Journey Live:

Arranging Austin Wintory's Complete Score from Journey for Live Performance



Patrick O'Malley SMPTV Minor Field August 17th, 2018 Note on reference Youtube video recording:

This paper makes frequent reference to scenes from the video game *Journey*. Given the nature of video games, specific scenes and moments cannot be accessed at a moment's notice (such as a page in a book or a film time code on home video). I have therefore provided links throughout the paper to a recorded playthrough of the game posted on Youtube. The playthrough, uploaded by a channel called IAmSp00n, effectively demonstrates all relevant scenes in the game without commentary or extraneous editing.

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Arranging Austin Wintory's Complete Score from "Journey" for Live Performance

In the fall of 2015, I was hired by Chicago-based Fifth House Ensemble as an arranger for a rather unique project: a concert tour of Thatgamecompany's 2012 video game, Journey. Released in 2012 by Sony on the Playstation 3, Journey became a bestselling independent title on the Playstation Network Store, and its music, composed by Austin Wintory, received well-deserved praise and notoriety, becoming the first (and still only) video game soundtrack to receive a Grammy nomination for best score. Set in a mysterious desert world, *Journey* casts its players as a red, robed figure, who sets forth towards a large mountain in the distance without any expositional context. The narrative, told without dialogue or written text, is delivered through visuals and music alone, the latter beginning as a stirring cello solo, and slowly over the course of the game, grows in orchestration to a full ensemble at the climax. This combination of music and visuals creates an emotionally resonant experience, and it is difficult to find or have any discussions regarding *Journey* without mention of Wintory's score. Given the game's approximately two-hour playtime, a live concert presentation of the game and its music was an obvious way to follow up the game's success. In this paper I will discuss how this project got underway, and my experience in translating Wintory's complete score for *Journey* into a live, chamber music setting, focusing especially on the technical considerations of instrumentation and live synchronization.

Background

In our discussions about adapting *Journey* for live performance, Wintory mentioned to me that it was something he had wanted to do since the game released, but never found the time to organize a performance himself, let alone create a "live" performing version of the music. Between 2014 and 2015, Wintory became familiar with the Chicago-based chamber group Fifth House Ensemble, primarily through contact with its composer-in-residence Dan Visconti (who had written an article about Wintory's score for *Journey* when the game had first released). The two parties eventually agreed to pursue the project together, with Wintory supplying the intellectual property and getting Sony's support for the show, and Fifth House supplying the arrangement, concert planning, personnel, instruments, equipment, and rehearsal time to make the show possible (as opposed to Wintory hiring a freelance group). Fifth House Ensemble, though made up entirely of classically trained musicians, had been pursuing interdisciplinary projects and concerts as a main part of their seasons since its inception, collaborating with visual and multi-medial artists, videographers, educational groups, and non-western musicians to name just a few. Its goal has and continues to be spreading the voice of classical chamber music to a more diverse audience and community, primarily through broadening the chamber music repertory, rather than only playing the same canonical pieces over and over again. Having a concert based on a best-selling video game with a popular soundtrack was a ideal situation for Fifth House to tackle, not only for the notoriety of the game, but also that it

would expand its audience to game enthusiasts; people who might otherwise not go to a contemporary classical concert.

The first big step to make the show a reality was creating a performing version of Wintory's music. Video game music concerts were nothing new at the time - shows such as Video Games Live, and Play! had been touring since the early 2000's, presenting music from video games as orchestral pieces with synchronized video and lights. There have also been several "single-franchise" concerts produced that focus on presenting music from a single game brand over the course of an evening, such as the Final Fantasy, Legend of Zelda, and Pokémon series. However, Journey Live sought to be different in a rather ambitious way. The aforementioned concerts primarily present music as suites and themes (including the main theme for *Journey* on occasion), with video edited or prerecorded to fit the music. Any instance of the opposite - that of a "live" game being played with the orchestra following the image on screen - are typically short, side-show bits that are presented in between big pieces (such as a random audience member or contest winner being chosen to play Space Invaders for five minutes with the orchestra humorously playing the exceedingly simple music in the background). Journey Live, on the other hand, sought to perform an entire video game score *live to picture*, with real video game players onstage playing a real video game console, and the orchestra having to follow the video game players' choices and progress throughout the evening (I will be referring to the video game players as "gamers" for the remainder of this paper to avoid confusion with the word "players" referring to the musicians).

In order to make this happen, it was impossible for Wintory to simply throw his old music parts in front of Fifth House Ensemble and tell someone with a PlayStation to press "play." Two major challenges stood in the way: instrumentation and synchronization. Regarding the former, the composer had created the score for *Journey* by using a multitude of musical resources that he then combined and mixed together, as opposed to recording a single western orchestra on a single sound stage. These elements included extensive solos for flute, cello, harp, and voice (recorded at the composer's studio), a string orchestra (recorded in Macedonia), a short list of non-western instruments for brief solos on specific cues, and a bevy of sample libraries that included more non-western instruments, electronic instruments and pads, sound design elements, and specialty percussion not readily available in most orchestras. Fifth House Ensemble consists of ten core musicians, with the ability to hire a few ringers for special shows. Its standard instrumentation is flute, oboe, clarinet, horn, bassoon, piano, one violin, viola, cello, and double bass; in other words, wind quintet plus low string quartet plus piano. Therefore, someone would need to re-orchestrate, or reduce, Wintory's complete score down to Fifth House Ensemble's available personal of about twelve or thirteen people, while preserving the essence of the original soundtrack. Add to all that the fact that Wintory's score was mostly composed in short sections that would be strung together by the game's audio engine to match gamers' input. This leads to the topic of synchronization: how is a live classical ensemble with conductor supposed to jump at a moment's notice between different sections of music depending on the

gamers' progress without getting lost or sounding jarring? The arrangement would need to solve this problem as well.

In 2014, Dan Visconti approached me with the offer to create the arrangement for Journey Live, with me officially starting work on it in late 2015. I had gotten to know Fifth House Ensemble by participating in its 2013 summer workshop program for composers and musicians, the Fresh Inc. Festival, held in Kenosha, Wisconsin. During the festival I worked with several of the Fifth House musicians on performances of two of my chamber pieces, and studied composition privately with Visconti, with whom I casually mentioned my interest in film and game music. Fifth House has made a practice of keeping alumni from the festival in mind for future collaborative projects, and with regards to *Journey Live*, I had apparently impressed them enough during the festival that I was an good choice to tackle a video game score arrangement, due to both my skills as a composer and as a fan of video games in general. During the fall of 2014, I had also met Wintory at the Indiecade video game festival in Los Angeles, where I had a short discussion with him on video games and music (before signing on as an arranger), so by the time the project was set in motion, everyone had gotten to know each other. It took a while longer for Fifth House to get a premier performance date organized, but once that was settled I was able to get to work on the arrangement. It was also decided that Wintory would conduct the concert, with me conducting the preliminary rehearsals in Chicago, and any concerts that Wintory could not attend due to scheduling conflicts.

The first steps in creating the arrangement were studying Wintory's original score in the context of the game, and gathering materials from Wintory himself. I began by replaying through the game multiple times, first at a normal pace to refamiliarize myself with the game's aesthetic, world, and narrative, and then at a snail's pace, listening intently for changes in the musical sections and keeping a thorough written record throughout. Multiple listenings to the soundtrack album also reinforced my knowledge of the music and its development over the course of the game. When I eventually met with Wintory at his studio to discuss the arrangement, we were able to get through the whole game rather quickly thanks to my beforehand preparation, and were able to throw out a lot of ideas about instrumentation and consideration for Wintory's various digital music tricks that would be difficult to replicate by a live ensemble. At the end of that meeting, Wintory gave me essentially every file he had created while working on *Journey*: Finale notation files, PDFs of music parts, and most importantly his Digital Performer sessions of every cue, containing all the MIDI data and recorded tracks made for the soundtrack. These sessions all had "bounce in place" sound files within each cue, so I could hear Wintory's music in Digital Performer on my own computer in sync with the MIDI without having his sample library. He also gave me a copy of Journey Sheet Music Selections, a compilation of six cues from the game arranged for solo piano by Laura Intravia, as an extra resource of notated music.

Instrumentation

I will discuss my approach to the instrumentation challenge first, as that was what I tackled at the outset of my preparation of the arrangement. I knew that I would have Fifth House's core instruments at my disposal (woodwind quintet, low string quartet, and piano, as mentioned above), but I knew from my knowledge of the score that we would need a few extra things in order to even hope to preserve the affect of Wintory's music. Harp and percussion play a large roll in the original score, so I immediately convinced Melissa Snoza, Fifth House's executive director, to allow me to add one harp and one percussion player to the ensemble. Harp and percussion rental costs can be relatively expensive for a small chamber group, so I knew that one of each would be the maximum that the ensemble would be willing to extend its budget for in all likelihood. The original score also utilized a bass flute, an uncommon doubling for flute players, in many of the quieter cues. Snoza, who also serves as the ensemble's flutist, was able to procure a bass flute at low cost from a flute maker in exchange for some free publicity on the concert's marketing and donor "thank you's." There was also the issue of having a female vocalist to sing the score's end credits song, "I Was Born For This," for which Fifth House was prepared already to hire singer for each concert.

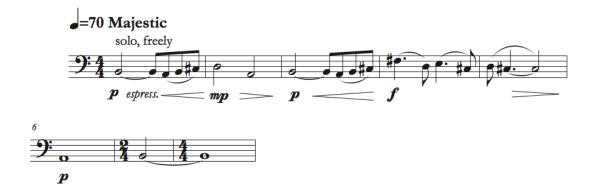
With the personnel in place, the last thing for me to determine before starting the arrangement was what the percussion battery would consist of. Again, percussion can be very costly for a performing ensemble budget, since most of the instruments need to be rented, not to mention that they take up a lot of space on stage and can be a hassle to move, so I needed to be practical in what I would

arrange for. I decided that multiple mallet percussion instruments would be too impractical for the budget and a single player to deal with, so I chose to only have a vibraphone for the "keyboard" percussion sound. Its mid-range and bell-like timbre would fit Wintory's music best as opposed to a marimba or xylophone. I knew that small, accessory percussion (triangle, rute, snare drum etc.) would be no problem, so I did not limit my choices regarding those types of instruments. Wintory had used a number of non-western percussion samples in the soundtrack, so I planned on condensing those sounds into a diembe (or conga) and log drum. In order to preserve the atmospheric qualities of Wintory's music, I did decide to use some larger percussion instruments, but only those that I knew would be consistently used throughout the arrangement (as opposed to making Fifth House pay for and load in a big instrument that would only play a few notes on one cue). Tam tam and bass drum would absolutely be necessary for ethereal timbres and low rumbling to convey the music's mysterious qualities, and a set of tom toms would be needed for the score's loud, dissonant penultimate scene. A suspended cymbal would also be needed to help certain transitions from musical section to section. Finally, in Wintory's original score, the percussion instrument that stands out the most is the bell plate samples¹. Although bell plates are occasionally called for in orchestral music, they are difficult to find and expensive to rent, and are usually only asked for with a single pitch, while Wintory's music uses several notes' worth of bell plates throughout. After Fifth House did a fruitless search for an affordable set of bell plates, I fell back on an alternate option: Thai gongs. These instruments are similar

¹ Prominently heard, for example, throughout "Atonement" and "Final Confluence" on the soundtrack album.

in sound to bell plates (though less resonant) and are more commonly available from percussion outlets. In order to keep things practical, I restricted my use of Thai gongs to only three notes: A3, B3, and D4. These notes correspond nicely to Wintory's score, which is mostly in B minor and D major, so I knew that these three pitches would be very useful in preserving Wintory's bell plate sound, especially when mic'd.

Now that I had set my instrumentation, I could delve into setting Wintory's music into Finale. As I began working, I developed a system of "guidelines" as various issues and challenges arose. Two of the most important rules had to do with preserving Wintory's original concept of the score, while the others had to do with translating the non-Fifth House sounds into the Fifth House instrumentation. Firstly, I needed to make sure that Wintory's main theme was always clear and followed a similar development over the course of the arrangement. The score for *Journey* is essentially monothematic, with the main theme getting its full treatment by the solo cello, with an expressive yet chant-like quality:



The theme is presented in its entirety on the opening track of the album, as a sort of overture, but in the beginning of the game itself, the theme is only heard in

fragmented phrases (for example the first two bars only). This was intentional on Wintory's part, as he wanted to save the full main theme for pinnacle moments in the game, as the narrative gets revealed over the course of the experience as the gamer gets closer and closer to the mountain. It was necessary for me to keep this concept in mind, and to make sure that any use of the theme, whether it be a fragmented reference or a full statement, be clearly orchestrated in the texture. This also applied to the theme's dark alter ego – an octatonic variation that plays during the scenes where the gamer is in danger from colossal machines or cold weather:



Secondly, Wintory's concept of gradually introducing the theme as the game progressed was likewise implemented in the way he orchestrated the score. The music at the beginning of the game is very sparse, relying on low drones and melodic fragments to complement the expansive desert scenery. As the desert gives way to more visually detailed structures and landscapes, the music begins to broaden the orchestrational palette, adding more instances of woodwinds and string orchestra. This gradual expansion of color comes to full bloom about two thirds of the way through the game when the narrative reveals a full sequence of the world's history that the gamer has been collecting piece by piece². The music here reflects this culmination by finally letting the string orchestra play the theme at full volume with great expressivity, rewarding the gamer for all the progress they have

² 48:47 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=48m37s

made³. Preserving this concept of gradually building orchestration with Fifth House's limited instrumentation was a bit of a challenge. When discussing the matter with Wintory, we agreed that as long as the strings did not take up too much of a presence in the arrangement before the scene mentioned above, then the effect would remain intact. I implemented this solution by only using strings reservedly, usually without much expression and using special playing techniques such as sul ponticello or harmonics. The only exception was the solo cello, which needed to be expressive in order to keep the main theme clearly heard. In place of strings I relied on the winds and piano to cover various harmonies and sustained notes, which the strings could easily play if we had wanted it, but would work against the concept of saving the full string sound for later in the game.

With regards to translating Wintory's soundtrack into Fifth House's instrumentation, I quickly settled on a set of rules for dealing with more general aspects of the score, which helped speed up workflow so more specific issues could be given more time. Although there are many parts of the score that translated into the arrangement directly (flutes are covered by the flute player, strings orchestra parts are covered by the low quartet, harp part is played by the harp etc.) there were a number of textures that had to be changed to fit the chamber music personnel. For example, many of Wintory's cues feature ethereal synth pads or ambient, sustained electronics. When these occur in a low register⁴, piano tremolos and low strings cover those drones, and when they occur in a mid or high register⁵,

³ "Final Confluence" on album.

⁴ 1:10 of "The Call" on album.

⁵ 0:00 of "The Road of Trials" on album.

the woodwind quintet covers those notes. Given that woodwinds, other than the flute, are not used much at all in Wintory's original music, this system worked very consistently throughout the arrangement. Wintory also used plucked and struck string instruments throughout the score (guitar, cittern, dulcimer), whose parts I assigned to the harp and piano to cover. Any sort of drum percussion would automatically go either to toms, djembe, or bass drum⁶. Atonal electronics and sound textures would be covered by the percussion or string extended techniques on a case-by-case basis⁷. With these basic rules in place, sifting through Wintory's dozens of MIDI and audio tracks in Digital Performer trying to condense it all down to twelve instruments became a rather efficient process, at least in these general cases. Here is a typical example of what my arrangement looks likes on a rather busy cue (see next page):

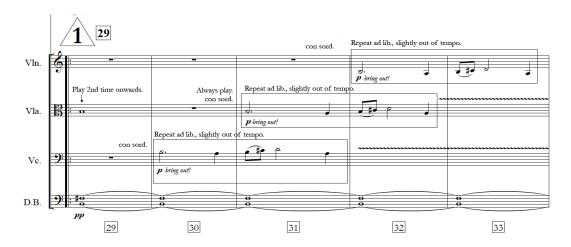
⁶ As in "Atonement" on soundtrack album.

⁷ As in "Temptations" on soundtrack album.



Bar 6 corresponds to the beginning of "The Road of Trials" on the soundtrack album. This segment of the arrangement can be heard on Youtube at: <u>https://youtu.be/KHgijdNgclQ</u>

I will now go through the arrangement and highlight specific instances that needed a bit of creativity to effectively translate from the original soundtrack. In these cases, my general guidelines stated above were insufficient to preserve the original intention of the composer. These difficult spots tended to be instances of strange instrumentation that I had to work around, or overdubbed instrumental takes in the final mix that were impossible to replicate live. The first example is of the latter, which occurs when the gamer reaches the level select area of the opening stage⁸. Here, the solo cello has the opening phrase of the theme, which Wintory then overdubbed on top of itself several times, creating an atmospheric canon effect, without any sense of pulse or beat⁹. My method of arranging this effect was to have the cello plus the high strings play the melody in the same octave repeatedly, each starting a bar apart, and instructing all three instruments to play slightly out of tempo. I encourage players during rehearsal to be very free with their tempo, as exact synchronization to the conductor's beat is unnecessary in this type of ambient desert music:



 ⁸ 5:14 of Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=5m14s
 ⁹ 2:55 of "The Call" on album.

Like the original overdub version, the overlapping string parts work nicely together, resulting in a tasteful moment of pandiatonicism (as opposed to unorganized dissonance), thanks to the melody being in B minor mode. Wintory was also supportive in general of using aleatoric orchestration for the arrangement (when appropriate), because, like the game itself, he did not want the music to sound exactly the same for each performance.

The second stage of the game features a musical layering system that is affected every time the gamer builds a segment of a large cloth bridge¹⁰. The concept of musical layers has been present in games since the 1990s if not earlier; a cue is comprised of a base layer of material, with other layers being added to the music as the player progresses through a level or completes specific tasks. In *Journey*, this technique is only used once in a significant way, so I wanted to replicate that sense of building layers in the arrangement for this bridge level. I began by arranging the cue in its full state, with all three layers on the page. An instruction was then written into the score and parts assigning each instrument a layer number: layer 1 always plays from the beginning, layer 2 comes in second, and layer 3 comes in third. When the cue begins, musicians on layers 2 and 3 are asked to count along with the music, but not to play. When the gamer activates the cloth bridge segments, the conductor must activate a musical layer in the ensemble. I did not want to have the conductor try to bring layers 2 and 3 in exactly down to the beat when the gamer activates a bridge segment, since it would risk confusing musicians as to when to come in. Instead, I put four small rehearsal numbers into the parts, and

¹⁰ 8:30 of Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=8m30s

when the gamer activates a bridge segment, the conductor brings the corresponding layer in at the next rehearsal mark. This gives the musicians plenty of time to mentally and physically prepare for their entrance, and helps to keep the players from getting lost. Admittedly, this solution does not exactly replicate how the layering system sounds in the game, but was a practical compromise to keep the musicians from being confused (as they are usually not asked to play in this manner). All put together, the arrangement's score for this section looks like this (see next page):

II. Barrens

Scene 1 - Building the Cloth Bridge







One of the *Journey*'s unique gameplay features is its anonymous online cooperative play, in which the gamer can be joined by a second avatar onscreen controlled by another gamer elsewhere over the internet. Wintory wanted to highlight this online connectivity through the music in a subtle way, for which he wrote a special harp layer of music into many of the game's cues. When the gamer is alone, the harp track does not play, but will fade it when a second gamer connects to the game and joins the journey. We both decided that it would be too complicated to ask the harpist to only play when a second avatar is onscreen, so in my arrangement the harp always plays its part, regardless if the online cooperative play is being utilized. Occasionally, Wintory's harp track takes on a more ethereal quality, performing arpeggios freely as opposed to melodies and chords in strict tempo. For these segments, I selected a basic outline of Wintory's harmony and cast it as an ad libitum accelerando and rallentando in order to capture the effect, as seen in this excerpt from the game's third level¹¹:



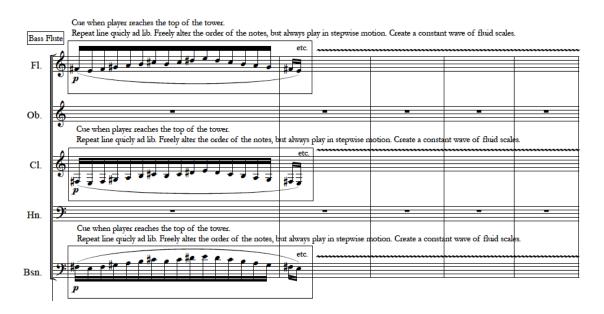
This same cue goes on to feature a larger variety of percussion sounds than most of the other cues¹². For this reason, I decided to have the piano player play simple rhythms on accessory percussion (triangle, snare drum, low tom) while the percussion player handles the more complicated vibraphone part. While I never

 ¹¹ 17:13 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=17m13s
 ¹² "Threshold" on album.

intended from the outset for any of the musicians to handle percussion other than the percussionist alone, I made an exception in this single cue because it was the only way I could see to preserve the energy and atmosphere of the "Threshold" cue. I could have chosen to have the percussionist play the accessory percussion and the piano tackle the harmonies instead, but to me the piano sound would feel too familiar to the listeners' ears against the vast desert backdrop. The vibraphone has a much less "domestic" color to it, and a gentleness that compliments the relaxed feeling of the game quite well. Thankfully, since I was arranging for Fifth House, I did not have to worry about the pianist demanding any doubling fees.

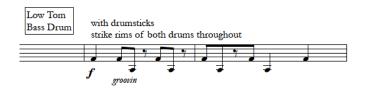
One last interesting challenge in this cue was arranging a subtle woodwind effect for when the gamer discovers a secret mural off the game's intended path¹³. When the gamer activates this mural, a track briefly fades in and out of overdubbed flutes playing scales on top of each other. To capture this effect, I asked the flute, clarinet, and bassoon to play the scale on their own, and then continue to improvise their own scales and contours on the same collection on notes. This creates a nice washy sound that will sound different in each performance, and is very easy for the players to execute (see next page):

¹³ 19:35 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=19m35s



It is up to the conductor to clearly bring the winds in when the gamer reaches the appropriate spot in the game, and also to help cut the wind players off once the gamer move on from the mural.

In "The Road of Trials," Wintory wrote for a variety of wood percussion to generate a propulsive rhythm section (bamboo sticks, ticks, other clicking sounds from libraries etc.). Assembling all these special instruments to be played by one percussionist was an impossible undertaking, so I fashioned a simple substitute. I ask the percussionist to play on the rims of the toms and bass drum, which creates a nice clicking sound that is simultaneously wooden and metallic:



In addition to this, I ask the bass player to improvise percussion sounds on his own instrument, tapping the body of the bass and producing a lower wooden sound:

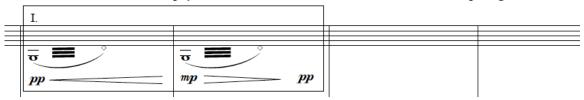


I let the musician choose where and how to strike his instrument, and encouraged him to explore different timbres as he liked. This worked to create a unique percussion sound that fit the spirit of Wintory's music without having to rely on expensive specialty instruments.

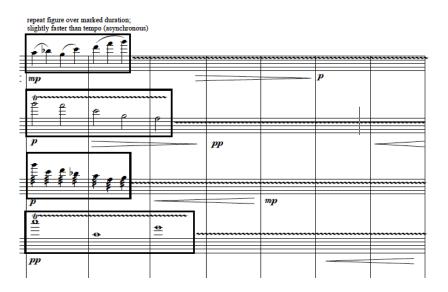
The game's fifth level starts to introduce more alien-sounding music into the score, as the gamer has now gone underground and will soon be climbing the slope of the fateful mountain soon after¹⁴. Although Wintory had been sprinkling sound design elements into the music since the opening, this level was the first that I felt that they needed to be translated into the chamber ensemble language for the sake of the mysterious vibe of the game. Throughout the cue "Temptations," Wintory supplements his acoustic instruments with ambient low electronics and gentle, high pitched synthesized shimmers. The piano and low strings easily covered the low material. For the high shimmering sounds, I had the percussionist play a waterphone, with the instruction to continue playing the instrument ad lib. in case the texture gets a bit boring if the gamer takes a long time to get through the area. I also instructed the violinist to play harmonic tremolos, using natural harmonics and an open string. This creates a very indistinct, electronic-sounding texture that fits in well with the mysterious atmosphere:

¹⁴ 34:28 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=34m28s

Violin: Play this gesture, then after waiting a bit, continue to improv brief tremolos on the open G string with touch-5th, 4th, and 3rd natrual harmonics, (or any fingering that gets a better sound with those resulting pitches). Always wait at least a couple bars between each gesture. The conductor may cue you to play more, if the music starts to become monotonous from repeating.



The violin and percussion create an effective backdrop against this cue's main idea; a duo originally for serpents¹⁵ (a ancient bass wind instrument, occasionally used in film music such as Jerry Goldsmith's score for *Alien*). I knew, unfortunately, that Fifth House would not be willing to spring for a pair of specialty wind instruments (understandably), so I transcribed the duo for horn and bassoon. The pair blends quite well, and is a decent substitute for the sound. At the end of this cue, Wintory wrote aleatoric melodies for the high strings, recorded on multiple passes during the recording session.¹⁶ Here is Wintory's original version for violins:

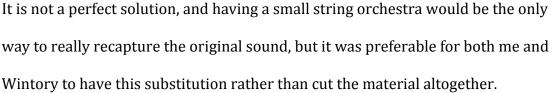


¹⁵ 0:20 into "Temptations" on album.

¹⁶ 3:00 into "Temptations" on album.

With only two string players for the arrangement, simply transcribing these boxes for would sound very exposed in that register. I did not want to leave this material out, as it is a very effective moment in the score as the gamer floats upwards on cloth jellyfish¹⁷, so I augmented this thin texture of violin and viola by adding the piano and having them all play very quietly:





In the following scene, the gamer encounters the first enemy of the game; a winged mechanical serpent guardian that springs out of the ground¹⁸. The music here features the score's only jump scare moment, with Wintory using dissonant percussion and electronics in a very detailed mix, heightening the alien feeling of the scene¹⁹. For the acoustic arrangement, I used a lot of aggressive extended techniques to capture a similar feeling: high strings playing behind the bridge, low

 ¹⁷ 36:29 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=36m29s
 ¹⁸ 37:47 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=37m47s
 ¹⁹ Beginning of "Descent" on album.

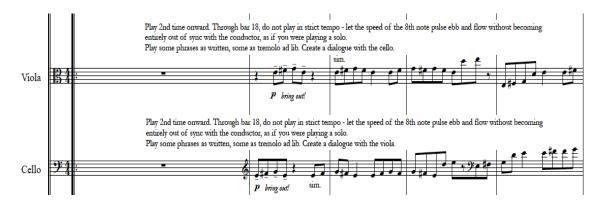
strings playing smashing col legno battuto, the harp's thunder effect where the low string buzz violently against each other, fluttertongue in the horn and bassoon, a loud buzzing multiphonic for the oboe, and of course bass drum and tam tam hits for the percussion. The total is very loud and striking, as long as the conductor times the hit correctly to the guardian's scare (see next page):

V. Caves - Descent

Scene 2 - The Guardians



The penultimate level of the game, set on the snowy mountain, featured a few intriguing challenges for my arrangement, not only because of the harsh dissonances, but also because of Wintory's mixing of various tracks out of sync with a universal beat. As the gamer ascends a windy canyon²⁰, multi-tracked cello lines play a single melody in a sort of amorphous canon. The sense of beat here is very obscured, with the multiple cello lines weaving in and out of the mix seemingly at random²¹. Trying to transcribe this music literally would not only be very time consuming, but also would result in complex rhythms for the musicians to have to play around the conductor's beat in order to obscure the pulse. As in some of the previous examples, my solution was to give the players enough information to use their intuition and effectively improvise the part, but not too much information too make the technique complicated or difficult to understand. I used the viola and cello to replicate the multi-tracking effect, telling them to playing slightly out of tempo with ebbing and flowing speed, as if they were performing a solo work with an elastic beat:

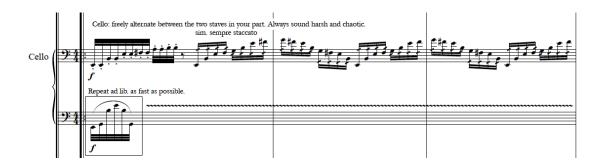


 ²⁰ 52:55 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=52m55s
 ²¹ 0:50 of "The Crossing" on album.

These simple but specific instructions effectively imitate Wintory's original mix, and do so without overcomplicating the arrangement with busy notation or auxiliary electronic effects just for the live show.

As the gamer makes their way up the mountain, they are confronted with an oppressive snowstorm and the return of the dangerous guardians from the underground level²². The music equally ramps up the dissonance to match the dark turn of the game. As in the previous example, Wintory used multi-tracked cello takes to create the musical texture, this time with aggressive tremolos and arpeggios instead of expressive melodies. Again, the sense of beat is very much masked, and the various cello sounds create a ghostly atmosphere²³. For the arrangement, there were two things that I had to consider: how to get all these multi-tracked sounds played by one live player, and how to make sure the cellist would not physically tire from performing aggressive music for a continuous amount of time – this game sequence can take up to several minutes to complete! My solution was to provide the cellist with two separate staves of music for this single section. One staff contains the more aggressive and physically tiring tremolo gestures, while the other staff contains a slurred string crossing gesture – much easier to play but not as violent sounding. The cellist is allowed to switch between the two staves at will, depending on her stamina and feel of the music overall:

²² 57:42 into Youtube playthrough: https://youtu.be/bkL94nKSd2M?t=57m42s
²³ 0:30 into "Nadir" on album.

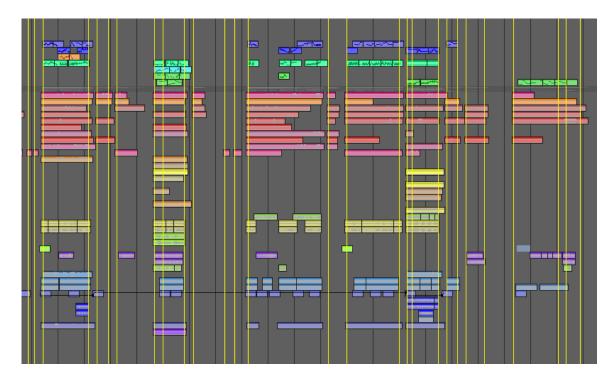


This allows for the cellist to deliver the variety of Wintory's original gestures without becoming over-tired or monotonous sounding.

Synchronization

The rest of the arrangement flowed into Fifth House's instrumentation from Wintory's original score without any major issues or problems to solve. The next challenge was synchronization: how was a conductor supposed to get the ensemble to play in sync with a live playthrough of the game, especially when each playthrough would be different concert to concert? Before going about a solution, it was necessary to fully understand how Wintory had constructed the "interactive" original score in the first place. For each of the eight areas in the game, Wintory had composed multi-sectional cues that would move from one section to another depending on the gamer's progress. Each area has about three to ten sections of interactive music, with a traditional "film score" cue for movie cutscenes at the end of the first six areas. These interactive sections, when strung together, make up a single cue of music (or in two exceptions, two or three cues), with the final cutscene music in each area being one self-contained piece of music. For example, here is a

zoomed out snapshot of Wintory's Digital Performer session for the game's most well known area, the sand slide²⁴:



Notice how the MIDI and audio data is separated horizontally into several chunks, each chunk marked by a yellow line at the beginning and end. These are the interactive sections of music, which when combined create what one hears, more or less, on the album track "The Road of Trials." When implemented into the game, the cue works in the following way:

- 1. A short introduction as the gamer descends towards the sand.
- The energetic section begins as the gamer lands on the sand, and will loop continuously until...
- 3. The gamer reaches the tunnel, where the music automatically crossfades into a more percussion-heavy section.

²⁴ Youtube, 27:25: https://youtu.be/bkL94nKSd2M?t=27m25s

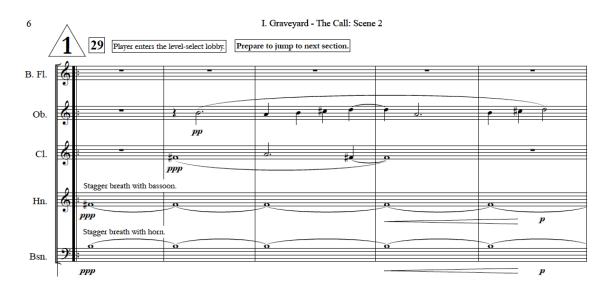
4. Finally, when the gamer reaches a certain point near the end of the tunnel, the music will crossfade into a crescendo section, timing perfectly with the camera cut to a wide shot of the gamer flying out of the tunnel.

These four sections string together to create one continuous cue of music that is able to match the gamer's timing as they slide down the stage at their own pace. There is then a brief silence in the music while the gamer activates a nearby switch, at which point the music starts up again with the next section etc.. Wintory uses this technique in all of the game's eight areas, each one having several sections of music that digitally combine into fully assembled cues when played in the game. The challenge for me was to create an acoustic version that could achieve this same effect.

At the outset, it seemed as though we would need to set up some sort of electronic synchronization system to get the show to work; a special click track or visual feedback system to keep the musicians in the right place (I once had a mentor who had written an opera so complex that the instrumentalists and singers needed to see a digital measure counter to keep from getting lost). We also thought that the musicians might have to read off of scores instead of individual parts in order to deal with the jumping from section to section. However, after thoroughly studying the music and the game, I came to realize that it would be possible to carry out the arrangement without relying on electronic aid or complex notation. All we needed was a *simple* and *clear* notation system, and a conductor familiar enough with the game to cue the musicians according to the notation system at the right time. This realization was a big relief, not only because it meant that we would not have to deal

with a complex electronic setup, but also because it meant that the experience for the musicians would stay very similar how they perform classical music – the thing that they are actually trained to do.

The way the *Journey Live* synchronization works is not dissimilar to how vamps work in musical theater, though instead having one or two bars of repeated material, there are a couple minutes worth of repeated "loops." In each of the interactive cues, I went through and determined which sections were "jump" sections, that is to say, sections of music that begin by jumping *from* a previous section of music. I assigned each of these sections a number, enclosed by a triangle shape in the score and parts (the squared number is the bar number). Here is an example from "The Call":



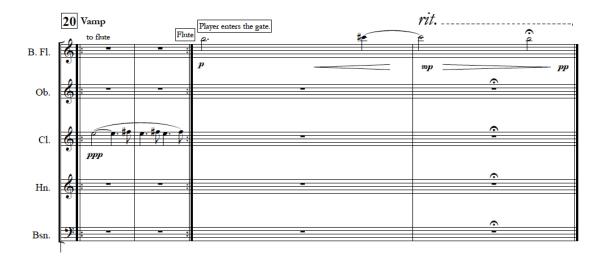
Before measure 29 in this example, the musicians play the first 28 bars, then automatically repeat that music. When gamer starts to approach the location of the game where bar 29 needs to start, the conductor performs the following actions:

- Use the left hand to *clearly* show "1" with the index finger, making sure that all musicians see the gesture. This let's the musicians know that a jump is coming up, and which triangle number they will need to jump to.
- 2. As the gamer crosses the threshold into the new music area, the conductor switches the left hand to a thumbs up. This means that the *next downbeat* will be the first beat of bar 29, regardless of what current bar the musicians are currently playing (1-28). In other words, the thumbs up is a 1-bar warning that a jump is approaching.
- 3. The conductor gives a *very big and clear* downbeat to physically indicate the arrival of bar 29. This reinforces the musicians' confidence to jump in their music to the correct section.

This system works the same way for every musical jump in the game, with the only change being the number that the conductor shows with the left hand, depending on the situation. For triangle numbers "6" and "7," the conductor uses the pinky and ring fingers to signal those jumps (it looks a bit silly, but it works perfectly fine). Since all the sections are numbered, the conductor can not only make the ensemble jump forwards in the music, but backwards as well, as is sometimes necessary during two levels in the game in which the gamer can explore the environment in a non-linear way. Both Wintory and I agreed that this system would be the best solution to synchronizing the ensemble with live gameplay, and we also liked that it would allow the musicians a bit of freedom in transitioning from one section to the next. In the game, many of the musical transitions are achieved with crossfades in the mix. This triangle cuing system would let players who *do not* play at the

beginning of a new section to carry over their parts from the previous section, creating an acoustic crossfade that would unique to each performance.

There are a few places in Wintory's score that do call for a traditional "vamp" of a small amount of music. These sections require no special notation other than a pair of repeat signs and the "vamp" indication in the score and parts. The musicians automatically repeat the material with the conductor conducting normally. When the gamer reaches the appropriate point for the music to continue, the conductor finishes that iteration of the vamp and gives a big down beat to the ensemble to let it know to continue on. It is a very easy system that we knew would not confuse any of the musicians. Here is an example from the end of "First Confluence":



The only other synchronization concern was that of the cutscenes. In most live film music concerts, the conductor relies on punches and streamers, or click track, to stay in sync with the picture. However, with *Journey Live*, the amount of movie cutscenes in the game is less than fifteen minutes in total (out of a two hour experience), and during those fifteen minutes, there are only three moments that require relatively precise timing of sync points. The rest of the cutscenes look fine with the music simply washing over the visuals²⁵. Wintory and I decided that instead of going through the trouble of setting up streamers etc. just for three specific sync points out of the entire score, we would just memorize and *practice* conducting the music to picture without any aid. While there is always room for human error here, it was the simplest way to get the job done, and we usually do get the timing right thanks to knowing the game so well. An example of exact synchronization in a cutscene happens during the game's opening, where the music builds and builds as the camera flies across the desert, and then abruptly cuts off when the camera cuts to the face of the gamer's avatar for the first time²⁶. Since we are not using streamers, I give the conductor and ensemble a little bit of help by putting a fermata on the bar right before the camera cut, letting them focus on hitting the important downbeat right on time.

Rehearsal and Performance

I conducted the first series of rehearsals with Fifth House Ensemble outside of Chicago in February of 2016. The main challenge of these initial rehearsals was to familiarize the ensemble with the special cueing system, and to test it out on a playthrough of the game itself with a live gamer. Wintory's music for *Journey* is not that difficult for good musicians to master, so thankfully we spent the majority of rehearsal time working out the syncing of music with picture. For the most part, the cueing system worked effectively, and the group quickly acclimated to watching me

²⁵ such as in this cutscene during "First Confluence":

https://youtu.be/bkL94nKSd2M?t=6m54s

²⁶ Youtube, 0:30: https://youtu.be/bkL94nKSd2M?t=30s

give the number signals and jumping to the next section as a single unit. A few revisions had to be made to the timings of some of the vamps, and we did have one disaster occur during the final area of the game where the ensemble and gamer got way out of sync. This was my fault as I had not put in enough triangle numbers to allow the ensemble to jump forwards if the gamer went through the level at a quick pace, so that was one area that had to be remedied for subsequent rehearsal. Once the cueing system was locked in place, the rest of the rehearsals were able to focus on more musical aspects of the concert; balance, expressions, intonation etc.. Wintory and I conferred back and forth throughout this process regarding the success of the cueing system, and ironing out of how the hand signals would work. By the last rehearsal, I was able to conduct the show in sync with a live gamer for the entirety of the game, and the musicians had become very familiar and comfortable with their parts. The arrangement was ready for Wintory to conduct for the premier at MAGFest 2016 in National Harbor, Maryland.

Wintory, who of course knew the music better than myself, handled the cueing system without problem. The only thing left to rehearse was the gamers who would be playing the game live onstage alongside Fifth House. These gamers were selected either by donating a certain amount to the *Journey Live* kickstarter, or by winning an "audition" held by Fifth House at MAGFest the night before the show. "MAGFest" stands for the Music and Gaming Festival, and is a weeklong convention that features many panels and performances based on game music and game design. The event draws thousands of fans, so it was not hard for Fifth House to find interested people to "perform" the game for the concert. Once the gamers were

selected (we have anywhere from two to six people per concert who trade off at the end of each level), we gave them some performance advice before starting a dress rehearsal. While we wanted our gamers to play the game in their own way, we wanted to make sure that the concert stayed interesting to watch. First, we made sure that they had actually completed the game on their own before doing it live, and then we advised them to go through the game at an efficient enough pace so that the audience did not get bored. The gamer has complete control over the game's camera, so Wintory told the gamers to give the audience a "cinematic" tour of the game, showing off the beautiful art design with cool angles etc.. During the performance I sat with the audio engineer to help determine instrument balance throughout (we always mic the show). Wintory had arranged for Sony to have a team create a version of the game with the music score removed, only leaving the sound effects, so the live mixing process was not at all dissimilar to mixing a live film score production.

The premier performance drew a crowd of about two thousand people, and was very well received. Since then, I have made no major changes to the arrangement; only updating the score and parts with various corrections and changes that were made during the initial set of rehearsals. The show has gone on to have several performances since then, all with Fifth House Ensemble as the performing group. To my knowledge, *Journey Live* is still the only video game "live to picture" concert of its kind; a full playthrough of a single video game in a single evening without any prerecorded footage. I am especially proud that we were able to create this show using completely "classical" means of arranging the music. The

lack of electronic synchronization and complex notation or scores means that the musicians and conductor can focus entirely on their parts and *listening* to each other as an ensemble. Whenever Fifth House has had to find a substitute player for a *Journey Live* show, if one of their core members is unavailable, the subs have had no problem adapting to the arrangement within a single rehearsal. Recently in February 2018, Fifth House did a performance of *Journey Live* at San Francisco conservatory with members of the school's precollege division joining Fifth House onstage to augment the ensemble into a more baroque-sized group. These high school students had never played a concert of this kind, and were very much used to performing strictly from classical sheet music. Yet, since the arrangement was created specifically with classical players in mind, they were able to understand and execute the section jumping system by the end of the first rehearsal without issue. In a time when technology pervades so much of the media-music creating business, I feel very lucky that I was able to help create a live show that allows players to be fully musical, and utilize the skills that they have spent their whole lives training, instead of raining them in with a click track. It goes without saying that the success of this arrangement is thanks in no small part to Wintory's music, which is of undeniably high quality and continues to be one of his best scores. I can only imagine what it felt like for him to hand it over to someone else to arrange, but thankfully he was very easy to work with and very supportive of my decisions throughout the reduction process. We both were certainly in agreement that prioritizing *simplicity* and *clarity* would be the best way to make *Journey Live* a success with the resources we had.

Works Cited

Chen, Jenova, dir. *Journey.* 2012: Sony Computer Entertainment, 2015. PlayStation 4.

IAmSp00n. "Journey – Gameplay / Playthrough (No Commentary)." Youtube video.

accessed August 17, 2018.

https://www.youtube.com/watch?v=bkL94nKSd2M&t=414s

Wintory, Austin. Journey. Recorded and released 2012. Sony/Sumthing Else

Musicworks. Compact disc.