

Notes on the realisation of Éliane Radigue's *Occam XVIII* for contrabass recorder and the composer's method of oral score transmission

Pia Palme 2017

I first came across Éliane Radigue's work in 2002 online, during a spontaneous, nighttime search on the internet under *Tibetan Buddhism electronic music*. This combination of keywords represented my focal interests at that time: I had just begun to experiment with electronic sound and searched for ways of merging contemplative listening and performing. On the other hand, my longtime practice of meditation and Tibetan Buddhism had brought me to a more thoughtful approach and reflective awareness in my artistic perspective. I felt the need to contextualise my artistic practice and began to research on the internet. Hitting the above keywords, I was surprised to come across a single, crudely designed composer's page, presenting a short text and blurred images of a woman in front of a huge old synthesizer. I had discovered Éliane Radigue, and was immediately impressed by the composer's life story, her music and artistic outlook. The respective page, featured on Kalvos and Damian's¹ research site *Nonpop* still exists in its original appearance from 2002 under <http://kalvos.org/radigue.html>. Unbelievably, I could not detect more information online about the composer, at that time.

A few years later, the contemporary music scene discovered Radigue's work, while the composer was turning to instrumental music. In 2011, Radigue embarked to work on *Occam Ocean*, a compositional endeavour that (currently) has grown into a large collection of solo works and ensemble pieces for a wide variety of musical instruments (including electronic instruments). Radigue's *Occam Ocean* works are orally transmitted by the composer herself, without any written score or text. The works evolve in a unique aural and oral interaction between the composer and the respective performer. The exchange is directed by Radigue in a specific way. Her method requires the performer(s) to personally meet the composer (who does not travel much any more) in Paris – her home or in a rehearsal space. Radigue often uses expressions connected with water to describe her music. The term *Occam* hints at the medieval philosophic principle of *Occam's razor*. It was coined by Radigue and underscores her personal preference of working with sound from a focused, reduced and simple perspective, stripping away the unnecessary. In her own words, working with performers and instruments has been a tremendous discovery and enrichment of her practice.²

In 2008, I met Éliane Radigue for the first time in her home in Paris, in the company of Austrian electronic composer Elisabeth Schimana; we came to conduct an interview with the composer for the *IMA* portrait series.³ Aside from the research into Radigue's methods of

composing, our visit also happened to prepare the 2009 festival *e_may*⁴ in Vienna, which programmed a focus on the work of Éliane Radigue. Years later, between December 2013 and February 2014, I had the opportunity to collaborate with Éliane Radigue in realising *Occam XVIII*⁵ for contrabass recorder solo, and the duo *Occam River V*⁶ with harpist Rhodri Davies. Davies had initiated the first composition of the series *Occam I*. In 2014, I also conducted a personal interview with Radigue, which serves as a source of material here.



Éliane Radigue at the shore of the Danube near Vienna in 2009 (photo by Pia Palme)

Meetings with the composer for a realisation of a new work usually extend over a period of some days. Through this process Radigue achieves a unique compositional style, which is influenced by her method of working with analogue synthesizers. I report on my personal process here, for *Occam XVIII* for contrabass recorder, which happened in Radigue's home. To begin with, Radigue initiated a conversation, during which an image of a body of water was found and established together. To this key image Radigue added a compositional structure, along which sonic material with the instrument was defined: following her specifications, I suggested specific tone material created with the instrument. This sound material was then edited in exchange with the composer. A first version of the work was then

performed. Radigue carefully listened to my performance of her ‘composition-in-progress’ and afterwards adjusted, commented, and edited the sonic product. From there, a second version was developed and performed. Following this first session, I had a day to individually practise this primary result; then, in a second session with Radigue, the piece was re-performed and refined. At the end of this second session, Radigue verbally authorised the composition (“This is it!”) and thereby officially included the work as number XVIII into her *Occam* compilation.

For the potential performer, planning for the process of realisation must take into account that it is neither possible to predict the duration of the process nor to foresee its result. In most cases, two or three days suffice, but in particular instances a more extended period stretching over months can be required. It has also occurred that Radigue denied authorisation; then, the music cannot be performed under her name. The length of the piece is never determined beforehand; the composer states that every work will find its own timing.⁷ The duration may be influenced by the instrument and by the personality of the performer as well. Performers (such as Rhodri Davies, Dafne Vicente-Sandoval, or Julia Eckhardt) report that performances of Radigue’s works can vary between performance; in my case, the work tends to become longer. I found it advisable to record the entire process and also take notes for myself, to facilitate re-performing; my experience is that I tend to forget details of Radigue’s pieces, because I have neither an image of a written score nor a text in mind to rely on – which is what I have been trained to work from, as a performer. In a conversation I led with Rhodri Davies, he reported having the same experience.

The entire collaborative process between Éliane Radigue and the performer(s) unfolds by ears. The composer is very clear about her preferences; she precisely remembers and comments specific sound textures and timbral shades performed during consecutive rehearsals. For every single composition, the solo performer or the ensembles have to go through a procedure similar to the one I have been describing. For the duo *Occam River V* for harp and contrabass recorder, another similar three day session was organised in Paris with Rhodri Davies, myself, and Radigue.

A facet of Radigue’s method of working is that most performers who seek a collaboration with her seem to be familiar with her compositions and background. There is a preconceived image of what her music would sound like, which arguably influences the selection of sounds, timbral shades, and noises the performers might offer in the collaboration. A comprehensive study of the performer’s perspective of collaborating with Radigue was published by the composer Luke Nickel. From the outside perspective of a researcher, Nickel here explores the process of what he defines as a ‘living score’. He conducted a number of interviews with performers (I was among them) and with the composer herself.⁸ There is yet

another facet of Radigue's method of working: from the age of 21, Radigue has been a practitioner of Tibetan Buddhism. Remarkably, the Tibetan tradition relies on *oral* communication, and since ancient time listening has been an intrinsic factor of passing on their practice and philosophy. Pre-Chinese Tibetan culture generally relied on aural rather than written information; key information of Tibetan meditation practice is transmitted orally/aurally in an exchange from person to person, i.e. teacher to student, exclusively.⁹ Radigue's method is strikingly similar to this approach. Among performers who have worked with her, awareness is rising about how her scores might be passed on further in the future, if at all.

When I asked the composer about a possible link between her compositional and contemplative practices, Radigue argued that she keeps her artistic work separate from her meditation practice. Instead, she said, she perceives both lifelong practices as “two rails of a track, which I'm traveling on, like a train on two rails.” – her process of life is what joins composition with contemplation. In the interviews I led with her, Éliane Radigue expressed a remarkable modesty and relaxed attitude towards her career as a composer: her focus is on working with sound and creating music. She reported that during her early motherhood, raising three small children, she was not able to pursue her musical activities. Nevertheless, she continued to compose in her head. She decided that her music would never leave her. Everything else, she kept repeating in the conversations I could conduct with her, would happen by itself. Radigue neither actively planned nor pushed her career and development as a composer.¹⁰

Instrumental techniques in *Occam XVIII* for contrabass recorder

In realising *Occam XVIII* with my instrument – a contrabass recorder manufactured by the Swiss company Kueng in 2007 – I faced a number of challenges. Extended durations and slow minute changes of both sonic material and timbral shades are characteristic of Radigue's music. However, it is not possible to sustain tones for very long with the contrabass recorder. A wide airstream is necessary to blow the instrument; one's breath is used up quickly. Circular breathing is not possible, if one wants to work with subtle forms of articulations.¹¹ For these reasons, the contrabass recorder is primarily a percussive instrument. I had to find innovative means to achieve – or rather to create an aural illusion of – longer durations of sound.

Partials are an important aspect of Eliane Radigue's compositions. The contrabass recorder boasts of a rich selection of multiphonics, whose upper partials can be almost infinitesimally varied. Variation can be achieved both through changing the intensity of the airstream (i.e. through controlled and subtly raising or lowering the air pressure) and through minimal adjustments in fingering (such as very minimal changes in the finger position on a hole, or in

the pressure of the fingertips on the keys). A very limited range of lower partials is available too, for very few fingerings in the lowest register combined with ‘under-blowing’ (very low air-pressure). For my realisation of *Occam XVIII*, I offered to the composer a specific tonguing technique plus a concise selection of multiphonics. The combination of both would allow for a maximum of timbral flexibility and long, sustained sonic developments.

For *Occam XVIII*, I decided to work with ‘d’ and ‘l’ (tongue) articulations. With double-tonguing, the sound production on a single breath can be prolonged. The airstream of the out-breath is divided into minimal sections with gaps in between; the airflow can thus be upheld for a longer duration. Furthermore, the technique of double-tonguing results in a pulsing sound quality. The parameters tempo, regularity and velocity (intensity) of these attacks can be infinitesimally varied by the performer. Also, formants can be used to shape the airstream. Altogether, these techniques allow for a wide variety of audible pulses and colour shades. Another focus is on variations of the attack, in order to influence the production of the multiphonics. In very fast double-tonguing, the quick succession of notes highlights the physics of the attack (as in hocketing): I can work with the very earliest apparent particles of tones, which are maximally enriched with partials and noise.¹²

In performing *Occam XVIII* it was imperative to fully integrate the in-breath into the flow of instrumental playing. Radigue mentioned that the in-breath should be executed slowly and calmly, to follow the pacing of the work. At certain passages during the work, I audibly articulate (double-tongue) on the in-breath. I want to keep up the fluttering rhythm throughout. Another interesting compositional detail to recall is Radigue’s instruction never to return to any sound (or pitch) material one had already performed before: the piece should continuously flow further, like water.

Éliane Radigue on *Occam Ocean*

[Program notes by Radigue for the premiere of *Occam XVIII* and *Occam River V* at Phipps Hall, University of Huddersfield, UK, 2014]

The idea for this piece was initially inspired by a large mural that I saw by chance in 1973, at the Museum of Natural History in Los Angeles. It showed the “spectrum of electromagnetic waves” moving from the largest to the smallest of known measurable wavelengths. Out of this large spectrum, there is a tiny zone from slightly less than 100 Hz to slightly more than 10 KHz that the ears of certain species populating the planet earth, have transformed into “sounds”.



Éliane Radigue in conversation with Rhodri Davies during the rehearsals for Occam River V, Paris 2014 (photo by Pia Palme)

Later, I discovered interesting parallels with several of my reflections on William of Ockham and his famous treatise “Ockham’s Razor”. Expressed most succinctly in his own words, “The simplest, the best”, it has been adapted and used by numerous artist/creators. Last came the distant recollection of a science fiction story I had read about the existence of a mythical ocean. Only the title remained etched in my memory, “Occam’s Razor”, which explains the origin of the spelling I chose. It seems in fact that the Ocean with its multiple waves allows us to symbolically be in contact with a rather large spectrum of vibrating undulations, stretching from the great deep-sea swells to wavelets sparkling on a fine summer day. This explains the overall “structure” of the project.

The work mode is based on an individual “image” illustrated and evoked within each solo. Each musician is guided by his or her personal “image”. This provides the essential, letting descriptive words and evocations establish a system of communication as the piece is being elaborated, and through this intuitive-instinctive process, we are guided to the very essence of music. There will be as many solos as there are volunteers willing to enter into this shared experience. They become the “sources”.

Occam XVIII

[Program notes by Pia Palme]

Breath and tongue coax the long air column of the contrabass recorder into vibration. Generously the air flows through the instrument, in and out. A low sound appears at first, later pulsing partials start to oscillate. As the instrument surrenders, fractal moments of articulation gather like beads on a string. Is there an end to the flow, is there a beginning? What happens between the in-breath and the out-breath? Is continuity a mere illusion?

A few days after Eliane's 82nd birthday in 2014 work on *Occam XVIII* was finished, accompanied by the perfume of abundant flower bouquets in her living room.

¹ Kalvos and Damian are Dennis Báthory-Kitsz and David Gunn, two Vermont-based composers who since 1973 until recently presented concerts and other activities that highlight new music.

² Éliane Radigue in conversation with the author, 7. February 2014.

³ Primosch, C., Swarowsky, D. and Schimana, E. (2009). *Éliane Radigue – IMA Portrait Documentary. Portrait #4 09*. Vienna: Institut Für Medienarchäologie. Retrieved from <http://imaneu.weblog.mur.at/en/imafiction/video-portrait-04-eliane-radigue/>

⁴ The festival had been co-founded, organised and curated by myself and voice-performer Gina Mattiello.

⁵ Authorised by Radigue on 31. October 2013.

⁶ Authorised by Radigue on 7. February 2014.

⁷ Éliane Radigue in conversation with the author, 7. February 2014.

⁸ Nickel, L. (2016). *Occam notions: collaboration and the performer's perspective in Éliane Radigue's Occam Ocean*. In *Tempo / Volume 70 / Issue 275 / January 2016*, pp. 22 - 35. Retrieved from http://journals.cambridge.org/article_S0040298215000601

⁹ I would like to point attention to the fact that in process of learning a musical instrument, the personal exchange between teachers and students is a crucial facet. This exchange is guided by listening to each other.

¹⁰ Éliane Radigue in conversation with the author, 7. February 2014.

¹¹ it would require a minimum of resistance from an embouchure.

¹² Immediately after the attack, the produced sound still contains a very high range of partials and noise; these frequencies fade out, once the sound is settling into its main vibration.