

Are you a synesthete?

No. As it is described here, <http://www.musanim.com/mam/mamhist.htm>, the graphical score started as an attempt to make a score that was simpler to follow.

My work in visualizing music is guided by what I know about music theory, perception and cognition. I'm hoping to eventually do an animation which captures more of my original experience, but I haven't done much along those lines yet.

Was there a decision process on symbols and colors for notes and tones? Are they the same across the board (meaning a long C# is always a thick green bar, etc)?

You might want to read this (if you haven't already):

<http://www.musanim.com/mam/pfifth.htm>

I tend to use blue for the tonic (home) key, but that's relatively arbitrary. What's essential about the method is applying the tones from the circle of fifths to the colors on the color wheel (so that pitches which are similar in tonal function are similar in hue). There are twelve possible ways of doing this (one per pitch class), and they all work about equally well; I only stick with blue as the tonic for consistency and because blue is a relatively "stable" color (which therefore seems to match, psychologically, to the tonic).

Had you studied or did you have any understanding of audio-color synesthesia?

I've read about it a fair amount, and understand the varieties, the mechanisms which are believed to cause it, etc.

When you started the project, was it meant to relate to synesthesia in any way? Is it now?

That depends what you mean by "meant." I don't remember when I first learned about synesthesia, but my understanding of it hasn't been a significant factor in my approach to making graphical scores.

I had an email correspondence with a woman with synesthesia, and I wrote a version of my iPad app that used her color set; I never heard back whether she'd tried it out. That's as close as I've come to doing anything directly synesthesia-related in my project.

In what ways do you think your work might benefit or relate to synesthesia research?

I've found it's interesting to talk to people with synesthesia, to try to understand what their experiences are like, as a source of ideas for my visualizations. However, this is only very loosely "synesthesia research" --- it's also interesting to talk to non-synesthetes about their experiences visualizing music, or to look at a book of paintings, or walk through the woods. As for the other direction, I don't think my work would benefit synesthesia research.

The audience for my visualizations of music, like the audience for music generally, is human beings. The art of music is based on auditory perception, and my work is based on the relationships between auditory perception and visual perception. In people with synesthesia, there is "cross-talk" between the senses, which alters these relationships. I'm trying to make visualizations that are interesting to all people (not just synesthetes), so while what happens for a synesthete is interesting, it is not as relevant to what I'm trying to do as the experiences of an ordinary person are.

Where do you see the project growing from here?

That depends on whether "the project" means my work or work in the field I'm working in.

Personally, the main thrust is to develop new varieties of animation to show different aspects of the music. Did you look at this series of experiments <http://www.musanim.com/bwv1007m1/> ? That shows you a little of my process. I'm also working with a violinist/conductor/entrepreneur in Europe to develop a version of my software that can be used in live performance. In it, the "animator" is another performer in the ensemble, and controls the timing (and, in the proposed design for future versions, the content) of the animation so that it's in sync with the performance. I expect that this will be popular with symphony orchestras and other classical ensembles with the wherewithal to project videos in concert.

Besides those two avenues of development, there are other projects in my to-do queue that are related to music visualization. For example, I have plans to make software that teaches you how to sight-read keyboard music; this will have a significant visual aspect to it. I also have occasional ideas for visually-oriented musical instruments (for example, my Harmonizer: <http://www.musanim.com/harmonizer/>).

More broadly, music visualization is just beginning to come of age. When Oskar Fischinger (perhaps the most important early pioneer in the field) was working, everything had to be done by hand by people with expertise in art, film, etc. ...

<http://www.amazon.com/Optical-Poetry-Life-Oskar-Fischinger/dp/0253343488>

Later, when computers first started, people who were computer experts started

experimenting ...

<http://www.amazon.com/Digital-Harmony-Complementarity-Music-Visual/dp/007070015X>

Now, we are at the start of a period where "normal people" can begin to do music visualization. For example, although it was not specifically designed for this, people have been taking my graphical MIDI player (<http://www.musanim.com/player/>) and writing music that is designed to be interesting both visually and musically; there was a fad of this in Japan a while ago, and I put up this page

<http://www.musanim.com/niconicodouga/>

(I haven't kept up with that, so it might be out-of-date, but hopefully enough of it will be there for you to get the idea.)

Lots of people are also doing what I'm doing:

<http://www.musanim.com/all/MAMMIDIPlayerOnYouTube.html>

At the moment, it still takes a certain amount of technical ability, both musically and computer-wise, to do music visualization, but I have a design in mind for software that would make it possible for just about anybody to do it. I might develop the software on my own, or in conjunction with a video game company --- or somebody else might just do it on their own. In any case, I expect that the field will flourish. I mean, it's kind of a new art form. Just as ballet combines music and physical motion, music visualization combines music and visual art. I'm like the cave man who's made a three-hole flute and can play some notes ... there's a universe of visual music yet to be invented.