Zoom Interview with Alex Nowitz (PhD), Vocal Performance Artist and Composer, Potsdam 6. May 2021

Alex Nowitz is a Berlin-based vocalist–composer. His invention, the *strophonion*, is an instrument reminiscent of Michel Waisvisz's "The Hands", developed at STEIM Amsterdam. The strophonion provides buttons for changing functionality and playing different pitches and various types of sensors to measure movements of hands and arms. The data thus obtained is processed and translated into sonic and musical parameters.
https://nowitz.de/

Vocal Realm

Franziska Baumann: In the context of musical instruments, the voice itself is a special case. It provides us with our most physical and embodied instrument without an external interface, while musical instruments are used as a mediated extension of the body.
Can you describe your vocal realm? What is the voice for you? What inspires you? And in which vocal culture do you feel embedded?

Western Idiom and Improvisation Practice

Alex Nowitz: I am socialised in the Western idiom. In my early twenties, I performed with bass, guitar, keyboards and voice in an experimental punk rock band called Vol-Vox. Also, I studied the tenor voice in Germany and the US. Simultaneously I always used to improvise in combination with the voice. My aim is to explore the sonic possibilities using the entire vocal apparatus. For example, twenty years old, I discovered a whistling technique applying the lower lip, unlike the usual whistling technique of involving both lips. Since then, I'm applying this technique and keep on refining it until the present day. What helps in doing so is the training I received during my studies of the tenor and countertenor voice learning to use the voice in the most efficient way. During a typical week of study, I was rehearsing, for example, the "Tamino" arias and the Lieder from Schubert's "Winterreise". During the weekends though, I was performing in clubs in Berlin scratching at the edges of what the voice is able to do. I don't want to miss this period of intensive learning. At that time, in these underground clubs, partly squatted places, heavy smoking was involved. So, I was constantly challenged, sometimes even over-challenged. But it was during this time that I learned the most about the limits and the mental, physical and psychological conditions that the vocal performer needs to develop. Only if you know the boundaries, you can go ahead and step across them. The exploration per se is the other pillar in my practice. What's interesting to note is that the voice *always* yields some sort of meaning. Every expression bears information important to both yourself and those who perceive your performance. It doesn't matter if you present lyrics or if you make up a gibberish kind of language that refuses linguistic semantics. What matters is to understand that the voice, per se, always brings along emotional information, which also is the case during vocal improvisations and inventions.

FB: You describe your vocal vocabulary of the Contemporary Performance Voice in the framework of a vocal taxonomy based on continuous and mutual interactions of four categories: the singing voice, the speaking voice, the extended voice and the disembodied (acousmatic) voice. Could we say that your approach displays a posthuman ideal in which the "one-register" voice is no longer at the centre with extended techniques on the periphery but in which diverse vocal manifestations are expressed on the same hierarchical levels?

Unlimited Possibilities of Singing Techniques

AN: I wouldn't be able to put it better. I came up with the term' multivocal voice' to describe the practice of applying very different approaches and using various vocal techniques. To make use of those practices, you need to develop a deepened appreciation for each technique and the surrounding culture, some sort of openness in voco-technical (physiological and psychological) and cultural terms. During my studies, combined with improvisation sessions with musicians and vocal performers in Berlin, I discovered so many different ways of expressing myself applying various aesthetics. Each voice category emphasises one particular aspect. If we look at the singing voice, the bel canto voice, for example, we must note that it is crucial to project the voice beyond the volume of an orchestra of around 60 people. Other vocal idioms, such as the rock voice, the jazz voice, etc., show different rules and affordances. If you use the microphone, you must no longer focus on the volume. On the contrary, you now can explore soft vocal sounds.

What's important to recognise is that, only if you accept and respect those, you can develop and build up a variety of different types of voices, all of which are coming from one vocal apparatus. And then, you might realise that the indeed most interesting vocal sounds emerge only then when you allow yourself to go in-between and beyond these voice categories. With regard to singing techniques we have a set of various possibilities at our disposal. If you merge those with speaking and extended vocal techniques, the range becomes almost unlimited. Coming back to your question about the discourse of posthuman systems theories, we can say that they are characterised by proclaiming a 'new materialism.' This is, in fact, at the core of the concept of the 'multivocal voice,' that is, to come up with novel sound entities and new sound assemblages.

Eclecticism, Sound Morphing, Overcoming a Paradox and The Vision of Understanding Each Other

FB: In discussing the multivocality approach, it is also essential to mention the challenge of gradually mixing techniques from one to the other and exploring the passages in between. This is a different approach from the eclecticism that emerged in the 1980s, an aesthetic framework in which you have a block of this and then a block of that and then another block. Cathy Berberian's Stripsody is a good example of this approach. So you have these flavours in nice doses.

AN: Yes, indeed. Cathy Berberian's approach is a role model. Moreover, I am interested not only in juxtaposing different vocal practices one after the other, but also in dissolving the boundaries between the different applied techniques. This is why I'm concerned with questions, such as, how can I gradually go from pitch-related to noise-related sounds; or how can I blend one sound into the other? This, from a rather abstract starting point, is one way to discover new vocal territory. It is this idea that matters to me and is a strong driving force during the creation process. Even though I'm failing and not getting where I'm aiming at, due to completely different muscle parts involved, I still pursue and advance the idea of gradual transition. I love the concept of applying different, intertwining techniques to go from one practice to another and see what happens along the way. For example, suppose you go from a deep voice, like the Mongolian singing technique of 'kargyraa', to the Western bel canto singing technique, it needs to be stated that it is not possible to realise that smoothly and gradually because each technique requires completely different muscle parts. Also, there is an octave gap in between. However, nobody would stop such an experiment and attempts to overcome the paradox. So, even it doesn't seem possible, we can still keep on trying to *make* it possible. Along this way, a lot of interesting outcome is or can be generated.

The other important aspect of this approach reveals the following question: what tools do we have to gain a better understanding of each other. My claim is that human beings, no matter where they come from, no matter their cultural background, could easily get an understanding of each other if they'd approach the encounter from a voco-musical stance. This may sound naïve. However, the turbulences and problems in the world are often caused by language issues and the twisting of facts. Emphasising on the power of sound, on the contrary, I see the field of vocal performance art also as a communication platform that, if applied, could help us to gain a better understanding of the Other on different levels. It might be a possibility to come closer to one another.

I return to the characteristics of my practice. Once, during an improvisation piece, let's say I discover an unusual sound that interests me, I try to focus on it playing with its essential components and exploring its potential. So, in a sense, at this moment, it is the composer who's at work. In fact, to me improvisation is a method of instant composition. Usually, the composer has plenty of time to think about and probe various approaches and possibilities until the final composition is completed. In comparison to that, even it sounds paradoxical, the beauty of improvisation is the fact that we have absolutely no time to reflect like a composer has. In effect, we are forced to constantly take action and react to whatever comes next. But even in an improvisational setting, we can still apply compositional strategies. It is in this sense that I'm aiming to bring improvisational concepts together with compositional ones.

The Amplified Voice, Wii Controllers and the Strophonion

FB: What are your perspectives on understanding the mediated and disembodied voice in human-computer interaction? For example, can the mediated voice be seen as an electrified space of vocal expression? Or as "clones of myself"?

AN: As for me, mediatisation starts once the voice is amplified. By doing so, one can already, for example, enhance certain frequencies. In 2007, a turning point in my biography, I was invited by the Studio for Electro-Instrumental Music (STEIM) in Amsterdam to explore the possibilities of new musical interfaces to be used in my vocal performances. I started to apply Wii controllers. The staff at STEIM, the programmer Frank Baldé respectively, gave me two of those together with a very simple patch. Having a pianistic background, I'm familiar with sound control through the haptic sense. So, applying the Wiis didn't seem awkward to me. It was exciting to see and find out what's possible concerning gestural control involving built-in 3D accelerometers providing data on a continuous basis. I started to sample the voice and used the material as gained right after its

recording. I practised this approach a lot and, from scratch, developed an idiosyncratic performance practice with all its implications. A negative one was that I strained the wrist of my right hand. A positive outcome was that in 2009 I was awarded the first prize by the European Promoters for New Music (ECPNM) at the International Society for Contemporary Music (ISCM) in Gothenburg. In consequence, STEIM offered me the opportunity to research and develop my 'own' instrument starting in 2010. The instrument that emerged from that is called *strophonion*. It was a long-term project throughout a period of two years during which the hardware system was designed, developed and created. Meanwhile, the software components were programmed and then constantly tweaked and refined. In December 2018, during the solo performance Moving Tongues: Playing Space, for voice, live electronics (strophonion) and video, the final artistic presentation of my PhD at the University of Arts in Stockholm, the period of designing and developing the instrument came to a preliminary end.

FB: How do you experience the mediated or disembodied voice in relation to your embodied voice? Can the machine voice affect your embodied voice in the sense that you learn from the machine processes?

Playing with Clones and Ghosts

AN: I consider the aural clones of my voice as parts of my original voice simply because I'm still using them during the performance and manipulating them by changing pitches, creating glissandos, changing the sound frequencies, etc. The difference to the live voice is that the aural clones are now controlled by the extremities of hands and arms. There are numerous possibilities to play with the vocal clones applying different sonic and/or musical strategies.

One particular practice that I'm fond of is to make the time spans very short between the recording action and the one of playing it back: At the same time I try to realise and repeat this process as quickly as possible. It almost brings me to the verge of losing control. Let me explain this: let's say you are playing the drums with the hands applying alternating left-right movements, so-called paradiddles, and assuming you become very fast, then you end up with various tremolo effects. Similar to this drum roll technique is the practice I am applying when recording and playing back. Now, if you're using this in a very fast way, you might get results you couldn't have planned ahead. The result ranges from various feedback phenomena to unintended sound constellations. On top of that, I also focus on the very strange merge between the live voice and the recorded one. So, I am constantly performing and playing with the vocal material, feeding the machine and playing back the recorded voice on a continuous basis.

Let me illustrate the 'ghostly' or spectral connotation of this practice by quoting a paragraph from the 'Letters to Milena' by Franz Kafka. He perfectly describes the communication process as it takes place when writing letters, which is as if ghosts are drinking up the kisses between the communicators. So, writing letters allows all these ghosts to appear while, due to the temporal

delay and the distance, the author is no longer in real connection with what s/he expressed in the letter. Kafka writes:

"The easy possibility of writing letters […] must have brought wrack and ruin to the souls of the world. […] Writing letters is actually an intercourse with ghosts and by no means just with the ghost of the addressee but also with one's own ghosts."

This reminds me of my own practice as described above. What's amazing is that once you create copies of your vocal material, you are in a way also creating tiny little fragments of yourself. There is a spectral aspect embedded in the practice of sampling your voice and playing it back. It is a bit creepy sometimes. But, of course, if we rehearse and do it over and over again, it loses this haunting effect. If I haven't been practising for a long time, though, I need some time to get into it because it's like putting up multiple mirrors around me that I am 'looking at', which is fascinating and weird at the same time. So what I try to do, through the practice and the way I play the live electronics, is to create some sort of a 'new' voice merging the live voice with the sampled clone. This is when a novel, unique kind of voice emerges. So, based on my practice, these are the main aspects of how I see the mediated voice. I have elaborated on these thoughts in an essay called "Intercourse with Ghosts: 'Haunted Territories' revisted" as part of my doctoral dissertation "Monsters I Love: On multivocal arts."

In any way, what's exciting with regard to this practice is that the clone or 'doppelgänger' is dissolving into its live voice, and the live voice is dissolving into its doppelgänger. That's when it becomes interesting to me. Sometimes on stage, it can happen that the audience can have a hard time telling which is which, asking themselves the question what is the live voice and what is the mediated one. This confusion is something I deliberately work with for the sake of creating surprising moments. When it comes down to the question of developing and designing the instrument, my aim always was to establish synchronicity between movement and the generated sonic result. This might be a guarantee for the audience to comprehend the performance practice and to understand how the instrument works. But at some point, depending on the degree of complexity of the created sound and music, the understanding of the instrument as established might get blurred, too. Suppose I am trying to bring together the live voice with its doppelgänger, the practice can become obscure due to the complexity of all applied manipulations and the high speed used between recording vocal material and immediately playing it back. But that's the beauty of new practices that are able to create a mysterious and thus fascinating momentum.

FB: When working with the Strophonion, you must compose the gestures to the associated sonic process or result. The gestural system allows you to assign any gestures to induce functions or events. Is the gesture itself a constitutional factor when you compose mapping strategies between your embodied and your mediated voice?

AN: Before using live electronics, the gesture was a crucial factor for my performance outcome. I always used the hands either as a visual 'amplification' or, to put it differently, an intensification of the expression. This way the hands underline what one is doing, like generating the upcoming next sound. It's some sort of support for myself. I'm gesturing right now which helps me finding the right words. It is an enhancement or even an illustration for the audience to get a better idea of what the performer is aiming at. It is a way of transmitting the content to make it more plausible. So, before even applying gesture-controlled live electronics, I was already incorporating the gesture into my vocal performance art. To me, it was a very natural step to then also use gesture-controlled live electronics and, in so doing, to steer the sonic and musical process with the help of hands and arms.

Mapping and Sampling Strategies

FB: In your mapping strategies, are there experiential aspects of instruments or other cultural references while composing gestures for the strophonion? What are the gesture's communicative references?

AN: I elaborated on gestural techniques in my articles "Designing and Playing the Strophonion" explaining what does what. First of all, there is an instrumental approach to the strophonion. To put it simply, there are twelve buttons to play back samples within the range of a whole octave whose pitches, of course, can be transposed into different octaves. In this way, the strophonion works like a traditional instrument. On the other hand, there are also gestures, such as the left arm movement, that control sonic and musical parameters on a continuous basis. By applying ultrasonic distance measurement, for example, and extending the left arm the volume is controlled and set to the loudest possible degree. Contrarily, if the left-hand controller is close to the hip the volume equals zero. The linear and gradual volume control can be compared with the fader on the mixing desk. However, as opposed to putting up or down the fader, it is a big difference for the audience if the volume control is made visible by the movement of extending the arm. It becomes evident that the movement is related to the parameter volume control.

Furthermore, other gestures, such as the rotating of the right hand, control frequencies, pitches, timbres, etc. I try to be consistent with the mapping of those. Even you may think this is very straightforward and literal, it is crucial if you want the audience to understand what you are doing and thus comprehend your performance practice. Aiming for synchronicity between motion and the resulting sound is one way to provide an understanding for the practice. Appreciation is made more accessible if the audience member understands the artist's actions.

The core of my practice is very much related to applying a variety of sampling methods. I can either record material in the performance space, my voice or the sounds of the musicians I'm performing with. Or, on the other hand, I can use sounds previously recorded in the studio or elsewhere. For example, I am using the sound of a bass flute playing the concert pitch of 442 Hertz just to have a reference note. Of course, I can play with it, too. It sounds like a regular bass flute in this register. But if I transpose the sound into other octaves, it suddenly sounds like a pipe organ, especially if I play more than one tone. The listener is given the opportunity to follow the path of how the sound can travel. If the sound then is transposed 4 or 5 octaves up or down from the original sample, the sound won't refer to the original flute sound anymore. It has become an electronic sound. Nevertheless, being able to transpose sounds, the strophonion works like a traditional instrument. But when I'm using the instrument to sample my voice, it reveals a completely different approach, which becomes significant if the live voice gets blurred into its copy. It is the moment when the gestures gain a more abstract meaning leaving the familiar place of what we thought we know what the performer is doing. So, in effect, the instrument's functionality can change very quickly, going back and forth between a rather traditional approach of playing the instrument applying determined gestures to gain sonic results and, on the other hand, the approach of using the instrument in a more jittery way like chance operation. This is one task that I am trying to solve during the performance and allow the audience to follow the track of a controlled way of playing the instrument to a more abstract way of moving on stage. There is the pitch-related practice playing of the instrument and, at the other end, there is what I call the practice of sound dance, which unfolds if full-body movements are involved in controlling the sounds.

FB: In your piece "Untitled", several performance levels refer to birds: there is the gesture reminding of birds, your whistling technique, and sometimes your postures. Together they create a genuine vocabulary that doesn't belong to the instrumental gesture vocabulary. As a composer, you compose mapping strategies and genuine gesture language that define your individual organology. In this way, you compose a new instrument. With each piece that you play with a specific gestural

approach, you develop a virtual instrument depending on how gestures are connected to sound modification or precomposed samples.

On the other hand, you say that you use the same gesture for the same sound control during a concert so that the audience understands your intention. But you could convert the mappings and make a "Trugschluss"…laughter…

So the question arises on how you want to play a certain electronic process live. What gesture do you associate with that sonic process or what movement do you use to bring that specific electronic process together with your body?

AN: What I'm aiming at is to define the instrument's basic functionality and avoid re-defining it over and over again for each piece anew. It's a lot of work before even composing and interpreting a piece of music. At one point during the development process, therefore I decided to stay with one specific set of preferences. I am not a programmer myself, which means that I always need help if I decide to re-program the software. I decided to stay with one set of preferences instead of re-defining the instrument every time I present a new piece. I always wanted to work like this. If you play the piano, for instance, it always works the same, too. It is the task of the musician to keep the playing of the instrument interesting and surprising. The way we play and make decisions upon the course of music is, as for me, more important than having a new set of features and control parameters available. Also, the question of how we contextualise the sound creation process seems to be crucial. In the case of the strophonion I use four up to five different sample buffers allowing a variety of combinations of sounds being played back at the same time. This then strongly determines the final outcome.

FB: If you create a new piece with your patch, could you reassign each musical parameter you want to play with?

AN: Yes, I could. But I don't change the general mapping any longer. This is what I think belongs to the process of the instrument development. What changes from piece to piece, though, is the selection of applied sounds, if I decide to use pre-recorded ones, and their combinations in the sample buffers. In fact, it is an important component of the compositional work to ask how do I arrange the samples and how are they going to be played back. In this way I have a few options for various different approaches. But the overall fundamental musical functionality of the instrument works and stays always the same. So, even if I could, I do not switch the assignment of ultrasonic distance measurement that, at one point during the development process, I decided to use for volume control. Because this way I can practice the instrument on the same basis which, with regard to the applied movements, forces me to develop a very specific vocabulary. For me, there is no way to get around this. It is important to exactly know what the various components of the instrument (can) do. This then enables me to focus on the aspect of the performance practice that I'm after, that is, 'vocal sound dance' as a novel way of vocal expression in combination with movements of the whole body. Becoming certain about the question of how to handle the instrument is an inevitable task of mastering the instrument. It forms the basis on which I can work

without constraints and as freely as possible. In this way, you may say, my approach is a very traditional one.

Compositional Strategies for mappings

FB: With the software JunXion by STEIM, I can assign each gesture to each process. But sometimes, I use the same mapping several times, i.e. the same gestures assigned to the same voice modifications can appear in different pieces. On the other hand, different mappings can be assigned to the same gesture.

AN: So you have some sort of freedom on *how* your gestures are producing sounds.

FB: Yes, this freedom in the gestural assignment is part of my work. Unfortunately, I have to recreate the mapping workflow because JunXion is no longer supported on a 64bit operating system. I find the constant change in digital systems very tiring. It repeatedly requires time to get to know technical tools, time that I would rather spend on creative work. But since I want to compose with gesture mapping, I have no choice.

AN: There was a point when I was not happy with the performance outcome. I did video recordings of some of my live performances to study their impact on me as a spectator. It turned out that, most of the time, as performer I was busy with playing the instrument by applying micro-movements, like *finger-hitting-button* actions. This is a very musician-like approach. There is nothing wrong about that, but the resulting outcome wasn't what I was actually after. That's why I invited Berlin-based dancer and choreographer Florencia Lamarca, whom I collaborated with in the past, in order to work on the overall performance from a dancer's perspective focusing on the visual aspect and whole-body movements. During the rehearsal period for the project 'Haunted Territories' presented at the Radialsystem Berlin in 2018, we worked on the performance aspect that involves the whole body while, at the same time, playing the instrument in musical terms. This helped me a lot to develop the practice of sound dance.

Whole Body Movement – Sound Dance

FB: What do gestures do to your bodily sensation? Do they change your musical experience?

AN: Absolutely. Once you allow to happen that your senses, as musician, open up to the whole body, you also gain a deeper understanding of the meaning of the gestures you apply. During the process of learning the instrument I became more sensitive to and aware of the overall meaning of the gestural vocabulary. Before that, I was basically 'just' producing sounds. It was all about sampling the voice and the question of how to work with the gained material. It may sound funny, but after sharpening my senses for whole-body movements, I came to think that I finally understood the claim of my own practice.

FB: Controlling the music you want to do?

AN: Yes, but this is only one aspect of the whole practice. Once I incorporated whole-body movements in combination with the making and the controlling of music – not only from a musical standpoint but also from a performance standpoint or dancer's perspective – it kind of rounded off the whole thing. Aiming at a holistic approach it felt that it completed the performance practice as I envisioned it from the beginning: a trans-disciplinary performance practice whose components – vocal inventions, music making, live sound engineering and dancing – interact and intertwine to give form to a new *gestalt* of vocal performance art.

FB: Interfaces and gestural controllers allow one to choose the kind of relationships between gesture and the resultant sound. Can you say something about the meaning-making of your whole body gestures mapped to your sound? Do they fit into any traditional categories anymore? How does meaning appear in the communication of this specific approach?

AN: It is a difficult question. It touches the core of something that I'm thinking of a lot. Let me refer to Heinrich von Kleist who said that the words appear through speaking. Kleist advocates that the right words come into being through speaking and thoughts are manifested through speech. This is comparable to a lot of questions, too, that are based in the domain of dance. Dancers are all the time concerned with methods of how motion is triggered and generated. What is the meaning of the gesture in contemporary dance when the surrounding sounds are beyond the concrete, but rather of an abstract nature?

FB: But dancers don't create sound.

Agreements between Audience and Musical Performer

AN: Exactly. However, sound can function as some sort of mediator between movement and music creation. In fact, something I'm concerned with a lot is the question on the mediation within the interaction process between body, sound and technology. Who is mediating whom? Or, in other words, who is dominating whom? I think this is an interesting question. As said above, one way to solve this is by adapting our attention to the given situation. This implies that sometimes the focus is on the vocal outcome, other times on the technical realisation of playing gesture-controlled live electronics, and, again at other times, the emphasis is on the movements in the performance space. Each discipline is feeding back into the other while they altogether form the overall performance outcome. I think we need to be aware of this in order to provide the audience with some sort of an agreeable basis. Nonetheless, now, with the advent of new forms of performative expression, our perception needs to change, too. Because we can no longer evaluate these performance practices with the good-old, musico-traditional matrix of 'beautiful tones', 'nice development', etc. We also need to extend the way we *look at and listen to* these performance practices.

You see, this is a difficult question that touches upon many different discipline-related issues, which I guess is the reason why it is challenging to find an appropriate language to describe it what's going on. So far, every movement that I apply onstage is motivated by the urge of creating sounds. This is the starting point. But, collaborating with the dancer and choreographer Florencia Lamarca, I gained another conception of my performative outcomes. I came to recognise that the performance can be perceived by the audience differently and other than 'just' attending a traditional music performance or the realisation of a composition written for traditional instruments. What I mean to say is that there are different agreements on which we form an understanding of a performance and, thus, on which we create meaning. These agreements are interacting, not to say, quarreling with one another.

There is the gesture related to music-making. Even big gestures and whole-body movements still contribute to the music-making process. But they also have another expressive quality that tends to belong to the realm of dance. The point when interdisciplinary art forms take place and happen successfully or convincingly is when we, as performers, are in control of all these different disciplinary requirements and, therefore, aware of the underlying agreements while, at the same time, going back and forth between the different disciplinary requirements. Our duty as performers, first of all, is to create an agreement between the audience and ourselves. This is already hard to achieve. For us being improvisers, we have a completely different agreement with audience that is used to listen to improvised music as opposed to that kind of audience that, let's say, usually listens to a Gustav Mahler symphony. In other words, only within the musical domain there is already a plethora of different agreements.

Now, with regard to extended vocal performance art, we have another agreement to deal with… The audience wants to understand how we do things, how we create sounds. Everyone knows how it works with regard to the piano. The musician pushes, presses or touches piano keys that, in return triggers a hammer that hits the string producing the sound. The agreement is clear, and the semantics of this practice is more than obvious. But with regard to the use of new musical interfaces it is not that clear. Therefore it is our duty, to a certain degree, to provide an understanding of the overall instrument and to form the basis for an agreement in order to create meaning and thus communicate. Of course, it is possible to say: ok, I will not explain anything; the audience members have to figure it out themselves. Certainly this is the artist's choice! But I believe it gives more pleasure to both the audience and the performer if the last one mentioned at least gives some hints about how the instrument works in order to help the audience to decipher the gestural vocabulary and to match it to the musical or sonic outcome. This then builds the basis on which musical meaning is or can be produced.

FB: I like the notion of agreement between the vocal performer and the audience and how meaning-making is mediated through a digital interface. How can we think about these agreements? What are the individual "co-players" of meaning generation with gestural systems?

How do we direct the focus of attention? "Information density" is another aspect because we cannot understand the meaning with an overabundance of information.

AN: Yes, these are great examples. With regard to 'information density' I'd like to add that it creates meaning on its own, so-to-say, even we don't understand it in terms of linguistic semantics. However, it still has the potential to convey information, that is, in this case, to create and multiply confusion. By doing so, it creates a semantic value. The deciphering of the actual meaning of it, though, takes place in a secondary, hermeneutic step and thus belongs to the realm of interpretation.

FB: Like in free improvisation, out of chaos, new structures can evolve. The dynamic of intensity in the stream continuum is another aspect to think of.

AN: Yes, indeed. This is a very interesting aspect. Analysing a video recording of the sound dance practice as I have elaborated over the years, I can now describe how new structures evolve from an alleged chaotic state. In fact, I can tell once and how my attention, during the performance situation, is shifting from dance to sound, from vocal expression to the act of engineering, that is, live recording and playing back the gained sounds. The audience might not be able to see or detect that, but as for me it is clear how the different areas of vocal performance, movement and technical aspects interact. For example, in order to focus on whole-body movements, I need to let go the musical aspect for a tiny little moment. At the same time the applied movement feeds back into the momentum of sound creation. The only way to master an interdisciplinary performance practice is to gradually shift the performer's attention from one to the other. Sometimes one needs to do things even simultaneously.
However, we are human beings who cannot apply multitasking for a too long period of time since it is extremely exhausting. Therefore we have to shift our attention and take care of what we can do within one attention span. As to me it is intriguing to have the opportunity of going back and forth between the vocal, the music-making and the movement-related parts of a performance. The vocals are always between the body and the clone of the voice, between the dance and the manipulated sonic result. What I'm always coming back to, in this very complex performance situation, is my (live) voice.

FB: If you play with a dancer, you get another connotation, and also, your gestures create another meaning.

AN: Yes, very good point. By the way, have you seen this short clip of Berlin-based dancer Susanne Martin and me called 'Dr. D. meets Dr. V.' and how we interact?

FB: Yes, it is amusing and absurd. I love it!

AN: This performance has a strong focus on acting. Susanne's core discipline is actually dancing, but she is constantly acting, too. So do I. The scene gets perfectly understood even though one must say that the result may be completely absurd. However, it is very encouraging to see that we can allow ourselves to work across and push the boundaries of artistic disciplines. It's what I think we need to do, if we want to expand the field of vocal performance art…

Links & References

Essays:
Assemblages of Multivocal and Schizophonic Practices: Unleashing the machined voice
in *Machinic Assemblages of Desire. Deleuze and Artistic Research 3*, eds. Paulo de Assis and Paolo Giudici, Orpheus Institute Series (Leuven: Leuven University Press, 2021), pp. 129-141,
https://doi.org/10.2307/j.ctv1595mb9.12

Designing and Playing the Strophonion: Extending vocal art performance using a custom digital musical instrument
in *eContact! 18.3—Sonic DIY: Repurposing the Creative Self*, Montréal: Communauté électroacoustique canadienne / Canadian Electroacoustic Community (December 2016),
http://econtact.ca/18_3/nowitz_strophonion.html

Works:
Mönche am Meer: Eine konsonantische Auflösung
In 'Mönche am Meer' (Monks at the sea: Dissolving consonants) the consonants are gradually removed from the words until only the vowels remain with the emotional information of anger.
https://www.researchcatalogue.net/view/492687/493272

Panache oder über konsonantische Rasanzen
'Panache' (or on consonantal rapidities) is a good example of an articulation reference. By articulating mouth sounds without sound, we hear his tongue and lips in action.
https://www.researchcatalogue.net/view/492687/492987

Schaumspuren (On dissolving vowels, decomposing the voiced sphere)
'Schaumspuren' (Traces of foam) begins with a clear sentence, then the individual words are swirled nonsensically, broken down into individual syllables and letters.
https://www.researchcatalogue.net/view/492687/560212

Untitled
In 'Untitled' for voice and live electronics, Alex re-embodies his live recorded samples with the gestures related to the live processing of the strophonion. The bird-like motions that he mapped to his gestural system raise the relative intensity of the meaning of the doubles. His gestural vocabulary intensifies the focus and the meaning.
https://www.researchcatalogue.net/view/492687/560292