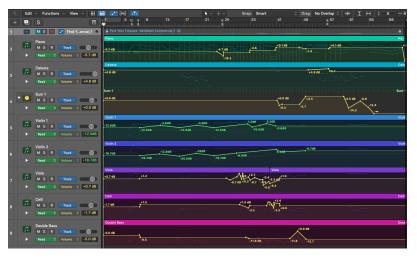
## **Gary Couch MPVI Documentation**

## Project 1

My goals for this project was to clean up any instances where the music was not properly aligned with the movie, as well as making the instruments and VST's not sound like MIDI or fake. I feel like I did a very good job the first time through in MPV but with only a week to work on the project, I know I could have allowed more time to craft the sounds I used into something more emotional and fitting for the arrangement I wrote as well as the movie.



Here is a screenshot of the overall project view, which shows the arrangement, volume automation parameters, and microphone automation parameters

On the VST side of things, there was a lot that needed to be done. For starters, what I arranged for instrumentally was a string quintet with piano and celesta. The VST choices I had originally was meant to be for an entire orchestra and were too much for what I wanted. My solution was to find the solo patches through OPUS and cheat a little bit with my choices to still fit. I picked the solo violin master patch for both first and second violins, and adjusted microphone placements and panning to make them distinguishable from each other. I really made use of the key switches this time allowing for more expression and realism.

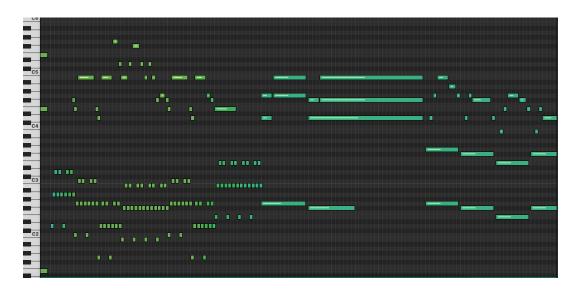
For the viola and cello, I cheated and used the solo cello master patch for the two of them, as OPUS does not have solo viola or contrabass, as I wanted to maintain the quintet sound. I think the range difference between the two allows this to work and I did more microphone adjustments to these two to further separate them.



Shown above is are screenshots of the violin I OPUS player and automation views

The contrabass part I was unable to find a solo patch that matched with the ensemble tone so I made some microphone adjustments and dialed back the overall volume to sit further back. The part musically was more pizzicato with some arco notes so I was able to pull this off more in the background.

For the piano and celesta part I played around with more OPUS settings with lid positions and velocity settings in the piano roll to not be as aggressive near the end of the piece to show the delicacy of the scene matched with the celesta. There were issues with pedal automations not lining up or registering that I never noticed the first time I did this project so I also remedied those. The celesta part also had mistakes near the end with that part being one octave too high and too harsh sounding, so that was an easy fix.



Piano roll of a portion of the piano section addressing velocity adjustments

Mixing the arrangement involved gentle uses of the in-house OPUS reverb to connect all of the instruments (increasing the reverb a small amount for the violin parts when they start to reach the higher register). On top of that, I used some panning to the right and left for the string section to match the placement of the ensemble and bring more realism, while leaving the celesta and piano center. In the first screenshot, you can see the main automated parameters of volume as well as the sum track that houses all of the string section, mostly for minor group automation like Chromaverb and ensemble crescendos and decrescendos, as this was easier than individually automating the same thing five times over, and helps the string section fade out to nothing near the end.

The main challenges I faced with this project was limiting how much memory I could allocate and that meant limiting the amount of specific details and adjustments I could do with the instruments. I would learn from this with the rest of my projects. With the recent release of Hollywood Strings 2 from East West, I was tempted to go back to this project and try a small

string quintet arrangement, but found it lost the closeness and impact of solo instrumentation.

That, and time did not allow for me to pull it off completely in time.

Here is a PDF file to the score: MPVI Project 1

Project 2

This was definitely my most ambitious project of the semester, with the intent of revisiting my massive orchestral project from MPIV and doing a better job of mixing, ironing out problematic sections and parts, and working on my laptop this time instead of my desktop pc which allowed me to work in Logic. I had to manually input all midi information and parameters again as there is no way to port over information from Ableton into Logic.

My major problem was the fact that the project needed roughly 32GB of memory (roughly 2GB per instrument) which is double of what my laptop has. I found the easiest thing to do to avoid any further troubles was to manually bounce every single instrument track as their own separate audio files. This helped reduce the memory load on my laptop and ensured that there would be no errors in midi rendering during editing - all parts would sound the same no matter what. This also meant I could use 4GB of memory per VST instance and make sure they sounded as good and realistic as I could, as once I exported the midi to audio, I could purge the VST instance and get my RAM back. This consumed way more time than I expected, but I believe helped the overall project and mixing process.

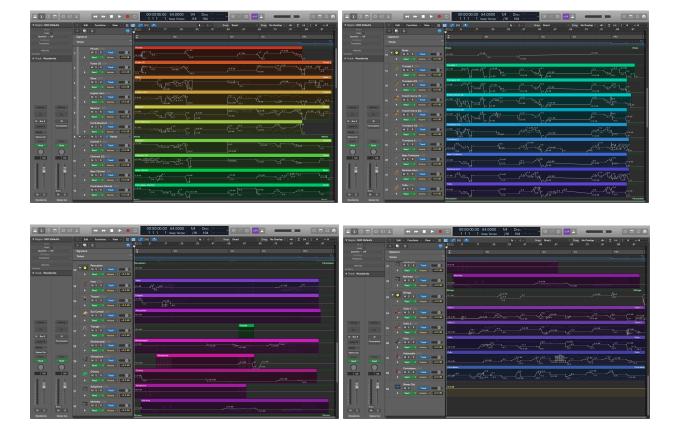
For the VST's, I made extensive use of East West's Hollywood Orchestral OPUS edition of woodwinds, reeds, brass, percussion, and strings. I made sure to bounce all the tracks raw without any volume automation settings as those would be applied later. I messed around with

individual microphone settings on most of the instruments as well. You will notice the automation changes from midi to audio that had to be made in the screenshots below.

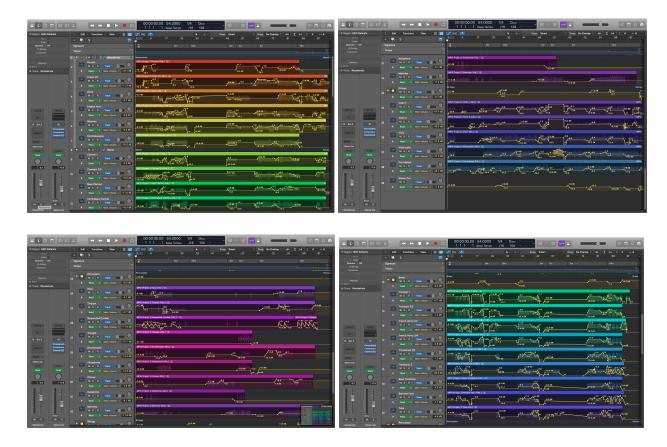
Another change I made to the orchestration as a whole was to get rid of the choir, as not only was it a pain to get working, I also didn't need it anymore as it was a requirement for the MPIV project. I instead incorporated the choir parts into various instrument sections as needed.

The score has been vastly improved and more professional than what it was, as this was a piece I submitted for a contest. Here is a link to the score: <u>Acerbumdalce Malum</u>

This is the MIDI project view:



While this is the bounced audio session:



Basic overview of some of the OPUS VST instruments:



















**Project 3** 

My goal for this project was to create some kind of loopable electronic tune, as it was something I had not done in a long time and wanted to see how I would do. I envisioned the atmosphere of this piece being something out of an underwater level of a video game. I put that keyword in the forefront of my mind as I sculpted out the piece.

I was unsure where it would go, but had a starting point of making a plucked-synth play out an arpeggiated figure that would be persistent throughout the whole song. This synth would also be warped sonically by increasing the attack time, and adding more gain to the lower frequencies of the equalizer. For this sound, I used a free synthesizer instrument rack called Vital.

I wanted to try something different with the bass instruments by having two different instruments play almost the same lines, with one being hard panned left, and the other hard panned right. One of them has a harder attack which was nice for occasional arpeggios and the other one was more connected and legato, and sometimes played some funky riffs. I used two different Alchemy instances for the bass instruments.

There is a complementary synthesizer part to the melody that I use that sounds like a glass harp that comes from Sculpture. It shares some of the melody lines while also going off and doing its own thing.

There are three different pad synthesizers that play in the background and mostly play the same parts, occasionally sneaking in some melody lines. There is one called Aquaponics from Alchemy that has some noise sources that replicated beach waves and shore splashes which sneaks in overtop the other synths at times. However, it can get too noisy at times so it is often softly playing in the background. The other synthesizers come from EFM1 and another Alchemy instance.

The main melodic instrument sounds like an airy cello, and it comes from ES2. I really experimented with effects like manual vibrato and pitch blending to breathe life into the synth. I used other Apple-native synthesizers like Sculpture, Alchemy, EFM1, ES2, and an outsider called Vital (where I got my plucked synth arpeggiator sound and one of my bass synth sounds as well).







Project 4

For this project, my goal was to turn my MPV midterm project into a more complete string ensemble piece. The midterm was scored for a movie scene from Wall-E, and while I enjoyed what I did for the project, I felt that I could do more and remove the limits I was working under by taking the piece away from the film to allow greater flexibility and expanding on more fleshed-out ideas. The ideas in the piece was originally from my loving and longing piece I did earlier in that semester.

I was excited that this project was the last one of the semester because I got to experiment with it for longer, and that East West was coming out with a Hollywood Strings 2 package, which is essentially a smaller string ensemble version of the original with more close and intimate sounds and far more microphone settings, as well as all-around better sounding effects and articulations. This limited me on how much time I could mix the project, but it sounded so good that I didn't need to do much!

The main challenge was, again, the memory issues as more options can mean, for example, the Violin 1 patch could take up as much as 6GB memory. I was able to disable whatever articulations I did not need to use for the project and also mess around with every microphone setting to find what ones worked best, and that saved enough memory across all the instruments in my session to allow a smooth session and no extra bouncing and work.

Another challenge was making transitions from section to section as it was easier with film to stop suddenly and then start something new relative to what was happening on screen, and after messing around with expanding ideas and filling in silence, I had a complete piece with good enough transitions.

One thing I did that was 'off the script' was to turn this audio project into a video project with the audio playing over the score.









