"A Composer's Approach to a Computer Music Composition"

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Abstract

I had a difficult time when I started taking a computer music course at Columbia University because of lack of my background in computer. I would like to talk about my experience studying composition and computer music in the US and how I found the way to compose my first computer music piece with very few sophisticated computer techniques, hoping to encourage people who are having troubles starting computer music. Also I will talk about how I start a piece as an ordinary contemporary music composer who always works on a computer music piece in the same manner as for an instrumental piece.

" 作曲家としてのコンピューター・ミュージック作品へのアプローチ"

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概要

私がコロンビア大学でコンピューター・ミュージックのコースをとり始めた時、それまでに何も経験が無かったため、非常に大変な思いをしました。その年の最後には、なんとか作品を完成することができ、幸運にもその作品は、今年のICMCギリシャ大会に選ばれ、発表することができました。何もわからなかった初心者が、9ヶ月間苦しみながら一人で制作したその経験と、一人の普通の作曲家としてのコンピューター・ミュージックへのアプローチを、同様に苦しんでおられる作曲家の方々のためになれば、という思いからも、お話ししたいと思います。

Foreword

When I went to ICMC in Greece this fall, I met many people from all over the world. Soon I noticed there was a strange question those people asked me: "Do you compose instrumental music,

too?" I did not understand why they were asking this nonsense question to a composer, and I always answered "Yes, off course. I am a composer, and I am supposed to be able to compose for a ny medium."

For me, computer music is just one of my musical languages. I compose a computer music in the same manner as I compose an orchestral music or a chamber ensemble , just like I choose a specific instrumentation for a specific piece. The only difference is that when I compose a computer music piece, I need to actually "realize" its sound myself.

In the conference this time, I would like to talk about my own approach to a computer music compositions as an ordinary composer, who composes contemporary music for any medium, using my first computer music piece that I finished in 1996 as an example.

My first computer music experience at Columbia University

In 1995-96 school year I took a computer music course at Columbia University with Brad Garton and I composed my first computer music piece "REMINISCENCE" as my final project. Although I had taken an electronic music course before, it was the first time to compose a piece on a computer. I was the only beginner among the students at that time and I had a hard time understanding what was talked about in the class because of lack of basic knowledges in both computer and computer music terms.

Mainly, the class was taught using Cmix program, which requires a lot of programing in C language. I struggled whole first semester and came up with nothing. I was completely devastated and depressed not knowing what to do. I was almost giving up all computer music at that moment. In the second semester, however, when I was playing around on a SGI computer, I accidentally discovered something that I could do by myself. It was to compose a piece using MIX, Sound Editor and some other tools available on SGI.

Basically, what I did was a so called "musique concrete." First, as I always do for my instrumental pieces, I thought about the plan of the piece including the form, the textures, how to begin the piece, how to build up the intensity, and how to end the piece. At that time, since I was not comfortable with "forms" or "formal thinking," which might limit my creativity, I made up my mind to leave the form open and to wait for my own judgement at each moment as I compose and realize the piece.

I started recording some existing sounds on DAT at home, hitting the wooden chairs, shaking the bottles of oil, sugar, salt, and so on. They can be heard throughout the piece. Also, I wanted to do some experiments using a speaking voice for the first time. I tried it myself speaking in Japanese, but the sound of Japanese did not fit to my image of the piece. I did not want to use English either, so I asked a friend of mine who was from Cyprus to speak in Greek, which I could never understand the meaning. She read some poems by a famous Greek poet Konstantine Kavafy.

I was fascinated not only by the context of the poems but also by the sound of the language. Greek has many interesting consonances. Using the Sound Editor I edited her speaking voice and created new sounds out of it. I could do that because I did not understand the meaning by hearing it, therefore I was free minded dealing only with the sound of the language. They are used in the first and the second sections of the piece as a foreground. Entire reading of the poem "Days of 1903" is used in the last section not as a foreground but as a part of the mixture of the sounds used in the section, and it fades away in the wet reverves. Here I experimented non-traditional use of different compositional elements: fragments for foreground and a whole meaningful set for a part of background.

I used some instrumental sounds, too. Some of them are recognizable, but most of them are transposed up and down in different ways in order to make them unrecognizable. I mainly used Ceres program for pitch transpositions and also intentionally used Sound Editor's primitive ones. Outside digital sound processors and internal one from MIX program are used for sound effects.

Conclusion

Now I, after a couple of years of studies, have come to be able to use a little more of Cmix, and some other applications such as AudioSculpt, Patchwork, and new Ceres, which has been dramatically improved by my colleague composer Jonathan Lee.

I have a step by step plan of my own in order to experience many kinds of possibilities to use computer programs for my projects. So far, I have composed a tape only piece and a piece for a tape and an instrument. Now I am planning a large ensemble of fifteen instrumentalists with live electronic s using a computer program to control the sound processors. With Tristan Murail, I have just started working on this project as my dissertation piece. Since we also have to write an essay as a part of our dissertations, I am planning to write about my compositional thoughts and processes rather than sho wing how I used fancy computer techniques, because I am not a computer programmer, but I am a composer. I am supposed to be dealing with sounds, not with computer techniques.

Luckily, I had a chance to study both traditional contemporary music composition and electronic/computer music composition. I, as a composer, believe that we have more musical possibilities in combining both of them. If we approach computer music in the right ways, we will be able to enrich musical languages of our own. There, I can see the future for the art music.