

Hippo (2015) for, clarinet, piano, violin. 6:30 minutes

Hippo was written for Ensemble TrioPolis in 2015. In *Hippo*, the clarinet uses a synthetic ultra-thin reed designed by the composer that allows the expansion of the clarinet's sonic pallet. Also, the violin's first and fourth strings are tuned at a lower pitch to match the reed's acoustic properties. The piano is adding to the ensemble with sounds from inside the piano. The acoustic model of *Hippo* comes from a field recording of two hippos making sounds nearby in the river. The resynthesis of the "grunt" timbre has been achieved using the synthetic. Using sonographic analysis I studied the rhythmic iterations, the way they are sequenced as well as the temporal timbral changes their envelope and spectral intensities. Next, I reproduced similar instrumental sounds by modifying various acoustic aspects of the instruments (reed, strings, found objects) and by developing the appropriate performance techniques. While experimenting with the various instrumental sounds to match my acoustic models I recorded hours of sound materials. In order to identify the grunt sound, I was looking for I used iZotope's Find All Similar feature: with this feature from one grunt sound selection I was able to find all related instances of that audio event more quickly and accurately.