Mind the Gap!
Musicians Challenging Limits of Birdsong Knowledge

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ABSTRACT

When contemporary musicians work with animal sounds, they are often not only interested in the sound qualities but moreover in the animals’ musical capacities. In the works by Wolfgang Müller and David Rothenberg discussed in this text, distinct abilities of singing birds are demonstrated. Beyond the established knowledge about birdsong, the musicians propose a hitherto unthinkable participation of birds in cultural activities. These propositions become possible by a reflection of current scientific knowledge and its limitations. The artists explore a room of speculation set between references to scientific facts on the one hand and gaps in this knowledge on the other hand. This setup is constructed by individual arrangements that include not only genuinely musical parts, like sound or scores, but also paratextual elements like a booklet text or chapters of books which they published separately. In a first part these settings are described, to show how by interdependence of the various parts hypotheses emerge on specific musical capacities of the respective birds. The second part shows how these hypotheses are legitimated at paratextual levels by references to scientific and common knowledge. Thus a more general mechanism is elaborated concerning the fruitful utilisation of areas of uncertainty by artists in opposition to the interests of science.

Keywords: Wolfgang Müller, David Rothenberg, Kurt Schwitters, birdsong, starlings, Albert’s lyrebird, interspecies music, musical capacities, art and science, scientific knowledge.

1. FROM COMPOSITION TO HYPOTHESIS

1.1. Wolfgang Müller

Hausmusik. Stare aus Hjertøya singen Kurt Schwitters was published by Wolfgang Müller as a catalogue for an exhibition in Berlin in Septem-
ber of 2000 (Müller 2000). It consists of two parts, a CD with birdsong recordings (which simply sound like any twitter to the untrained ear) and secondly, a DIN A5 booklet containing photos of details of a tiny derelict wooden hut and a letter describing the origin of the recording. Dated June 11\textsuperscript{th}, 1997, Müller reports from a visit on the Norwegian island of Hjertøya, where Kurt Schwitters had spent his summer holidays from 1932 onwards. The remainders of the hut Schwitters and his wife lived in were still there, though in poor condition.

In what follows, Müller refers to Kurt Schwitters’ extensive sound poem, the “ursonate”, that he worked on over a period of 10 years and published in 1932 (Schwitters 1922-32). It consists of nonsense syllables arranged according to the basic musical principles of repetition and variation and is composed in a large form similar to a classical sonata. To continue with the letter, Müller reports that he had spotted a starling on the hut’s rain gutter and recognized in its song parts of Schwitters’ “ursonate”:

Da hörte ich auf einmal einen Star sonderbare Laute von sich geben. […] Ir
gendwie kam mir das bekannt vor, was er da von sich gab. Ja, mit einem Mal
erkannte ich, dass der Vogel Passagen der Ursonate rezitierte, die ein un-
beannter und entfernter Vorfahr vor vielen Jahren Schwitters abgelauscht
hatte und die über Generationen weiter vermittelt wurden. Stare sind ja
bekanntlich Meister der Imitation […]. Sie lernen den Gesang von ihren
Eltern (oder Teile des Gesangs). Hier also waren Passagen der originalen
Ursonate unbemerkt vom Kunstbetrieb überliefert worden. (Müller 2000)

By framing the birdsong recording both with this report and with the
photos of the hut, Müller states hypothetically that the starlings were sing-
ing the “ursonate”. This hypothesis implies in particular that starlings can
imitate human sounds, incorporate these phrases into their song repertoire
and propagate these over generations without major changes.

1.2. David Rothenberg

David Rothenberg’s œuvre both as an author and musician revolves to a
large extend around animals and animal sounds. He has published several

\footnote{1 For a detailed analysis see Heiter 2012.}

\footnote{2 “All of a sudden I heard a starling uttering strange sounds. […] Somehow these
sounds had a familiar ring. Suddenly I realized that the bird was reciting parts of the
ursonate which some unknown ancestor had picked up from Schwitters long ago and
transmitted over generations. Starlings are known to be masters of imitation […] . They
learn the song from their parents (or parts of the song). Here, parts of the original urson-
ate had been transmitted without notice by the world of art”.

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CDs and books, and he regularly performs in concerts and gives talks and interviews in public media and at academic conferences.

I will focus here on one special encounter he had with a particular Australian bird of the species Albert’s lyrebird, named George. The recording of this encounter is published on the CD Why Birds Sing as track 6, “Sheer Frustration, Really” (Rothenberg 2005a).

The track starts with a kind of “rainforest” soundscape. An insect humming is to be heard and several bird vocalisations of differing qualities are recognisable though it is not clear whether this is one bird or several. After eleven seconds, the clarinet joins in with a motif consisting of a downwards octave leap in a syncopated rhythm which is then repeated and extended with the notes of a diminished triad; sometimes trills are interspersed, and sometimes passing and neighboring notes are added. The clarinet motifs follow in a loose succession with some longer pauses indicating a phase of listening to the bird sounds by the clarinet player. Sometimes the clarinet takes up notes from the bird, though the bird sounds are often more noise-like than melody-like, whereas the clarinet is clearly melodic. Often the clarinet motifs are surrounded by bird sounds. Thus, a compound soundscape emerges, but explicit correlations between the bird sounds and the human part are hardly discernible.

The booklet designates as performers: “George, a wild Albert’s lyrebird”, “DR, clarinet” and “a few green catbirds in the background (not to be confused with George imitating the catbird, which you will also hear)”, “recorded live in the Lamington National Park, Australia, June 2004”. Two Australian lyrebird species are described in the short booklet text, and the encounter is commented on as follows:

Michael Pestl and I went to Australia to jam with these impressive birds in the height of lyrebird mating season. The experts thought the birds would just fly away, but they were wrong. You see, once a male lyrebird starts to sing for a mate, he just cannot stop. Confronted with clarinet and flute, he is bound to join in. (Rothenberg 2005a)

Through the juxtaposition of a combined human and bird recording and the booklet description, Rothenberg implies that George, the Albert’s lyrebird, participates in a musical performance and changes his song in response to the clarinet. By interpreting the recording as a product of a jam session (“jam with these birds”), Rothenberg ascribes a genuinely human activity to George, and thus he implicitly ascribes to him the musical capacities that are necessary to exert this activity: “Jamming” would include an active participation of the bird, listening to the other’s music, reacting musically and being capable of consciously controlling his sound production under
aesthetic considerations. Rothenberg does not expound on these capacities, and it is left to the recipient to ponder how far one could go in terms of inferring “consciousness” or “aesthetic considerations”.

2. LEGITIMATIONS

Both Müller and Rothenberg try to support their hypotheses through commentaries on several levels both in the works described and in later texts that refer to scientific and common knowledge concerning birdsong. Thus, a discourse on the interpretation of their own works is initiated.

2.1. Wolfgang Müller

The first layer of Müller’s commentaries is contained in the catalogue itself. In the letter addressed to “Úlfur”, a pseudonym created by Müller in 1995 (Müller 2013), he justifies his proposition that “starlings are singing parts of the ‘ursonate’” by references to general knowledge about starlings: “Starlings are known to be masters of imitation […]. They learn the song from their parents”.

Furthermore, Müller reports in a later source that he had invited an ornithologist, Prof. Dr. Jörg Böhner from the Freie Universität Berlin, to talk at the exhibition opening about the scientific possibility of his hypothesis:

“On the occasion of the exhibition opening […] he [Böhner] gave a well-noted speech, confirming as a scientist that it may really be possible that Hjertøya’s starlings had incorporated parts of Schwitters’ poem into their song repertoire”.

Müller then cites from ongoing communication with Jörg Böhner, who is quoted both to describe areas of uncertainty and to confirm the possibility of long-term propagation of song elements in a population of starlings:

“Es gebe seines [Böhners] Wissens leider keine langfristigen Untersuchungen darüber, wie sich einzelne Gesangsteile über eine lange Folge von Genera-

Schwitters himself wrote that a notation of the “ursonate” could only be fragmentary. He preferred listening to the sonata rather than reading it, and that is why he willingly performed the sonata in public (Lach [1973] 1998, 313).

Finally, the photos of Schwitters’ hut on Hjertøya, which constitute large parts of the catalogue, can be read as a commentary in their own right. In opposing the lore of the “ursonate” – depicted on the CD – with that of Schwitters’ hut on Hjertøya – illustrated by the photos – Müller sets two systems of transmission side by side: on the one hand there is the oral, continuously self-renewing transmission within the birds’ population – regardless of the subject; and on the other hand there is the human transmission of acknowledged works of art, and it has failed concerning the hut, which has not yet been recognised as a Merzbau and was left to decay instead of a thorough preservation 7. Furthermore, the “ursonate”, which

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5 “As far as he [Böhner] knew, there were no long-term investigations concerning the propagation of song elements over many generations. [...] In the end I felt reassured when he closed with the words: ‘It may certainly be possible that certain song elements may be propagated over generations with only minor changes and be recognizable to us’.”

6 “Reports concerning Schwitters’ enthusiasm for outdoor recitations reassured me. Such a situation is described for instance by his close friend, Dadaist Hans Arp: ‘In the crown of an old pine at the shore of Wyk on Föhr I heard Schwitters practice his Lautsonate every morning. He fizzled, whizzed, chirped, piped, cooed and spelled’”. The original Arp-citation could not be verified.

7 Schwitters transformed his flat in Hanover as a whole into a work of art where he still lived in and which has come to be known as “Merzbau”. He later referred to it as his “Lebenswerk” (“life work”). After his emigration he built a second and third one in Norway and England, respectively (Webster 2007). Since the publication of Müller’s catalogue the hut on Hjertøya has attracted some attention. It has been referred to
has been transmitted continuously by the birds, was long forgotten, and a recording by Kurt Schwitters himself was rediscovered only in the 1990s (summarised in Heiter 2012, 149).

By this juxtaposition, Müller raises the question which system of transmission should be preferred both in terms of accuracy and in terms of reliability. Again Müller puts an expert into place, art historian Thomas Groetz: In his essay, which is included in the catalogue, he highlights the more reliable form of tradition ensured by the starlings (Müller 2000).

2.2. David Rothenberg

In the booklet of Rothenberg’s CD, Why Birds Sing, there is a hint to his corresponding book: “Read the companion book Why Birds Sing […] to learn what all those song titles mean” (Rothenberg 2005a).

The story of the encounter with George, the Albert’s lyrebird, is told in the final chapter of this book, entitled “Becoming a bird” (Rothenberg 2005b, 209-29). Rothenberg reports on his visit to Australia with flutist Michael Pestl, where they met ornithologist Sydney Curtis, who would guide them to George,

The only member of his wary, elusive species who can stomach the sight and sound of human beings. […] George […] has been studied in the wild by two men […] for twenty-five years and has learned to tolerate all sorts of strange recording and filming equipment. (Rothenberg 2005b, 209)

Those two men, as the reader learns elsewhere (Rothenberg 2005b, 211, 226), are Sydney Curtis and photographer Glen Threlfo, who also accompanies the group.

The complex song of the Albert’s lyrebird is described in an earlier chapter as being composed of “imitations of many of the other birds that share his home”. It takes “an Albert’s Lyrebird at least six years to successfully learn this song” (Rothenberg 2005b, 31-2).

In Lamington National Park in Queensland, the group finally reached George’s territory and George appeared: “Then, just as Syd predicted, after about fifteen minutes George descends from the trees. He finds one of his branch platforms to begin his Albert cycle of mimicked songs” (Rothenberg 2005b, 212). The song is described in onomatopoetic syllables: “First,

a *sneeep* of the crimson rosella parrot, then the *plink chee chee chee chee* of the tiny yellow robin […]” (Rothenberg 2005b, 212). After listening for a while, “It is time for the humans to come in” (Rothenberg 2005b, 220).

In the following narration, Rothenberg tries to convince the reader of the authenticity of his musical interaction in three steps.

First, he describes the exciting moment when he thinks he experiences a real musical encounter blended with a reflection upon the (supposed) feelings of the players:

> Boo. Toot. Pe-bum, Brealummph! Our music does not proceed in such strange words but with melodies that are birdlike only by association. George at first is puzzled with the strange sounds. He pauses his concert for just a half second, but not much longer. “What are these strange foreign sounds getting in my way?” he might be thinking. […] I concentrate on the power of a single tone, high B. Ping. Ping. Some tiny forest bird above matches it. George cannot stop, but he can change his song – in the smallest, subtle ways in response to what he hears. This is far more than we expected. […] I cannot resist playing along. My single notes soon extrapolate to phrases, jumps up and down. Imitations of imitations, mimicry of the mimic. I know, as usual, I’m playing too much to earn a place in this forest. I try to learn from the proportions of George’s music – to quiet down, to hone my style. (Rothenberg 2005b, 220-1)

Secondly, he is accompanied by “experts”, whose expertise is explicitly founded, to confirm the bird’s deviant behavior: In Australia it is Sydney Curtis, “the greatest living expert on lyrebird song” (Rothenberg 2005b, 198), who had already guided Olivier Messiaen to listen to a lyrebird (Rothenberg 2005b, 198-200; see also Curtis and Taylor 2010). Curtis knows this special bird very well and Rothenberg cites him:

> “I do believe you’re getting to him”, muses Syd, listening closely to our proceedings, […] “I’ve been recording George for twenty years and his song is different today. […] He begins his cycle over and over, but seems unable to finish it. Never done that before. Either he’s changing the elements of his routine or you two strange foreign birds are doing something to his demeanor”. (Rothenberg 2005b, 225-6)  

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8 In an e-mail message to Hollis Taylor on September 22, 2009, kindly submitted to the author by Hollis Taylor on July 20, 2012, Sydney Curtis recalled his view on the encounter: “I find no evidence of George producing any notes that are not part of his normal repertoire. On balance I incline to the view that the intrusion of the totally new clarinet sounds may have confused George enough to sometimes upset his stereotyped mimicry order, but that there is no evidence of his deliberately responding to them” (Curtis 2009).
Finally, in a seemingly more scientific approach, he analyses his “bird-human duets” supported by sonograms to depict the assumed interaction. The climax of the narration, “I am trying to play in and around George, the one Albert’s lyrebird willing to face human music on his own ground” is illustrated by a sonogram analysis of George and Rothenberg playing together, entitled “Interspecies music at last” (Rothenberg 2005b, 225).

The sonogram shows the last part of an episode of approximately 20 seconds, corresponding to the section at 03.44-04.08 of track 6 of the CD. The clarinet starts with the already familiar figure of a filled minor third and extensions of this motif and then passes into a descending chromatic scale – which Rothenberg describes in the book as “[m]y own chromatic slightly speeding-up version of his descending territorial song ending in an octave leap” (Rothenberg 2005b, 225). Immediately following is the section depicted in the sonogram, where the bird starts with two notes which the clarinet takes over with close pitch approximation. The clarinet repeats the notes several times and is surrounded by rapidly gliding sounds of the bird.

However, the sonogram, which only shows the bird and the clarinet singing and playing simultaneously without any distinct structural relation, is not explained in detail. Moreover, the analytical parts (axis descriptions, context of the song, etc.) are omitted, leaving only the picturesque, aesthetic part. Thus, the figure points towards the possibility of scientific objectivity in (bird)song analysis without executing it itself. Rothenberg himself emphasises the aesthetic value of sonograms elsewhere in the book: “There are many sonograms in the pages that follow, not because I expect you to decipher them, but mostly because I find them to be quite beautiful” (Rothenberg 2005b, 214).

Still, in the context of the encounter with George the sonogram is part of the argument trying to convince the reader of “Interspecies music at last”. Consequentially, the sonogram is placed directly beneath the above citation of Syd Curtis (“I do believe you’re getting to him”). But the evidence is not achieved by analytical argument, but by aesthetic inference: The beauty of the figure – and not its scientific correctness – establishes the supposed truthfulness of the encounter. This resembles the well-known argument formulated amongst others by John Keats: “Beauty is truth, truth beauty” ([1819, 1939] 1958, 262).

An additional level of commentary can be identified within the book’s aim to summarise research results concerning bird song from scientific publications as well as personal communication with various researchers. Rothenberg depicts many studies about birdsong in detail, illustrating the richness and variety of birdsong and the capabilities of birds, for example,
in terms of song learning and imitation. Finally, inserted into the narration of the encounter with George he recalls the studies of several experts that have been described earlier in the book (Rothenberg 2005b, 214), among them for example Peter Marler, who has been introduced as “probably the greatest bird song scientist alive today”, “at the University of California at Davis” (Rothenberg 2005b, 60).

However, Rothenberg often also points to the limits of scientific research, especially concerning the question of the functions of birdsong. His main case is that birdsong is sometimes more beautiful than necessary, thus provoking the argument that its function encompasses more than the biological necessities of mating and territorial defense. Such limitations are acknowledged even by academically legitimated experts, like Donald Kroodsma, who is introduced as “recently retired from the University of Massachusetts at Amherst, […] one of the world experts on the complexity of bird song” (Rothenberg 2005b, 105): “Kroodsma admits that after forty years of serious work on birdsongs, we know very little about why some of them are so enigmatic and complex. ‘We still don’t know why the mocking bird mocks’” (Rothenberg 2005b, 105). Likewise, the question of “joy” cannot be satisfactorily answered, as “Peter Marler muses, ‘Birds are driven […]. Is that drive something like an emotion […]? We tend to assume a bird is being joyful. This may or may not be true’” (Rothenberg 2005b, 97).

3. CONCLUSION – A GENERAL MODEL?

At first glance, Wolfgang Müller’s and David Rothenberg’s works are considerably different in texture and intention. While the provoking and hypothetical character of Müller’s Hausmusik is obvious and the special meaning of the bird recording only emerges in the context of the catalogue, Rothenberg’s music may stand on its own as a piece composed of human and bird sound, whereas the paratexts of both his booklet and book evoke an additional level of interpretation. Furthermore, Rothenberg’s “interspecies music” seems more convincing, as the task demanded from the birds is less challenging; Rothenberg’s birds “just” have to sing along; they don’t even have to do it consciously or really react to his music. On a basic level, it is sufficient if they inspire Rothenberg to play a new, different kind of music himself (“Our songs will never be the same again” is the concluding remark in the booklet). Müller’s birds, on the other hand, have to articulate a highly evolved human composition, which is much less likely.
However, both works share the provocative character suggesting a hypothesis that ascribes capacities to animals that at the moment are not generally accepted and not scientifically proven. Closer analysis has shown that both artists employ a similar mechanism – they investigate the current field of knowledge about birdsong and find both established facts and unsolved questions. These are two mandatory conditions to open up a room for speculation which can be filled by the artists’ hypotheses. These are legitimated by citing experts, who are themselves legitimated by academic affiliation or special experience, to confirm both the established facts and the grey areas of uncertainty.

The mechanism identified in these two examples may serve as a more general model how artists and scientists deal differently with the limits of knowledge in the current debate on aesthetic capacities of animals. A complementary interest can be found. Whereas scientists aim at closing the gaps of knowledge thoroughly, artists depend on unsolved questions, as these offer space that can be playfully filled with new, provoking propositions. If Wolfgang Müller for example suggests that starlings are singing Kurt Schwitters’ “ursonate”, he questions the superiority of man in the performance of composed music, and if David Rothenberg lets the birds participate in a creative act, a jam session, he is actually suggesting the possibility of communication with birds by music.

REFERENCES


