



## COMPOSER-PERFORMER COLLABORATIONS IN NEW COMPOSITIONS: SUGGESTIONS FOR CHANGE VERSUS AUTHORSHIP

Agata Kubiak-Kenworthy

Born in Poland, Agata Kubiak-Kenworthy started her music education at the age of 6. After graduating from Stanislaw Moniuszko Music College, she moved to London and continued her studies with the renowned professor, Stephane Tran-Ngoc. Agata completed her BMus at London College of Music with a First Class Honours in 2011. She then returned to LCM to continue her studies at a postgraduate level, gaining a distinction in 2014. In late 2019, she was awarded a PhD for her thesis: ‘Creativity in new music for strings: Under which circumstances does creative change occur in different types of performer-composer collaborations’.

Agata has pursued an active performing career since graduating from her BMus. She has toured Europe and Asia with the Avizo String Quartet, I Maestri Orchestra and the Symphonic Orchestra of India. She plays 2nd violin in Konvalia String Quartet with which she performs new music regularly. She is also a jazz singer, she writes and performs with her own jazz group. She was a finalist in the Riga Jazz Stage international jazz competition and was included in top 20 female jazz singers by the European jazz magazine Jazz Forum.

### **Abstract: Composer-Performer Collaborations in New Music: suggestions for change versus authorship**

Composer-performer collaboration is a phenomenon particularly associated with new music performance. This unique social situation often creates the opportunity for an artistic dialogue that would not occur otherwise. New music performance has been a rich source for music academia but, as stated by Fitch and Heyde (2007): ‘Very little attention has been paid to the performer’s potentially significant mediation between composer and piece’.

This article examines in detail the types of ‘creative change suggestions’ that drive many composer-performer collaborations. Through analysis of the rehearsal process and the communication that takes place within it, as well as through semi-structured interviews with participants and professionals, I have been able to gain insight into the process and ask important questions about the nature of authorship in new music performance. The pieces involved in this research range in culture from neo-romanticism to spectralism and require creative involvement from the performer at different stages. This research establishes a typology that allows one to look closely at the different kinds of creative interactions that occur in collaborative situations.

## Composer-Performer Collaborations in New Music: suggestions for change versus authorship

It is commonly agreed that, in the area of musical performance, it is the presentation of newly-formed compositions that connects most obviously with innovation, the widening of artistic expression and 'newness'. It is also an area that gives unique opportunities for dialogue between the composer, the performer and the audience. That in itself provides for a fascinating socio-cultural research study. However, in view of its being such an important area of artistic research and performance studies, and despite increasing interest in recent years, it remains a relatively little explored one – especially once one moves outside the realm of personalised reflective accounts of individual projects.

While conducting my research, I developed two typologies to analyse the nature of creative interaction between performers and composers collaborating on new works. In this paper, I will discuss the first one - the typology of 'creative change suggestions'. The case studies in this research relate primarily to string players but there is no reason why these results should not be applied to other areas of performance practice. The study relates to the ways in which performers contribute to the development of new works throughout the phases of their being devised and rehearsed. The first typology categorises seven different forms of creative change that may happen during rehearsals: mistakes being spotted, simplification being offered, choice being offered, intention being clarified, experiment being proposed, moments occurring when creative change happens spontaneously and editorial changes being instituted. These categories arose from an analysis of the data that was gathered from the interviews and the observations during the projects.

Conducting artistic research (also defined as practice-as-research) can prove challenging as "Currently there is a lack of consistency across disciplines in the way researchers think about, present and evaluate practice-as-research".<sup>1</sup> However, that also means it is an exciting place to be, with a lot of gaps for new knowledge to arise.

The reason I was interested in the subject was that I am myself a practitioner. I am a violinist and I perform as a part of a string quartet as well as being a solo performer and I have long been interested in how collaborations with composers work and what makes them differ from the collaboration-at-one-remove with non-living composers that we also have to engage with as a part of our practice. That is why I decided to conduct my research using both 'emic' and the 'etic' approaches. It is important to add that in neither case was I interested in influencing the practices or correcting them in any way.

I purposefully chose not to use an established definition of creativity at the beginning of my research, instead allowing participants to self-identify moments of creativity. I was very interested in how fellow practitioners, who specialise in new music, engage with the subject. Creativity became quite the 'buzz word' within the Arts and within Cognitive Psychology and it is still developing as a hot research topic, with the recent set of Oxford publications (for example, 'Distributed Creativity', 2017) and a plethora of current conference themes standing as a proof. It fascinated me how difficult it was for my participants to 'pin down' what 'creativity' actually means.

I conducted 22 semi-structured interviews with participants who are professional string players and composers. All of my participants were specialists in their field.

I conducted 7 emic research projects, where I was a participant in the study, and 2 etic research projects, where I was the observer of the group being researched. I concluded the research with a survey of 118 practitioners in which closed questions used themes extracted

from the interviews and observation sessions. This survey material provided a more balanced, mixed data collection. The data gathering activities were as follows:

## Participant Observation

### Project no.1 - Kubiak/Szafranski collaboration

(*Six Spiders* - piece for electric violin/voice, electric guitar and electronic drone)

I commissioned Bartosz Szafranski, a fellow LCM DMus candidate, to compose a piece showcasing one performer in a dual role of violinist/vocalist by the autumn 2016. The composer also took on the role of performer in this work. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

### Project no.2 - Konvalia/Jones collaboration

(*String Quartet no.9* - string quartet piece)

The Konvalia Quartet has been collaborating with composer Martin Jones since 2013. We have got to know Martin through our connection with the London Composers Forum. We have taken upon ourselves to perform and record every single string quartet that Martin has written. So far, we have completed *String Quartet no.3*, *String Quartet no.5*, *String Quartet no.6* and *String Quartet no.7*. *String Quartet no.9*, which is the most recently completed quartet by Martin, features in my research. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

### Project no.3 - Konvalia/Szafranski collaboration

(*Eight* - piece for a string quartet, piano and electronic drone)

The composer commissioned my group - the Konvalia String Quartet - to take part in rehearsals and the first performance of this piece. The piece involves performing with a newly-developed video scrolling score. The composer joins the ensemble as a pianist. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

### Project no.4 - Kubiak/Bush collaboration

(*Komunikacja* - solo violin piece)

This is a new piece of music commissioned in autumn 2015 from composer Thomas Bush for delivery by autumn 2017. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

### Project no.4 - Kubiak/Williams collaboration

(*Boojwah Bagatelles 1-3* - solo violin/voice piece)

I commissioned composer Nick Williams to write a piece for solo violin/voice with elements of improvisation for delivery by spring 2018.

I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

### Project no.5 - Kubiak/Zagorski-Thomas collaboration

(*Shutting the Unstable DAW* - piece for violin and electronics)

I commissioned the composer to write a piece including elements of improvisation to be delivered by spring 2018. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

Project no.6 - Kubiak/Franklin collaboration

(*Beloved* - solo violin/voice piece)

I worked together with Nikki Franklin, who is a PhD candidate at the University of York, Department of Composition. Nikki's PhD is based around jazz composition. The piece is inspired by Polish history and performed by myself. The piece includes elements of improvisation and, stylistically, belongs within the jazz idiom. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

Project no.7 - Kubiak/Paton collaboration

(*Variations On The 1998 Chart Hit Single* - solo violin/voice piece)

I commissioned the composer to write a piece showcasing one performer in a dual role of violinist/vocalist, for delivery by spring 2018. The composition was also to include elements of improvisation. I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

## Observation and Interviews

In contrast to this active research, I have also conducted observations and interviews with string players and ensembles which specialise in performing new music. I planned my observation around seven different projects.

Project no.1

Pre- and post-performance extended semi-structured interviews with an established cellist and new music specialist - Lawrence Stomberg. Transcriptions are analysed using NVivo<sup>2</sup> and thematic analysis.

Project no.2

Two extended semi-structured interviews (one year apart) with an established violinist and new music specialist - Timothy Schwarz. Transcriptions are analysed using NVivo and thematic analysis.

Project no.3

An extended semi-structured interview with an established cellist and new music specialist - Neil Heyde. Transcriptions are analysed using NVivo and thematic analysis.

Project no.4

An extended semi-structured interview with an established violist and new music specialist - Rivka Golani. Transcriptions are analysed using NVivo and thematic analysis.

Project no.5

An extended semi-structured interview with an established jazz cellist and new music specialist - Shirley Smart. Transcriptions are analysed using NVivo and thematic analysis.

Project no.6 - Modulus/Lummi collaboration

Observation of a rehearsal and interviews with new music specialist London-based Modulus String Quartet and composer Veera Lummi.

I use video recordings from rehearsals as well as interviews with participants and video recall transcriptions in my analysis.

## Survey/Questionnaire

In addition to these projects, a formal survey/questionnaire has been conducted among 118 professional string players. This survey, conducted in spring 2018, allowed me to use themes emerging from interviews and observation analysis as material for creating multiple choice question surveys. SPSS<sup>3</sup> will be used in the analysis of the survey findings.

Despite not using an established creativity definition, I built a strong foundation of theories that are currently used and which feature in creativity research. I was fascinated and inspired by Amanda Bayley's research into the string quartet with her research project 'From composition to performance'.<sup>4</sup> I also thought that Csikszentmihalyi's Systems creativity model (Csikszentmihalyi, 1999) worked well with my research.<sup>5</sup> Bourdieu's theory of power and practice and his forms of capital (Bourdieu, 1977) also play a crucial role in these very intricate social relationships that are created between composers and performers, especially in establishing the authorship of a piece of music.<sup>6</sup> Other research that had a definitive impact on the shape of my thesis did so in connection with cognitive psychology, creative problem solving (Kozbelt, Beghetto and Runco) and other language-based studies (Herbert Clarke, Linda Kaastra and Thomas Porcello).<sup>7</sup> As mentioned earlier, this research is based around mixed data collection. The initial qualitative data collection methods included extended interviews and video and audio recordings of observed practices. The quantitative data include findings of the survey, which was conducted in the later stage of the research project. It involved a hundred and eighteen participants, all professional string players, and was based solely on multiple choice questions. No open-ended questions were involved. All participants in this research are adult, professional string players.

The first stage of data analysis included thematic analysis of transcribed interviews and rehearsals. This was done both manually and with the use of NVivo software. In the case of performers' interviews, the themes looked for included 'creativity definition', 'creativity triggers', 'new music performance statements' and 'creative change suggestions in collaborative situations'. When analysing composers responses, themes such as 'completeness of the work prior to collaboration', 'precision of notation' and 'preferred presence in rehearsal process' were additionally looked into.

The analysis of the transcribed data from rehearsals was a more complex process. First, a careful thematic analysis was applied, often with an aid of different versions of the score itself. This initial stage was a crucial step in this research as its task was to determine any 'creative change suggestion' coming out of any party to the collaboration in question. Owing to the difficult nature of dealing with the internal cognitive processes of participants, only the suggestions mentioned verbally were considered in the analysis. These were marked in the transcript, often with a specification of who made the suggestion and a short-hand description of the nature of the change suggested.

The second stage of the analysis involved a categorisation of the aforementioned 'creative changes'. Initially my system of six categories was used, marked [a] to [f], representing the following models of creative interactions in the collaborative situation:

- a. Mistake is spotted - Correction is made
- b. Simplification is proposed - Accepted/Declined
- c. Choice is given - Choice is made
- d. Intention is clarified - Change is suggested - Accepted/Declined
- e. Experiment is proposed - Experiment is conducted - Accepted/Declined
- f. Change happens spontaneously - Change is noticed - Adopted/Ignored

These initial six categories came from linking the multiple ideas noticed in the short-hand descriptions mentioned above. Repetition of certain themes was spotted and a set of draft categories was applied to the changes noticed in the Kubiak/Szafranski and Modulus/Lummi collaborations. These worked well and no change was left uncategorised. This, however, was not the case in the Konvalia/Jones collaboration. Differences in the composer's working methods, the style of collaborating and the notation used made the previous system incomplete. At this point it became necessary to add another category to the group:

- g. Editorial changes, often with no need for consultation

These seven modes and their hybrids describe in full all the creative interactions between the performers and composers observed in all the collaborations of this research project. Traces of some of these 'creative change categories' have been mentioned in recent literature, but they have never been combined into a functioning framework as above, although Nicholas Donin (2017) mentions important interactions between members of the Augmented String Quartet Project that directly connect to changes [a], [d] and [g] of the framework.

In any working session, members of the quartet had to ensure that they grasped the intention behind Baschet's demanding writing, could track potential errors or problems in notation, and at the same time could find the fingering that would enable them to deliver an acceptable performance on the fly. (...) Baschet had to judge the degree to which it matched her intentions and to decide whether any shortcomings either were a temporary consequence of the sight reading process or stemmed from a more serious misunderstanding that needed her intervention.<sup>8</sup>

Amanda Bayley (2017) also mentions the importance of the category [d] in her analysis of the Kronos/Sadovska collaboration. In this case we are also speaking of the composer's clarification to the performers, rather than vice versa.

[...] the essential input the players needed from Sadovska concerned the broader aesthetic, image, mood and character of what they were trying to portray.<sup>9</sup>

Bayley later alludes to the presence of experimentation (category [e]) in collaborations using a form of a notation:

Notation fulfils a variety of possibilities depending on the collaboration and serves a fundamental purpose as a building block or 'roadmap' on which layers of musical content - including precise specification of pitch, articulation, phrasing and expression - are tried out, modified, discarded or accepted.<sup>10</sup>

Irvin Arditti (2017), on the other hand, mentions the importance of experienced performers offering 'choice suggestions' to composers in order to improve the shape of the new piece (category [c]).

We can make suggestions to composers: cut this bit out, those dynamics don't make sense, how about *col legno battuto* here, you can articulate *arco* faster than *pizzicato*, all sorts of practical suggestions, because the experience of playing tells you what you can do, and mostly composers won't have the same wealth of experience as we have.<sup>11</sup>

Issues of playability and the role of simplification (category [b]) were remarked clearly by Fitch and Heyde in their 2007 article 'Recercar - The Collaborative Process as Invention':

Later, the composer faces the question of what is possible to perform within a certain context. There may be a hundred books about writing for the cello, but everything is a

question of context. Nobody will ever be able to list all the possible - or impossible - ways of combining things. The performer steps in to sort out the innovative from the impossible.<sup>12</sup>

The collaborative paper of Clarke, Doffman, Gorton and Östersjö (2017) conveys their fascination with the category [f], when the creative change happens spontaneously. They quote an important paper from the realm of cognitive psychology, by Geraint Wiggins (2012), in which the author:

[...] has proposed a model of 'inspirational' creativity - 'the kind of creativity that happens spontaneously, and on many different levels of significance, but without conscious volition' - that concentrates on preconscious cognitive processes that give rise to, or subserve, the apparently spontaneous discoveries, that are often taken to be paradigmatic.<sup>13</sup>

I shall now proceed to present an example representing each category. These were all discovered in the analysis of rehearsal footage of various collaborations within this research project and will help with a more detailed understanding of the classification in question.

### Examples of Categories

A good example of the model [a] Mistake is spotted - Correction is made, is the interaction between Konvalia String Quartet members and Martin Jones from the third rehearsal in the Konvalia/Jones collaboration that took place on the 26th of November 2017.

*Alina (violin I): Oh! I think because...because we had a conversation about this, so bar eighty-eight and eighty-nine you want me to do legato for the...*

*Martin (composer/deputy cello): Yes, yes*

*Alina: Pi ra ra pa pa pa, pi ra ra pa pa pa*

*Martin: Yes, that was an omission on my part*

*Marietta (viola): Could we go again from five flat, I try my best hahaha*

*Alina: Oh yes, so I've got a dot missing as well, two after C by the triplet pam pa ram pam pa ram*

*Martin: Yes*

(Konvalia/Jones collaboration, Rehearsal no.3 transcription, change no.7, category [a])

In the case of this interaction, not one, but two mistakes in the score are discovered.

The second category in the new system is [b] Simplification is proposed - Accepted/Declined. As an example of this, I will cite the Kubiak/Szafranski *Six Spiders* collaboration. This fragment of dialogue comes from the first rehearsal, which took place on the 4th of October 2016.

*Agata (violin/voice): mmmmm...I guess I was wondering about entries, when I'm playing that figure, 'cause obviously I'm syncing things up and that will be the biggest challenge for me with singing and playing, so moments of entries and note changes and things...I was wondering how accurate where that falls...*

*Bartek (composer): On that one it was...it was pretty instinctive as I was composing so happy to move it onto the beginning of the bow*

*Agata: Oh Ok!*

*Bartek: So it'll fall onto the second beat*

*Agata: So it's not that it falls somewhere in-between these? B: No, I don't think so, it was how it instinctively...*

(Kubiak/Szafranski collaboration, Rehearsal no.1 transcription, change no2, category [b])

Modulus/Lummi collaboration provides an excellent example of category [c] Choice is given - Choice is made. In this case the initiation of the ‘creative change’ is attributed to the first violinist - Jonathan Truscott.

*Jonathan (violin I): How...because they...because we’ve got the accelerando as well, did you want the trill on one sustained note? and the trill changing because we were changing with the bows, so it could be just written...it could be thought of as [demonstrates] or it could be [demonstrates]*

*Veera (composer): With bow*

*Jonathan: So we actually bowing...moving the speed of the bow as well?*

*Veera: Yeah*

(Modulus/Lummi collaboration, Rehearsal transcription, change no17, category [c])

The following category [d] Intention is clarified - Change is suggested - Change is made is a very commonly present one. Owing to the common and hybrid nature of this category we will allow for two examples.

The first example is attributed jointly to both collaborators and comes from the second rehearsal of Kubiak/Szafranski’s *Six Spiders*.

*Bartek (composer): Yeah... ‘cause what I had before was this single note that was kind of a...[demonstrates] this sort of pizz, but it didn’t work, it’s too ?? too much...but this technique was something that I picked up from people talking about an orchestral...[Agata demonstrates] ...Actually that’s very good...yeah... that was...*

*Agata (violin/voice): Three string it would be...*

*Bartek: No, that was on a single note, on the top note of the chord*

*[Agata demonstrates]*

*Bartek: But then whether you can do it when you [points at position] when you’re here...maybe it’s trickier, isn’t it?*

*Agata: But you know what...why not, why not to do it there*

*Bartek: Yeah?*

*Agata: If it’s just the one note I can pluck...I can catch one here*

*Bartek: Yeah, it’s just the top note of the chord...exactly when you see the dynamics*

*[Agata demonstrates]*

*Bartek: Yes...This, I want, it’s a very good effect...*

(Kubiak/Szafranski collaboration, Rehearsal no.2 transcription, change no.7, category [d])

This example showcases the entire process of explaining the intention, offering a suggestion, reinforced by demonstration, and finally accepting the change suggested.

Depending on the nature of the music in question, another common version of the category [d] was not connected with the immediate ‘creative change’ suggestion. In the case of the example below, the composer explaining their intention simply gave freedom for the performer’s interpretation of tonal material in the piece in question:

*Thomas (composer): In terms of like getting the quarter tones out, to me, it doesn’t sound...there is a few moments when it sounds quarter tonal, and that’s fine, like...*

*Agata (violin): mhm*

*Thomas: How do you feel about that?*

*Agata: Yeah...I’ve been trying to practise it accurately, but obviously it’s never gonna be hundred percent*

*Thomas: No, and I don’t want it to be*



*Agata: It's really tricky...*

*Thomas: Really, I don't care about the difference between an f and f sharp, like quarter tonal jumps. That's the only one really, if there is a way you could make that*

*Agata: And that's really like, you could almost do that with just a bend*

*Thomas: Yeah,*

*Agata: But I want it to come out, that's why I'm using different fingers. Obviously it would be a bit [demonstrates]*

*Thomas: But it's like [demonstrates] Tone, higher tone. It doesn't have to be...because you're gonna play solo, so I don't mind about the intonation. Rather than twelve positions, you can be in twenty four*

(Kubiak/Bush collaboration, Rehearsal transcription, change no.7, category [d])

The next category [e] Experiment is proposed - Experiment is conducted - Accepted/Declined was more present in initial rehearsals of especially those pieces of music that allowed for, and sometimes required, the score to evolve with players' creative input. This 'creative change' suggestion could arise out of the composer's initiative as well as that of the performer. The examples below illustrate both cases.

Performer's initiative:

*Agata (violin/voice): Can I do some stomping?*

*Nikki (composer): You can do whatever you like, it's just you say, the monster is finally unleashed and then you get those chords when it's just like 'Ok, it's gonna be alright' [demonstrates] yeah...so...you can literally hold your violin in the air if you want?*

(Kubiak/Franklin collaboration, Rehearsal transcription, change no.15, category [e])

Composer's initiative:

*Nick (composer): Can you do a little bit more...make more of the glissando? With more separate bows?*

*[demonstrates]*

*Agata (violin): Oh, ok!*

(Kubiak/Williams collaboration, Rehearsal no.4 transcription, change no.11, category [e])

'Creative change' category [f] Change happens spontaneously - Change is noticed - Adopted/Ignored is the most fascinating one of all. As an example we can use the following interaction from Kubiak/Szafranski's first rehearsal. This case shows that spontaneous 'creative change', when spotted, can become a crucial contribution to the final shape of the piece.

*Bartek (composer): I could either notate that left hand pizz. in or...*

*Agata (violin/voice): hahaha, you've noticed my sneaky note checking*

*Bartek: No! But that...it's good! It's just I just didn't think of the fact that it's...*

*Agata: That I can do that?*

*Bartek: It's just there! so we can put that in or we can just say do it...and first of all no-one will notice anyway apart from us and the second thing is it what is the harmony is...it is an a against the g it's just that the voice comes at a certain point but if happens before as a left hand pizz. in the violin, it's fine, it fits so we can do it. I don't know if...why not just notate it, why not? Let's be honest about it!*

*Agata: haha*

*Bartek: Let's be open about... I just didn't think about it, of course it's an open string*

*Agata: I'm gonna try to remember when it goes, but...*

*Bartek: Well...*

*Agata: Or we could put it like in brackets or something as an option...optional*

*Bartek: We could make a motif out of it, because of course your left hand is bored here now just on the g*

*Agata: Yeah*

*Bartek: So that could be a...*

*Agata: I could do something simultaneously? As I'm doing the ta ta ta ta ta ta ta ta*

*Bartek: Yes, that is the one thing that I didn't want to...That was a topic I didn't necessary want to start until we know...in terms of what might happen simultaneously in the voice, unless I only put it when there is no voice parts? But that would of course make the part that much more elaborate and it would make much more impression when someone looks at it...'Oh, there is a left hand pizzicato'*

*Agata: haha...You know I think as long as it would go somewhere in a place when it's on the beat*

*Bartek: Rhythmically...*

*Agata: ...it could be even happening simultaneously with the voice and the*

*violin...because I'm counting in my head anyway...so maybe something like that?*

*[demonstrates] It's not gonna disturb me cause I'm counting that way anyway and I can just hold my A on top of it, it's not gonna be a problem, so like [demonstrates]*

*Bartek: You've just composed it for me...That's very good especially when you go down to G#*

(Kubiak/Szafranski collaboration, Rehearsal no.1 transcription, change no.7, category [f])

Finally the last category [g] Editorial changes, often with no need of consultation, is the most common when looking at collaborations that strongly reference the language and notation of the Classical, Romantic and early-20th-century music, such as that of Martin Jones in the Konvalia/Jones collaboration. These changes often have to do with bowing, small articulation adjustment, phrasing etc. and mostly happen in rehearsals with no composer present.

*Marietta (viola): Andi in 5/4 the last crotchet you want to do down bow?*

*Andrea (cello): Oh generally?*

*Marietta: Yes... 'cause first you did up bow and I tried as well and it was better*

*Andrea: I didn't notice. haha...I don't know what I've done...*

*Marietta: And we should start up bow...at the beginning...*

*Agata (violin II): Yeah*

(Konvalia/Jones collaboration, Rehearsal no.1 transcription, change no.4, category [g])

These categories (a - mistake is spotted, b - simplification is proposed, c - choice is given, d - intention is clarified, e - experiment is proposed, f - change happens spontaneously, g - editorial change) provide a framework for detailed analysis of creative interactions between performers and composers. The table below shows a breakdown of all creative changes found in the analysis process.

Category type/Project	'a'	'b'	'c'	'd'	'e'	'f'	'g'
'Six Spiders - Kubiak/Szafranski'	3	14	6	5	5	1	3
'Eight - Konvalia/Szafranski'	6	4	5	6	4	5	0
'Modulus/Lumi'	3	1	10	8	14	2	0
'Konvalia/Jones'	2	1	3	10	2	2	6
'Kubiak/Bush'	0	0	7	6	0	1	0
'Kubiak/Franklin'	0	2	8	4	4	1	0
'Kubiak/Williams'	3	1	11	9	8	0	0
'Kubiak/SZT'	0	0	5	4	2	0	0
'Kubiak/Paton'	0	0	3	2	0	0	0

By looking at the table above, it can be clearly seen that certain types of creative change were favoured in different projects. This leads us to another important question posed by this research: What are the different models of performer/composer collaboration and how are they established and agreed on by participants? Further data concerning this, and the findings generated from them, are currently unpublished.

## Bibliography

- Arditti, Irvin, 'These four must be stopped', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), pp. 91-92
- Bayley, Amanda, 'Ethnographic Research into Contemporary String Quartet Rehearsal', in *Ethnomusicology Forum*, Vol.20, No.3, 2011, pp. 385-411
- Bayley, Amanda, 'Cross-cultural collaboration with the Kronos Quartet', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), pp. 93-113
- Bayley, Amanda, Neil Heyde and Peter Sheppard Skærved, 'From Composition to Performance: innovations and interactions in contemporary string quartets', British Academy funded project 2007-9 at the Centre for Creativity, History and Identity in Performance (CCHIP) of the University of Wolverhampton. See: <https://www.wlv.ac.uk/research/institutes-and-centres/cchip---centre-for-creativity-history-and-identity-in-performance/from-composition-to-performance-innovations-and/>
- Bourdieu, Pierre, *Outline of the Theory of Practice*, (Cambridge: CUP, 1977)
- Clark, Eric F., Mark Doffman David Gorton and Stefan Östersjö, 2017. 'Fluid practices, solid roles?: The evolution of Forlorn Hope', in *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), pp. 116-135
- Clark, Herbert H. & Adrian Bengterter, 'Navigating joint projects with dialogue', in *Cognitive Science*, Vol.27 (2003), pp. 195-225
- Collins, Hillary, *Creative Research: The Theory and Practice of Research for the Creative Industries*, (New York: Bloomsbury Academic, 2010)
- Csikszentmihalyi, Mihaly, 'A Systems Perspective on Creativity'. As cited in James C. Kauffman and Robert J. Sternberg, eds, *The Cambridge Handbook of Creativity*, (Cambridge: CUP, 2010) p. 27
- Donin, Nicolas, 'Domesticating gesture: the collaborative creative process of Florence Baschet's StreicherKreis for 'augmented' string quartet (2006-08)', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), pp. 70-87
- Fitch, Fabrice J. and Neil Heyde, 'Recercar': the collaborative process as invention', in *Twentieth-century Music*, 4 (1), 2007, pp. 71-95
- Kaastra, Linda T., 'Performance Inquiry and Cognitive Science: A search for Common Ground' in *College Music Symposium*, Vol. 48, 2008, pp. 131-156
- Kozbelt, Aaron, Ronald A. Beghetto and Mark A. Runco, 'Theories of Creativity' in James C. Kauffman and Robert J. Sternberg, eds, *The Cambridge Handbook of Creativity*, (Cambridge: CUP, 2010), pp. 20-47
- Porcello, Thomas, 2004, 'Speaking of Sound: Language and the Professionalisation of Sound Recording Engineers', in *Social Studies of Science*, Vol. 34, No. 5, 2004, Special Issue on Sound Studies: New Technologies and Music, pp. 733-758
- Zagorski-Thomas, Simon, 2015. 'Developing the Formal Structures of Artistic Practice-As-Research', in *New Vistas* Vol.1, Issue 2, 2015, pp. 28-32

- 
- 1 Simon Zagorski-Thomas, 2015. 'Developing the Formal Structures of Artistic Practice-As-Research', in *New Vistas* Vol.1, Issue 2, 2015, p. 32
  - 2 **NVivo** - computer software for qualitative data analysis, designed for researchers dealing with rich text based and/or multimedia information
  - 3 **SPSS** - software for statistical analysis designed for researchers working with quantitative data
  - 4 Amanda Bailey, Neil Heyde and Peter Sheppard Skærved, 'From Composition to Performance: innovations and interactions in contemporary string quartets', British Academy funded project 2007-9 at the Centre for Creativity, History and Identity in Performance (CCHIP) of the University of Wolverhampton. See: <https://www.wlv.ac.uk/research/institutes-and-centres/cchip---centre-for-creativity-history-and-identity-in-performance/from-composition-to-performance-innovations-and>
  - 5 Mihaly Csikszentmihalyi, 'A Systems Perspective on Creativity'. As cited in James C. Kauffman and Robert J. Sternberg, eds, *The Cambridge Handbook of Creativity*, (Cambridge: CUP, 2010) p.27
  - 6 Pierre Bourdieu, *Outline of the Theory of Practice*, (Cambridge: CUP, 1977)
  - 7 Aaron Kozbelt, Ronald A. Beghetto & Mark A. Runco, 'Theories of Creativity' in James C. Kauffman and Robert J. Sternberg, eds, *The Cambridge Handbook of Creativity*, (Cambridge: CUP, 2010), pp. 20-47. Herbert H. Clark & Adrian Bengert, 'Navigating joint projects with dialogue', in *Cognitive Science*, Vol.27 (2003); Linda T. Kaastra, 'Performance Inquiry and Cognitive Science: A search for Common Ground' in *College Music Symposium*, Vol. 48, 2008; and Thomas Porcello, 2004, 'Speaking of Sound: Language and the Professionalisation of Sound Recording Engineers', in *Social Studies of Science*, Vol. 34, No. 5, 2004, Special Issue on Sound Studies: New Technologies and Music
  - 8 Nicolas Donin, 'Domesticating gesture: the collaborative creative process of Florence Baschet's StreicherKreis for 'augmented' string quartet (2006-08)', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), p.74
  - 9 Amanda Bayley, 'Cross-cultural collaboration with the Kronos Quartet', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), p.109
  - 10 Amanda Bayley, 'Cross-cultural collaboration with the Kronos Quartet', p. 110
  - 11 Irvin Arditti, 'These four must be stopped', in Eric Clarke and Mark Doffman, eds, *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), p. 92
  - 12 F. J. Fitch and Neil Heyde, 'Recercar': the collaborative process as invention', in *Twentieth-century Music*, 4 (1), 2007, p.71
  - 13 Eric Clark, Mark Doffman David Gorton and Stefan Östersjö, 2017. 'Fluid practices, solid roles?: The evolution of Forlorn Hope', in *Distributed Creativity, Collaboration and Improvisation in Contemporary Music*, (Oxford: OUP, 2017), p.117