLVED

Artistic research is evolving as a field in which, among other questions, we can ask whether the problems posed by complex and challenging musical compositions are necessarily intended to find fully satisfying resolution in any given performance—or even, for that matter, in the collective sum of all their performances. Whilst traditional musicological research may also pose this question from a theoretical standpoint, the open, experimental research-cum-performance space of the artist-researcher allows it to be addressed in different, more empirical ways. Moreover, a public performance that both builds upon and extends such experimentation, presenting the question as integral to the interpretation, may ultimately have more to contribute to an audience's appreciation than one that defuses unsolved elements through seeking an interpretation in which all internal conflicts are, supposedly, neutralised.

The concept of the “unsolved performance,” at first sight an unappealing prospect to the ticket-purchasing concertgoer, on closer inspection reveals itself as potentially capable of delivering greater value—and, perhaps, longer-lasting impact—than its counterpart, whose resolution may be contrived or illusory. The performative tracing of compositional problems proposes a degree of co-creativity from audiences, offering them partnership with performers and composers, rather than a pleasurable but intellectually disengaged passivity.

Within this renegotiated concert setting, performances can take on the character of complex, speculative “games,” in which gambits are deployed that, as the performance unfolds, may lead to victory, defeat, or stalemate, but where any of these outcomes still make the witnessing of the game's unfolding

worthwhile. Analogies between music and chess are by no means novel; but, in this chapter, I am encouraged to add to their number because the particular case I shall be examining—that of Arnold Schoenberg—presents us with an individual who, as it turns out, was no less innovative and challenging in his chess-game creations than in his compositions. I shall suggest that deepening one’s understanding of his creative inventions in both domains may divulge strategies for “unsolved” but gratifying realisations of his musical works.

Since I shall be discussing experimentation, I should acknowledge at the outset that the “ontological flashes” that are associated with new insights within experimentation are to be found more readily in the unexpectedness that musical performance affords us than in moves within a chess game. Within chess, one may have insights that allow one to perceive novel moves that will lead to winning the game, but one’s insights cannot change the game itself; the transformative nature of the unforeseen is thus circumscribed. In performance, however, we may find means of acting on the insights gained through experiment, refreshing and transforming our practice with fundamentally new approaches. Performance is therefore more consummately the kind of experimental situation that Hans-Jörg Rheinberger would recognise: “Experimental systems are thus impure, hybrid settings ... [They] must be capable of differential reproduction ... in order to behave as devices for producing scientific novelties that are beyond our present knowledge, that is, to behave as ‘generator[s] of surprises’” (Rheinberger 1997, 2–3).¹ Despite this caveat, I shall hope to show that, in the case of the music I shall be discussing, the conflation of chess and composition within a discussion of “unsolved” music performance actually offers fruitful insights on both the literal and metaphorical level; not only do Schoenberg’s inventions in the realm of chess offer an intriguing sidelight on his compositional strategies but also the metaphor of chess itself, provided it is understood to be only a metaphor, becomes a way of reconciling the predetermined and the unforeseeable within the conceptual experimental set-up.

ARNOLD SCHOENBERG: COMPOSITIONAL CONTROL AND THE PERFORMER’S RESPONSE

In the 1920s, following a period of apparently decreased productivity precipitated by both the privations of wartime and a personal creative crisis in his development as a composer,² Arnold Schoenberg re-emerged as an artist in the

¹ Here Rheinberger cites Mahlon B. Hoagland (1990, xvii).

² The apparent slowing, or blocking, of Schoenberg’s creative momentum is discussed in a number of secondary writings, notably “Silence, Order, and Terror 1914–1933” by Allen Shawn (2002). However, an examination of the chronology of Schoenberg’s work at this time that goes beyond considering completed compositions uncovers a more complex picture. There are, indeed, several incomplete and fragmentary items: a “Choral Symphony” fragment (1914), text for *Die Jakobsleiter* (1915–16), and incomplete work on the Second Chamber Symphony; but the Four Orchestral Songs, op. 22, were completed in 1916. Furthermore, Schoenberg served in the Austrian Army for a period of time (1915–16) before being medically discharged. Given his previous, intense productivity in the pre-war years, from 1908–12 in particular, the perception of a loss of momentum is not surprising. This account of some of the practical reasons does not replace the sense of a genuinely existential set of problems faced by Schoenberg during this time, but it shows that, for Schoenberg, the practical and tangible stood very closely indeed to the abstract aspects of creativity.

throes of potent reinvention. His engagements with the organisation of musical material and his consequent development of “composition with twelve tones,” were but musical instances of how the evolution of his entire worldview touched most of what he created and formed an apparently unifying field of possibilities. Another example is his development during the same period of his “Coalition Chess” game, a kind of “super chess,” played from all four sides, in which the conventional pieces of the traditional game are replaced by planes, tanks, artillery, and other icons of twentieth-century warfare.³

Through study of Schoenberg’s compositional processes during this time, as well as scrutiny of his creation of physical objects (such as his chess pieces, formed from bits of cardboard, wood, paper, and string that might otherwise have been discarded), it is possible to assert that what Schoenberg formed for himself in each of these areas was a highly controllable metaphorical field within which he could conduct various kinds of experiments that had the capacity for concretisation, leading to verification or refutation (since many of them involved mathematical number games, formal constructional strategies through tone-row language, and other means of expressing an apparently external logic).⁴ It is this capacity that has made Schoenberg’s twelve-tone music something of a magnet for music scholars and analysts. However, it has made it more challenging for performers to engage with material in which compositional determinism seems so absolute and personal expression so circumscribed. Paradoxically, this makes the repertoire all the more fertile a terrain for the artistic researcher seeking to generate the kinds of practice-based approaches that might lead to greater illumination of the core musical material and to the potential development of new musical ideas, new modes of presentation—and even new knowledge. In such a process, the materials of practice-based experimentation have the potential to become “epistemic objects,” characterised by “an incompleteness of being and the capacity to unfold indefinitely” (Knorr Cetina 2001, 180–81), creating *unsolved performances*. The apparent over-documentation of Schoenberg’s music may thus be refreshed by the pleasures of a sensate, practice-based approach that welcomes the unforeseen, the “generation of surprise” within the performance, as an extension to Schoenberg’s own experimental system, noted above.

To illustrate this, I will use a specific example from Schoenberg’s piano works of the 1920s, the *Klavierstück* op. 33a, as a case study. I shall be examining how the performer’s processes of experimentation, via such means as finger-

3 During 3–5 June 2004, the Arnold Schoenberg Center hosted a special exhibition and symposium, *Arnold Schoenberg’s Brilliant Moves: Dodecaphony and Game Constructions*, in which original manuscripts of all of Schoenberg’s twelve-tone works were displayed alongside practical artefacts for twelve-tone composition, designs for furniture, inventions (such as drawings for a typewriter for musical notation), and the Coalition Chess game itself, including the chess pieces. A volume of the proceedings of the symposium has been published (Meyer 2006), as has a catalogue of the exhibition (Meyer 2004).

4 Schoenberg’s Coalition Chess is the focus for an online gaming community found at www.schoenbergchess.com. On this site, one can learn Schoenberg’s rules for the game, the “Zaman-Strouhal variants,” and the remarkable scope of the game’s complexity, in terms of possible configurations. It is also possible to play games on the site. On 23 February 2004, the Arnold Schoenberg Center in Vienna hosted a trial game involving four chess grandmasters, who, “following initial scepticism ... revealed that Schoenberg’s game is relatively easy to learn” (Ehn and Strouhal 2004, 79).

ing, variable generation of sonorous “fields,” and execution of phrasing, may be seen both to interface and be at odds with Schoenberg’s own layers of experimentation—as evidenced, for example, through his process of sketching and generating row tables that are neither as “abstractly” detached from the musical compositions that they generate as one might initially assume, nor as determining of final compositional outcomes as one may infer through studying the secondary literature.⁵ The aim will be to interrogate this process of experimentation as a potential crucible for new knowledge and to speculate upon the necessary modes of dissemination, including new approaches to practice and performance, that might be required for such knowledge.

One of the most important elements within this kind of reading is that the performer’s own “gambits” *matter*; in artistic research, the performer can indeed evolve a profound technical knowledge of a work in order to “play the game” to its deepest level and even to “re-write the rules.” As will be discussed in more detail later, this last possibility is in apparent contradiction to Schoenberg’s own thinking about where the sole prerogative for rule-making lies in the composer-performer relationship. In a famous letter that I shall cite, he even comes close to suggesting that analysis is a field from which performers have nothing to learn and which they should therefore leave to composers. However, this should not stop us in our tracks—any more than an ambitious chess player should avoid an opponent likely to defeat them!

CHESS AS METAPHOR AND CULTURAL TROPE

Chess is a game like any other, with its hermetic system of pieces and moves, but it also features in an iconic way in many artistic genres. We learn of chess as a metaphor, as a set of signs for how we might conduct ourselves in confrontation, and we also see chess as a language game in which the cut and thrust of move and counter-move mirrors the polemical structure of argued discourse. It is a metaphor used to memorable effect in cinematic, televisual, and literary creations:

Are we not guilty of offensive disparagement in calling chess a game? Is it not also a science and an art, hovering between those categories as Muhammad’s coffin hovered between heaven and earth, a unique link between pairs of opposites: ancient yet eternally new; mechanical in structure, yet made effective only by the imagination; limited to a geometrically fixed space, yet with unlimited combinations; constantly developing, yet sterile; thought that leads nowhere; mathematics calculating nothing; art without works of art; architecture without substance—but nonetheless shown to be more durable in its entity and existence than all books and works of art; the only game that belongs to all nations and all eras, although no one knows what god brought it down to earth to vanquish boredom, sharpen the senses and stretch the mind. Where does it begin and where does it end? Every child can learn its basic rules, every bungler can try his luck at it, yet within that immutable little square it is able to bring forth a particular species of

⁵ See Auner (2010) for illuminating readings of the often less than orderly path from sketches and row materials to final outcomes in selected works of Schoenberg. This aspect of op. 33a, with Auner’s contribution to the debate, is discussed below.

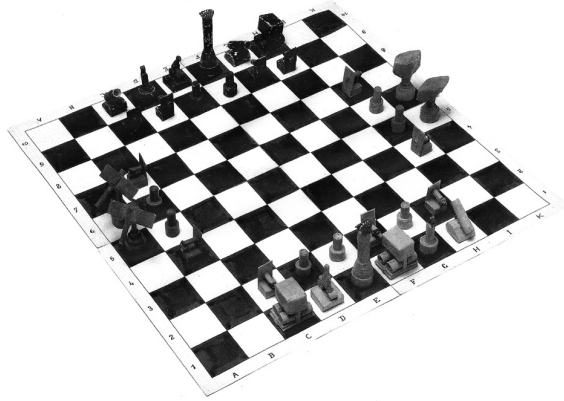


Fig. 1

masters who cannot be compared to anyone else, people with a gift solely designed for chess, geniuses in their specific field who unite vision, patience and technique in just the same proportions as do mathematicians, poets, musicians, but in different stratifications and combinations. (Zweig 2006, 11–12)

Zweig's commentary suggests a way in which subservience to general rules can still, in the case of a sufficiently subtle game, allow for the decisive intervention of the creative imagination of the player. His eulogy on the mathematical, poetic, and musical analogies inherent in the traditional game is amplified when one considers artistic conjectures as to yet more subtle and complex variants:

On a low table sits a very modern object, which I discovered was five chess-boards mounted one above another in a glass frame; there are chessmen on each board, as arranged for five different games in progress; the boards are made of transparent Lucite or some such material, so that it is possible to look down through them from above and see the position of every man ... (Davies [1972] 1983, 518)

... Each player plays both black and white. If the player who draws white at the beginning plays white on boards one, three and five, he must play black on boards two and four. I said ... that this must make the game impossibly complicated, as it is not five games played consecutively, but one game.

[The reply]:

Not half so complicated as the game we all play for seventy or eighty years. Didn't [your analyst] show you that you can't play the white pieces on all the boards? Only people who play on one, flat board can do that, and then they are in agonies trying to figure out what black's next move will be. Far better to know what you are doing, and play from both sides. (ibid., 532)

All these elements of chess—its modelling of power structures, its aesthetically compelling plastic qualities, its tests of logic, and its potential for risk—made it an obvious organisational vehicle for Schoenberg when he invented his own version of the game in 1921. The Austrian-American chemist, Carl Djerassi, also a novelist and playwright, but best known for his contribution to the development of oral contraceptive pills (and thus to “risk-reduction”), describes Schoenberg's “coalition chess” in an experimental piece of writing, as follows:

Arnold Schönberg had invented a four-party chess game, coalition chess (*Bündnischach*). The basic rules of the game are as follows. Two of the four players have

Of Arnold Schoenberg's Klavierstück Op. 33a

twelve chess figures (yellow and black) at their disposal and are thus considered the two “big” powers, whereas the other two have only six figures (green and red), thus representing the “small” powers. After the first three moves, two “coalitions” ensue in that one of the small powers declares itself associated with one of the big ones. Thereafter the play continues until checkmate is reached. (Djerassi 2008, 2)

Schoenberg's chess game is part of his confrontation with—and use of—history.^[Fig. 1] If standard chess cloaks its aggression in the stylised symbols and personages of a bygone age—kings, queens, knights, bishops, etc.—and plays out success and failure in straightforwardly dualistic dynastic conflict, Schoenberg's “coalition” chess is strategy and warfare with a contemporary face. The kings in this version of the game are modern monarchs with technologically equipped armies at their disposal and the capacity to broker alliances with other powers. The underlying message of the game is that the only recourse of the weak is to find powerful allies to protect them:

Pieces for Coalition Chess, their moves and distribution:

- (King) moves and captures as in chess and also has the same importance.
- (Plane) is a new piece, it corresponds to two successive moves by the Knight. The only move which is not permissible is one that takes the “Plane” back to its starting position.
- (Submarine) is also a piece which is not found in the game of chess. It is permitted to move in the same way as the Queen and Knight.
- (Tank) corresponds to the queen in chess.
- (Artillery) corresponds to the Rook.
- (Engineer) corresponds to the Knight.
- (Motorcyclist) corresponds to the Bishop in chess.
- (Machine-gun) is a piece which is not found in the game of chess. It has the same rights as the King and Pawn, but can be captured without the player losing the game. Therefore, it can also move forward two squares from its starting position and can move one square in all directions to capture other pieces.
- (Guard) corresponds to the Pawn in chess. (Zaman and Strouhal 2004, 76)

It may not be too far-fetched to suggest that, in the aftermath of defeat in 1918, and with the concomitant decline of the “old Austria” to which he felt considerable loyalty and which included canonical composers whom he revered, Schoenberg re-focused his energies on the achievement of tangible outcomes within his own creative domains that also had ethical subtexts. Coalition Chess and “composition with twelve tones” share both concrete characteristics and ideological resonances, however ironic these may be, in their use of images of rigid protocol and tight, centralised control in the wake of devastating defeat in war. Similarly, Schoenberg's development of another stabilising set of rules in the Society for Private Musical Performances, which was inaugurated on 23 November 1918, becomes a sign that, as with the collapse of the old world and its certainty, so within the hierarchies associated with Western art music, a new “country” is needed, in which “citizenship” is determined by adherence to a set of ethical rules of conduct concerning how new “high” artworks should be experienced.⁶

6 See Bujic (2010, particularly 95–107, 108–34).

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Schoenberg's utopian structures and statements are far more than reflections upon the process of composition. Is the following famous text from Schoenberg's essay "Composition with Twelve Tones" concerned with composition, or chess, or both and yet more?

The unity of musical space demands an absolute and unitary perception. In this space ... there is no absolute down, no right or left, forward or backward. Every musical configuration, every movement of tones has to be comprehended primarily as a mutual relation of sounds, of oscillatory vibrations, appearing at different places and times. To the imaginative and creative faculty, relations in the material sphere are as independent from directions or planes as material objects are, in their sphere, to our perceptive faculties. (Schoenberg 1941, 223)

Schoenberg writes here of the "unitary perception," which can unite sounds appearing at different times, and likens it to the "perceptive faculties" that come into play when we contemplate material objects—a category that might well include chessmen and the multiple interactions of their possible moves. The standard chessboard and the serial row matrix that we use in the analysis of specific aspects of Schoenberg's music have many features in common. But in Schoenberg's coalition chess, and in the serial row matrix, the players/note-sequences move from all four sides, adding potential dimensions, increasing both potential risk and gain. Recalling Davies: "Far better to know what you are doing, and play from both sides" (Davies [1972] 1983, 532)—or in our case, from *all* sides.

PERFORMING FROM ALL SIDES

This multilateral way of working is becoming increasingly interesting to performers. Characteristically, Glenn Gould situated himself in the early vanguard of such informed performance practices, offering extended commentaries on the keyboard works of the Second Viennese School, and even prefacing his performances of serial compositions by playing the prime row of the work in question, something upon which Mitsuko Uchida comments in her own account of developing performances of Schoenberg's Piano Concerto, op. 42 (Arnold Schoenberg Center 2007).⁷ This latter interview is significant for performers of Schoenberg's work, in that Uchida does *not* follow Schoenberg's apparently prohibitive injunctions concerning performers' recourse to music analysis; instead, she does something much better, which is to play with the tone-row material as a part of experiencing its manifold properties, exploring its intervallic "physiognomy" by touch and sound, and developing an intellectual, aesthetic, and emotional relationship with the material. Here, performance and analysis merge in a critical reading, full of poetry. Uchida becomes an ideal kind of Schoenberg performer—respectfully disobedient.

Uchida challenges us through her example to be similarly questioning in our own listening, interrogating what can be gleaned from even a small fragment

⁷ This interview with Uchida was filmed in association with her rehearsal of the work with Jeffrey Tate and the Rotterdam Philharmonic Orchestra.

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such as the tone row. In an almost literal, as well as metaphorical, sense, she experiments with the row. In the opening passages of Schoenberg's music, this is important because, if we return to the chess metaphor, his opening bars, more than most, are opening gambits, which generally contain the row's prime material that, as Uchida demonstrates, opens the sound world of the work to us. Furthermore, performers who are mindful of the contradictions and ambitions of Schoenberg's life project are well placed to create links between the tacit world of his musical ideas and the words that have come to surround these, via the embodiment and temporal experience that form the milieu of performance. They can thus propose certain kinds of resistance to Schoenberg's more problematic utterances.

Among such statements must surely stand the much-discussed letter written by Schoenberg to the violinist Rudolf Kolisch, dated 27 July 1932. The letter was sent in response to correspondence in which Kolisch had discussed the tone-row material of the Third String Quartet, op. 30 (1927), as part of the Kolisch Quartet's preparations for a performance of the work:

You have identified the tone rows of my string quartet correctly (except for one small point: the second consequent phrase reads: 6th tone = C sharp, 7th tone = G sharp). It must have taken a great deal of effort, and I do not think I would have had the patience. But do you think that knowing it serves any purpose? I cannot imagine how. I am convinced that for a composer who knows nothing whatever about using rows there is a stimulus in learning how he can proceed, a purely technical hint as to the row's potentialities. But aesthetic qualities are not disclosed in this way, or only incidentally. I cannot caution often enough that this kind of analysis must not be overestimated, because it leads only to what I have always fought against: to the knowledge of how something is *made*, whereas I have always helped people to realize what something *is* (Schoenberg 1932, 31)

There has been a considerable amount of literature dedicated to unravelling Schoenberg's intention in this letter,⁸ but much of this has pertained to how the communities of music theory and analysis should respond, rather than the community of performers. As well as this being yet another manifestation of the marginalising of the performer's perspective, there are logical reasons why the letter should provoke so much attention from theoretically-oriented commentators. Schoenberg's reply might be read as a manifesto, a gathering together of key points concerning the interface between his compositional world and the double-sided "other" world of music analysis and musical performance, both of which he appeared to regard as problematic and in need of certain checks and controls. This drive for control is shot through the Kolisch letter. As seen above, Schoenberg is quick to correct Kolisch on points of attribution with respect to the tone row as a prelude to voicing his concern that Kolisch has done the analysis in the first place.

It is difficult for performers of Schoenberg's music—who, as a rule, exemplify a particular kind of dedication with respect to a repertoire that generally offers

⁸ See, for example, John Covach (2000).

few material rewards—to avoid frustration in light of such pronouncements. After all, performers are generally enjoined to make detailed studies of the works they are crafting for performance, going beyond what is actually required to play a work, with a view to uncovering aspects of construction, large-scale phraseology and structure, and historical and critical contexts, all with the aim of enriching their encounter with the work and, one hopes, that of the audience as well.

Navigating the ideological constructions that Schoenberg places around his works requires a great deal of critical acuity. It also calls for new ways of presenting counter-arguments to those constructions through performance, something that is extremely difficult in standard concert set-ups. In this regard, a performer reading the Kolisch letter must understand that the words, while ostensibly addressed to Kolisch, are actually for a wider community in which other composers, critics, and music scholars figure prominently. Furthermore, it is not to his own time that Schoenberg addresses himself: it is to the future. Indeed, Joseph Auner has argued that the sizable and well-ordered legacy that Schoenberg has left, following a life in which teaching, writing, and speaking all played major roles alongside his creative work as an artist, itself forms a kind of “composed public performance.” This phenomenon began with his rise to fame and still resonates today in the concert halls and, especially, the institutions of music education and research that seek to understand Schoenberg’s complex legacy (see Auner 2005).

An outstanding contemporary example of a performer tackling head-on the issue of how to champion Schoenberg through constructive resistance to his strictures is Daniel Barenboim, who has successfully “performed” music analysis in the public sphere of the concert hall in order to introduce the Variations for Orchestra, op. 31. An account from a British newspaper, *The Independent*, written by the music critic Edward Seckerson for a concert given on 3 February 2010, offers a sense of the potential that, on this occasion, was unlocked by such an approach: “Only Barenboim would then have dared to programme Schoenberg’s notoriously ‘difficult’ Variations for Orchestra Op.31 as the final piece of the series. Nobody left at the interval. Preceding the performance with an ‘illustrated talk’ that was longer than the piece itself he probably did more for Schoenberg’s cause in twenty minutes than others have failed to do in almost a century.”

In fact, the ability of the finest performers to work intelligently and artistically to disclose music’s most telling ideas is acknowledged by Schoenberg himself, in the Kolisch letter: “I know of course (and never forget) that despite such examinations you never lose sight of what attracted you to this kind of music in the first place: its spiritual, tonal and musical substance” (Schoenberg 1932, 31). He even goes so far as to open a small chink in the armour of his opposition to performers’ dabbling in analysis, although he quickly re-emphasises the notion that they should remain concerned primarily with the nuances of their own métier: “For me there can only be an analysis which concentrates on the idea, showing its presentation and development. Of course, one should not overlook artistic refinements in the process” (ibid., 32).

“Performed analyses,” as exemplified by Barenboim, Uchida, and Gould, give us important models for carrying out exactly the kind of analysis that Schoenberg states he might tolerate. But these approaches present challenges:

Of Arnold Schoenberg's Klavierstück Op. 33a

they are multi-faceted, and they subvert the norms of concert-hall behaviour. They require much of the musician, including the breaking down of the phantasmagorical screen between performer and audience.

Through employing types of analysis that centre on tactile aspects, metaphorical reading, and communicative possibilities, performers can feel their way into the rhetoric of the music, and this will have a bearing on their whole process of learning and assimilation. As with any kind of research process, precursor materials can prove useful to this process. After all, they can represent the corresponding process whereby the composer felt his own way into the rhetoric of the new composition.

“PERFORMING” THE ANALYSIS

As an example of how this might work, in the matrix for op. 33a [Fig. 2&3], the most relevant iterations of the row material are highlighted.

	G	7	2	1	11	8	3	5	9	10	4	6
0	B \flat	F	C	B	A	F \sharp	C \sharp	D \sharp	G	A \flat	D	E
5	D \sharp	B \flat	F	E	D	B	F \sharp	A \flat	C	C \sharp	G	A
10	A \flat	D \sharp	B \flat	A	G	E	B	C \sharp	F	F \sharp	C	D
11	A	E	B	B \flat	A \flat	F	C	D	F \sharp	G	C \sharp	D \sharp
1	B	F \sharp	C \sharp	C	B \flat	G	D	E	A \flat	A	D \sharp	F
4	D	A	E	D \sharp	C \sharp	B \flat	F	G	B	C	F \sharp	A \flat
9	G	D	A	A \flat	F \sharp	D \sharp	B \flat	C	E	F	B	C \sharp
7	F	C	G	F \sharp	E	C \sharp	A \flat	B \flat	D	D \sharp	A	B
3	C \sharp	A \flat	D \sharp	D	C	A	E	F \sharp	B \flat	B	F	G
2	C	G	D	C \sharp	B	A \flat	D \sharp	F	A	B \flat	E	F \sharp
8	F \sharp	C \sharp	A \flat	G	F	D	A	B	D \sharp	E	B \flat	C
6	E	B	F \sharp	F	D \sharp	C	G	A	C \sharp	D	A \flat	B \flat

Fig. 2

	0	7	2	1	11	8	3	5	9	10	4	6
0	0	7	2	1	11	8	3	5	9	10	4	6
5	5	0	7	6	4	1	8	10	2	3	9	11
10	10	5	0	11	9	6	1	3	7	8	2	4
11	11	6	1	0	10	8	2	4	8	9	3	5
1	1	8	3	2	0	9	4	6	10	11	5	7
4	4	11	6	5	3	0	7	9	1	2	8	10
9	9	4	11	10	8	5	0	2	6	7	1	3
7	7	2	9	8	6	3	10	0	4	5	11	1
3	3	10	5	4	2	11	6	8	0	1	7	9
2	2	9	4	3	1	10	5	7	11	0	6	8
8	8	3	10	9	7	4	11	1	5	6	0	2
6	6	1	8	7	5	2	9	11	3	4	10	0

Fig. 3

Figure 2. The matrix for op. 33a.

Figure 3. The integer matrix for op. 33a.

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My own understanding of the piece actually began through working with this material as sound and, in the process, being drawn to, and fascinated by, four particular bars. These are bars 14–18; and, in the hands of a good performer, they have a distant, lyrical, but near-still quality about them, bookended as they are with bars of disjunct music in a *forte* dynamic. They become like an insert of altered time and affect. This is emphasised further by what Michael Cherlin might have called an “uncanny” (*unheimlich*)⁹ recollection of F minor at bar 18. This moves fleetingly through the phrase like a Proustian waft of perfume; recognising the past, the listener reaches out to the gesture, but the sudden cut to “*heftiger, forte martellato*” foils any sustained tonal nostalgia.

So through practice and hearing, the performer learns of the signs that abound, which point to the section from bars 14–18 as being close to the work’s centre, or heart—something that is both underlined and reinforced by a sense of abstractness in the sounding phrases. This sense develops because of how the sonorous quality of the lyrical phrases sits alongside disjunct, chordal, and linear structures. This comes to be one of the formal organisational strategies for the piece: the shift between skittishness and lyrical abstraction. In working with the material, one experiences this dialectical approach in the tactile imprint of the music.

The engendering of a centre, or core, in the draft materials for op. 33a becomes even more significant when one considers some of the revelations of music analysis in conjunction with close listening and physical awareness during practice. As noted above, in the sketch of P0 and I5, through the use of a drawn-in bar line that divides his row materials in half, Schoenberg’s layout highlights the characteristic of hexachordal combinatoriality that he employs so effectively as a structuring principle in the work. Twelve-tone aggregates may be formed by reading “horizontally” across the staves or “vertically” up and down the two sets of stacked hexachords. In either case, one arrives at a full complement of twelve tones. This property of combinatoriality has been written about extensively in the analyses of op. 33a, but its ramifications for performance are also considerable, as one hears when interrogating the material *as* music. [Fig. 6]

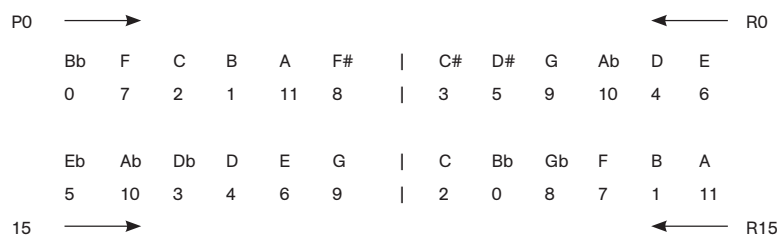


Fig. 6

⁹ Cherlin’s excellent delineation of *unheimlich* (the uncanny) as a category is found in the chapter “Uncanny Expressions of Time in the Music of Arnold Schoenberg” (Cherlin 2007, 173–229).

Studying a different element of the first draft [FS 24] gives further credence to this view; if we return to a consideration of the material which corresponds to bars 14–18 in the final version, we see that these bars are marked with one of only two instructive affect indications in the entire draft: *cantabile*. The only other written-out term in this stage of the compositional process is its introductory tempo indication *Mäßig*, which appears at the start of the draft as the overall tempo instruction. The marking of *cantabile* is structurally significant, being associated with the majority of combinatorial iterations of Po/I5 until the final eight bars, 32–40, following the “grand pause,” in which two Po/I5 iterations occur but without the *cantabile* indication, giving this section an affective distinctiveness that marks it out structurally. The other statements of Po/I5 that lack the indication are bars 10–12 and bars 37–39. These are, in effect, *stretto* bars in which all of Schoenberg’s utilised row forms (Po, I5, Ro, and RI5) are presented in quick succession—and they can be performed as such, to good effect. They prepare either a sectional shift (bars 10–12) or closure of the work (bars 37–39).

The structural importance of the Po/I5 combinatorial rows is also emphasised through their association with other tempo and affect markings. If, as previously stated, bars 14–18 are emphasised in this reading as structural—and, significantly, as the performative/affective heart of the work—then bars 21–25 underline this through their provision of a mirroring completion that emphasises the central symmetry. Just as the preliminary draft of the work employed contrary motion to highlight mirroring, the statements of Po and I5 in the bars in question present their hexachords in reverse order. The *cantabile* instruction is maintained, but the affective delineation *ruhiger* is added. [Fig. 7]

A tempo cantabile				heftiger martellato		heftiger martellato			
P0 Hex 1		P0 Hex 2		R0 (P0 Hex 2,1)		P0 Hex 2		P0 Hex 1	
I5 Hex 1		I5 Hex 2		RI5 (I5 Hex 2,1)		I5 Hex 2		I5 Hex 1	
14–15	16 ¹⁻²	16 ³⁻⁴ –17	18	19	20	21	22	23	24–25 ¹

Fig. 7

The chart in figure 7 shows that this complex of material does indeed form a “heart” for the work, with the four-bar hexachordally combinatorial “cantabile” sections enclosing a section marked “heftiger martellato,” in which the row forms Ro/RI5 allow overlapping linear aggregates to form both with the material that precedes and with that which follows. But this central section has other points of interest as well. In his article on the relationship between Schoenberg’s row tables and the musical idea, or *Gedanke*, Joseph Auner notes the point made above that within Schoenberg’s sketch [FS 24] there is no full matrix evident for op. 33a and that, instead, Schoenberg started the compositional process first, composing only materials that related to Po and I5 (Auner 2010, in particular 171). However, Auner makes the additional observation that mid-way through the sketch, Schoenberg appears to have become “stuck.” At this point, he interrupts the musical content of the text to return to devise row materials for P2 and I7 and also P7 and I0. These correspond to materials used in a fragmentary way within bars 28–31 of the work. This way of working with the row material in

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“real time” has some resemblance to how one might practise a piece of music; its potential sense of co-creativity can be helpful for performers, engendering a closer sense of identity with the compositional process. It underlines the conclusion that if, in the manner of Gould and Uchida, one can have as full as possible an intellectual, emotional, and kinetic understanding of the material even before learning the work, the potential for some other kind of deeper content emerging within the culminating performance of the music is enhanced.

Thus the sound quality of the material in practice leads one to a performative reading in which the sonorous qualities of the combined linear/vertical fields become a central concern. It therefore leads to a rather different reading than one might derive from a purely score-based approach. I find that experiments with different opening “gambits,” one of which I shall describe below, have the effect not only of unfolding each iteration of the piece as a new entity but also of revealing it as variations in a state of flux, both highly coherent and fleeting. I hear and play the variant materials as gravitating toward a coherent sonorous core, which itself is derived from Schoenberg’s opening gambit, the iteration of the P₀ and I₅ forms in tetrachordal stacks.

PERFORMANCE CHOICES: GAMBITS, EXPERIMENTS, AND “GRASPING AT THE UNKNOWN”

A gambit is a chess opening in which a player, most often “white,” sacrifices material, usually a pawn, with the hope of achieving an advantageous position. In performances, we do make sacrifices; performances are not ideal presentations, but a series of negotiations. So there are benefits in linking how a work is experienced through the understanding of the physicality of the performer with newly considered historical evidence that considers performers as real people, with real, embodied experiences of the music. Performers thus become agents able to make both good and bad choices and able to respond variably to the outcomes of these.

The opening of op. 33a, conceived as a gambit, might involve different “moves” with the opening six chords that serve as the “motto” for the whole work. The chords appear disjunct—but are they? If so, what about the over-arching phrase mark? The standard performance approach here is noted in Jean-Jacques Düнки’s (2006, 114) book on performing Schoenberg’s piano music,¹⁰ in which he suggests a fingering approach to bring out the top line of the chords. Düнки rightly points to the difficulty of sustaining a melodic line in which the swapping of hands also alternately allocates that top voice to the left and right hands. Maintaining the consistency of the line indeed becomes a problem that must be addressed in practice. Once this is achieved, the maintenance of a true, overlapping legato, beyond that which may be achieved by strategic use of the

¹⁰ Düнки’s approach in this book is determinedly pragmatic; he makes extensive reference to Schoenberg’s sketches and writings, but reads them rapidly back into the process of generating performances. Indeed, the book is accompanied by Düнки’s own CD recording of Schoenberg’s piano works, performed on what might be regarded as a “period” instrument, Schoenberg’s 1912 Ibach piano. Düнки carries out his research with a view to engaging not in the development of abstract ideas but rather in the development of well-informed performances.

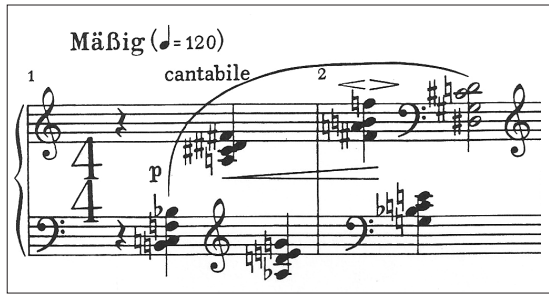


Fig 8.

right pedal, is also a concern, as is the creation of an appropriate sound-world based on good balancing of the chords. But the emphasis on the top voice alone is not the only option open to the pianist. [Fig. 8]

Another performer's gambit might be for the pianist to "play down" the standard "top-voicing" (B \flat , F \sharp , G, F, E, D = 0, 8, 9, 7, 6, 4) and to seek out instead the conjunct internal voices that link the chords (B \flat , A, A \flat , F \sharp , E, D = 0, 11, 10 [semitone series], 8, 6, 4 [tone series]). This second approach is of interest because it creates a motivic link with the section beginning in bar 14, which I proposed earlier as introducing the core of the work, by using this three-note tone/semitone motivic series. A fusion of these approaches might be the best approach of all, linking the "cantabile" indicated to the conjunct inner movement of motivically coherent material. This is a rather "Gouldian" tactic, and it becomes part of what we might call "informed artistic experimentation." In a sense, it solves the apparent contradiction of the long phrase, since the legato that melds the phrase together exists in the inner voices, alongside the disjointed upper melodic material. It also provides a viable approach for the entire piece, since these linear-versus-disjunct complexes, and transpositions of them, appear throughout the work.

The point of all of this is that experimental approaches can yield a possible response to Schoenberg's dismissal of the usefulness of identifying a row—a response that neither accepts it nor refutes it. It may indeed be true that a level of understanding that stops with solving the row puzzle gets us nowhere particularly useful. At the same time, an experimental approach necessitates more knowledge, not less, since the experimental system is full of choices and narratives:

The retrospective view of the scientist [or artist-researcher] as a spontaneous historian is not only concealing but in many respects also revealing. It reminds us that an experimental system is full of stories, of which the experimenter at any given moment is trying to tell only one. Experimental systems not only contain submerged narratives, the story of the repressions and displacements of their epistemic concerns; nor, as long as they remain research systems, have they played out their potential excess. Experimental systems contain remnants of older narratives as well as shreds and traces of narratives that have not yet been related. Grasping at the unknown is a process of tinkering. (Rheinberger 1997, 185–186)

Identifying the row is thus the beginning of the journey and of the tracing of its "story." It is neither the journey's terminus nor its epilogue; and far from meaning that the work's problems are "solved," it opens up a whole vista of freshly problematised terrain for exploration. In this kind of game, a sense of performer autonomy can create new musical forms even within "works" in which the compositional form may seem set or obvious.

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The Kolisch letter discussed in detail above demonstrates Schoenberg's determination to cement his historical position (and, in the process, betrays his insecurity about how effective his measures will be), as well as driving home the underlying message that performance is part of his legacy—even though his manner of communicating with performers conveys a distinct sense that their positions in the creative hierarchy are inferior to his own. This leads to a series of paradoxes: “I am convinced that for a composer who knows nothing whatever about using rows there is a stimulus in learning how he can proceed, a purely technical hint as to the row's potentialities. But aesthetic qualities are not disclosed in this way, or only incidentally” (Schoenberg 1932, 31). This is one of the most problematic utterances of the letter. For performers, the separation of the row material from aesthetic qualities of the music simply does not ring true; the qualities of a row, its intervallic contours, whether conjunct or disjunct, the extent to which the row has sonoral resonances of tonal music in its structures (as in the prevalent triadic echoes of Alban Berg's tone-row arrays), the use of rows that have particular mathematical/intervallic qualities (such as the all-interval “Klein row”)—all these contribute to the performer's aural and tactile relationship to the music. Furthermore, the mathematical aspects of row structures and their utilisation that analysis can reveal, and their relationship to musical structure (as in hexachordal combinatoriality or the prevalent use of “mirroring and canons,” for example), far from draining a work of its “poetry,” can generate an intensified sense of wonder for the performer of the work.

So, for a performer, it is not possible to accept at face value what Schoenberg has written in his letter. Instead, it might be instructive to remember his earlier reflections upon being asked for titles for his Five Orchestral Pieces, op. 16. In a diary entry of 27 January 1912, Schoenberg writes: “The wonderful thing about music is that one can tell all, so that the educated listener understands it all, and yet one has not given away one's secrets, the things that one doesn't admit, even to oneself” (quoted in Reich 1971, 51). Again, the statement is paradoxical, in the mutual exclusivity of “telling all,” yet “not giving away one's secrets.” But the core of the matter is in the medium within which the “telling” takes place: it is within the musical *idea* that Schoenberg “tells all,” something that articulation in written language (in this case, titles for movements in op. 16) cannot capture, both despite and *because* of its literal nature. For Schoenberg, his “truths” can hide in plain sight while communicating their messages tacitly. Far from being a modernist sentiment about the refractory nature of artistic truth, this is a reminiscence of aspects of romanticism, epitomised by the Friedrich Schlegel quotation that precedes Robert Schumann's *Fantasie* op. 17:

Durch alle Töne tönest
Im bunten Erdentraum
Ein leiser Ton gezogen
Für den, der heimlich lauschet.¹¹

¹¹ “Resounding through all the notes / In the earth's colourful dream / There sounds a faint long-drawn note / For the one who listens secretly”; this forms the motto for Robert Schumann's *Fantasie* op. 17 (Schumann 2003).

This is an appeal to the initiated, to those who listen with a secret insight and sensitivity; Schoenberg preserves similar—and by now somewhat anachronistic—notions in aspects of his own thinking concerning communication, in keeping with his wish (and his careful construction) to be seen as an inheritor of the grand Austro/German musical tradition, something that also included his role as a teacher. The sense of obedience to the master that bound Schoenberg and his composition pupils together has had resonances in the performance history of his works, even long after his death. In part, this can be accounted for by the fact that many early performers of his works were also his pupils and/or friends. One might conclude that these performers adhered very literally to Schoenberg's words to Kolisch. But that was not always the case, as the example of Edward Steuermann demonstrates. His reflections on the topic of music analysis, coming as they do from the standpoint of a pianist who studied composition with Schoenberg, are worth noting at length:

Analysis is a procedure for comprehending single features of the movement of tones we call music in order to get a better picture of their coherence. Primarily analysis is applied to music we feel instinctively, music we “understand.” “Understanding” is not necessarily increased by analysis; successful analysis is rather the consequence of understanding. Nevertheless, assuming there is no such thing as complete lack of understanding of a masterwork, we can analyze in order to “understand” better, to get out of a chaotic condition of mind and into an organic and positive following of the events—to agree with them. Only somebody completely unmusical could lack absolutely the ability to follow, at least partially, the flow of the music (in saying this I do not rule out a sense of bewilderment, of contradiction, of lack of continuity, an inability to feel the work as a whole). “Not to understand” means in effect not to trust the composer; one might be right—sometimes. But to understand means always to love—and finally to agree completely and find in one's heart the image of the music projected by the composer.

If this situation has not yet been reached, analysis may be tried as a guide, though in order to be able to analyze one must be able to feel the basic coherence of the events, in some detail at least, later in complexity. (Steuermann 1989, 131)

On the one hand, Steuermann's comments suggest that there can be no final and successful analysis other than that which leads to complete agreement with the composer's image of the music. They also link understanding with love—but in a way that implies something closer to unconditional surrender to the composer's vision. At the same time, Steuermann suggests that the roots of analytical understanding reside in the analyst's own a priori capacity to “feel”—or, perhaps, to understand in a pre-intellectual way—how the music works. The performer might initially take encouragement from this appeal to the “instinctive” dimension of understanding as the precursor of the journey to find the heart of the music. However, the idea that all exploratory roads—or at least those with any validity—must ultimately lead back to the composer's undisputed supremacy makes it more questionable whether, for the performer, the journey through the territory of analysis is likely to lead anywhere that offers genuine revelations.

PERFORMING SCHOENBERG NOW

For today's performers, the very disjunction between the perceptual frames of music analysis and performance, together with the fact that Schoenberg can no longer intervene personally in mediating between the two, makes the situation more open and ambiguous. An analytically aware performance of a work may indeed be one that "transgresses" Schoenberg's strictures; nevertheless, in the right hands it might serve the genuinely useful purpose of facilitating a contemporary audience's understanding of the work in terms that they and the performer have in common. Arguing against Schoenberg's injunction to Kolisch that performers gain little that is genuinely useful by identifying a composition's twelve-tone "signature" at the most literal level, we may counter that the analytical matrix is about much more than analysis; in it, we can find the interrelationships that *make* the tone colours that we hear. Moreover, and this is especially true of twelve-tone pieces written for piano solo (where the instrument of the final performance is often also the sonorous tool of the compositional process), we can project ourselves, to some extent, into the web of interrelationships and tone colours that would have been inhabited by the composer in the very act of creation.

As I have tried to show, in wielding this understanding, we can play both "with" the material and "against" it. Today's performers need to take a robust, and sometimes combative, view of Schoenberg's writings, especially those that pertain to performance. Like adversaries in a chess game, they need to engage tactically with his utterances, aware that these were a means by which he sought to gain mastery over his legacy by marshalling all of the elements at his disposal but also conscious that each "move" he made can be interrogated for what it reveals of his overall strategy. Without two players, the game is void; moreover, both players need to strive to inhabit not only their own tactical mind-set but also that of their opponent/co-participant.

I believe that discussion of Schoenberg's music in the manner that I have attempted here, although based on existing theory, reveals profound opportunities to use artistic research approaches in novel ways precisely *because* discussion of the composer has elsewhere been so heavily co-opted by traditional forms of study that do not involve musical practice at all. Where the hegemony of Schoenberg's works and statements is played out entirely in the theoretical realm, contesting it can only be achieved by pointing out internal inconsistencies and contradictions that operate on the rational plane. Artistic experimentation offers an additional dimension in which consistency may be tested by bringing into play issues of what "feels" right, both physiologically and affectively.

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