

John Broaddus and Connor Hoffman

MTI CE Written Report

1 July 2015

interim: A Restorative Nap Optimization Experience

1. Introduction

interim is an immersive sound installation that blends generative musical structures with live improvisation to create a meditative auditory experience. It explores the efficacy of ambient music in a controlled environment to induce a state of relaxation and introspection in the audience.

The installation was first held in Sala C, where we provided four hammocks in which the audience could relax. The lighting in the room was kept dim, lit primarily by projected video of soothing abstract imagery while we performed an extended set of ambient electronic music.

We joined forces in order to create a venue in which to present our music and further define a structure around which it is oriented. In the process, we solidified our direction and philosophy: music as nap therapy. With this goal in place the project rapidly took shape, with the room chosen and organized in order to provide minimal sensory input, and furniture selected to provide a relaxing and open way to experience the music. The original plans for an interactive audio/visual installation evolved into a minimalistic, generative electronic performance, a sort of anti-concert, in which the performers are out of sight, the visuals are designed to be utilitarian and the goal of the music is to put the audience to sleep.

2. Description of the Work

interim was born out of prototypes of two separate projects we began individually, each involving an ambient music performance or installation in a dedicated space, with some manner of audience interaction and nonlinear musical composition. Working in parallel, the two of us were both trying to solve the problem of how to create a space in which the music—a style of music usually relegated to background listening—could become the focus for the audience without falling back on traditional concert approaches. At the beginning of May, we began to collaborate around the rough concept that would become the skeleton of *interim*: make use of the meditative quality of ambient music in a way that would not draw the attention of the audience, but rather place them in a relaxed state. In this way they would be more susceptible to the calming qualities of the music, without any of the distractions that usually prevent focused listening.

Through research into the regenerative qualities of daily naps, the project shifted from a meditative listening environment to one in which sleep was encouraged outright. The role of video was reduced from a detailed, generative lightshow that reacted to and interacted with the music to a more subdued form meant simply to provide a soft, shifting light source. Most critically, the idea to use hammocks as the primary seating arrangement was proposed, and ultimately we settled on four freestanding hammocks. Chairs were also available for those who could not or did not want to use the hammocks, and for overflow seating as needed. The core of the project became the four hammocks, which could be reserved by audience members in advance in order to take twenty minute naps as a

restorative exercise during the installation. The theory behind this system came from research into the human sleep cycle.

Here's how the power nap works: Sleep comes in five stages that recur cyclically throughout a typical night, and a power nap seeks to include just the first two of them. The initial stage features the sinking into sleep as electrical brain activity, eye and jaw-muscle movement and respiration slow. The second is a light but restful sleep in which the body gets ready -- lowering temperature, relaxing muscles further -- for the entry into the deep and dreamless "slow-wave sleep," or SWS, that occurs in stages three and four. Stage five, of course, is REM, when the eyes twitch and dreaming becomes intense.

... Stage one can last up to 10 minutes, stage two until the 20th minute... [E]xperts believe that the optimal power nap should roughly coincide with the first 20 minutes in order to give you full access to stage two's restorative benefits.¹

The space was set up with four loudspeakers delivering the music to a darkened room in which four audience members would be allowed to take twenty minute naps in shifts. Meanwhile a separate computer projected video onto the wall in front of the

¹ Ketcham, Christopher. "How to Power-Nap for All Day Energy." *Huffington Post*. 15 September 2014. <http://www.huffingtonpost.com/2014/09/15/power-nap-all-day-energy_n_5798256.html>

hammocks, creating a slow-moving, immersive texture to aid in relaxation without distracting from the music and the ultimate goal of sleep.

The music, instead of the entirely computer-generated material originally envisioned, was a human-mediated performance, in which we oversaw the playback of semi-generative thirty-minute musical cycles using Ableton Live and Generative 2, a Max application for granular synthesis. Each cycle is written to give participants time for a twenty-minute nap with a ten minute buffer built in for transitions. Volunteers ushered audience members to and from their spots, and alerted them as to when their cycle had finished.

3. Innovative Aspects of the Work

interim presents a new kind of venue for musical performance, one in which the music being presented is not meant to hold the audience's attention, but simply to enhance the space and create a soothing environment for relaxation. It draws on elements of music therapy, and seeks new ways for ambient music to be used in contexts not suited to other styles.

Our project allows the audience to connect with the music in a space with limited sensory input. The environment restricts the use of devices, social discourse and noise, and our presence as performers is minimized. By eliminating external distractions, we provide a calming soundscape to promote comfort, active meditation and power napping, allowing participants a place to refresh and recover from the barrage of stimuli and the accelerated pace and pressures of their day-to-day lives.

4. New Skills Acquired

For this project we are putting to use all of the skills acquired during our time as Berklee Masters students. *interim* includes aspects of audio and video production, sound design and DJ skills. The music of *interim* is composed from a variety of sources, both recorded and synthesized, sequenced using Ableton Live and Max using elements of nonlinearity and generative structures.

Neither of us has extensive experience in electronic music collaboration or live performance so this project provides a way to explore our individual strengths and learn how to effectively contribute in a co-production situation. Finally, our mixing and mastering skills will be required toward the end of the project, when a selection of music from the final performance will be made available as an album for download.

5. Challenges

interim itself was conceived as a response to challenges we faced during our previous projects. Namely, how to present ambient music in a public environment, in a way that provides appropriate context; how to organize the installation technically and spatially in a way that serves the project without creating unnecessary complications; and how to create a thematic direction for the music in order to frame the compositional process.

As the project grew, we faced more specific challenges in terms of where to execute the final performance, how to shape the music in a way that underscores the thirty minute

cycle of the timeslots without undermining the music as a work in itself and finally, how to cohesively link the visual aspect, the music and the physical environment.

Securing a space for the project was a frustration due to the complexities in scheduling between Berklee and the Palau de les Arts. The original intent was to host the project in Sala B, but after planning the layout of the space and scheduling rehearsals, it became clear that Sala B would not be viable from a scheduling perspective. This necessitated moving the project to Sala C, a smaller space in a less controlled environment, and rescheduling the rehearsal times that had already been booked.

The change in location from Sala B to Sala C required a rethinking of the visual aspect of the project, as the columns that were to be used as framing devices in B were no longer available. At first, we intended to create a hanging structure of semitransparent mesh on which to project the video, but upon testing in Sala C discovered that this was both impractical and visually cluttered. Instead, the video was projected onto the front wall of the room, which in the end, effectively created a large and immersive color space.

One of the most persistent challenges was the question of how to organize and perform the music itself. We decided early on that the music would have generative elements, and be composed of samples provided and iterated on by the two of us, but the technical aspects of the performance went through several revisions. At first, the plan was to create a self-contained generative musical system, that would produce music without human interaction over the course of the installation's run. However, after early testing we found that such a system would not effectively provide the musical development we desired. This concern is what led to the performance aspect of *interim*, with

human-mediated musical systems allowing a lengthy improvised set that could breathe and shift as we intended. This was better, but still seemed unstructured, and we hoped to find a solution that would better fit the thirty minute timeslots the audience would reserve for their naps. This led to the current approach, with multiple thirty minute pieces of music played back twice over the three hour duration of the installation, with generative and improvisational aspects that ensured subsequent performances of the same piece would not be too repetitive.

On the day of the performance, we were happy to see that all of our preparation effectively minimized the challenges we faced in the final execution. We reserved ample time in the space to allow for setup and testing the night before, and as a result were able to double check all of our failsafes, adapt our plans where required and make a couple of last minute improvements. One challenge we had not fully anticipated was how quiet the room would be once everyone was in the hammocks and drifting off. We discovered very quickly that any movement on our part caused the floor to creak, and even the sound of the buttons on our APC and the clicking of the mouse seemed amplified. This forced us to be very deliberate with our movements in order to minimize extraneous noise.

6. Future Ramifications

interim presents a number of possibilities for future development. The benefits of napping, as demonstrated by scientific research is being increasingly recognized by health, education and business sectors. The relaxing quality of ambient music provides an essential tool for deepening and enriching the experience. Companies such as MetroNaps

are already exploring the possibilities of providing large-scale napping solutions for businesses, with some infrastructure already in place for adding a sonic element to their products. Further prototyping of the musical and visual aspects of our project, such as refining it into a form that can be experienced in a variety of spaces, and creating fully recorded music and/or a self-contained generative musical program, will allow us to further investigate the business potential of this project as a restorative and therapeutic service.

7. Conclusion

interim is an original take on ambient electronic music performance, creating a space that minimizes audience distraction while also reducing emphasis on the performers themselves. It challenges the participants to take time out of their lives to simply be open and reflect in an environment optimized for this purpose, and provides an effective way to reduce stress and induce relaxation.

Survey respondents so far have indicated that they found the experience enjoyable, relaxing and all have expressed they felt less stressed after the performance than they did prior. This feedback signals that we are on the correct path with our work, and that with continued development *interim* could provide significant benefits in a wide range of settings. As an example, businesses continue to explore the positive effects of napping for the health and productivity of their employees. In this context, *interim* could offer an easily implementable approach for progressive companies to improve workplace morale and employee performance.