//Martin Niederauer

Knowledge-based cooperation between art music composers and musicians

This article discusses the artistic practice of composing and centres on cooperative networks in which composers depend on the motivation, participation and knowledge of various professionals involved in the composition process. Taking Howard S. Becker's theory of "art worlds" into account, I will concentrate on the dynamic cooperation between composers and musicians, in order to illustrate the extent to which musicians form an important group of professionals during the composition process through their musical expertise.

My argument is based on five case studies of Austrian art music composers documenting composition processes from the beginning of a given work up until the final rehearsal before the first public performance. The documentation included composition diaries, interviews and participant observation of rehearsals. Further, I draw on fifteen additional interviews with composers on their emotional, technical, organisational, and artistic challenges during their creative work. *(1)

Collective action and cooperative networks - Howard S. Becker's "art worlds"

Theoretical approaches to art offer many ways to investigate an artwork. Looking at a musical composition, for example, one can focus on composers as individuals working alone or on analysing scores in order to understand the inner logic of the "work itself". Since the 1960s, however, theories from philosophy, literature and sociology have constantly expanded perspectives on art by questioning the role of institutions, the practices of recipients or how aesthetic values are constituted, and hence have focused on the social organization of art (cf. Danto 1964; (*6)) Warning 1975; (*11) van Maanen 2009 (*10)). American sociologist Howard S. Becker, for example, challenged the notion of a composition as a "work itself" by asking:

"What constitutes the 'work itself' in the case of a musical composition? Is it the score as prepared by the composer and, perhaps, vouched for by scholars as being the authentic real work as the composer intended it? Or is it the work as created in performance by players or singers? And if the latter, is some particular performance the work itself? Or is every performance to be taken separately as a work in itself?" (Becker 2006: 22) (*2)

Becker argues that art should be seen "as collective action" (Becker 1974) (*1) which includes its production, distribution, advertising, reception and evaluation. Concentrating on the process of making art, he suggests "a genetic approach" (Becker 2006: 25) (*2) which questions the interactions of all participants and looks closely at how they participate. Similar to sociologist Herbert Blumer's concept of "joint action" (Blumer 1986: 16–20), (*4) Becker foregrounds temporal and social dimensions of art to gain "an understanding of the complexity of the cooperative networks through which art happens" (Becker 2008: 1, (*3)) emphasis added; cf. Zembylas 2006: 26 (*13)).







Applying this approach to composition processes opens the possibility to highlight the cooperation between composers and various professionals from different fields who contribute to the composition process, so that the composition can be written (computer scientists producing composition software), edited, printed and distributed (publishers), advertised (promoters) and evaluated (critics, listeners). Concerning economic and institutional questions, composers also rely on purchasers. They raise a budget, create the thematic context in which the composition will be performed and organise the venue. These interdependencies primarily reflect the division and coordination of labour necessary to write and perform the composition. But it is also important not to lose sight of the artwork itself, because "all of the people who participate in making the work have some effect on the final choice of the 'work itself'" (Becker 2006: 24). (*2) The basic parameters set by purchasers, for example, influence the work of the composer and thereby also the composition with regard to time (concert date/work period, deadlines/time pressure, length of the composition in relation to budget), theme of the composition (which should correspond to the topic of the event), and instrumentation, as it is not uncommon for the performing ensemble or orchestra to be pre-booked. But even as purchasers influence the composition process and the artwork, they are not directly involved in the creative work - unlike the musicians. Because, when talking about the process of composing, many of our interviewees specifically refer to cooperation with musicians. So in this article I will explore three different aspects of this cooperation: the time (in the process of creating or in rehearsals), the quality (whether musicians and composers share or do not share the same object of work and whether or not they are contractually bound to each other) and the aspect of knowledge (expanding, transferring and exchanging explicit and tacit knowledge) in such cooperation.

Cooperation in the process of creating

At the beginning of the creation process, some composers enter a creative cooperation with musicians. In order to discover the ensemble's sound options in relation to their instrumentation or to get a feel for their way of playing, they contact the musicians who will be performing the composition. Preferences, peculiarities or unique skills of individual musicians can also serve as influences. As a composer explained his cooperation with an ensemble he knows: "I probably wouldn't have written a relatively complex electric guitar part like that for an ensemble that I didn't know at all, yes. But since I know the musician and his readiness to experiment, and also his desire so to say to do something he otherwise normally doesn't do like that, this rather encourages me not to reject an idea that suggests itself."

Knowing the ensemble in advance can be an advantage, because it makes it possible to anticipate the way individual musicians will interpret the composition or play certain parts. Simultaneously, the quote above also illustrates, that working with an unknown ensemble requires a different approach to the writing process. Compositions can be very complex and the musical imagination of the composer very particular. Thus the following questions emerge: can the musician play my composition according to my imagination? Or can the musician add something valuable to the composition through her/his own interpretation or individual expertise? Hence this kind of creative cooperation is rooted in artistic exchange of musical ideas and possibilities of creating sounds and happens during the development of the composition. It also reveals a formal dimension, as composers and musicians share the same object of work and are contractually bound to each other.









As we can see, even if composers have studied composing, know the pitch range, the different possibilities to create sounds or the history of an instrument, their explicit knowledge is not always sufficient to realise their musical intentions in the composition. As another interviewee explained, he contacted a double bass player who would perform his composition to talk about possibilities and to get ideas, even though he played bass guitar himself. So the composer tried some things with the bass player, watched him play and asked him "[w]hat one can do, what one cannot do, and what he can do. And there I made notes and used some of them, others not. [. . .] The fingering is quite different on an electric bass guitar and a double bass. And because of that I knew that things I imagined on the bass are not so easy to do with the double bass." This is an example of a transfer of knowledge from the musician to the composer, which the latter cannot learn from a book or any other medium of knowledge. Through years of training and rehearsing the musician has obtained a physical knowledge of his instrument on which the composer consciously relies in order to identify or solve potential problems through the expertise of the instrumentalist. Hence the instrumentalist serves as a creative partner who, to quote Michael Polanyi, brings in his "tacit knowing".

Tacit knowing should not be confused with explicit knowledge (for example a composition theory), which is abstract (formalised), language-based (linguistic or sign language), saved in artefacts (written down in books), always available (regardless of time and place) and as matter of principle can be learned by everyone (as it is abstract, language-based and always cognitively available). On the contrary - as we can see from the example of the bass player - tacit knowing illustrates that an individual's competency and agency is exclusively based on their practical experience. As it is physically embodied, tacit knowing is tied to the individual who has gone through a practical learning process. Tacit knowing therefore cannot be separated from the practitioner. Generally it is not possible to verbalise it directly - sometimes it can be expressed metaphorically. Rather it comes through in actions and needs to be demonstrated in order to facilitate communication about it, so it is described as tacit. Tacit knowing appears to be relevant in all areas of human activity – even the most intellectual ones. To quote Michael Polanyi again: all human activities include a "tacit dimension" (Polanyi

1966; cf. 1964: 144). (*7)

Returning to the example of the composer and the bass player, we can see that the creative process is affected by the cooperation with musicians who provide the composer with their individual experience and tacit knowing, which cannot be substituted by the explicit knowledge obtained through an academic training in composing. Through such knowledge-transfers composers are constantly expanding their knowledge of instruments.

However, communicating with musicians to get inspiration or to develop the composition does not necessarily require a formal, contractual obligation. As one composer puts it, if he was not sure about an idea he would just double-check with instrumentalists he knew. "But they don't primarily have to be the musicians who will be performing it." Hence composers and musicians do not necessarily have to share the same object of work. Sometimes composers also search for an informal cooperation with musicians who may be friends or close colleagues with whom they have already worked for years.

Musical conventions, practices of representation and cooperation in rehearsals

The quality of the cooperation also changes after the composition is finished and







musicians and composers meet in rehearsals. Here the cooperation does not necessarily have to be efficient, because the cultural sector in which contemporary art music is played today gives rise to possible frictions. In German-speaking regions, 18th- and 19th-century tonal music dominates the concert world. In this context contemporary art music is mainly presented in smaller, low-budget venues, and fails to attract broad public interest. In academic instrumental education, too, contemporary art music or new forms of music developed over the last 50 years are more or less neglected. Because the musicians are situated within this context, the cooperation between composers and musicians is not always easy. One composer, for example, pointed out: "Many orchestral musicians just don't want to abandon what they are used to. I think these are really experts, who play the instrument perfectly but just in a specially prescribed framework." The slight deprecation in these words invokes the assumption of a hierarchical relationship between composer and musicians where the creating composer is placed above the reproducing musicians. In reality, however, composers stress the cooperative character of their relations with performing musicians in rehearsals.

As our study is revealing, composers consciously rely on the musicians, for the simple fact that they are the ones who will be playing the composition and are one main key to a successful performance. Because of this, composers try to attend rehearsals and also to motivate the musicians, knowing that their composition can only be realised through joint efforts: "I just know that when you are jointly motivated for an objective it is just super." Or as another composer explains: "When someone now says to me this or that sounds absolutely crap and it won't work like that, I am the last person to say no, it's got to be like that. But then I say, yes, OK, then we'll change it where we can."

This quote also shows that the interaction between composers and musicians in rehearsals does not just depend on their attitude to one another or on pursuing a common goal. The interpersonal relationships are also mediated by an artefact: the score that needs to be conveyed. Despite the differences in musical education between composers and musicians they do, of course, also share a wide pool of knowledge: of reading and writing notational signs, of instruments, arrangements and musical interplay – i.e., they have knowledge in common that facilitates professional interaction.

Regarding the knowledge of different participants in a professional interaction points out to another prominent notion in Becker's theory of "art worlds": conventions. According to Theodore Schatzki, "Becker defines conventions as ways of doing things (1) that are known to everyone, (2) that everyone knows are known to everyone, and (3) that people uphold because upholding them is the easiest way to coordinate activities" (Schatzki 2014: 21). (*9) *(2) Because conventions are standardised agreements - like symbols or practices - they reduce complexity and thereby simplify interactions, and guarantee that people can refer to something without the need to negotiate its meaning over and over again. Imagine a musical score with C-D-E: every professional musician will know how to read the symbols on the staves and their position on their instrument. A composer can therefore write C-D-E, anticipate possible reactions and expect musicians to read these notes without asking. One can say: a composer communicates his or her musical intentions through the score or, to paraphrase Becker, through conventions intrinsic to his or her particular art world.

The importance of conventions as well as the anticipation of possible reactions becomes especially clear when the notational system cannot express particular intentions of the composer. Because even if conventions are a kind of aid, this does









not guarantee that they offer easy or established solutions to problems in any given situation. A score, although it is based on conventional symbols, can express many things, but it also constantly comes up against its limitations. In many cases, regardless whether it is precise or not, the notation gives rise to questions concerning details about timbre, tone length or play. In such cases, composers can refer to three different practices of representation to answer questions or to avoid misunderstandings, as the following examples illustrate.

Some composers use verbal explanations via analogies such as metaphors. As one composer explains, he tries to avoid extensive notation in favour of a simple explanation to his piano player:

"I would tell him: listen, that has to sound like perfumed bar music. As if someone smiles and then plays 'I Did It My Way'. This has its own sound. I can suck that out of my fingernails, as we say in Austria, to write that and research how the voicings go. Or I tell him: you know - a bar piano in a five-star hotel, but not the highest class. Imagine you have pomade in your hair and a white dinner jacket and you smile across and know that you're not really allowed to talk to anyone, because you're an employee here."

The composer and the musician have a shared cultural knowledge that is rooted in a musical practice in which both of them participate. The metaphor of "a bar piano in a five-star hotel" serves as a common point of reference to obtain the desired result easily. Known associations and pictures are self-explanatory and function as a communication aid.

Being confronted with these limits of symbolic representation or referring to verbal or mimetic explications cannot be interpreted as a lack of skill - either on the part of the composer or on the part of the musicians. Even musical experts with a profound knowledge of notation systems or ways of playing and with a substantial experience through years of making and creating music can come up against their limits in understanding scores. This can be illustrated through an interview in which a composer (who also teaches composition) explains one of his scores to a music analyst (who also teaches music analysis at university level). Despite their wideranging expertise, both of them have difficulties communicating about the score. When the music analyst asks the composer what musicians should know in order to understand the score and to play it adequately, he gives a verbal interpretation via metaphors, but also refers to sound imitations and physical gestures for explanation: "So, that way an area of rustling noise builds up, which moves around the room, yes. And then at that point the tremolo is slowly turned up from zero to a half, that is in eight seconds. This is a very precise instruction, yes. That is, it happens that this noise surface begins to tremble [makes a trembling noise and quivers with his hands]."

Analogies, sound imitations and physical gestures function as alternative practices of representation that fill the communication gap in the symbolic representation of the score. These different representation practices can complement one another, as one practice can shift the boundaries of another. And as we can see, music practitioners are aware of the problem that notations cannot fully explain the intentions or vision of the composer. Moreover, they know that the score basically lacks absolute exactness. But regardless of a standardised notation system one can also raise the question of whether absolute exactness is at all possible. Because, as Ludwig Wittgenstein argues, exactness cannot be defined by objective criteria and has no universal validity: "No single ideal of exactness has been laid down"

(Wittgenstein 1953/1968: §88). (*12) As the given examples illustrate, the









meaning of exactness is negotiated among the participants (e.g. composer and musicians), in a specific situation (e.g. rehearsals), with different practices of representation (e.g. analogies, sound imitations, physical gestures) and in light of a specific practical implementation (e.g. preparing a performance). Consequently the meaning of exactness is an (a) temporally limited, (b) purposive, and (c) intersubjective affair, and therefore (d) refers to the knowledge and experiences of the people involved.

The given practices of representation require a central communicative skill. Composers must assess the common frame of reference they share with musicians, so that analogies, imitations and gestures work. Composers have to know the common pool of knowledge, which consists of shared symbolic or material tools, experiences and ways of thinking (cf. Zembylas/Dürr 2009: 14). (*14) It is about knowing what the others know and what knowledge you share with them.

In order to understand and to play the score, however, musicians do not just depend on the composer as the author of the work. They not only support the composition process by knowledge exchange, give creative input through their musical expertise and thereby function as an inspiration, but can also help one another in rehearsals, quickly identify problems and find uncomplicated solutions. In an observed rehearsal, for example, when the violin, cello and double bass had problems with a complicated rhythm in a passage, the percussionist - although he was not part of that passage - came up with some suggestions. He gave advice on how to count in order to get an accurate accentuation and to coordinate the interplay between the instrumentalists and then played the passage with them a couple of times and counted out loud, so that everybody could hear. He also turned on a metronome. Neither the composer nor the conductor participated in this situation. The four musicians got together spontaneously in an informal interaction between themselves in order to coordinate their interplay based on their knowledge. It is what Fritz Böhle calls an "experience-based subjectifying cooperation" (Böhle 2010: 164; my translation). [8] (*5) In this, occasion, time and participants in the cooperation arise in reference to the characteristics of the problem. The interaction is based on shared experience, mutual trust in the expertise of each participant and is supported by tools. Furthermore, such peer-to-peer cooperation among musicians can also provide a substantial relief for composers. Although composers know a lot about music theory, the pitch range of instruments and their common type of use, they also depend on the explicit and tacit knowledge of musicians and therefore can also hand over responsibility to them. As one composer responded to the question of whether it might be possible that musicians could not play something she had written: "Yes, that has happened sometimes, but it is no big disaster, because the musicians find a solution for themselves."

Conclusion: the social, epistemic and motivational dimension of knowledge-based cooperation between composers and musicians

Composers rely on shared knowledge among different participants during the composition process and which gains relevance through various forms of cooperation concerning institutional, financial or, as discussed in this article, musical questions. Concerning the latter, cooperation between composers and musicians is almost unavoidable in the light of artistic and creative challenges. Such cooperation can be abstracted into a social as well as an epistemic dimension. While the social dimension concerns the collective effort of providing impulses and generating ideas in joint actions, the epistemic dimension is based on the transfer of knowledge in order to solve problems and expand the composers' knowledge in a reciprocal way. Consequently one can also find a reciprocal motivational dimension. In order to







produce a good performance, composers have to motivate musicians, convey their understanding of the composition and stimulate engagement. Simultaneously, composers have to be open to the expertise of the musicians, as their individual skills, peculiarities and interests can also be motivating for composers.

Taking these three dimensions into account clarifies the fact that the cooperation between composers and musicians is one of interdependencies in which all participants rely on and simultaneously benefit from one another. These interdependencies are not only important for the investigation of the interactions during a composition process. It also shows that the form of interaction affects the shape and the content of the composition itself. The composition process is informed by taking into consideration the performing musicians and the context in which the composition will be played. In this way, composing can be interpreted as a collective cooperation in which the participants are involved to varying degrees relative to their knowledge, experience and resources.

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//Fussnoten

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- *2 In a following passage Schatzki criticises Becker for his concept of convention. Highlighting his own concept of art, understood as wide-ranging "bundles" linked to each other within "constellations", Schatzki argues that interactions among the participants in an art world would not be as standardised as Becker suggested.





