Haojun Wang
haojunwa@usc.edu Week 2 Report

Impromptu is a Java-based program to create a short period of music melody. It provides a large set of short tunes with graphic representations. Users are also able to modify these tunes for customization. In [1] J. Bamberger presented her work by two case studies of college students with bare formal musical background using this software to create their own music work. These tasks are open-ended, and students are free to modify the tunes in the software in order to have a consistent melody as the work result. She concluded that given unfamiliar melodic tunes, untrained adults are able to adjust them and make a consistent melody with the combination and modification of these tunes. Her contribution in this case study is that users are not only experience the instances of archetypal structures, but also creating music archetypes. The user behavior of music composition is also well studied by two scripts of students when using Impromptu.

First Look at Impromptu

The first time when I opened this software (Figure 1), it took me around 5 minutes to get familiar with the features.

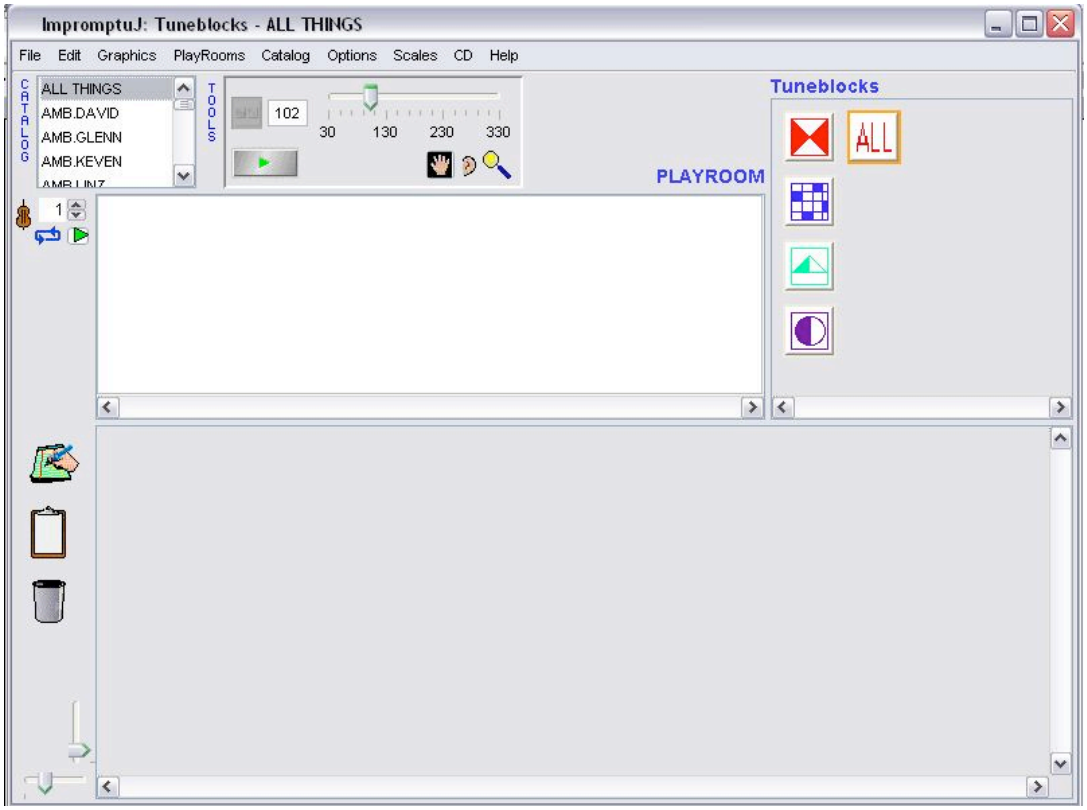

Figure 1. Impromptu Initial Window

The catalog panel, tuneblocks panel are very easy to understand and user. However, some very important tools, like block selection, hearing the tunes, and edit are very small to find and control. Another problem is the difference between notepad and block pad, I cannot understand why need these two pads, instead of one. As my suggestion the buttons should be laid together, and with the size that is easy to see and control.

Haojun Wang
haojunwa@usc.edu Week 2 Report

Melody Composition Using Impromptu

The music I composed using this software consists of CHINA tunes. First, I opened tunes from catalog CHINA. (Figure 2) I listened to all the tunes in this set. For a student without too much music knowledge like me, I cannot choose any combination of the tunes could be a melody at this point.

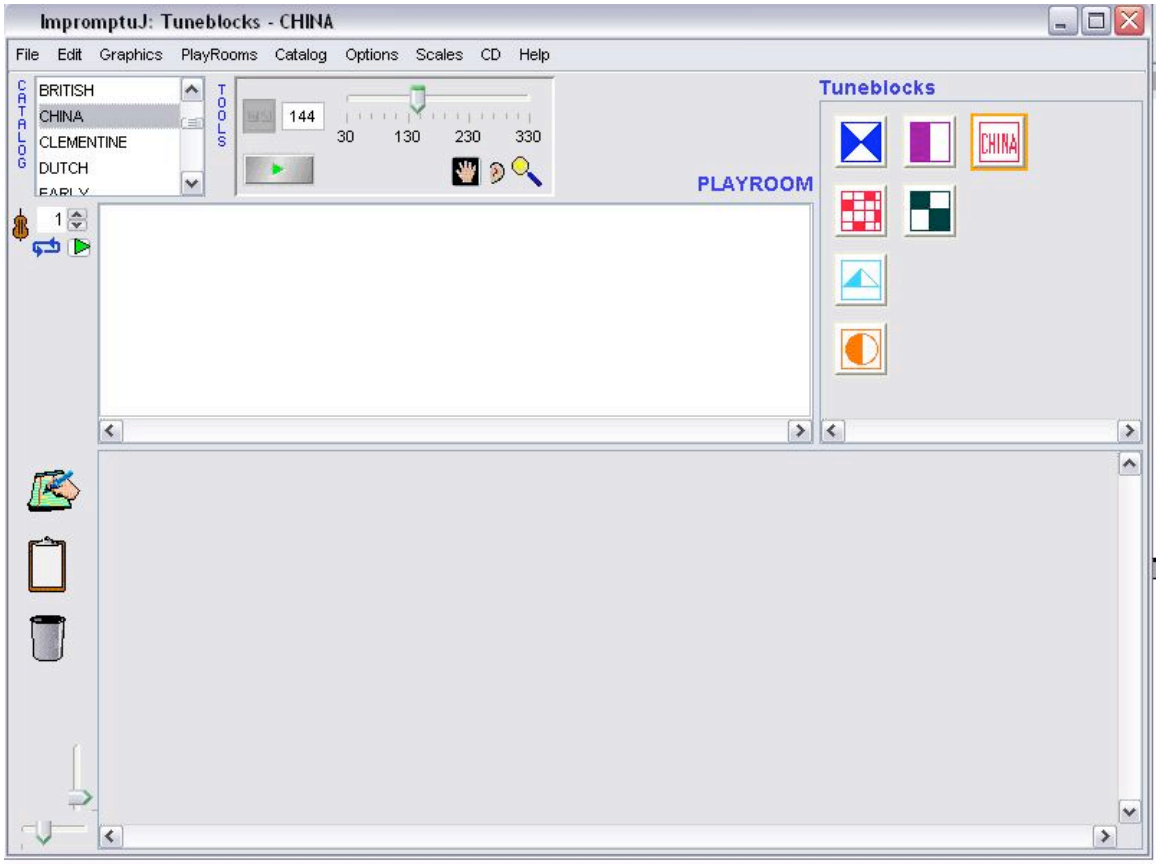

Figure 2 Impromptu with CHINA tunes

Next step, I put all tunes in playroom panel, and the bottom panel automatically showed the pitch contour of each tune. I tried to connect some tunes when the connection of them looks smooth with regard to pitch contour. After these tries, sounds like block 5 and block 3 could have a consistent phrase. Also block 3 and block 6 are consistent. However, after these tries, I also noticed that the smooth pitch contour sometimes also produce some monotonic and boring melody. But in traditional Chinese music, the “up” and “down” between pitches are usually not very drastically. At least at this point, I have a short melody with the sequence of block 5, block 3, and block 6.

So I kept using this hearing combined with graphic assistance method to create my melody, I got the sequence of block 5, block 3, block 6, block 2, and block 1. It sounds that block 5 is naturally a good beginning for this melody. Now I need an end. I have not used block 4 yet, but its pitch is a bit too low when directly connecting with block 1. The way I solved this problem is that I noticed block 3 could be a good candidate to connect

block 4, and block 4 is good for ending the melody. Since block 5 and block 3 are already a good phrase, why not I use this phrase again in the melody? I connect block 1 with block 5, block 3 and finally block 4. I got my own melody. (Figure 3)

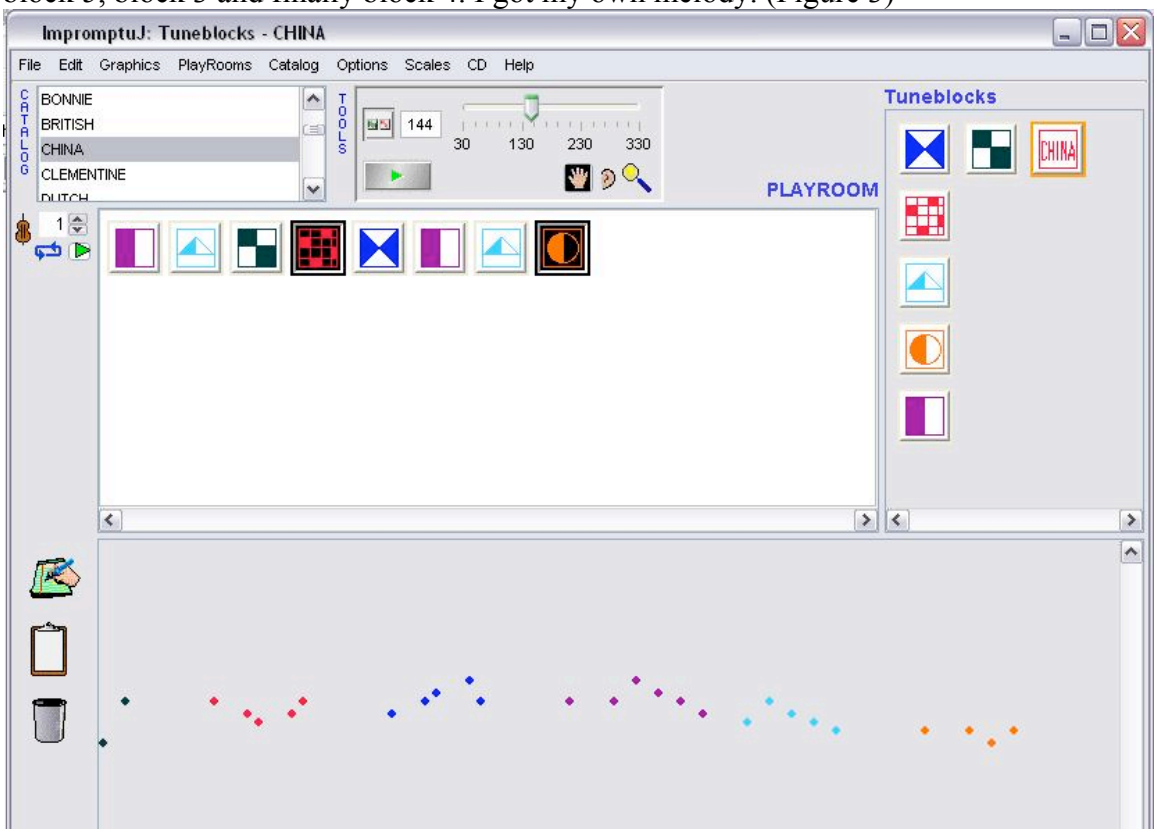

Figure 3 My Melody Composition

It took me another 10 minutes to create this melody after I have got familiar with the software. I did not use the tune modification feature. Because I think I could get a consistent melody without any modification. Also the graphic representation of tunes helped me a lot in composition. Impromptu also support XML format storage of melody, which is very easy to use.

User Experience Comparison

Compare to the students experience described in the paper, there is a big difference when I used this software. I did not consider the beginning and ending of the melody at the beginning phase of my composition. In stead, I consider the body of melody most of the time. After I got the body, I checked any tunes I have not used in the melody yet, and try to use it as either the beginning or ending of the melody.

Haojun Wang
haojunwa@usc.edu

Hyperscore is another program to create music with graphic representation. Hyperscore is more focused on children as users. In [2], K. Jennings presented a case study of ten years old child using this software to create music. User behavior is well presented and analyzed in this paper.

First Look at Hyperscore

The user interface of Hyperscore (Figure 4) looks more vivid than Impromptu. However, the software is more difficult for me to get used to. It took me around 15 minutes to understand the features of the software. Some important features, like play, tempo, and harmony selection on sketch window are small and fuzzy. I think it would take more time for kids to understand how it works.

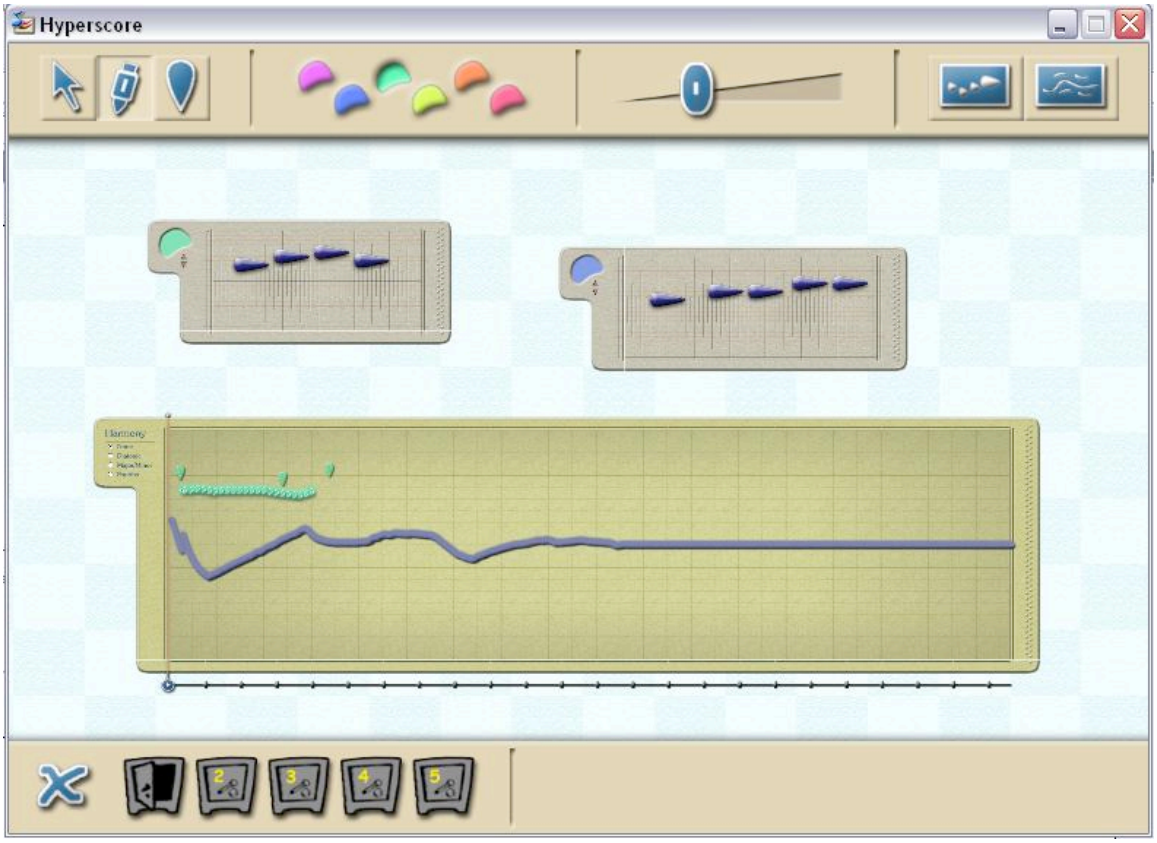

Figure 4. Hyperscore

Music Composition Using Impromptu

The way I tried to create my own motives are through the motive window. I tried to create either smooth phrase or regular pattern in the motive windows first. After creating four motives, I begin the combine them in the sketch window. In this phase, the software seems need more intuition and become a bit hard for me to control. My final work is shown in Figure 5. But I still think it sound a bit weird. The reason is the length of line drawn by the pen decides the repetition of motives, however, if I want to control the times of repetition, there is no direct method. I have to modify many times, especially

when more than two motives are used, to make a consistent melody period. Another point is though each motive sounds consistent to me, but the combination of them sounds really weird. Maybe there is some constraint in such case, but I have little music background on it. I have to complete the work by hearing many times. (The same case presented in the paper).

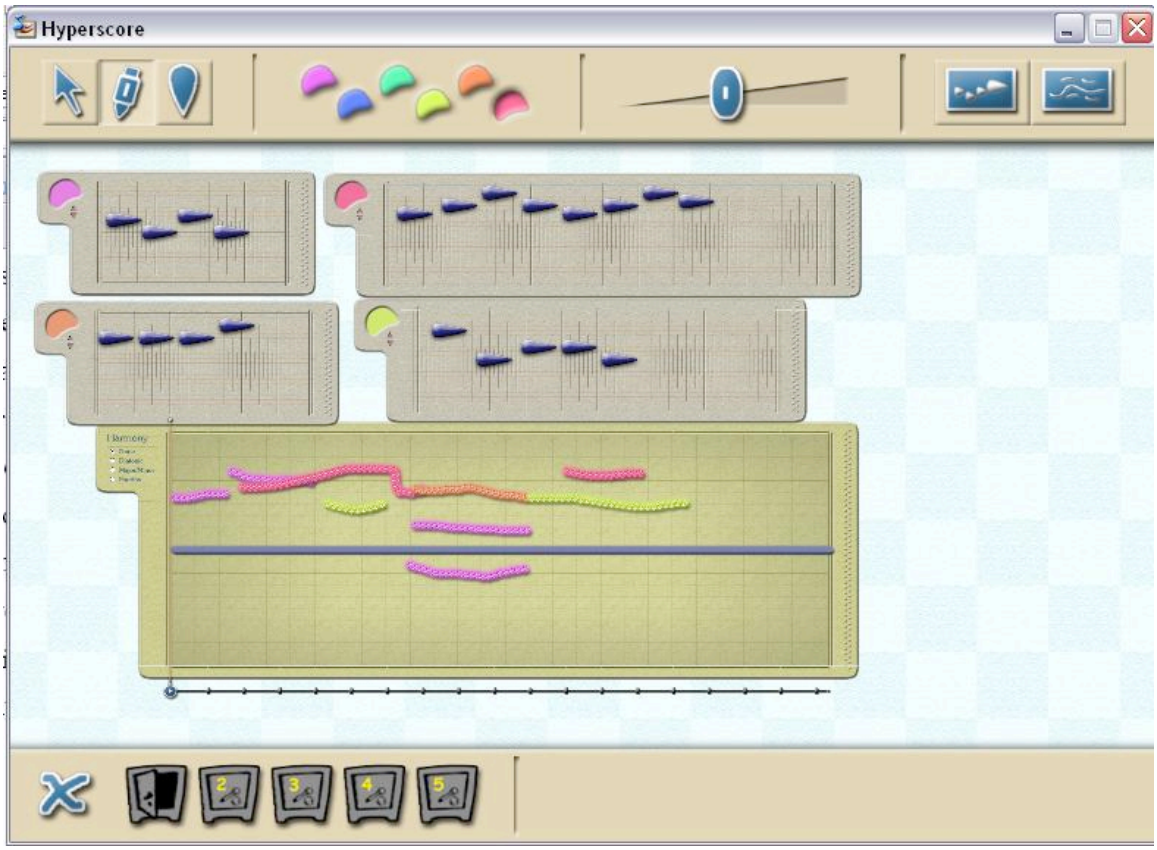

Figure 5. My Music Composition

User Experience Comparison

In the paper, Kevin spent more time than me to understand how system works. When Kevin created the motives, he was more focused on how it sounds, while I looked at the shape of the motive when drawing the motive. I want to have some smooth curves in the motive windows. We both played back a lot when composing. But the motives he created seems have more beat patterns than mine. Kevin tried a lot of parallel motives in his final sketch, while I tried only a bit, because from my point of view, combining too many motives would make it sound noisy.

Comments on Impromptu and Hyperscore

Both software are to facilitate music composition, users are expected to have little formal music background. Hyperscore is more focused on children. I think both user interface need to be improved, because some important features are not easy to understand and control. I would more prefer Impromptu because many tunes are already stored. I can

skip the trivia part and focus on the melody. With Impromptu it is also very easy for me to modify existing tunes. The music work I finished from Impromptu is much better than the one from Hyperscore.

References

[1] The Development of Intuitive Musical Understanding: A Natural Experiement, Jeanne Bamberger
[2] Hyberscore: A Case Study in Computer Mediated Music Composition, Kevin Jennings