

### *Paper Comments*

Similar to the Impromptu paper, this study sets out to investigate compositional abilities in musically untrained subjects using a creative software program. However, Jennings focuses on adolescents and the creation and revision techniques they use in composing. He also elaborates on the educational principles Bamberger mentioned by studying the role of the teacher in this music-learning process.

The software in question this time around is called Hyperscore and again it is an intuitive music creation tool. In the program, the user can create ‘sketch’ and ‘motive’ windows by clicking and dragging in the main window. The motive windows serve as palettes for brief melodic ideas while the sketch window acts like the broader compositional score. What makes Hyperscore different from Impromptu is that the user “paints” a motive on the sketch window; Hyperscore then maps the motive to the contour of the stroke. In all the design windows, the user may listen to the composition at any time. It is important to note that while the notes and strokes operate with pitch and duration like standard notation, there are no bar lines.

For the study, Jennings observed ten Irish adolescents aged 9-11 who used the software for about ten, fifty-minute sessions over five weeks. Each session had two students on separate computers and a single teacher. The sessions were videotaped so that a full record of students’ process could be studied.

Jennings’ case study is Kevin, a bright, 10 year old boy with no prior musical training. Initially, Kevin begins playing with the motives and haphazardly creating tunes. As Jennings pointed out, he is simply interacting with the interface, not the music. By the second week,

Kevin, assigned with creating two motives that “go together,” now begins to focus on creating viable, interesting melodies. He listens to motives to determine how they should be changed. An important development occurs when Kevin is encouraged to clap the rhythm to his motives; he soon realizes how each is a different length and decides to add rests (which he did not realize was possible before).

As with the Bamberger case studies, Kevin begins to experiment with repetition to push his idea forward. Moreover, he “zooms” out from the motive window and begins to consider the entire sketch. While singing his melody, Kevin realizes that he instinctively extends some notes where the computer plays rests. Perhaps the most surprising development, however, is what he says about the middle of his piece. Referring to an abrupt transition where the thin melodies are replaced by multiple voices, he says, “I don’t think that people will be expecting it in the audience.” Not only does Kevin realize that he is creating something evocative, but he also views his work as having meaning for a larger audience.

Kevin, like Linz and Keven, demonstrates a hierarchical understanding of his piece and the importance of movement towards a goal. Unknowingly, he also perceives the subtleties of texture and rhythm in composition. One unsuspected result (and different than Bamberger’s study) is that while Kevin creates tonally based motives, his overall sketch has many keys. Jennings suggests that this is a function of the tool: being able to zoom out and see the composition as a whole, Kevin’s attention is shifted to the rhythm, such as making sure each motive starts at the same time.

Ultimately, Jennings’ analysis of the teacher’s role achieves similar results as the reflection did in Bamberger’s study. Whereas Linz and Keven introspectively consider their

choices, Kevin's age requires a teacher to help him motivate him to reach new ideas and stay focused. Nevertheless, the results are the same.

### *Personal Experience*

While this might seem embarrassing to say since adolescents excelled at Hyperscore, I found the program difficult to understand and use. I read through the tutorial, but the interface was still troublesome. It does, in fact, resemble a paint program; I know this is the appeal of the program, but for me it detracted from the ease of use.

After familiarizing myself with the interface (as Kevin did), I sat down to compose a tune. I created various motive windows and "drew" on the sketch window. However, the best I was able to compose resembled strange-sounding pizzicato violin tunes from a horror film—not quite my desired outcome. When I finally got something more pleasant sounding, I still could not create the sounds I was imagining in my head. There is no (obvious) coherent relationship between the pitch and duration of the motive windows and the sketch window. I can not even begin to understand the program's correspondence between motives and painted strokes, which makes it impossible to have a sense of how my motive will sound. Finally, it is a challenge simply to paste a stroke and have it line up properly with the previous section; this results either in unexpected pauses or in overlapping notes.

While I did not find Hyperscore as intuitive as Impromptu, it is possible that if I allowed myself more time (as they did in the study), I would be have achieved more desirable results. However, as an teaching tool, Hyperscore seems to have abstracted the music details away too much in favor of flashy graphics.