

The Compositional Possibilities are Endless

By Else Marie Pade, originally published in *Lettre Internationale*, no. 4, June, 2004.

Composition is defined in a dictionary as follows:

(From Latin *compositio* – see *compose*) – A written piece of music ... Structuring, production (e.g. of a poetic work, painting).

Compose: (From Latin, *com* + *ponere* put together) – Put together, produce, especially of music, ballet. Often = arrange material harmonically.

Compositional: Related to the process of composing. Ex. form with compositional clarity.

It may sound wildly exaggerated – unbelievable, to put it mildly – but I would dare to make the claim that at the age of three months I made the acquaintance of the above three words and reacted positively to them.

It happened like this:

I lay in bed and was life-threateningly ill with the kidney condition *pyelitis*. Penicillin was unknown, so it took some time to get my temperature down. It wasn't easy to get a baby to lie still while my temperature was taken. My mother had the idea of singing for me in the meanwhile. I lay still and listened attentively (my mother claimed) to these productions of words and music that floated in the air between my mother and me. But one day I heard the melody of the song *Det er hvidt derude* (It is white out there) – in a minor key. Then I cried. Of course my mother could not resist trying out whether this “major = happy/calm and minor = sad/agitated” reaction was consistent or just a single instance. It was consistent. A friendly fairy had given me as a gift in the cradle the ability to be receptive to the world of sound. Being able to receive impressions is an important precondition for being able to express yourself, they say.

Right up to the age of 13 these kidney infections reappeared at regular intervals, and I had to stay in bed for long periods. But it turned out that in a sense this minimalistic world I was in contained just as many sensory impressions as the spectacular world in which the busy, active people moved. It was like being a drop in the ocean. From morning to evening there was life and sound around me. The day started for me with morning sounds – sponges with splashing and dripping in the washstand; the kettle whistling; the birds, also whistling if the rain wasn't pouring down; different footsteps, friendly words – and temperature-taking songs.

The days passed with reading aloud and toys when the worst of the fever was over; and the radio played for me and read to me and explained things. When the window was opened, I could hear carpet-beating, the caretaker sweeping the yard and the children playing. Sometimes I came into the living room for a while and sat on the sofa. There were quite different sounds there: heavy horses' hooves on the paving stones, horses and carts that arrived with bread from the baker opposite – horses for this and horses for that – and bicycle bells. There was a confusion of sounds – the street vendors' cries and much else.

I learned very quickly that some of the sounds came at a particular time of the day in a particular order – every day. I also learned that during the day the sun could make the birds sing, while the moon could not make the stars say anything, although it looked as though they would like to. They twinkled. All that could be heard at night was bird calls and the moaning of the wind, cats miaowing and the sirens of ambulances now and then. So then I decided to give the stars some sounds of their own. I formed tiny little tingly sounds with my lips, and the Man in the Moon, whom I firmly thought I could see, laughed back at me – a deep, friendly laughter. But best of all were the fairytales that were read out to me. Hans Christian Andersen's tales, in which the life of the animals was just as lively and eloquent as that of the humans. The *Top and the Ball*, for example, and *The Ugly Duckling*. The top spun and the ball bounced, I heard that myself on my own floor, but I also heard what they talked about together. The tales of the Brothers Grimm and The Arabian Nights were a bit more exotic and grim, but exciting. They didn't make

me cry. Hans Christian Andersen's *The Little Mermaid* did (at the time I never dreamt that I would one day set Ellen Gottschalck's reading of the tale to electronic music and musique concrète). I also cried a lot over *The Red Shoes* and *The Travelling Companion* and Kaj and Gerda in *The Snow Queen* – they were the worst ones. These and many other fairytale characters became my friends: what they saw, I saw; what they heard, I heard; where they went, I went too ... I can still remember the shock it gave me in 1952 when I read Pierre Schaeffer's recently- published book *À la recherche d'une musique concrète* (In search of a concrete music). It begins like this:

“Jan. 1948: When I write, I sometimes miss a kind of expression more intense than words – the sound of the breath of frost, dancing snowflakes in gusts of wind with a perfect fullness of sound, footsteps crunching in the snow or the brittle cracking of ice crystals when you tread on thin ice.”

In this description I recognized the realm of the Snow Queen. In 1948 Pierre Schaeffer, sound engineer and composer, realized his ideas on musique concrète in the experimental studios of the French broadcasting corporation. A regular group was soon formed around Schaeffer, and composers from all over the world with an interest in innovative thinking gathered round. Musique concrète – ‘concrete music’ – is based on recordings of already-existing sounds which are treated electro-acoustically – that is, they lose some of their recognizability through filtering, changes of speed, the addition of reverberation etc. These sounds are then used as parts in an orchestral score, edited so they are given rhythmic durations corresponding to note values, and they function – if all goes well – in the concert hall as well as the media world, where the sound director sits as the only ‘musician’ at the mixing desk and directs the volume and motion of the sounds in the space through speakers. As I said, I made the acquaintance of concrete music and Pierre Schaeffer in 1952 – and was enthusiastic. One summer evening in 1953 I stood in the fairground Dyrehavsbakken (“Bakken”) listening to the variegated, joyous and distinctive sound-world that surrounded me, and suddenly I understood exactly what Schaeffer means when he so often says: “A perfect universe of sound is at work all around us.” Déjà vu: my childhood world. Where I stood, the market scenes from Stravinsky's *Petrushka* sounded all around me in concrete music.

The next day I began working on a synopsis for *A Day at Dyrehavsbakken*, written for the brand new Danish TV channel. The director of this new TV channel was an enthusiast, Jens Frederik Lawaetz. He immediately said yes, and equipped with the best sound and vision people we got to work. A broadcast lasting 30 minutes was the result. The images for the *Bakken* film were alternately underlaid with concrete music and synchronous sounds. *A Day at Dyrehavsbakken* was premiered on 8 August 1955 and was given fine, amazed reviews.

To get back to the street of my childhood at Marstrandsgade 3 in Aarhus, I had a father who was incredibly inventive with toys that could please and activate a bedridden child with many games – he turned up with jigsaw puzzles, mosaic games, card games, alphabet blocks, number lotteries. He played, taught me the rules, acted as my playmate. But the finest of all the games was the glass bead game. With the bright, strongly coloured glass beads you could make the most beautiful patterns and fill out the transparent glass plate. But you could also make up patterns of your own. I did that often when the models became too predictable. For me the glass bead game was like the starry sky. I thought they were saying something, these shiny beads – or rather, they were singing. But what?

At that time – in my twenties – I didn't know that music was on its way towards new tonalities and twelve-tone technique – serialism – in which the classic major and minor scales of seven intervals were replaced by all twelve semitones of the octave. This twelve-tone row had a very strict set of rules that had to be carefully observed. Otherwise there would be no musical pattern. I had often thought that it was strange that I couldn't find these glass bead tones as sounds for my inner ear in any ordinary musical instrument. But at that time there was nothing called electronic music. And yet it was electronic sounds I was hearing. I realized that in 1956, when at the Danish broadcasting corporation DR I illustrated six tales with concrete music in collaboration with Aase Ziegler. One day we stood there and needed ‘mermaid song’. Despite determined efforts from the technical department and ploughing through the sound archives, we could find no sirens there except the one from the war. “Go up to Engineer Lauridsen in Lab. III (the lab for acoustic measurements)” the technicians said. I went up there and had a friendly reception

from Engineer Lauridsen and his assistant, the head of the radiophonic workshop Villy Bak, who listened to our account of the problem. Lauridsen got up, switched on an oscillator, twiddled some knobs – and NOW the mermaid sang as mermaids should. You could even hear several of them, so they could sing polyphonically. I was blissful!

They told me that this apparatus could also be used as musical instruments in the other new musical discipline – ‘electronic music’. The scientist Werner Meyer Eppler had invented this in 1948 (the same year as Schaeffer invented *musique concrète* in Paris) by exploring the sound sources of electronic machinery and setting up experiments with their expanded capacity. Westdeutscher Rundfunk systematized this discovery for further development in its experimental studios in Cologne, headed by Herbert Eimert and Karlheinz Stockhausen. Enraptured, I went back to the technical department – at DR – with my mermaid song under my arm, and had it registered in the sound archives under H = havfruesang – ‘mermaid song’ – with (artificial) in brackets (i.e. a truthful description, to be on the safe side).

This mermaid-singing was the cue for a group of radio people to gather around Engineer Lauridsen and Villy Bak at the laboratory, where we were given training in how, with the aid of electrical apparatuses, we could produce these ‘sounds never heard before’ (the *nie erhörte Klänge*, about which Karlheinz Stockhausen wrote) – and could consider ourselves as belonging to the first generation to write ‘scores on graph paper’ – also a Stockhausen quote. Engineer Holger Lauridsen was already internationally famous for among other things his MS stereo system. He had connections with researchers in other countries and exchanged results with them.

When my sonic experiments began to cohere and become compositions, I was struck by the second *déjà vu* of my life: it was the tone colours of the glass beads of my childhood game that were emitted by the speakers. My mental sound-picture had become reality. In 1960 I wrote *Glasperlespil I og II*, *Glass Bead Game I and II*, inspired by Hermann Hesse’s novel (the introduction) of the same name. Hermann Hesse writes among other things: “The Glass Bead Game is thus a mode of playing with the total contents and values of our culture; it plays with them as, say, in the great age of the arts a painter might have played with the colours on his palette.”

I felt there was an analogy here with the electronic music that used the laws of mathematics and physics as the rules of the game: the technique of serialism (as formulae); set theory (as degrees of intensity and durations); tone painting (as tonal colouring) and the dance (as motion in space); in short, a set of mental rules within the framework of which the patterns sought and found their form. Karlheinz Stockhausen, who as a lecturer had visited the study circle that had been formed at the Danish Broadcasting House around the experimental music, at a slightly later juncture included my electronic *Glass Bead Game* as one of the examples in his lectures on early electronic compositions. None of that would have been possible for me if I had not already been employed at DR and been allowed to experiment “when the studios and the technical staff were not busy with their everyday work.”

This is therefore a suitable place to express my great gratitude to the two programme directors Jens Frederik Lawaetz and Aksel Dahlerup (TV and DR), as well as the four programme controllers Vagn Kappel (music), Fr. Heegaard (technology), Felix Nørgaard (drama) and Valdemar Christensen (school radio) and many of the able staff of Danish TV and radio. Without their magnanimous efforts Denmark might never have contribute to the production of the first *Modèles sonores*, as Stichting Gaudeamus in Holland called its electronic festival in 1989 with the first electronic works as its theme.

In October 1958 I went to the World Exposition in Brussels with Erik Schack and Mogens Andersen from the music department and Sven Drehn-Knudsen from the technical department. There I experienced that the world was full of avant-gardists. Dizzy with delight I rushed around among 400 speakers playing the electronic ‘picture poem’ *Poème électronique* by the composer Edgar Varèse and the architect Le Corbusier in the Philips pavilion. The work is an audiovisual presentation of the development of mankind from the beginning until now – that is, the atomic age. The Atomium, a giant structure in silvered bronze (as far as I remember) was the icon of the World Exposition.

I also discovered other new disciplines than concrete and electronic music: Mauricio Kagel’s Music Theatre, for example; and John Cage’s philosophically determined value measurements for compositional elements. John Cage included simply EVERYTHING in his compositional material, even silence. There was

also Planetarium Music – that is, music which, along with visual elements, is realized in the domed architecture of a planetarium. This was where my third déjà vu came: the firmament and the carefully arranged courses of the stars, both for the eyes and the ears. I received a commission from Henry Jacobs, a composer from San Francisco, the inventor and director of the audiovisual Planetarium Vortex. As soon as I got home, I wrote *Seven Circles*, which is based on a seven-note row, each note furnished with its own tonal colouring and its own speed, from slow to fast. The circles come in one after another and once all seven are in motion, they accelerate, reach a climax and are drawn back to the tonic in reverse order. The work was purely electronic. *Seven Circles* was very quickly sent by airmail to San Francisco.

The programme technician Sven Drehn-Knudsen and I realized this piece shortly after we had finished *Symphonie magnétophonique*, *Symphony for Tape*. The tape symphony depicts the course of a 24-hour day with the aid of characteristic concrete sounds in the city of Copenhagen – in other words it is a piece of concrete music. The sounds were recorded individually, treated electro-acoustically and then put together as parts in a score, with their durations edited corresponding to the classic note values. The score, which one can follow like an orchestral score, has the following sections. Morning: alarm clock, polyphonic yawning, tooth brushing (in semiquavers), shower, etc. The sections are separated by the signals of the City Hall clock. Forenoon: traffic sounds, work sounds, a barrel organ and other street music (that was then!). Noon with the Changing of the Guard and the radio news. Afternoon with shopping, ladies drinking tea, children playing, rush hour and closing time. Evening, with dining and entertainments. Night: sleepers breathing, heartbeats, a light breeze, the natural tone row merging into lark song. Everything has come full circle: a new day begins.

As a reaction to the World Exposition in Brussels the Music Department had arranged a week (4/11-11/11/1959) with daily broadcasts under the general heading Music in the Atomic Age. There was of course a wide range of foreign works, but there was also room for my three ‘fully fledged’ results of the laboratory work: Hans Christian Andersen’s *The Little Mermaid*, read by Ellen Gottschalck, with underlaid concrete music in the sequences on land, and electronic music in the mermaid’s underwater domain. In addition the concrete music was illustrated on its own in the *Tape Symphony* and the electronic music *Seven Circles*. This experimental week was given harsh treatment by the Danes – it was ‘not composition at all’ and ‘at any rate not music’, and ‘by no means ART’. There was a deluge of phone calls, panel discussions, reviewers giving it the thumbs-down and hordes of people who aired opinions exhibiting their literary understanding of The Emperor’s New Clothes.

Personally I think it is fine to review works soberly and objectively. It can only benefit and encourage a development process. But subjective ridicule is hubris and such hubris has mercifully been abandoned by the reviewers today. As far as the reviews I read today in the musical world are concerned, and in the articles on the eternal ‘music of our time’, true interest and engagement now seem to be the fundamental principles.

In the years after 1959 I became an assiduous student at the annual *Ferienkurse für neue Musik* in Darmstadt. And by this time some composers had arrived who also worked with the new disciplines; but you could count them on the fingers of one hand. So DR rejected our application to start up an independent electronic studio in Denmark. But in Darmstadt people met from all over the world without political or racial or prejudicial musical opinions. There were no prejudices at all. There was no time for them. In *Darmstadter Beiträge zur neuen Musik* (1961) Pierre Boulez wrote in his article “Discipline and Communication”: “We find ourselves in a particular epoch. We follow certain universal lines of force that not only apply to music but are part of the great currents of thought of the centuries (whether we are aware of it or not). It would be madness to deny this. Is it now possible in such a situation to produce craftsmanlike communication? Is it possible at all?”

Yes – the whole Darmstadt period proved that it was. The composers who taught there had in fact found out how the compositions of the time were to be expressed graphically or in technological language in order to reach the outside world. And the composers who were taught were given tools with which they could express their own works compositionally (that is, form them with compositional clarity, as in the dictionary example). For my own part I was in Darmstadt for the last time of four in 1972, when I attended a course held by Christoph Caskel on the new language for percussion and its notation. After that I wrote a work for percussion: *21 Aquarellen über das Meer nach ein Gedicht von G.S.H.* This uses

tonal colouring to create impressions of watercolours of the sea. The individual percussion sections must be recorded in advance in stereo and sent out into the space in moving stereo. The other day I looked at the *Aquarellen* score and suddenly remembered how at one point in a radio interview about concrete and electronic music I was asked the question: "But you trained at the Academy in piano and with Vagn Holmboe in composition, isn't that enough?" To that I had to reply: "Yes, apparently". That training was at any rate my highest wish and I had a wonderful time, and yet I searched on.

I had also searched on 20 years earlier (as a 14-year-old). My marvellous parents had educated me classically. My multi-artistic mother had made sure I heard all kinds of music: the classics, operas, operettas. And she taught me the piano. In addition my mother was knowledgeable about literature, theatre and film. My playful father had instilled 'laws' for letters and numbers in me, taught me card games and even the noble art of the Kabbalah. And then he took care of my report card ...

But now that I was healthy and brimful of life I sought out the spectacular life wherever it was to be found, and was hardly ever home. It was jazz that I devoted my affection to, even more than my three male fellow players in the proud band 'The Four' – later expanded with two more members under the name 'The Blue Star Band'. We took on jobs playing for dances at schools and youth associations. In those years I discovered that behind the apparently wild, wanton jazz and the popular 'schlagers' (the Top Ten of the time) there was set of rules as strict as in Beethoven's sonata forms. I had always loved fantasizing for myself on the piano; now I began to compose – schlagers – and to improvise on jazz themes. My parents despaired.

One of my slightly older friends who was studying music thought like my parents that it was a 'waste of time' for me to work with jazz and popular music. As for myself I have never forgotten the charismatic mood these sessions could create. But Jørgen introduced me to Karen Brieg, a teacher at the Royal Danish Academy of Music in Aarhus. And so Karen became my excellent piano and theory teacher, and taught me as secretly as possible out of consideration for my parents, who had had their fill of me-plus-music. And Karen became the best friend and confidante I had in my life, which turned out to set my life on a different track from the one I was following before.

Denmark was occupied by the Germans on 9 April 1940. That gave rise to a righteous indignation in me that went beyond all bounds. I considered it incredibly cowardly that a giant country occupied a tiny little country that had done no one any harm. They called themselves the *German Wehrmacht* (defence forces), but behaved as the German master race. I protested!

I joined the political party *Dansk Samling* (the Danish Unity Party) and was soon going around distributing their underground publications. Sometimes too I spat at Germans when they came marching by. Once one of the soldiers ran after me but I got away from him. Out of breath, I came up to see Karen, who got angry at me and said: "Stop that sort of nonsense! You're putting both your own and others' lives at risk. If you want to do something, it has to be done properly ..." "Well, then, I'd like to," I said. "But where can I go to do it?" "Here," replied Karen, who turned out to be the leader of a resistance group consisting of women who worked for Tholstrup in Jutland. We had to reconnoitre telephone cable positions and blow up telephone boxes in the event of invasion. So we were given instructions in the use of weapons and familiarity with the use of explosives and their functions. A woman called Anne Katrine was responsible for the instruction. She and I were a team during the research trips. Only after the war did I find out that Anne Katrine was the journalist and writer Hedda Lundh.

One fine day we were betrayed. Three of the group escaped underground, and three were captured: Karen Brieg, Paul Heide and myself. Now I experienced on my own body almost everything I had read about in illegal accounts: a dramatic arrest, a hysterical house search, warning shots, handcuffs, interrogation, the 'third degree', blows and kicks and solitary confinement ... one night when everything was chaos in my mind, I screamed out loud in fear and helplessness in my solitary cell – but no one came. It was then I promised myself that if I survived this I would work with music for the rest of my life. And then I felt a strange calm: light, warmth and love were all around me. I was no longer alone. This was the turning-point in my life.

The next day I started scratching staves on the prison wall with my garter belt fastener, and wrote out the theme that had come to me, inspired by the vision of the night. When the Commandant discovered this vandalization of a solitary confinement cell lent out by the Danish State, there followed a sound-

collage of shouting and screaming, the tramping of boots, the rattling of chains, the slamming of doors and the ominous jingle of keys ... I reacted very intensely to that. But suddenly the Commandant changed his tune: he had noticed my interest in music (my cover story was all about music – I had chosen the name Wagner – and about the teacher-pupil relationship between Karen Brieg and myself), so now the Commandant decided that he would make sure that the Red Cross brought me music paper and writing utensils so I would refrain from violence and would not dirty the wall any more. “Ich bin ja auch Musiker,” he mumbled almost inaudibly and disappeared quickly. When the parcel arrived I stared at the label almost in a trance: in war and peace, compassion ...

Soon afterwards we were sent to the Frøslev Camp. The horrors of interrogation were over, and we were left waiting for later transport south. It was ‘no tea party,’ as Hedda Lundh has called her book from 2002 about a group of women in the resistance movement. No, but it was better than a solitary cell, miserable insufficient food, poor hygiene and – the worst thing – being the helpless victim at the whims of those in power. And as the best thing there, in the women’s barrack, H 17, I met just as many splendid people gathered in one place as I have met later scattered through the rest of my life.

So, back to composition: Karen and I worked as much as we could with music. Karen wrote out Danish songs for a three-part women’s choir, and I wrote ‘schlagers’ – with which I wanted to earn money for music studies when we were released ... Both – the treasury of Danish songs and the songs with the catchy refrains – were sung in the corridors of the women’s barracks when the Germans were not watching.

One fine day, some comrades who had been consulting with Karen came into the living room. They had decided to invest in me – they didn’t say if, but when we got out of there. Then I was to live in Copenhagen and attend the Royal Danish Academy of Music. My gratitude as I write this is as boundless and wondering as it was then when my comrades stood there in Room 8 and gave me a brand new life. I can never thank them enough.

Does all this sound like a fairytale? Well, it is. It all came true. We were released on 5. May 1945 – and after the intoxication of freedom (in more than one sense – that is no secret), I moved to Copenhagen and passed the auditions for the Academy in December 1945. And now this tale is coming to an end. The story of the many mysterious compositional paths has come back to its starting point.

A perfect universe of sound is at work all around us.

Translated from Danish by James Manley, May 2017