



UNIVERSITY OF LEEDS

This is a repository copy of *Getting exercised: ensemble relations in Christian Wolff's Exercises*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/166882/>

Version: Accepted Version

Book Section:

Payne, E orcid.org/0000-0003-2109-8126 and Thomas, P (2020) Getting exercised: ensemble relations in Christian Wolff's Exercises. In: Adlington, R and Buch, E, (eds.) Finding Democracy in Music. Musical Cultures of the Twentieth Century . Routledge . ISBN 9780367486921

© 2021 The Author(s). This is an author produced version of a book chapter published in Finding Democracy in Music. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

This is the Accepted Manuscript of a book chapter published by Routledge in Robert Adlington and Esteban Buch (eds), *Finding Democracy in Music* (2020), available online:

<https://www.routledge.com/Finding-Democracy-in-Music/Adlington-Buch/p/book/9780367486921>

CHAPTER 5

GETTING EXERCISED: ENSEMBLE RELATIONS IN CHRISTIAN WOLFF'S *EXERCISES*

Emily Payne and Philip Thomas

Of course democracy is imperfect. That's fine, Wolff seems to be saying: You don't have to change human nature before things can really get better. On the contrary, people can get there by themselves, just as they are, without guidance from a higher authority and without the nuisance of transitional forms (like provisional governments and prisons). [...] All you need are convincing ways to remind people of how intelligent they are, and of the kind of behaviour that is needed to get where they all want to go. And here is where music really can play a useful part. (Rzewski 1998: 14)

Christian Wolff's music is well known for reflecting, implicitly and explicitly, a generally leftist political engagement. Although some compositions involve political texts, to be sung or narrated, or bear titles referencing a politically relevant topic or person, more radical still is the degree to which Wolff's music seems to *act* in ways which model and indeed facilitate an egalitarian approach to music making. This chapter takes the sequence of pieces with the title *Exercises* (1973–2018) as the focus through which to understand the extent to which performers' responses, actions, and interpretations might be seen to reflect a democratic approach to rehearsing and making music. We explore the notion of a democratic praxis using a case study of a recording session of the ensemble Apartment House (with whom one of the authors, Philip Thomas, plays piano), in which a selection of the *Exercises* was rehearsed and recorded. Wolff employs a form of skeletal, indeterminate notation in the pieces, with little by way of instructions and indications for performance. Consequently, players negotiate a way of working with the score and with each other, making decisions prior to, and during, the moment of performance. Issues of orchestration, tempo, dynamics, sequence, coordination, and much else are 'up for grabs'. Drawing on selected episodes from the session, we argue that performance both foregrounds and complicates notions of democracy and agency in indeterminacy.

A political shift?

The first set of *Exercises*—numbers 1–14—are among the first pieces Wolff composed after a radical change in aesthetics in his music around 1972. Since 1958 his music had been characterised by a particular form of indeterminate notation which meant that what performers played, and when they played it, was determined by what other musicians performing played, and when they played it. The notation mostly involved forms of cues, often, though not always, combined with some kinds of limits as to the range of material available from which to play, and usually a fairly lengthy preface, providing instructions, options, possibilities, rules, and ideas as to how to navigate the score.

In performance, the earlier pieces tended to result in a rarefied music characterised by hesitation and awkwardness, discontinuity and disruption. While the music composed during these fifteen years can be read in terms of solidarity and communality, and of non-hierarchical, essentially democratic approaches,¹ in 1972 Wolff's music changed significantly in response to an increased leftist political awareness. This shift arose in part from his friendships with fellow composers Cornelius Cardew (and others in the Scratch Orchestra), Frederic Rzewski, Garret List, and others, whose music was taking a very direct and explicitly political turn; and in part, too, responding to wider cultural shifts and the no-doubt leftist tendencies of Wolff's (non-musical) community at Dartmouth College, where he taught classics, including classes on Marxism and literature, and political philosophy (Hicks & Asplund 2012: 57). These changes were, first, the introduction of political texts, to be sung or spoken, as a part of the performance; and, second, a more outward, lively musical character, comprising substantially more familiar material (pitches, melodic and harmonic, and rhythms) than had hitherto been the case. Reflecting on this change nearly twenty years later, Wolff wrote:

It could be said that my work shifted from an implicit expression of the politics of a kind of democratic libertarianism akin to anarchism, to an explicit politics of, roughly speaking, democratic socialism. And in the music I tried to make my work less introverted, less sparse, more of a response to what a larger number of people might recognize as music ... (1990b/2017: 115)

The second of these features—the extension of Wolff's musical language to embrace longer melodic sequences and a generally more through-composed approach—was to have the more lasting effect, and can be evidenced in his music to the present day. The first—the use of political texts—was more short-lived, recurring from time to time in his music since, but for this period (the 1970s–80s) being limited to just two pieces composed in 1972—*Accompaniments* and *Changing the System*—and

¹ Wolff admitted, in a 1974 Darmstadt lecture, to being 'tickled' by Hans G. Helms's radio broadcast a few years earlier in which Wolff's earlier music was subjected to 'a kind of Marxist analysis', noting that, while it pleased him, at the time of composing 'it had never so much as crossed my mind' (Beal 2010: 35). Similar observations were made by Earle Brown concerning the critique of the new American music by Helms and Heinz-Klaus Metzger in the late 1950s (Beal 2007).

a third piece from 1975–76, *Wobbly Music*. Despite the seemingly abstract qualities of *Exercises 1–14*, early performances were, however, situated within a more strikingly explicit political context than either *Accompaniments* or *Changing the System* presents, for Wolff *did* compose a set of six songs, which were often performed not just alongside the *Exercises* but interspersed between them, suggesting a very direct link between them, almost as if the performances might be titled ‘Exercises and Songs’.² While this chapter focuses on the first set of *Exercises*, it is worth noting that the title *Exercise* is one to which Wolff has returned repeatedly, such that there are now 37 *Exercises*, plus 36 *Microexercises* (2006), and numerous other pieces bearing the title, such as *Berlin Exercises* (2000) and *Apartment House Exercises* (2002). For Wolff it is a useful title—‘exercise’ as both noun and verb; to ‘try out’, ‘not necessarily an end in themselves’.³

Reconfiguring the composer

With this background in mind, we turn now to a discussion of how the politics of creative work play out in the *Exercises*. Wolff has characterised the term ‘experimental music’ as ‘music which allows for the possibility of societal change’ (2014). Instead of resorting to questions of ‘what the composer wants’, the emphasis is instead upon ‘what the music requires’. Wolff’s position, when present in rehearsals, is to refuse to play the role of composer as authority figure:

I have no one specific image of how a given performance should sound. It creates great problems for me when I work with performers, because they will have worked on a piece and they come and play it for me, and they say ‘Is this the way you want it?’, and I have to say, ‘Well it could be’. I have to work out a way to talk to them which encourages them to make the piece for themselves and not to make it some image of what *I* want. (cited in Smith & Walker Smith 1994: 255)

This holds also for the score itself: Wolff asserts: ‘The score’s nature is such that it cannot assert absolute authority, and, though this isn’t explicit, the players (if there are more than one) have to come to an agreement about how they will set about doing the piece, deciding together or (and) delegating leadership and so forth.’ (Wolff 1990a/2017: 136).

Despite the shift in the 1970s which affected both musical character and content, much of Wolff’s music, and the *Exercises* in particular, facilitate a democratic approach to performance. Wolff describes the music of the *Exercises* as arising ‘as much out of how the players are, individually and

² The songs were never published, but in 2017 Wolff submitted them (five, titled *5 Songs*) without further amendments, to Edition Peters for publication. They are melodic, mostly unison settings, of leftist texts, some clearly communist, others more socialist aspirational. Some have rhythmic settings, while others have notations more in common with the *Exercises*.

³ EP and PT interview with Wolff, 29 June 2017.

as a group, moved to do it as out of how it's written' (Wolff 2009a/2017: 254). This is, as Rzewski notes, political music: 'In *Wobbly Music* or *Changing the System* the coordination of the players is democratic, something that might seem obvious, but in fact rarely happens in written music. So we do not have people on stage talking revolutionary rhetoric while submitting to the same old authoritarian forms' (1998: 14). In relation to the *Prose Collection* (1969–) (but the description just as easily applies to the *Exercises*) Wolff has discussed 'the way [the scores'] function [...] could be seen to have political implications. The requirement of cooperative, more or less leaderless performance and its flexible conditions suggest a kind of democratic libertarianism' (Wolff 1980/2017: 74–75).

If the kinds of egalitarian approaches to ensemble dynamics suggested here are the primary ways in which Wolff's music enact political processes, then democratic libertarianism is a running thread through Wolff's music from the late 1960s onwards, including the present day. Even in his larger ensemble and orchestral works, conductors are employed only where necessary and function, to adopt John Cage's analogy, as a 'utility' (Cage and Charles 1976/1981: 109);⁴ there are numerous opportunities in these pieces for conductorless playing as musicians respond to other kinds of cues, extending principles found in the chamber works to a larger setting.⁵ Rather than marking a shift *from* democratic libertarianism *to* democratic socialism, as Wolff describes above, his musical practices suggest a continued demonstration of libertarian ideals through the ways in which the music functions in relation to performance, added to which, in the 1970s and continued to the present day, the music's titles, source material and character reflects Wolff's politics more broadly under an umbrella of democratic socialism. At various times, one of these might hold sway over the other, but to varying degrees libertarian principles underlie the ways in which the music is 'governed' – that is, notated – and performed.

As the above discussion makes clear, the context here is notated music. That is to say, the ways in which democracy is enacted can only be, in Wolff's music, within the framework of performers engaging with a composer's score. The option of developing an aural tradition, passing on performance practices from composer to performers, is not one which Wolff chooses to adopt, as explained further below. This is not a collaborative relationship: it is constructive to regard the roles of composer and performer not as hierarchical but as distinct. The composer is named as such, the rights are assigned to a major music publisher, the score is bought with the composer's name on it, and across the pages are musical notes, written by the composer. The performer fulfils a role that is no less creative, responding to the instructions and notations of the score, which is at once bound to the creative interests of the composer and severed from them, affording performance decisions which might be different from those which the composer might adopt. The instructions are written by the composer, and acted upon by performers, though it is true that the performers are called upon to make

⁴ Here Cage is referring to the role of the conductor in his *Concert for Piano and Orchestra* (1957–58). See Iddon and Thomas 2019 (Chapter 6) for a detailed exploration of this subject.

⁵ See Saunders 2010 for an examination of Wolff's orchestral music.

decisions that, within conventional ‘concert’ music traditions, are usually assumed by composers. Wolff is *exercising* his freedom to compose music, and performers likewise exercise their freedom to perform or not to perform this music.⁶ The responsibility of the composer to the performers is a recurring theme in Wolff’s interviews and writings, repeatedly emphasising the importance of ‘nonhierarchical’ conditions for making music, remarking in 2009: ‘I hope to stay always aware of good democratic principles.’ (Wolff 2009b/2017: 277).

The score, Wolff argues, is one element in a conversation, ‘before the fact’ (Wolff 1984/2017). It provides a text for musicians to work with, setting out limits, possibilities, rules, and choices. Inasmuch as the composer could be said to be embodying a power relationship towards performers he does so merely by setting out these limits. Anthony Arblaster defines the *idea* of democracy—distinct from the behaviour which follows, which may or may not be a poor reflection of the idea—being ‘the *desire* to bridge, or even to abolish, the gap between government and the governed, state and society implicit in so much conventional political thinking’ (1987/1994: 59; emphasis added). This essential democratic principle of ‘bridging the gap’ precisely underlies how relationships in Wolff’s music are conceived, not just in terms of the composer toward the performers, but also the performers in relation to the score, through the making of the music. The scores function as a site for the facilitation of democratic behaviour: pianist John Tilbury argues that the music-making generated by the scores is ‘collaborative, self-consciously giving and taking, non-judgmental, respectful, attentive, sharing, cherishing the quotidian, where *individuality*, not “individualism”, is nurtured. In short, it is strongly anti-authoritarian, “democratic”’ (Tilbury 2009).

The Exercises

There are no separate parts for the *Exercises*. Every musician reads from the same set of instructions and musical score. In many of the *Exercises* this is a single line of melody, but at times it subdivides, or may, as in a small number of them, be written in two voices (see Ex. 5.1). This means that every player has access to all the information. How it is to be negotiated, divided, and orchestrated, are questions to which the answers may be formulated by each and every player. Though it is a single line, Wolff specifies that pitches

may be read in bass or treble clef, applied for at least the extent of a phrase; or read in any pair of clefs or transpositions, e.g. in treble clef and a whole tone down transposition (as a B \flat instrument would read). But no more than two readings of the

⁶ Wolff is himself an experienced improviser, and is thus more than aware of both the differences between modes of working and of the authoritarian critique of power relations within composition networks, as espoused by many of the improvisers particularly of Wolff’s own generation, such as Edwin Prevost, with whom Wolff has performed often as a guest in the ensemble, AMM.

staves at a time. No octave transpositions except in #14. If you cannot produce a pitch, omit it.

Other parameters of the music, such as tempo, dynamics, ways of playing, articulation, and instrumentation, are entirely open. The instructions provide indicative directions as to how to navigate 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.

<INSERT Ex. 5.1 NEAR HERE>

Wolff, then, suggests that a combination of pre-performance and in-performance decisions might be made. Exactly how these decisions might be negotiated is not described. There is a clear suggestion that players ultimately 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. Ultimately, however, Wolff makes clear that the collective group decisions should be upheld as the main point of reference, an instruction clarified further in his 1974 Darmstadt lectures: ‘the players should never reach a point where they don’t know where someone is, since it is not a matter of individual performances, it is about ensemble’ (Beal 2010: 42).

Apartment House: Not an ‘ensemble, sinfonietta, [...] or group’

The specific case study addressed in this chapter is a recording session that took place in London on 21–24 March 2017 in which Apartment House combined a selection of different *Exercises* from the earliest to some of the most recent.⁷ The session was conceived as a professional (rather than

⁷ The members of Apartment House that participated in the session are Mira Benjamin (MB; violin), Bridget Carey (BC; viola), Simon Limbrick (SL; percussion), Anton Lukoszevics (AL; cello), Chris Redgate (CR; oboe), Nancy Ruffer (NR; flute), Andrew Sparling (AS; clarinet), Hilary Sturt (HS; violin), Philip Thomas (PT; piano), and Kerry Yong (KY; keyboard).

research) project, and will result in a CD recording. The session was observed and video recorded by Emily Payne, who undertook subsequent semi-structured interviews and stimulated recall sessions with the musicians. A further contextual frame is provided by an interview with Wolff, undertaken by Payne and Thomas in the months after the session. While the group was made aware that the session would be documented for a research project on performing Wolff's music, considerations of democracy were not an explicit concern during this preparation stage.

While the following discussion focuses on the face-to-face creative interactions between musicians, it is important also to consider the dialectical relationship existing between the immediate and present interactions of the musicians, and the wider influences and environment. This relationship is characterised by Eric Clarke, Mark Doffman, and Renee Timmers as 'inside/outside the room', whereby 'dialogue that references materials, persons and practices outside the room, as well as the immediate references to these things in the room, brings out the meshlike qualities of creativity as distributed over time, materials (notations, images, instruments), and people' (2016: 143). This is a useful lens through which to view the sociability of ensemble relations within this particular context. Apartment House's co-present interactions are shaped by a pool of shared knowledge and conduct acquired and developed over the group's lifetime. Apartment House is a UK-based, experimental music ensemble founded in 1995 under the leadership of Anton Lukoszevieze. Lukoszevieze has described the group as being originally conceived without a fixed aim: 'just a small group of us pursuing an enthusiasm for a wide variety of contemporary and experimental music' (Lukoszevieze and Fox 2015: 78). While the group initially focused on the music of American experimental composers such as Cage and Wolff, as well as European figures including Dieter Schnebel, Klaus K. Hübler, Helmut Oehring, and Gerhard Stäbler, today it performs a wider programme of contemporary and experimental music. According to Lukoszevieze, '[t]here is no dominant aesthetic or style', in the group's programmes, 'but there is always diversity and exploration' (Ibid.).⁸

Apartment House is distinctive in its personnel and its way of working: it was conceived as a group to challenge the 'orthodox' model of ensemble and its inherent hierarchies, and this intention is reflected in its name: Lukoszevieze has stated that 'I wanted a seemingly "neutral" name [...], one that didn't contain the word ensemble, sinfonieta, contemporary, or group, for example. A lot of the music we play is quite irrelevant to certain types of establishment music groups, which are often just microcosms of orchestral formations anyway' (p. 79). This rationale has implications for the politics that underpin the group's praxis. Writing on the ethics of group conduct (in jazz performance, but in a way that can be equally applied to the behaviours that underpin experimental performance) Mark Doffman has underlined the moral responsibility to 'get a job done' collectively, both in terms of the mutual cooperation between individuals, and in the sense of the musical negotiations that are required

⁸ Fox 2010 explores the ways in which Wolff's compositions were shaped by the ensembles for which they were written, Harmonie Band and Apartment House.

to shape a performance, such that ‘there is no doubting the commitment to collective action. This does not mean that power and hegemony are not features of performance, but it does mean that there is an underlying communicative rationality (in the Habermasian sense) that prefigures conflict and contest’ (Doffman 2011: 211). Apartment House has played Wolff’s music regularly for the past fifteen years, and most of the musicians are familiar with his compositional aesthetic. Yet it is important to note that, while as a collective, the musicians evince shared attitudes towards experimental music, they also have different backgrounds and bring with them different levels of experience. In addition, inevitably the group is not without its hierarchies: as we discuss, both Lukoszevics (as leader), and Thomas (who has a close working relationship with Wolff, and specialises in performing and writing about his music; see e.g. Chase & Thomas 2010), were viewed as epistemic authority figures during the recording session.

Democracy through praxis

In part, the *Exercises* are Wolff’s response to the emergent new music developments in the U.S., and in particular with the downtown New York scene, associated with early minimalism. Steve Reich and Philip Glass performed their music with regular groups which allowed for the increased possibility of more ‘improvisatory’ responses (within, of course, highly controlled musical parameters), and there was a sense of a ‘band’ ethos emerging that had much in common with popular musics. Wolff attended some of these early concerts, and ‘thought the music was fabulous—I just loved it’.⁹ Wolff’s response was twofold: first, musically the *Exercises* are a move away from the esoteric qualities of his earlier music toward a more obviously ‘musical’ and approachable character, reflecting a desire to position his work within a slightly broader artistic and cultural audience.

Second, the *Exercises* were written initially for an ad-hoc group of musicians, which Wolff saw in some ways as his ‘band’. They were a mixed-ability group, consisting of Wolff, Arthur Russell and David Behrman (the lesser-skilled players), together with Jon Gibson, Garrett List and Rzewski (the more technically-equipped players). The creation of the group was a practical response to the lack of access to more conventional line-ups, a kind of DIY aesthetic. The involvement of Wolff himself in the early performances also reflects the improvisatory way in which the pieces were composed, namely rapidly: in his words: ‘composing was almost like playing, so it had a kind of immediacy about it.’¹⁰ So these are both exercises in composition as well as exercises for the players. As with a number of Wolff’s pieces, the *Exercises* lend themselves well to players of mixed abilities. Wolff has likened them to the ‘hausmusik’ tradition, with which he was familiar from his family background.¹¹

⁹ EP and PT interview with Wolff, 29 June 2017.

¹⁰ Ibid.

¹¹ Ibid.. Hicks and Asplund liken them to ‘the loose-weaved texture of Old South congregational singing (and the Ba-Benzélé music Wolff admired)’ (2012: 54).

The use of small musical phrases, melodic in character, which are negotiated freely by the players, clearly references the early minimalist ethos, and perhaps most of all, Riley's *In C* (although exact repetition is eschewed). The freedoms within Riley's score are comparable: the limitation as to how far ahead any player can move, and the consequent commitment to the collective ensemble are features both works share. Writing on *In C*, Robert Carl describes it as 'a great tribute to American ideals of individualism and democracy' (2009: 7). One could very easily substitute Wolff's *Exercises* for *In C* in this description and it would still hold well, though the *Exercises*, unlike *In C*, are freed from any uniform measurement of time, allowing players to negotiate and mark out a temporal space unique to each performance, and making for a more radically collective and anarchic experience.¹² If *In C* can be considered an archetypal process piece, both in its manner of operation and its musical construction, similarly Wolff suggests that the *Exercises* are about the process of getting *into* a condition, rather than the condition itself, 'like working out'¹³, in so doing prioritising process over product, and the facilitating of behavioural and musical change.

Similarly, a 'band' mentality, and a focus on process over product is discernible in the ethos of Apartment House. All of the musicians possess a high level of technical skill, as Lukoszevieve comments: 'the simple (or complex) technical aspects of the music, doing that well and the actual playing of notes correctly, is a given. They will do it well' (Lukoszevieve and Fox, 2015: 80). Consequently, the rehearsal process is less concerned with working towards 'refining' performances in the conventional sense; rather, 'this is where the discussions come into play, as to how to decipher such scores and create music from them' (ibid.). Moreover, while there are some core members of the group, its personnel is somewhat fluid depending on the music to be played, and as a result, situations arise where performers might not have played together before.¹⁴ Even within the recording session described in this chapter, the configuration of the ensemble changed for each piece (and sometimes for multiple recordings of the *same* piece). This flexibility of ensemble size has implications for decision-making, since a larger group might be less conducive to discussions in which every member can participate.

Rules and procedures in practice

Carlo Accetti and Alessandro Mulieri's summary of Nadia Urbinati's book *Democracy Disfigured* (2014) reflects something of the way that scores function in Wolff's music: 'democracy can only be implemented through rules and procedures (the will) that regulate and structure the active political participation of the citizens in a representative framework' (2016: 205). If the 'rules and procedures'

¹² See Ryan 2010 for an incisive discussion of liberated time in indeterminate music, specifically that of Wolff, taking in Marx and Negri.

¹³ EP and PT interview with Wolff, 29 June 2017.

¹⁴ For example, in this particular session, Redgate and Benjamin had not played together.

have their mirror in notation and instructions, it follows that the forming of these—the operational fields they circumvent, what becomes licit and illicit, what is included and not included—form and shape the participatory behaviour of the citizens-performers. In an article written shortly before the *Exercises* Wolff articulates exactly these concerns:

The matter of instructions is delicate. How explicit or ambiguous will they be? To what extent will you insist upon their being observed? It becomes almost a question of what is legal, the letter of instruction or notation, and what is right, which cannot be formulated exactly and will be evident only by its active presence' (1970–71/2017: 47).

Having adopted the role of composer, it is as if Wolff seeks to do no more than set out regulatory frameworks for the activities of the performers, circumventing the trappings of the role and reducing government. In his words, he exercises his freedom as follows: 'freedom from the exercise of excessive constraint, from the imposition of rhetorical gestures, from inflexible rationalism, from efforts to push sounds and people around, recognizing that the latter are the critical centers of musical production' (1995/2017: 209).

Perhaps in the desire to ensure libertarian ideals are upheld, Wolff's scores are sometimes accompanied by an excess of written text, all of which point towards collective and individual freedom, plurality, diversity of interpretation, and suggestions for variation, but which at the same time run the risk of increased codification and complexity instead of reduced government. The liberal socialist writer Norberto Bobbio—whose writings closely map to the democratic libertarian ideals espoused by Wolff—identifies the problem that 'to extend democracy (and even more so when socialism is extended), means [...] extending bureaucracy' (1986: 70–71). Similarly, David Dieterle and Kathleen Simmons note that 'Critics of democratic socialist nations say that they have a tendency to develop too many layers of bureaucracy. They believe that this complicates decision making and has a deadening effect on individual initiative' (2014: 68). However, almost as if in the desire to *not* stipulate or regulate, Wolff sets out a field of operation which is so ambiguous as to be baffling. This can then lead to lengthy discussions just in order to get to grips with the instructions. While the early *Exercises* are generally concise in their openness, others are less so. *Exercise X* (1992) (discussed below) is one such example whereby an excess of instructions overshadows the notation itself. And yet on close inspection, the detail is necessarily complex to allow for the greatest variety of options and instrumentation while at the same time providing limits that prevent the suggestion of 'anything goes'. Typically, these lengthy instructions conclude with the sentence: 'Other elaborations, or simplifications, of these instructions can be made'. On the whole, Wolff's wording is careful to provide alternative options, favouring inclusion rather than exclusion. In some pieces Wolff gives

very specific alternatives,¹⁵ but in the *Exercises* the preference is for openness: the instructions for *Grete* (*Microexercises* 23–36) specify that ‘The material can be variously used, as much or as little as desired’; ‘Instrumentation is specified for Exercises 31–36, but other arrangements of these could be made’; and: ‘Whatever is not otherwise specified is free.’ These are typical of Wolff’s practical and inclusive directions, even if the need to state such freedoms contributes to the regulatory framework of the piece.

Episode 1: ‘So who wants to do a synopsis of the instructions?’

The manner in which Apartment House approached the instructions of *Exercise X* provides an indication of the group dynamics of the ensemble, particularly its internal roles and responsibilities. This was the first *Exercise* that the group chose to record, on the the first day of the recording session (21 March 2017), when all members of the group were present. It was also the first *Exercise* that the group chose to record. *Exercise X* consists of two pages of detailed instructions followed by a page of short rhythmic and melodic cells. Lukoszevieve and Thomas were immediately identified as having leadership roles. At the beginning of the session, Ruffer posed the question: ‘So who wants to do a synopsis of the instructions?’, and Benjamin quickly responded ‘Philip!’, before Lukoszevieve interjected ‘Can I just ask, can we just read through it?’, and proceeded to read the instructions aloud, interpreting them in light of the particular circumstances of the recording session. For example:

‘If number less than seven left over, make an additional group out of the 2 to 6 left or, if 1 is left, that player plays solo.’ [...] We have that situation. So we are going to make one player play solo, and then the rest are a group. [PT agrees]. OK. Right so one group plus one solo. That is what it’s going to be.

Having reached the end of the instructions Lukoszevieve allocated the soloist, in a playful interaction that demonstrated his position as leader, and as an epistemic authority.

AL OK, let’s just try and encapsulate this. Who’s going to be the solo? I have an idea who the soloist should be.

MB Who?

AL I think it should be Kerry.

KY No! [Laughter] Those rhythms, they don’t line up with your head.

NR But you’re so good, Kerry!

¹⁵ The prose score *For Jill*, for example, requires performers to construct an instrument ‘which can make 5 different pitches, or 11 or 3 different pitches’, typical of the kinds of instructions in these and earlier pieces.

AL Kerry, if you don't do it you're sacked! [Laughter] You have the most independent type of sound, and you can also vary things as well.

The discussion about the instructions continued along these lines, lasting nearly 25 minutes, but this short interaction gives some indication of the group's code of conduct. Throughout the recording session it was somewhat inevitable that Lukoszevics and Thomas were seen to be epistemic authority figures, a role that risks being unhelpful overall for the character of the music. The music *must* be changeable: it is inherently transitory, throwing the very nature of a recording session into confusion. David Estlund's writings on epistemically-oriented democracy argues that 'The biggest objection to bringing in the epistemic dimension is that it might tend to justify rule by the knowers – what we might call *epistocracy*', and suggests that the challenge remains to 'bring in knowledge without privileging any class of knowers' (2008: 19). Estlund argues that there are epistemic benefits of 'citizens thinking together' (2009: 157), which suggests that performance practices of Wolff's *Exercises* might be considered as primarily progressive and changing, in which knowledge is accrued through practice and may or may not inform successive performances or performers. Aware of the potential limitations created by transferring knowledge gained from one set of experiences to another, Thomas's approach when questioned by ensemble members was effectively to adopt the position of Wolff himself, by proffering little in the way of value judgments over and above (and possibly even less than) those of any other player. Though Luke Goode observes that, in a deliberative setting, 'some participants, more than others, will command high levels of implicit trust in the validity claims they raise because of their status of reputation' (2005: 66), Thomas's priority was to emphasise the score as the basis for activity—the law elements—from which all assessment of right and wrong, good and bad, may be measured. While at face value it could not be described as democratic in an obvious sense, with a complex set of instructions like this it is clear that musicians are required to decode and implement the piece's regulatory framework, and individuals to negotiate in performance the notations, their instrument and technique, in relation to that framework.

It is arguable that the music would be more simply executed, without the need for extended discussions, were Wolff to provide simpler, perhaps binary, choices, but this would serve only to identify more completely the composer with the work and a more unified, less complex musical situation. There is little doubt that simplifying the instructions would result in reduced discussion and greater uniformity across the ensemble; it is hard not to view the impracticality (so to speak) of Wolff's instructions as a means to facilitate debate, participation, and individuality. Democracy is, then, of course, a risk. And Wolff's music is risky: people get lost, or no-one plays—confusion and breakdown can be a feature of Wolff's music.

Episode 2: Negotiating through discussion

As the following section demonstrates, the start of the session in which *Exercise 4* (Ex. 5.2) was recorded with Benjamin, Redgate, and Thomas (22 March 2017) shows particularly vividly how collaborative discussion was used to negotiate aspects of Wolff's notation. As can be seen from Ex. 5.2, the notation is relatively minimal, with a number of parameters left open such as clefs, tempo, articulation, dynamics, timbre, and phrasing. Unlike some of the other *Exercises*, there are no wedge-shaped pauses, and while the beams are suggestive of phrasing, Wolff provides no instructions regarding their interpretation. In fact, during interview, he commented on this aspect of the piece:

[S]omething that's not explicit in the instructions, is that there are no wedges, but that doesn't mean that there are no pauses. The barring [beaming] is a phrase, and then to the next bar and sequence there can be a space between them. That, I don't make clear.¹⁶

<INSERT Ex. 5.2 NEAR HERE>

Thomas took responsibility for reading the instructions to Redgate and Benjamin, and the group discussed how they might approach the piece, in terms of both the practical and interpretative decisions that needed to be made.

PT So you kind of navigate it as a trio, in performance, and you don't have to play everything. And in fact, Mira, for you for example, some of the notes will be too low for you, no matter what clef. Is that true for you too Chris? So probably in that case I may well play everything, but maybe not all of it, some higher stuff. We can make some decisions. We could try and make some decisions as to who plays what, or we could just play actually, and see what happens. I would be tempted to do that.

CR I prefer that.

MB Fine, yeah.

PT And see what happens, and we'll just record it, then we'll try again.

MB And playing technique is pretty open, right? We can do any timbres or anything?

PT The idea is that we can listen to each other and adapt to what each other is doing. Push each other. Respond to each other. Lead each other. Submit to each other! [Laughs]

CR The beamed groups: do we have gaps in between beamed groups?

¹⁶ EP and PT interview with Wolff, 29 June 2017.

- PT I guess that's up to us. There's no wedges, so wedges generally mean an actual gap of some kind. There aren't any wedges. It's probably relatively fluid, but there are phrases. These beams do mean something, don't they?
- CR Yeah, so like a phrase almost.
- PT I suggest we just play it, see what happens, record it no matter what, and then we'll play again and maybe do another one.

While Benjamin and Redgate posed questions to Thomas (as the assumed leader) regarding the 'rules' governing techniques and phrasing, and apparently seeking his permission, he seemed reluctant to prescribe a certain approach, and focused instead on questions relating to considerations of practically how to navigate the musical material, and simply encouraging his colleagues to listen and respond to one another. The trio did not rehearse before recording. The first take began with Thomas entering first on piano, closely followed by Redgate, who gestured as if to lead the entry. The performance throughout the take was somewhat hesitant in character, without one performer taking a lead; instead there were moments when the musicians operated as individuals, in pairs, and when they seemed to work more collectively. Redgate played very legato for the first line; Benjamin began to play spiccato in the first line, and Redgate then echoed her in his articulation, beginning the second line staccato. The second line seemed to move on in tempo, perhaps pushed on by Thomas, before the group reached the third line, where Benjamin and Redgate appeared to push the tempo on together. Although in the first three lines, the beamed groups could be heard quite distinctly, by the fourth line the phrases felt more broken up, and less consistent with the phrasing suggested by the notation. Much of the material on line 6 falls below Redgate's range, so here he tended to follow Benjamin, embellishing her playing with short phrases, and trilling some notes. Thomas played somewhat slower than the other two players, to the extent that he was almost a line behind the others towards the end. Overall, Thomas tended to vary the duration of pauses between phrases more than Redgate or Benjamin, who finished more or less together, ahead of Thomas. He commented afterwards:

For me, some of it felt so obscure in terms of tempo, that it was hard to hold onto. I think that's OK because it's nice to get lost and be confused, but I wondered whether if our default was one of confusion. And I wonder whether that should be something that maybe is not so much the default, but something that's permissible. I got quite lost in a lot of it!

This comment was followed by some brief discussion between the players about the slightly chaotic character of the performance, and how they might approach it differently. Although not discussed explicitly, it appeared to be collectively agreed that this was an unsuccessful performance. As we

show in Episode 3, from the second take onwards there was little or nothing was said; rather, the ‘discussion’ between musicians took place in the playing itself.

In the absence of an authority figure (both literally, in person, and by implication, through the reduced nature of the musical score), performers negotiate the terms of their relationship to each other and to the score. Conversation is not something with which all players are comfortable, and most probably the ‘ideal speech situation’ (Habermas 1990: 43–115) here is a combination of verbal conversation and praxis, both of which encompass their own power relations. In fact, the power relations inherent in conversation which lead us to recognise the ‘ideal speech situation’ as really only an ideal, are likely to be as, if not more, prevalent in the playing as they are in the talking. One player might deliberately skew the rehearsal or even performance of an *Exercise* by emphasising a particularly loud or soft dynamic, or a fast tempo, or longer breaks between sequences. *Direct* democratic involvement in realising the *Exercises* is a very tangible possibility, allowing for each individual ensemble member to have equal share in the conception, realisation, and performance of the music. Players might be more empowered to form the music than in usual contexts of performing notated music, but it is important to recognise that the score and its procedures in themselves guarantee neither a good structure of working together to arrive at a method of realisation, *nor* necessarily a good realisation (as shown in Episode 2).

Episode 3: Negotiating through praxis

Having discussed alternative approaches to performing *Exercise 4*, a number of interpretations of the instructions were offered, yet no absolute decision was arrived at and the musicians resorted to working it out through the playing. The second take began in a more coordinated manner, with the trio breathing together and more synchronous entries from Redgate and Benjamin, shortly followed by Thomas. Overall, the playing was more homogeneous in texture and timbre than previously. The tempo was slightly faster and felt more stable throughout the performance, with fewer sudden fluctuations in speed. At the beginning of the second line, Thomas seemed to accelerate somewhat, but overall quite a steady tempo was maintained throughout the line. The group slowed down together for the high notes in line 2, where Benjamin employed some harmonics, and Redgate used a little staccato for these notes. As in take one, he also employed trills on the first notes of line 3. Benjamin and Redgate matched each other’s phrasing towards the end of line 3 (with staccato and pizzicato) and throughout line 4. Both players slowed significantly on the third phrase of line 4. Line 7 was played in a steady manner, but with extended rhythmic variation from Redgate, and Thomas rapidly accelerating through the final phrase. By contrast, line 8 was quite disparate rhythmically: Redgate played the semiquavers quite slowly, whereas Thomas moved through them very quickly. Benjamin and Redgate played line 9 quite quietly, matching each other’s articulation with staccato and pizzicato

until the end. They finished at the same time with a brief smile at each other, with Thomas finishing soon after.

After the second take Benjamin immediately commented, ‘That was more cooperative, wasn’t it?’, and it was certainly apparent that this version had a stronger sense of cohesion. Watching the video footage of the take during interview, Benjamin commented:

Obviously, this time I decided to do something totally different. I was like, ‘I’m going to try to play with Chris as much as possible’ [...]. It strikes me that this take was all about playing in unison with people, for me. [...] The first take was kind of a mess with a few happy moments of sounding brilliant. And this was a bit more chamber music.¹⁷

Similarly, Thomas felt that this take felt more cohesive, commenting afterwards that it ‘shows more signs of listening to each other, and greater confidence. There’s more playfulness with the interaction of lines, and at the same time less trying to muck around with the sound.’¹⁸

There were limited discussions concerning the performance in this episode, with the ensemble appearing to collaborate more immediately in real time. For her part, Benjamin felt that responding to the others was a priority in the first take, rather than necessarily aiming to take the music in a new direction, commenting during interview:

I think there are definitely some people who are more inclined toward leadership in ensembles, and some people for whom it feels important to decide on the direction. And there’s also different levels of experience and confidence. [...] And so at the beginning of [take one] I think I was waiting to respond to Chris. I’m not generally inclined toward needing to lead; I’m very happy to follow in ensemble dynamics, because I like choosing to either add or not add as my contribution [...]. It’s a little bit a mirroring of a social situation. You’re feeling each other out: is this person a safe person to take risks around?¹⁹

Benjamin’s responsive approach was evident throughout this take in her decisions relating to timbre. During interview, she reflected that ‘[a]t the beginning, I chose a really unobtrusive sound that I could easily back away from and not be heard. I wanted to feel it out a little bit.’²⁰

¹⁷ EP interview with Benjamin, 22 August 2017.

¹⁸ Thomas, email, 28 August 2017.

¹⁹ EP interview with Benjamin, 22 August 2017.

²⁰ Ibid.

A specific example of Benjamin responding to Redgate by matching her sound to his playing occurred about halfway through the second take where, having been playing in quite a legato manner, Redgate began line 5 in a staccato manner and soft dynamic, and Benjamin echoed him with gentle pizzicato. Similarly, Redgate reflected that at the beginning of take two, he wanted to find a sound that worked cooperatively with Benjamin's, and so decided against using a technique that would be too strong in character. Watching the footage, he commented:

I'm just remembering here [in take two]: when [Benjamin] was doing this, I was thinking, an obvious modification I could have done was to flutter tongue here. The problem with flutter, especially down there, it tends to be very loud and dominating, so I rejected it. Because I wanted to get into her sound world, but I realised that I couldn't do it with the flutter. It would just be too overpowering, so I rejected it.²¹

However, despite the built-in complexity and openness within Wolff's scores, there remains a tendency amongst players to follow the critical mass regarding dynamics, tempi and length of breaks between groups of notes. On the whole it comes down to the extent to which each performer is confident to operate within the freedoms given, and the extent to which they are able to identify aspects of their individual and collective playing which they would seek to change.

Episode 4: Working independently

There were instances across the four takes of *Exercise 4* where the musicians made decisions independently from one another that did not get picked up by their colleagues, a way of working that emphasises their liberty to work as distinct individuals and to offer difference in their playing. As mentioned above, in take one, Redgate included some trills around notes, and after the take he asked the others whether this was appropriate:

Talking about modifying things: what do you think about, because you've got lovely pizzicato, you've got the harmonics, and all the different bow things. Do you think trills and tremos are allowed? Once or twice I was picking bits and tremming two notes.

Thomas and Benjamin agreed to Redgate's suggestion, and in take two, Redgate employed this technique more frequently, particularly around repeated dyads, for example, at the beginning of line 3.

²¹ EP interview with Redgate, 2 September 2017.

He repeated this approach in all subsequent takes. For Benjamin, too, opportunities for independent decision-making lay in timbre. During interview, she reflected on her approach to bow technique in take three:

I think what I was doing in [take three]: I think having done a kind of messy take, and having done a really concrete, chamber music-y take, I think probably I thought to myself, ‘OK, what should I do this time? Make it different?’ Very often with a score like this, I’ll apply some kind of process to what I’m doing. So I went from a less present sound to a more present sound. So I went from tapping *col legno*, to bowed *col legno*, to half hair, to full hair, and then I think I just thought ‘I wonder what happens?’ It’s all about sound. That’s how I relate to these pieces.²²

Similarly, in take four Benjamin decided to play pizzicato throughout the performance. Her decisions to employ specific sounds may have influenced the other performers in places, but from her perspective, they were conceived of and applied separately from any consideration of the others. As she commented:

I like constraint. It does not appeal to me to just express myself in music! I don’t have the desire to do that. I want to see what happens when you make this trajectory happen. I love being surprised by what’s coming up. So ‘OK, I’m just going to do pizz. for the entire thing’.²³

Thomas later reflected on the impact that Benjamin’s decision had on how he experienced the piece, and on the dynamics of the ensemble as a whole:

Mira’s decision to play entirely pizz. was canny – it made everything slow down a little (although the full performance was not slower) and highlighted the canonic potential in the piece. It also I think made both Chris and myself listen more carefully, aware that Mira’s playing changed the character (pace, volume, articulation) of the piece.²⁴

Episode 5: Working emergently

²² Ibid.

²³ EP interview with Mira Benjamin, 22 August 2017.

²⁴ Philip Thomas, email, 28 August 2017.

The episodes discussed thus far have been focused on specific decisions made by the musicians, but there was a moment of interaction in take one of *Exercise 4* that unfolded somewhat more unpredictably. About halfway through the take, Redgate and Benjamin (reading the score in treble clef) played the repeated D4 figure halfway through line 4 quite freely; then Thomas entered relatively assertively with the same phrase but read in the bass (as F2); by that point Redgate and Benjamin had got to the beginning of line 6 and played the first two phrases in unison, and because they played on an F4 it sounded like an echo of what Thomas had just played. Watching back over the footage, Benjamin commented:

[Sometimes] you notice that something has happened and then you decide to try and keep that going a little bit. [...] You realise, 'Hey that was really cute what just happened', or 'That was a wonderful sound, I'm going to try and make it last'. And then as soon as you try to make it last it starts to deflate and then it leaves, but it's these little experiences of liking what you hear. [...] So right there we landed on this F really loudly, together, totally by accident at the same time. That was quite fun, and I think what follows is that little moment.²⁵

Research on group creativity emphasises the emergent nature of improvised ensemble interaction, where unpredictable outcomes are determined by the group as a whole rather than any single individual (Sawyer 2003). In these indeterminate circumstances, however, the unexpected outcome is one of momentary coordination, rather than innovation, where Redgate and Benjamin seem to pair up and respond to Thomas apparently spontaneously. This moment of interaction was not repeated in any of the subsequent takes.

Conclusions

As the foregoing discussion has shown, exercising democracy in Wolff's *Exercises* was a messy endeavour, with each take resulting in quite different interactions and outcomes. The distribution of creative authority was neither uniform nor static within the ensemble, with the players moving between different kinds of interaction: working responsively, individually, and emergently as a collective. Yet, it is important to note the role of practical factors: some decisions were made either as a consequence of Wolff's notation, where the pitch went below the range of an instrument; or of the ensemble interaction itself, for instance if performers got lost and omitted material while they reoriented themselves.

²⁵ EP interview with Mira Benjamin, 22 August 2017.

Clearly, ensemble musicians responding to one another in the moment of performance is not the preserve of experimental music. Michael Tree, the violist in the Guarneri String Quartet articulates the importance of spontaneity in the ensemble's playing, stating: 'Each of us is influenced by constantly fluctuating circumstances. Each moment of our playing is conditioned by what has just occurred or by what we think is about to occur. It remains creative because just about anything can happen' (Blum 1987: 20). Similarly, work by Peter Weeks (1990; 1996) has shown how chamber musicians maintain and restore synchrony in the moment of performance. What then, distinguishes the *Exercises* from chamber music in the 'concert' tradition?

We would argue that the thresholds in Wolff's music are shifted: first, all players are working from the same (underdetermined) material, creating a wider range of possibilities in terms of performance outcomes. As Redgate put it, 'You cannot actually conceptualise the music by looking at the dots. You can look at it, you can play your bit at home, but you can't look at it like an ordinary score and say "It's going to sound like this". You've got to come ready to create in the moment.'²⁶ Second, the score is upheld as facilitating work to be done, discussions to be had, solutions to be proposed, discarded, subverted, and enacted. Third, the process of dialogue and exchange is granted an importance equal to, and quite possibly greater than, the result. Failure and risk are, then, celebrated as part of the democratic ideal. Wolff's *Exercises* thus prompt a rethinking of what it means to play together, and emphasise Rzewski's remarks about the imperfect nature of democracy particularly vividly: cooperation is necessary, but the outcome might be one of uncertainty, surprise, or even complete breakdown.

Acknowledgements

We are grateful to Christian Wolff and Apartment House for their participation in this research project.

References

- Accetti, Carlo, Mulieri, Alessandro, Buchstein, Hubertus, Castiglione, Dario, Disch, Lisa, Frank, Jason, Sintomer, Yves & Urbinati, Nadia (2016), 'Debating representative democracy', *Contemporary Political Theory*, 15/2, pp. 205–242.
- Arblaster, Anthony (1994), *Democracy*, second edition, Milton Keynes: Open University Press.
- Beal, Amy C. (2007), 'An interview with Earle Brown', *Contemporary Music Review*, 36/3 & 4, pp. 341–56.

²⁶ EP interview with Redgate, 2 September 2017.

- Beal, Amy C. (2010), 'Christian Wolff in Darmstadt, 1972 and 1974', in Chase, Stephen & Thomas, Philip (eds.) *Changing the System: The Music of Christian Wolff*, Farnham: Ashgate, pp. 23–50.
- Blum, David (1987), *The Art of Quartet Playing: The Guarneri Quartet in Conversation with David Blum*, Ithaca: Cornell University Press.
- Bobbio, Norberto (1986), *Which Socialism? Marxism, Socialism and Democracy*, trans. Roger Griffin, Oxford: Polity Press.
- Carl, Robert (2009), *Terry Riley's In C*, New York: Oxford University Press.
- Cage, John and Charles, Daniel (1976/1981), *For the Birds*, trans. Richard Gardner and ed. Tom Gora and John Cage, London: Marion Boyars.
- Chase, Stephen & Thomas, Philip (eds) (2010), *Changing the System: The Music of Christian Wolff*, Farnham: Ashgate.
- Clarke, Eric, Doffman, Mark & Timmers, Renee (2016), 'Creativity, collaboration and development in Jeremy Thurlow's *Ouija* for Peter Sheppard Skærved', *Journal of the Royal Musical Association*, 141/1, pp. 113–65.
- Dieterle, David A. & Simmons, Kathleen M. (eds) (2014), *Government and the Economy: An Encyclopedia*, Westport: Greenwood.
- Doffman, Mark (2011), 'Jammin' an ending: Creativity, knowledge, and conduct among jazz musicians', *Twentieth-Century Music*, 8/2, pp. 203–25.
- Estlund, David (2008), 'Epistemic proceduralism and democratic authority', in Ronald Tinnevelt and Raf Geenens (eds), *Does Truth Matter? Democracy and Public Space*, Berlin: Springer Science & Business Media, pp. 15–27.
- Fox, Christopher (2010), 'Exercising the ensemble: Some thoughts on the later music of Christian Wolff', in Philip Thomas and Stephen Chase (eds), *Changing the System: The Music of Christian Wolff*, Farnham: Ashgate, pp. 125–39.
- Goode, Luke (2005), *Jürgen Habermas: Democracy and the Public Sphere*, London; Ann Arbor: Pluto Press.
- Habermas, Jürgen (1990), 'Discourse ethics: Notes on a program of philosophical justification', in *Moral Consciousness and Communicative Action*, trans. Christian Lenhart & Shierry Weber Nicholson, Cambridge: MIT Press, pp. 43–115.
- Hicks, Michael & Christian Asplund (2012), *Christian Wolff*, Urbana, Chicago, and Springfield: University of Illinois Press.
- Iddon, Martin & Philip Thomas (2019), *John Cage and the Concert for Piano and Orchestra*, New York: Oxford University Press.
- Lukoszevieve, Anton and Christopher Fox (2016), '20 Years of Apartment House: Anton Lukoszevieve in Interview With Christopher Fox', *Tempo*, 70/275, pp. 78–82.
- Ryan, David (2010), 'Indeterminacy and Politics in the Early 1970s', in Philip Thomas and Stephen Chase (eds) *Changing the System: The Music of Christian Wolff*, Farnham: Ashgate, pp.143-70.

- Rzewski, Frederic (1998), 'The algebra of everyday life', in Christian Wolff (ed.), *Cues: Writings and Conversations*, Cologne: Musiktexte, pp. 10–17.
- Saunders, James (2010), 'Organization and interaction in the orchestral music of Christian Wolff', in Stephen Chase and Philip Thomas (eds), *Changing the System: The Music of Christian Wolff*, Farnham: Ashgate, pp. 93–124.
- Sawyer, Keith (2003), *Group Creativity*, Mahwah: Lawrence Erlbaum Associates.
- Smith, Geoff & Nicola Walker Smith (1994), 'Christian Wolff', in *American Originals: Interviews with 25 Contemporary Composers*, London: Faber and Faber, pp. 251–59.
- Tilbury, John (2009), 'Christian Wolff and the politics of music', liner notes to Thomas Schultz (piano) *Christian Wolff – Long Piano (Peace March 11)*, New World Records 80699; online at http://www.newworldrecords.org/album.cgi?rm=view&album_id=82999
- Urbinati, Nadia (2014), *Democracy Disfigured*, Cambridge, MA: Harvard University Press.
- Weeks, Peter (1990), 'Musical time as a practical accomplishment: A change in tempo', *Human Studies*, 13/4, pp. 323–59.
- Weeks, Peter (1996), 'Synchrony lost, synchrony regained: The achievement of musical coordination', *Human Studies* 9/2, pp. 199–228.
- Wolff, Christian (1970–71/2017), 'Fragments to make up an interview', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 43–7.
- Wolff, Christian (1974), *Exercises [1–14]: For any number of instruments*, New York: Edition Peters.
- Wolff, Christian (1980/2017), 'On political texts and new music', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 71–82.
- Wolff, Christian (1984/2017), 'On political texts and new music', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, p.85
- Wolff, Christian (1990a/2017), 'Floating rhythm and experimental percussion', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 131–39.
- Wolff, Christian (1990b/2017), 'What is our work?', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 107–17.
- Wolff, Christian (1995/2017), 'Music—Work—Experiment—Politics', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 201–209.
- Wolff, Christian (2009a/2017), 'Some recollections of Arthur Russell', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 253–55.
- Wolff, Christian (2009b/2017), 'Interview with James Saunders', in *Occasional Pieces: Writings and Interviews, 1952–2013*, Oxford: Oxford University Press, pp. 275–86.
- Wolff, Christian (2014), 'Experimental music', *Institute of Musical Research Lecture*, 12 May 2014, online at <https://www.sas.ac.uk/videos-and-podcasts/music/prof-christian-wolff-lecture-experimental-music> (accessed 11 October 2018).