Circuit
Musiques contemporaines

"We also like to be surprised": Disruption, provocation and surprise in the music of Christian Wolff
« Nous aimons aussi être surpris » : perturbation, provocation et surprise dans la musique de Christian Wolff

Philip Thomas and Emily Payne

See table of contents

Explore this journal

Cite this article

Article abstract

This article explores the ways in which the music of experimental composer Christian Wolff engenders surprise through processes of disruption and provocation. The contexts under examination are: scores which employ cueing strategies; improvisatory pieces; ensemble pieces; pieces for solo piano; and Wolff's practice as an improvising musician. These case studies show how Wolff's music occupies a particular position between improvisation and composition. In examining the space that Wolff's music opens up for contingency and play, and in adopting a view of indeterminacy as understood through performance rather than limited by its notation, the article puts forward a view of indeterminacy grounded in sociality. More broadly, in its contribution to the body of literature investigating the role of notation in improvisation practices, the article invites a reconsideration of the ontological understandings of composition, improvisation, and performance.

"We also like to be surprised"[1]: Disruption, provocation and surprise in the music of Christian Wolff

Philip Thomas and Emily Payne

That's one of the pleasures of writing indeterminate music!
You're constantly surprised by what might turn out.
— Christian Wolff, interview with the authors, June 29, 2017.

A recurring thread in Christian Wolff's writings about composition and experimental music is the desire for surprise and to be surprised. Indeterminate notations facilitate the potential for surprise encounters, for the composer and performers, as well as listeners;[2] the avoidance of repetition points toward unpredictable occurrences;[3] qualities admired in music by other composers include the "capacity to surprise."[4] These primarily compositional concerns, which nonetheless reveal Wolff's performance concerns, are also suggested in his (relatively few) published views on improvisation, for instance when he states: "The danger with improvisation groups is too much homogeneity,"[5] or, commenting on his own experience as a performer: "[S]ometimes I decide [in improvisations] 'there's too much of that.' It's getting too harmonious. So I just decide to play and pay no attention to what they're doing at all for a stretch."[6]

These, and many other reflections published across his lifetime, point to the value Wolff places upon unpredictability and change, both in his compositional work and in performance. He eschews the role of the composer as authority figure, preferring instead to advocate for the written score as being incomplete—"no finished object,"[7] or as being "only material for performance"[8]—and regularly declines to express a strong view on the interpretation of his music by others, offering instead a simple shrug and "Sure!"

1. "Finally, I realized that the kind of sound made in an indeterminate situation includes what could result in no other way; for example, the sound of a player making up his mind, or having to change it. In fact, the indeterminate notation I've used is, as far as I know, the only possible one for the kind of sound I should like. And don't forget, we also like to be surprised." Wolff, 2017 (1964), p. 27.

2. See Wolff, 2017 (1964), p. 27; Wolff, 2017 (1970–71), p. 47; Wolff, 2017 (1993), p. 199. Our discussion focuses largely on qualities of surprise in performing Wolff's music, rather than its reception, as the listener's experience is beyond the scope of this paper. However, this subject is touched on in Thomas, 2016.

3. Wolff, 2017 (1964), p. 28.

4. Wolff, 2017 (1990b), p. 120, here concerning the music of Charles Ives; Wolff, 2017 (1997), p. 218, concerning the improvisation practices of Evan Parker and Eddie Prévost.

5. Wolff, 2017 (1969), p. 41.

6. Wolff, et al., 2007, p. 140.

7. Wolff, 2017 (1960), p. 24.

8. Wolff, 2017 (1970–71), p. 47.

9. See, for example, Wolff's characteristically understated response to the ensemble Apartment House in a rehearsal of *Resistance* (2017) in Payne and Thomas, Under review.

10. For a comprehensive study of Wolff's broader compositional practice, see Chase and Thomas, 2010.

11. Sparti, 2016.

12. Wolff, 2017 (1969), p. 41; Wolff, 2009, p. 360.

13. For a critique of the New York School as an aesthetic label, see Piekut, 2011 and Thomas, 2013.

14. Penny, 2016, p. 411.

15. Canonne and Aucouturier, 2016; Schiavio and Høffding, 2015; Wilson and MacDonald, 2016.

16. Berliner, 1994; Monson, 2009.

17. Sawyer, 2003.

18. Givan, 2016.

19. Goehr, 2016.

20. As opposed to "improvisation extempore," where improvisation fulfils a solely creative purpose. In his ethnography of the Dutch improvising ensemble, the Instant Composers Pool (ICP), Floris Schuiling employs improvisation impromptu to describe the group's antagonistic mode of performance where notation is used as a form of "resistance" or "sabotage" (Schuiling, 2018). Such an approach is distinct from that of Wolff, whose disruptive intentions are perhaps more benign, and whose music (particularly from the 1970s onwards) often reflects a concern with democracy and collaborative negotiation (see Payne and Thomas, Forthcoming 2020; Tilbury, 2009). Nevertheless, Wolff's music illustrates how notation can play an active role in facilitating moments of creative resistance and disruption in improvisatory situations.

21. Piekut, 2014.

or "Sounds good."[9] In this way, Wolff neither frowns upon a performance that may not be to his taste nor confirms as authoritative or "correct" an interpretation that he particularly enjoys. Instead, one could make a strong case that a performance of a composition by Wolff which repeats the interpretative choices of an earlier performance, whether or not successful, whether or not by the same or other players, is anathema to Wolff's broader musical concerns.[10]

Wolff's music thus occupies a particular position between improvisation and composition, fulfilling none of Davide Sparti's distinctions between music which is to be interpreted and music which is improvised.[11] The apparent spontaneity that is generated by Wolff's compositional processes is particular to his music, and he often describes it as being impossible to notate in any other way.[12] As we discuss, his approach is distinct from the forms of indeterminacy employed by members of the "New York School" of experimental composers, with whom he is often grouped;[13] and also from the improvisation characterized by the groups of his own generation, such as the British ensemble AMM, with whom he has performed. Simon Penny's argument that improvisation has its own systems and constraints, being essentially "a structured opportunity for constrained surprise, a game of exploration and experimentation,"[14] is, then, perhaps a fitting description of Wolff's music. The qualities of interaction and intersubjectivity are often emphasized in studies of group improvisation,[15] expressed through notions of conversation and the reciprocal "give-and-take" of ideas,[16] or the collective attunement of a group, characterized by Keith Sawyer as "group flow."[17] Yet, while Wolff's music can be seen to facilitate dialogue and negotiation, his notations often provoke discontinuity and obfuscation, lending support to Benjamin Givan's argument that not all modes of interaction are desirable in improvisation.[18] Another way to view the manner in which his notations disrupt the musical flow and communality usually associated with improvisation is to invoke Lydia Goehr's concept of "improvisation impromptu,"[19] which describes the phenomenon of grappling with unexpected resistances during performance.[20] In this way, Wolff's music invites a closer examination of the different modes of interaction that are manifest in improvisation, and provide further evidence of the need, identified by Benjamin Piekut, to redraw the boundaries of the "mixed avant-garde."[21]

In part, Wolff's indeterminate notations—taking many forms in his considerable output stretching from 1950 to the present day, and including more-or-less conventional music notation with few indeterminacies, open notations of varying types, graphic notations, text scores, and combinations

of all these—discourage repetition. They rely upon the consequences of intentional and non-intended sounds in the performance moment, and the unpredictabilities of ensemble playing. But even those pieces which seem to be most "open," and certainly those which are more conventionally notated, afford interpretations which "fix" elements, whether through habit or choice. And likewise, any performance situation, including (indeed, perhaps most of all) so-called free improvisation contexts, has the potential to operate within safe boundaries, foregoing risk, uncertainty, and surprise.

This article examines a number of contexts within which Wolff's music engenders surprise through processes of disruption and provocation. We draw in part upon Thomas's experiences playing the music, as a soloist and ensemble player, and Payne's fieldwork with the experimental music ensemble Apartment House, who have performed Wolff's music widely. The contexts under examination are: scores which employ cueing strategies; improvisatory pieces, including *Edges* (1968) and *Prose Collection* (1968–71);[22] ensemble pieces, especially the *Exercises 1–14* (1973–74); pieces for solo piano; and Wolff's practice as an improvising musician. In exploring the space that Wolff's music opens up for contingency and play, and in adopting a view of indeterminacy as understood through performance rather than limited by its notation,[23] we put forward a view of indeterminacy grounded in sociality. More broadly, in its contribution to the body of literature exploring the role of notation in improvisation practices, the article invites a reconsideration of the ontological understandings of composition, improvisation, and performance.

Cueing procedures

Wolff's earliest indeterminate notations are for piano, beginning with the *Sonata* (1957) for three pianos.[24] Here, as in its close relative, the better-known *Duo for Pianists I* (1957), each pianist is given time brackets within which to play material drawn from prescribed pitch sources.

These materials are typically numbers of sounds from given pitch sources, with additional conditions informing ways of playing (dynamics, preparations, and so on), but lacking indications for how the sounds should be played within the time bracket; therefore, they could conceivably be played as melody (sequence), harmony (simultaneities), or any combination of these.[25] The time brackets range from very short (1/16th second at the beginning of the *Duo*) to expansive (30 seconds, in the second system of Figure 1). Wolff gives little consideration to the relationship between time bracket and content, with some of the shortest periods of time requiring more activity than some of the longest periods. Pianists must negotiate a continuum between having a great

22. While many of Wolff's pieces involve some element of improvisation, as we discuss, *Edges* and the *Prose Collection* are distinct for being the most conventionally improvisatory, both in terms of their performance aesthetic and the performers and ensembles that usually perform them.
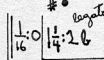
23. Thomas, 2013.

24. Barring an early experiment for voices, *Madrigals* (1950).

25. The durations are indicated by numbers to the left of a colon (indicating durations in seconds) while all indications to the right of the colon prescribe choices as to what to play, including nothing ("0") and numbers of sounds from a specified pitch collection (e.g. "2b") or other ways of playing (e.g. "1y" indicating one prepared note).
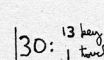
FIGURE 1 Christian Wolff: *Duo for Pianists I*, 1st pianist page 1a (lower). Edition Peters, No. 6492. © 1962 by C. F. Peters Corporation, New York. Reproduced by permission of the Publishers.

deal to play in a short space of time, most likely requiring, if not re-notation or annotation of the score, at least some kind of forethought, planning, and practising, and needing to play very little (or nothing—silence is a characteristic of both pieces) across longer periods. The pianist may choose to plan or notate a realization of the material, or may choose to improvise within the constraints of the score. Both pieces require pianists to play their material simultaneously and independently, much like the near-contemporaneous music by John Cage that Wolff would have known well, such as his *Music for Piano* series (1953–56) and *Winter Music* (1957). But whereas the material and the practices of Cage (and David Tudor, with whose approaches to performance Wolff would also have been extremely familiar) avoid improvisation, in the *Sonata* and the *Duo for Pianists I* the opportunity for making intuitive decisions, unplanned, and quite likely in response to the sounds made by the other players, is considerable. These expansive possibilities are counterpointed against the shorter time periods, which allow less room for spontaneous and improvised choices.

Cage and Tudor were not only influences on young Wolff, they were also friends, and the first performances of these pieces included them both.[26] Moreover, the notation for the work came about through musical and social encounters with a fellow Harvard student, pianist Frederic Rzewski, which demonstrates how this music offered a social dimension only latent in

26. Wolff was not a pianist in the first public performance of either piece. The third pianist in the premiere of the *Sonata* was William Masselos.

the music of Cage. Morton Feldman, too, was an influence. His *Piece for 4 Pianos* (1957), premiered in the same concert with Wolff's *Sonata*, also requires the pianists to act independently. As Feldman described more than twenty years later:

> It works better if you [the performer] don't listen. I noticed that a lot of people would listen and feel that they could come in at a more effective time. But the spirit of the piece is not to make it just something effective. You're just to listen to the sounds and play it as naturally and as beautifully as you can within your own references. If you're listening to the other performers, then the piece tends also to become rhythmically conventional […].[27]

For Cage and Feldman, the act of listening, being arguably analogous to both a conventional aspect of musicianship and to an improvisational sensitivity, resulted in sounds—or rather, we might read into Feldman's description, the timing and phrasing of sounds—which are conventional, that is, lacking in surprise or chance.

By contrast, Wolff's early indeterminate pieces allow and facilitate (if not explicitly encouraging) listening and individual choice, while circumscribing those choices through parameters of content and duration. The scores accommodate disparate approaches. For example, one could imagine highly structured and fixed readings of the 17 sounds to be played within 30 seconds by the first pianist in the *Duo for Pianists I*: 13 of which must be played on the keys (that is, in the usual manner), three by muting the strings, and one by touching a string, none constrained by adhering to given pitch sources, and all made irrespective of the sounds being made by the other pianist (second system, Figure 1). An alternative, and more likely, approach would be one which listens to the sounds and silences occurring, responds accordingly, while also counting the number of notes played, ensuring that one is played inside the piano and a further three muted—all of which naturally limits the potential for spontaneous responses.

Wolff's cueing procedures, for which his music is perhaps best known, begin with the next piece in his catalogue, the *Duo for Pianists II* (1958). Here the method of combining time brackets with restricted pitch content is retained, but the fixed sequence of the time brackets is abandoned, replaced by modules which are dispersed throughout each of the two-page parts.

The order in which modules are played is dependent upon each pianist listening to the other; what each hears the other currently playing in the final moments of the module becomes a cue for their next module. Within each module there are freedoms and constraints, as in the earlier pieces, but now they are joined with feelings of panic and confusion, often resulting in hesitation,

27. Feldman, cited in Gagne and Caras, 2006 (1980), p. 88.

that arise from the need to hear the sounds being played, reflect upon how they relate to the prescribed cues, and to act accordingly. Despite appearances that suggest a very open score, the performers undergo a rigorous process constrained by cueing procedures that leave little space for improvisation.

In marked contrast to *Duo for Pianists II*, *Duet I* (1960) for piano four hands, heralds the techniques that characterized Wolff's music for the next decade or so, including *For 5 or 10 People* (1962), *For 1, 2 or 3 People* (1964), and *Pairs* (1968). Here, large-scale structural cues are reduced in scope and applied to small-scale performance decisions. Thus, the pianists navigate each module together in a playful manner, the actions and sounds of one pianist affecting those of the other, and vice versa. The score, which is now shared by the players, becomes an object of play rather than disruption, causing less tension and more laughter. Examples include a module requiring 19 sounds to be played freely between the two pianists (presumably each player playing between 0 and 19 sounds; the remaining number played by the other), five of which are to be played *pianissimo*, and ensuring no successive repeated tones;[28] or, a simpler one, a single note of very long to medium duration to be played by either player, from a choice of two available pitches.[29]

28. See the left half of Figure 3. The circled "i" indicating in addition that each player should play one sound each on the string of a note played by the other.

29. See the right half of Figure 3. This event follows a similar instruction that each player should play a single note, player one from pitch collection "a" and player two either of the two pitches which match those of the second event.
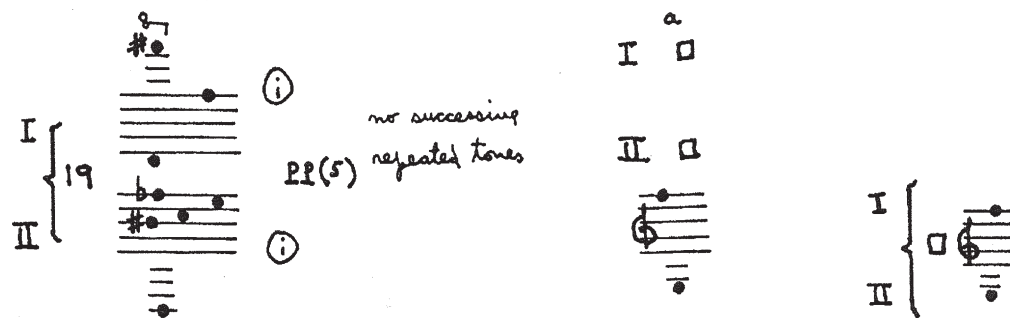
Though these processual details are not available to the audience, they are, nonetheless, likely to be perceptible through the hesitations in continuity and the physical gestures that result from the challenges of the tasks. Clearly, as the descriptions above indicate, *Duet I* is not improvisatory, but the kinds of social interplay—close listening, response, generosity, and togetherness, as well as unpredictability and surprise—that characterize the piece are also often associated with improvisational practices.[30]

Improvisatory pieces

Two pieces stand out amongst Wolff's works as being the most explicitly improvisatory—to an extent that is unusual in his music—and, surely as a result, they are some of his most frequently played. These are *Edges* and the *Prose Collection*, the latter of which consists of 12 original pieces, with a thirteenth added in 1986. *Edges*, which consists of a large single page of graphic score, and a second page of instructions, is often performed by musicians familiar with improvisation practices, and Wolff has said that "experience with improvisation is very useful in performing it."[31]

Edges participates in a movement usually associated with the improvisatory practices of the 1960s, most notably involving groups like Musica Elettronica Viva (MEV), Gruppo di Improvvisazione Nuova Consonanza, and AMM, with whom Wolff has played intermittently since 1968 (the year he composed *Edges*). The composer Cornelius Cardew was also a member of AMM, and his *Treatise* (1963–67), as a work in progress, was surely a formative influence upon Wolff's shift to more open work, though Cardew's score—193 pages of graphic complexes, developed in a systematic and sophisticated manner—is a world away from the apparent naivety of Wolff's single page.

30. See, for example, a performance of *Duet* by Philip Thomas and Mark Knoop at Music We'd Like to Hear, London, UK, on July 4, 2012: youtu.be/boT-VU5joMY (accessed February 24, 2020).

31. Wolff, 2017 (1990a), p. 139.
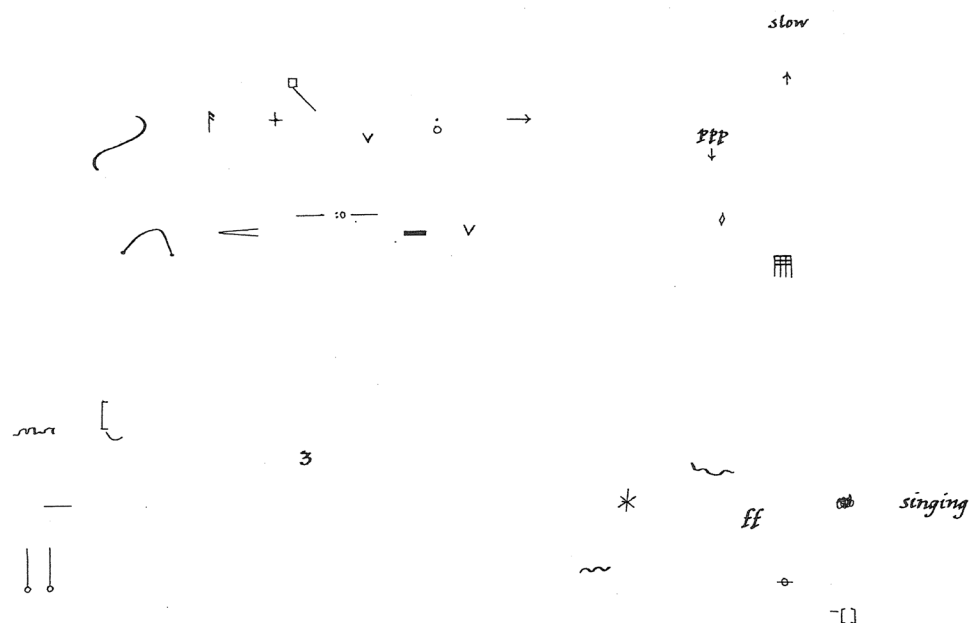
Yet, unlike *Treatise*, *Edges* is accompanied by instructions, or, rather, suggestions for interpretation that point to a more abstruse procedure than the page of score alone suggests. While *Treatise* is presented as graphics without instructions, the musical staves along the bottom of each page indicate quite clearly that the graphics are to be realized as sounds. However, the graphics contained within *Edges* (including words, musical notation—such as dynamics—and other notation symbols derived from Wolff's practice over the previous decade) are (for the most part) *not* to be realized directly as sounds but are used to indicate "limits" which may "be reached but should not be exploited."[32] Wolff has likened the score of *Edges* to a "negative image (as in photography) of the sounds to be made on the score, whose 'positive' might occasionally be perceptible in the course of a performance."[33] The score, then, is not to be "read," but acts as a kind of constraint, influence, or map which performers might use to gain understanding of the sounds they make as they navigate the page. While the way the piece is to be played is not specified in any direct manner, the option for considering the signs as cues—that is, sounds which may be *heard*, whether played by other performers or within the performing space—may also be taken.

32. Wolff, 1968.

33. Wolff, 2017b, p. 330.

Whereas a performance of *Treatise* might be quite literal in its mapping of sign to sound (and there exist recordings that can be followed with the score) performances of *Edges* that observe the instructions should be *non*literal. While performers may interpret the score in exact fashion, taking account of the various influences of signs from any vantage point in the score, the sounds they arrive at constitute at best an aural trace of a particularly complex process. For example, should the performer choose to position herself just to the left of the figure "3," she might choose to make something approaching three sounds, two of which might be responsive to but not coordinated with two sounds made by another player (informed by the bottom left notation). These sounds might be played in ways which are more or less responsive to the indication "level" (indicated by the horizontal line to the left of the "3"), are quite resonant or perhaps a little bumpy (all these responding to the left indications). Alternatively, should the performer orient herself towards the cluster of signs to the right of the "3," she might play sounds which contain a little vibrato, may suggest intricacy, which may be an echo of a *fortissimo* sound, may deviate from the "middle" register, may be unfiltered, clean, and not at all songlike (that is, in increasing opposition to the symbols the further right they are of the "3"). If this approach were taken, one could imagine a re-notation of the score for a particular performance, each sound being the result of a combination of signs informing its properties. Or, the performer might improvise a route towards one or more of these signs. A quite different approach might be to respond in some way to one or two signs, selected intuitively, and to allow them to guide an improvisation, which, as it progresses, is informed by other signs, and also (quite likely) by the other members of the ensemble.

Taken this way, one might imagine the score of *Edges* simply as a way of asserting change and difference to the individual contributions of an otherwise collective group improvisation performance. As a score, it affords events that are not precluded from improvisational practices but which tend not to occur within them, such as the isolated major chord that Wolff himself played in a performance given by Apartment House at the Serpentine Gallery in London, UK, in 2015.[34] On another occasion, Wolff's contribution consisted solely of rubbing and playing in other ways a thread attached to a bass piano string, an assertion of difference in relation to the ensemble and his own homogeneity.[35]

In improvised music practices, such occurrences tend to be regarded with some suspicion, as a "mistake," unless they are in some way responded to and made a feature of—what Gary Peters describes as a "bad surprise," which the

34. The whole performance, within a programme of other music by Wolff, can be viewed at vimeo.com/145150680 (accessed February 24, 2020), with the chord in question appearing at 35'55".

35. This performance can be heard on Wolff, 2015.

36. Peters, 2016, p. 447.

improviser generally tries to avoid, "coupled with the desire to constantly revisit and rework those areas of weakness, disappointment, unfulfillment, and failure."[36] As can be said of many other compositions by Wolff, *Edges* celebrates these moments, which are both conspicuous and perplexing. It is both invitation and provocation: as an inclusive, open score it invites anyone to join in, yet the processes it invokes are obfuscatory, a warning against the habitual techniques and choices in free improvisation.

Prose Collection is too great a collection to be examined in detail here. However, it can be noted that, amongst the most conventionally improvisatory pieces included within it—*Play*, *Stones* and *Stick*—the latter two are the most generous in the openness of their instructions. To paraphrase Wolff's succinct texts, they essentially consist of instructions to make sounds with stones, or sticks, with some suggested guidelines, which limits the tendency of habitual, or "musical," instincts to take over.[37] By contrast, *Play*, which permits any kind of instrumentation, is a more detailed text, which, though it remains more a set of suggestions rather than instructions, nevertheless reflects a concern for group dynamics. Instructions include various cueing options, emphasizing the importance of hearing each other, difference ("Sometimes play independently;" play mostly quietly, but "two or three times move towards as loud as possible," and occasionally play a long sound or complex of sounds), and surprise (play "at a signal […] over which he has no control [does not know when it will come]"). Wolff's instructional technique is both definitive and open (as well as humorous, generous), suggesting discipline but not control, for instance, stipulating, "Allow various spaces between playing (2, 5 seconds, indefinite)," and, similarly, "One, two, three, four or five times play a long sound or complex or sequence of sounds." Such suggestions may cause performers to think outside of the creative flow ("Is this space two or five seconds?" "Am I counting?") conditioning behaviour and potentially disrupting the music through hesitation.

37. In this way, these pieces foreshadow Cage's later improvisatory investigations with plants and other natural "found" objects, in pieces such as *Child of Tree* (1975) and *Inlets* (1977).

Ensemble playing: *Exercises 1–14*

Wolff's series of pieces under the title *Exercises* (1973–2018)[38] suggests an explicit concern with play, particularly its definition: "To exercise or occupy oneself, to be engaged with some activity; to act, operate, work."[39] Indeed, Wolff has referred to the title as both noun and verb: to "try out" rather than "necessarily an end in themselves."[40] The notation has a sense of immediacy, and Wolff describes his compositional process for this series as being rapid and quasi-improvisatory:

38. Wolff has composed a number of other pieces with the word in their titles, for example, *Winter Exercise* (2013) and *Apartment House Exercise* (2002). Here we refer specifically to the first fourteen pieces, *Exercises 1–14*.

39. OED online, 2019.

40. Authors' interview with Wolff, June 29, 2017.

I was writing quite quickly, almost as though I was playing. So it felt like I was actually improvising these pieces, in a certain restricted sense, obviously with very defined kinds of material. […] But the main thing was this feeling that composing was almost like playing, so it had a kind of immediacy to it.[41]

41. *Ibid.*

Composed for (mostly) unspecified instrumentation and number of players, the *Exercises* are pregnant with possibility for exploring contingency and group dynamics. There are no separate parts: every musician plays from the same score. The notation in these pieces is variously underdetermined: pitches (assigned to no clefs) are provided without time signatures or rhythmic specification, some notes are beamed in a way that is suggestive of phrasing, series of notes are interrupted with "wedge" notations (an inverted V, which signifies a break, breath, or silence of any duration), sections of material might be indicated only in terms of dynamic level, and so on. Often the notation expresses a single line of melody, but sometimes it subdivides, and very occasionally two voicings are used (see Figure 5; however, a wide variety of notational types are employed in other *Exercises*). Other musical parameters, such as tempo, dynamics, ways of playing, articulation, and instrumentation, are entirely open. The accompanying instructions provide directions for navigating the score:

> Arrangements for each exercise to be played should be considered, e.g. who, how many, play, who plays what parts, etc. Some of these arrangements can be made or altered in the course of performance […]. In general the point of reference, where more than one player plays the same material (the normal situation), is unison. But, as rhythm and speed, articulation, amplitude, colour, and modes of playing are all flexible, any player may try to establish what the point of reference for unison is at any point in the course of playing. If, however, a movement by a player, say, in the direction of faster is not generally picked up by the rest, he must return to the prevailing speed.[42]

42. Wolff, 1974.

The flexibility of Wolff's notation encourages decisions to be made either in advance, through discussion, or in the moment of performance. There is a suggestion that players work collectively, but also that individual players are free to be distinct, and that others may choose to follow or respond to changes of direction (tempo, dynamic, articulation, and so on) or to ignore them. Some ensembles might eschew discussion and just dive in and play and then play again; others might have a conversation about possibilities and what might and might not "work." The realization of *Exercises* can therefore differ radically across performances, even by the same ensemble. Some performances might be characterized by confusion, uncertainty, or bemusement, with no player taking the lead, or sometimes without anyone playing straight

away. Players might work responsively, coming together in moments of loose synchrony, without sudden shifts of speed, or there might be moments of cohesion in the material, with matching articulations and dynamics, for example. At other times, the musicians might choose to modify the material in unexpected ways, working apparently independently of one another. There might also be moments of "happy accidents," where players spontaneously come together, or diverge in unexpected ways. The resultant ensemble inter-action is playful yet often unsettled, characterized by uncertainty, surprise, or even complete breakdown. Reflecting on the possibilities for freedom and constraint within *Exercises*, Wolff commented:

> I think part of what's being reflected there is that all performance is exercise. In the sense that all performance is indeterminate. […] There's this element of improvisa-tion that's in performances of even the most "fixed" scores. And I associate that with the notion of exercise, and that's why I also apply the title, or why you could say I also apply the title to pieces that are relatively fixed.[43]

43. Authors' interview with Wolff, June 29, 2017.

Solo pieces

A great deal of Wolff's composed output is notated to a far greater extent than the pieces discussed above. Since *Bread and Roses* (1976, in versions for solo violin and for solo piano) Wolff has typically veered between scores which are notated more or less conventionally with respect to pitch, rhythm, and continuity, and scores with more indeterminate notation. Increasingly, his scores combined both modes. Yet, even the most fully notated scores, such as the *Preludes 1–11* (1980–81), include options for the performer to make choices which significantly affect the character of the music. Often, these are choices of tempo, dynamics, and articulation—usually left unnotated—as well as the duration of breaks between phrases, notes, sections, which are indicated by wedges.

In the context of Wolff's solo pieces, the conditions for making these choices may be personal preference, a sense of pace or variety, planned choices or responses in performance, perhaps to the acoustics of the hall, the qualities of the instrument, native sounds, or movement in the space. In the last thirty years, Wolff has used other notational techniques, some new, some variations on older techniques, affecting different parameters. For example, pitches may be left indeterminate while rhythmic detail is fixed, or, as in *Pianist: Pieces* (2001) and *Long Piano (Peace March 11)* (2004–05), finger-ings are provided without corresponding pitches. Another common device in Wolff's scores is to leave clefs unassigned; thus a complex contrapuntal texture might sound quite different, depending on which clefs the performer

44. Unassigned clefs, for example generally require a binary decision, though of course other clefs might be possible, particularly in ensemble music, which might also involve different transpositions.

selects for each line, or even each note. Though there are limits to these choices,[44] the potential for quite different interpretations, even within the solo piano music, is considerable.

To consider the ways the ideas presented above bear out in practice, we turn now to an examination of Thomas's experiences performing Wolff's music. Thomas's interpretations of these scores very often employ a method he has developed for Wolff's music, which derives in part from his approach to many of Cage's scores. For indeterminate notations in Cage's music, he generally makes decisions for different parameters using chance procedures (notating dynamics for each sound in the *Music for Piano* series for any given performance, for example). However, for Wolff's solo music he first decides how *many* instances from the total available are to be determined by chance, ranging from 0 to 100%. Then, of that percentage, he calculates which are to be notated in advance, and what the decision will be for each instance. Thus, for example, he might decide how many changes of dynamics might be reasonable within a piece, how many and which of them will be notated in the score, and then what the dynamic will be (usually between *ppp* and *fff*). Or he might apply the same approach to the duration of wedges, the possibilities ranging from very short to very long, or the position of each hand on the keyboard where pitches are indeterminate.

Thomas's approach may seem perverse and unnecessarily complicated given the simplicity and generosity of Wolff's notations. However, experience has shown how easy it is to lapse into a performance mode which "evens out" those properties in the notation which afford a wide range of possibilities. Thus, dynamics can easily approximate to a mid-range much of the time, the wedges all too easily end up averaging between one and three seconds, and so on. The process outlined above results in new possibilities and combinations, unusual continuities, surprising framing of phrases or sections, and the disruption of conventional musical relationships. At the same time, even after this preparatory work, there remain opportunities for making choices and improvising responses across these parameters in performance. The balance between choice, freedom, and surprise borne out of a disciplined pre-performance process works well in Wolff's music. As well as creating surprise for himself as the performer, Thomas hopes this approach draws out possibilities in the notation which might surprise even Wolff, recalling his words:

> I am not […] unduly anxious about the specific identity of any given piece, though some element of recognition, especially if combined with elements of surprise, is usually a pleasure.[45]

45. Wolff, 2017 (1993), p. 199.

Wolff and improvisation

As can be seen in this brief survey, Wolff's music adheres to the Western art music tradition of bearing a composer's name and providing a set of instructions for performers to follow even as it questions traditional authority by celebrating difference, indeterminacy, and the possibility of change. Although one might consider a performance which contravenes the instructions of the piece to be incorrect, given the limitations of what *is* notated and the obvious consideration the composer has taken in deciding what to notate and what to leave open, the instructions also operate in relation to the multiple other elements negotiated in performance. In Wolff's own words, the score is "at best hopelessly fragile or brittle;"[46] it is one element in a conversation, "before the fact."[47] The score, then, acts as a force of both resistance and liberation, informing, conditioning, and enabling musical action. When it is absent, as in the case of music which is entirely improvised, musicians locate the elements of conversation in other components of the musical process.

46. Wolff, 2017 (1960), p. 24.

47. Wolff, 2017 (1984), p. 85.

To return to a point we set out in the introduction, the provocative qualities of Wolff's scores—those which cause hesitation and confusion, difference, and surprise—cannot always be found in improvised music. Wolff recognized this early on, noting that:

> The danger with improvisation groups is too much homogeneity. There is a tendency to join in with whatever the musician imagines to be dominant, which is something I try to prevent in my own work. I feel a possible solution might be to disperse performers more widely in space.[48]

48. Wolff, 2017 (1969), p. 41.

The solution Wolff proposes here is Cageian, and typifies Cage's performance aesthetic from the mid-1950s onwards. It recalls Cage's 1965 encounter in Chicago with the Joseph Jarman Quartet, where Cage became an arbiter of difference, not only positioning himself and his activities separately from the quartet but also encouraging them to separate themselves in the performance space. Rebecca Kim examines the occasion in detail, describing how, in an interview conducted shortly after the performance, Cage made a distinction between the tendency of jazz musicians to favour "discourse" and his own Zen-inspired aesthetic of non-intention.[49] "Discourse"—or, in Wolff's words, "conversation"—is, however, a quality that Wolff values in music. One might conclude that his notated music is a means to facilitate conversation and dialogue in an experimental situation that too often precludes it (or, as in Cage's music, negates it); while in improvisation, which can be said to prioritize dialogue above all else, his role is *"agent provocateur,"* creating disruption and change when such devices are hard to come by.

49. Kim, 2012.

Recordings which feature Wolff as an improvising musician are notable for the inherently disruptive combination of instruments they feature. Invariably Wolff plays piano, but also, variously, melodica, guitar and bass guitar, percussion, and occasionally some form of electronics (such as radio or other "found-source" player). Musicians with whom he has recorded are dominantly "noise" musicians, such as Christian Marclay (turntables), Eddie Prévost (percussion), Keith Rowe (electronics and electric guitar), and Yasunao Tone (prepared CDs). As Prévost comments in his liner notes to their duo recording, "Christian uses and transforms what might be described as traditional musical material […]. I am an unrepentant noise-maker."[50] In these contexts, Wolff's curious melodies, chords, and rhythmic gestures make for eccentric combinations. One notable exception to this is the trio consisting of Wolff with his then-colleagues at Dartmouth College, guitarist Larry Polansky, and pianist Kui Dong. This ensemble is the focus of a published interview about the creative processes of improvisation; while it reveals little of Wolff's own improvisational concerns, the interview nonetheless foregrounds the importance of dialogue and conversation, specifically, here, in ways which enable social encounters between friends.[51]

As mentioned above, one ensemble with whom Wolff has occasionally played since 1968, only a few years after its formation, is AMM. The textural but often dense combinations of sounds that characterized AMM's early performances developed, in the 1980s, into no less textural but more minimal, slower-moving exploration, as the group stabilized as a trio of Eddie Prévost, Keith Rowe, and John Tilbury. Wolff's continued association with AMM is a tribute to their long-standing friendships, but musically, perhaps surprising: AMM is arguably one of the most consistent and recognizable improvising groups over the past fifty years, despite changes of personnel. Wolff's tendencies towards disruption might seem to contravene the AMM aesthetic. Philip Clark, reviewing the album *Sounding Music*—released in 2010, after Rowe's departure from the group, and also featuring the saxophonist John Butcher and cellist Ute Kanngiesser—noted the musical collision:

> Wolff occupies a role broadly—very broadly—comparable to Rowe, throwing in unanticipated googlies like thunderous bass guitar thumps, rattled-together pebbles and sounds incorporated from beyond the likely pool of possibilities. His melodica doodles, for instance, feel wincingly homespun at first, until Butcher finds a matching timbre on his tenor saxophone.[52]

Yet Prévost has observed that Wolff, along with saxophonist Evan Parker, "are the two musicians outside of the immediate circle of AMM with whom an

50. Wolff and Prévost, 2017.

51. Wolff, et al., 2007.

52. Clark, 2010, p. 44.

indefinable rapport is felt—and a confidence that the AMM aesthetic would be pursued and respected."[53]

Perhaps the word which unites many of the activities and pieces discussed in this article is the title of one of those pieces: "Play." The music is not equivalent to a game, where a specific strategy is projected with a set of aims or goals, but the notion of playfulness underlies much of Wolff's music. Players work with notation, with each other, with their imaginations, emphasizing the *process* of performance, a process which yields surprising encounters, "like meeting someone by chance for the second time, or like another shooting star on the same night."[54] Playing and encountering Wolff's music is unpredictable and exploratory, at times perplexing, but often exhilarating and surprising.

BIBLIOGRAPHY

Berliner, Paul (1994), *Thinking in Jazz: The Infinite Art of Improvisation*, Chicago/London, University of Chicago Press.

Canonne, Clément and Aucouturier, Jean-Julien (2016), "Play Together, Think Alike: Shared Mental Models in Expert Music Improvisers," *Psychology of Music*, vol. 44, No. 3, pp. 544–58.

Chase, Stephen and Thomas, Philip (eds.) (2010), *Changing the System: The Music of Christian Wolff*, Farnham, Ashgate.

Clark, Philip (2010), "Review: AMM – *Sounding Music*," *The Wire*, vol. 316, p. 44.

Gagne, Cole and Caras, Tracy (2006 [1980]), "Soundpieces Interview," in Chris Villars (ed.), *Morton Feldman Says: Selected Interviews and Lectures 1964–1987*, London, Hyphen, pp. 87–94.

Goehr, Lydia (2016), "Improvising Impromptu, or, What to do with a Broken String," in George Lewis and Benjamin Piekut (eds.), *The Oxford Handbook of Critical Improvisation Studies*, vol. 1, Oxford, Oxford University Press, pp. 458–80.

Kim, Rebecca (2012), "John Cage in Separate Togetherness with Jazz," *Contemporary Music Review*, vol. 31, No. 1, pp. 63–89.

Monson, Ingrid (2009), *Saying Something: Jazz Improvisation and Interaction*, Chicago, University of Chicago Press.

Payne, Emily and Thomas, Philip (Forthcoming, 2020), "Getting Exercised: Ensemble Relations in Christian Wolff's *Exercises*," in Robert Adlington and Esteban Buch (eds.), *Finding Democracy in Music*, London, Routledge.

Payne, Emily and Thomas, Philip (Under review), "'Suggestions for Action': Notation and Movement in Recent Music by Christian Wolff," *Music Theory Online*.

PHILIP THOMAS AND EMILY PAYNE

Penny, Simon (2016), "Improvisation and Interaction, Canons and Rules, Emergence and Play," in George Lewis and Benjamin Piekut (eds.), *The Oxford Handbook of Critical Improvisation Studies*, vol. 2, Oxford, Oxford University Press, pp. 401–23.

Peters, Gary (2016), "Improvisation and Time-Consciousness," in George Lewis and Benjamin Piekut (eds.), *The Oxford Handbook of Critical Improvisation Studies*, vol. 1, Oxford, Oxford University Press, pp. 439–57.

Piekut, Benjamin (2011), *Experimentalism Otherwise: The New York Avant-Garde and Its Limits*, Berkeley, University of California Press.

Piekut, Benjamin (2014), "Indeterminacy, Free Improvisation, and the Mixed Avant-Garde: Experimental Music in London, 1965–1975," *Journal of the American Musicological Society*, vol. 67, No. 3, pp. 769–824.

Sawyer, Keith (2003), *Group Creativity: Music, Theater, Collaboration*, Mahwah, Lawrence Erlbaum Associates.

Schiavio, Andrea, and Høffding, Simon (2015), "Playing Together Without Communicating? A Pre-Reflective and Enactive Account of Joint Musical Performance," *Musicæ Scientiæ*, vol. 19, No. 4, pp. 366–88.

Schuiling, Floris (2018), *The Instant Composers Pool and Improvisation Beyond Jazz*, London, Routledge.

Sparti, Davide (2016), "On the Edge: A Frame of Analysis for Improvisation," in George Lewis and Benjamin Piekut (eds.), *The Oxford Handbook of Critical Improvisation Studies*, vol. 1, Oxford, Oxford University Press, pp. 182–201.

Thomas, Philip (2013), "Understanding Indeterminate Music Through Performance: Cage's *Solo for Piano*," *Twentieth-Century Music*, vol. 10, No. 1, pp. 91–113.

Wilson, Graeme and MacDonald, Raymond (2016), "Musical Choices During Group Free Improvisation: A Qualitative Psychological Investigation," *Psychology of Music*, vol. 44, No. 5, pp. 1029–43.

Wolff, Christian (2009), "Christian Wolff," in Christopher Fox (ed.), *The Ashgate Research Companion to Experimental Music*, Farnham, Ashgate, pp. 359–69.

Wolff, Christian (2017a), *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press.

Wolff, Christian (2017b), "Selected Program Notes," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 327–38.

Wolff, Christian (2017 [1960]), "On Form," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 19–25.

Wolff, Christian (2017 [1964]), "Questions," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 27–29.

Wolff, Christian (2017 [1969]), "Interview with Victor Schonfield," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 37–42.

Wolff, Christian (2017 [1970–1971]), "Fragments to Make up an Interview," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 43–47.

Wolff, Christian (2017 [1984]), "On Notation," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, p. 85.

Wolff, Christian (2017 [1990a]), "Floating Rhythm and Experimental Percussion," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 131–39.

Wolff, Christian (2017 [1990b]), "On Charles Ives," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 119–21.

Wolff, Christian (2017 [1993]), "Sketch of a Statement," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 197–99.

Wolff, Christian (2017 [1997]), "*Most Material*: Evan Parker and Eddie Prévost," in Christian Wolff, *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford, Oxford University Press, pp. 217–18.

Wolff, Christian, Polansky, Larry, Dong, Kui, Asplung, Christian, and Hicks, Michael (2007), "Improvisation, Heterophony, Politics, Composition," *Perspectives of New Music*, vol. 45, No. 2, pp. 133–49.

DISCOGRAPHY

Wolff, Christian (2015), *Angelica Music*, Christian Wolff, Robyn Schulkowsky and Apartment House, I Dischi di Angelica, IDA030.

Wolff, Christian, and Prévost, Eddie (2017), *Uncertain Outcomes*, Christian Wolff and Eddie Prévost, Matchless Recordings, MRCD96.

WEB LINKS

Givan, Benjamin (2016), "Rethinking Interaction in Jazz Improvisation," *Music Theory Online*, vol. 22, No. 3, mtosmt.org/issues/mto.16.22.3/mto.16.22.3.givan.php (accessed April 2, 2020).

OED Online (2019), "play, v.," *Oxford English Dictionaries Online*, www.oed.com/view/Entry/145475 (accessed February 21, 2020).

Prévost, Eddie (n.d.), "AMM 1965/1994: A Brief and Mostly Chronological Historical Summary," www.efi.group.shef.ac.uk/mamm.html (accessed February 17, 2020).

Thomas, Philip (2016), "Fingers, Fragility and Freedom: Christian Wolff's *Pianist: Pieces*," *Divergence Press*, vol. 5, http://divergencepress.net/2016/10/24/2016-10-27-fingers-fragility-and-freedom-christian-wolffs-pianist-pieces (accessed June 9, 2020).

Tilbury, John (2009), "Christian Wolff and the Politics of Music," www.dramonline.org/albums/christian-wolff-long-piano/notes (accessed April 1, 2020).

SCORES

Wolff, Christian (1957), *Duo for Pianists I*, New York, Edition Peters.

Wolff, Christian (1958), *Duo for Pianists II*, New York, Edition Peters.

Wolff, Christian (1960), *Duet I*, New York, Edition Peters.

Wolff, Christian (1968), *Edges*, New York, Edition Peters.

Wolff, Christian (1974), *Exercises [1–14]: For any number of instruments*, New York, Edition Peters.