

album emphasizes that these are live performances. The other works on the album are “Circuit Combine” (2013) and “Level Shift” (2017). “Circuit Combine” recalls Bischoff’s earlier “Audio Combine,” perhaps as a reconfiguration of the earlier work’s processes. “Level Shift,” meanwhile, is the calmest of the works, leaning into similar creative tactics using drones as their musical material.

The second half of the concert featured a performance of “League Trio” by Bischoff, Perkis, and current Mills Center for Contemporary Music director James Fei. As the title suggests, it is inspired by the live, networked microcomputer works and improvisatory practices of the League of Automatic Music Composers (whose members included Bischoff and Perkis as well as Rich Gold, James Horton, and David Behrman).

The sonic terrain of “League Trio” was different from Bischoff’s earlier set, even after acknowledging the new personnel and equipment on stage. Interlinked through audio pathways and sharing data via OSC, the three improvisers operated with methodologies utilized by the League: personal setups, no preexisting plans, and an embrace of how each other’s actions and data would influence their own outputs. There is something to it that John Bischoff’s closing act in a concert celebrating his career is not a solo or even some kind of spotlight-hogging concerto-like work. Instead, he blurred into the group, as if a part of one of his hero David Tudor’s combines, working collaboratively with Perkis and Fei.

In some ways, Bischoff’s precision in the first half made adjusting to the looser structures and more generalized sound of this League-inspired improvisation harder for a moment. In reviewing some recordings of the League after the performance, it was especially clear how much they

had captured its rambunctious, live musicality.

This concert, especially after being rescheduled from its 2020 date because of the Covid-19 pandemic, had an extra layer of significance with the announcement that Mills College was going to close or change status in some way. In the months that have followed that night in April 2021, Northeastern University and Mills have created a plan to merge. Although much has yet to be clarified about the future of Mills College’s educational missions in the wake of its new relationship with Northeastern, Bischoff’s retirement is part of a generational chapter’s close for the college, following the retirements of longtime Center for Contemporary Music codirectors Maggi Payne and Chris Brown, and other faculty from the music department including Roscoe Mitchell and Fred Frith. Mills has experienced considerable shifts of musical trajectory before but has found new ways after the departures of previous faculty such as Darius Milhaud, Luciano Berio, Alvin Curran, Pauline Oliveros, and Robert Ashley. It has also invested in new possibilities, such as when the San Francisco Tape Music Center became part of the college, later renamed the Center for Contemporary Music.

Among the current students and alumnae of the college, there is still a great deal of concern about what will, or will not, survive into the partnership with Northeastern. The unique music opportunities at Mills College are worth supporting, as is finding ways to shine a light on the historically significant events and people throughout the music department’s history. Most importantly, I hope Mills College, in every potential iteration it may be transformed into, is one that continues to support women and women’s educational spaces.

Recordings

James Dashow: *Archimedes—A Planetarium Opera*

Neuma Records, 2021

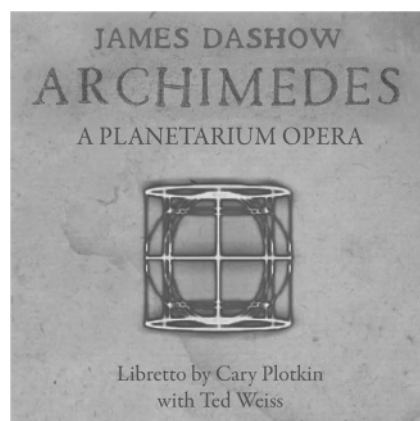
Digital download, 2021, Naviar Records NR011, available from Naviar Records, London, England, <https://naviarrecords.bandcamp.com/album/the-present-time>; <https://www.naviarrecords.com>.

Reviewed by Bradley S. Green
Washington, DC, USA

Archimedes: A Planetarium Opera by James Dashow is an opera written to be performed in a planetarium, mixing hexaphonic audio playback and live vocalists with intricate light shows that occur regularly throughout the opera’s three acts. It is a massive, complex work that took the composer nine years to complete, and, though finished in 2008, this new compact disc marks its first full release, mixed down to stereo from the 6.0 surround-sound original. The three-CD set can be found on Amazon, the Neuma Records Web site, and the composer’s Web site. As the present recording clearly demonstrates, this work is a monumental achievement.

Before discussing the composition or recording quality, some context should be given to the story and its characters. The libretto, written by Cary Plotkin and Ted Weiss, centers around Archimedes, the famed mathematical genius from the ancient city of Syracuse in Sicily, focusing

doi:10.1162/COMJ_r_00608
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primarily on his use of war machines to defend the city during the 214–212 BCE Roman siege. Although the opera certainly has a concrete (albeit minimalist) narrative grounded in documented history, this narrative serves to explore deeper themes of human nature, which Dashow describes as a “tragedy of humanity” in his liner notes. As a character, Archimedes is presented as an obsessive individual, preoccupied with the beauty and purity of his mathematical musings and motivated only by the discovery of invention. Another central character (and narrator) is Marcellus, the Roman consul who leads the siege against Syracuse and is motivated by an idealistic dream of a Roman utopia. Both characters espouse admirable goals—still, both are only human. Compelled by the suffering of a terrified Syracusan people, Archimedes uses his talents to build gruesomely effective war machines to protect the city, while Marcellus, backed by the power-hungry Roman senate, plans to persuade Archimedes to use his war machines to protect Rome from its enemies. These characters are all vessels that symbolize both the best and worst of humanity, illustrating how good intentions can be used to justify heinous acts, and how we can be left devastated by

our decisions, both individually and collectively.

There are two other characters that need mentioning: the Prime Mover, a god-like figure from Plato’s *Timaeus* who acts as architect to the universe, and Demiurge, a two-person conjoined being whom the Prime Mover tasks to “create the tribe of humans so . . . they may not equal gods but may imitate them perfectly.” Demiurge then creates Archimedes, giving him “a larger share of the flame, prime fire.” These entities, the events they set in motion, and their eventual bleak realization during the final act as a frame for both the story and the theme of human duality and fallibility, broadening the perspective and extrapolating from the flaws of a few historical men to represent the flaws of humans throughout history, past, present, and future.

The music Dashow composes to this elaborate libretto compliments the story and its themes flawlessly, both on a micro and macro level. It is colorful and engaging, with expertly crafted electronic sounds, and although the music is fixed media (except for the vocal parts), it has a thoroughly spontaneous quality throughout. The vocal parts are performed with a mix of spoken word, Sprechstimme, and fully sung lines, most of which are visceral representations of the text. There is a wonderfully stark contrast between the lyricism of the vocal parts and the colorful tapestry of electronic accompaniment which, if I’m bold enough to make an imperfect comparison, regularly reminded me of the interaction between voice and instruments in works such as Pierre Boulez’s legendary *Le Marteau sans maître*.

At all times during the opera, Dashow’s mastery of electronic music is on full display, and it seems as if every synthesis and sampling

technique available at the time of composition was utilized, many times simultaneously. Recorded and MIDI instruments are juxtaposed and combined with elaborately crafted synthesized instruments; audio samples are cut, mixed, and processed in a variety of ways; most sounds are spatialized and rarely static; and so on. It would be tiresome of me to list every technique heard throughout the piece (and I would certainly miss a few), but suffice to say, it would be possible to teach an entire electronic music course with this work alone.

What is equally impressive is that such a maximalist approach to the electronics does not become tiresome or monotonous, as can sometimes occur when too much is thrown on the canvas at once. Further, Dashow balances and gives meaning to his sounds by connecting them to the characters and themes. Structurally, the opera is largely through-composed and tends to focus on color and textural density as a means of development. For instance, drums are used whenever there is war or discussions of war, and according to Dashow, the character Archimedes is represented by various guitar and guitar-like sounds, whereas Marcellus is characterized by a chamber group that grows as the piece progresses. Another timbre-related formal progression appears to be the use of acoustic instruments (both samples and MIDI imitations) to represent not only Marcellus, but flawed humanity in general. These sounds are contrasted against the synthesized instruments and electronic sounds, which seem to represent more godly entities and endeavors (i.e., the Prime Mover, Demiurge, and Archimedes’s many mathematical daydreams, where the most colorful electronics are heard). This dualistic use of sound works to highlight the themes of human duality, which is most apparent in act 2, as the

terrified Syracusan people interrupt Archimedes's daydreaming for a third time. This final interruption is accompanied by sardonically imitated acoustic instruments (MIDI brass, strings, etc.), ultimately convincing Archimedes to give up his principles and build war machines to protect the city.

The music is both captivating and dramatically compelling for the entirety of the opera's two-and-a-half-hour duration, and though it would not be possible (or likely appreciated) to discuss every scene, there are certainly a few moments that stood out on an initial listen that are worth mentioning. The juxtaposition of the understated, almost somber introduction by Marcellus accompanied by mostly acoustic instruments in dry, impulsive spurts (entitled "Begin"), against the gravitas of the Prime Mover creating the universe in heavily reverberated and piercing sustained tones, presented a striking prologue, beautifully setting the tone of the opera. At the end of act 2 ("And the Sun"), Marcellus and the Roman senate simultaneously realize they can use Archimedes while they watch in horror the gruesome effectiveness of his war machines. Their conflicting purposes are deftly symbolized by a thematic clash of guitar (representing Archimedes), chamber instruments (representing Marcellus), drums (war), and synthesized instruments (godly endeavors). Lastly, although the opera is certainly a tragedy, there are wonderful and appreciated moments of levity throughout, including an early scene ("In Which He Grows Up") depicting Archimedes coming of age, expressed with capricious, almost child-like synthesized sounds and processed child laughter, and later, in an amusing take on the famous "Eureka" moment, a duet between two slave girls tasked with bathing Archimedes, who apparently cannot

be bothered with such an earthly task.

The vocal performances are also uniformly compelling and evocative of their respective characters, communicated solely by their tone and phrasing. The baritone plays the titular character of Archimedes with a mix of innocence and impulsive genius bordering on delusion, which pairs well with the tenor's confident, yet tragic, Marcellus. The tenor part also plays wonderfully against the bass who represents Hieron, king of Syracuse. The performer imbues the character with hope and paternalistic compassion towards Archimedes and the city. The soprano-and-tenor duets, as the conjoined Demiurge, constitutes some of the finest vocal moments of the opera, as their lines combine and overlap to create an eerie texture that alternates between heterophony and melody or counter-melody. The Prime Mover is the only character who does not appear live, as the part was prerecorded by the Shakespearean actor Philip Kerr, whose intense reading conveys a distinct profundity to the beginning of the universe. In addition, Toby Newman, Madeleine Albus, Antonio Politano, Nicholas Isherwood, and James Wright deserve to be mentioned as well for their excellent supporting work as minor characters and chorus members.

Finally, like most Neuma releases, the quality of the recording by Grammy-nominated recording engineer Adam Abeshouse, and mixing/mastering by Abeshouse, Doron Schächter, and Dashow is superb. Sonorities are appropriately crisp or lush, the relationship between the vocalists and electronics was consistently well balanced, and although there were plenty of occasions where the many overlapping sounds could easily become muddy, the audio was always clear. Additionally, Dashow

writes much in the liner notes about the importance of spatialization in the original hexaphonic mix (and Dashow's work in general), and this album does an excellent job translating the original six channels into a stereo mixdown.

Though the recording and mixing and mastering is certainly worthy of praise, by nature of this being an audio-only stereo release, a few important details are unavoidably lost in translation, the two most prominent being the depth offered by the spatialized surround sound that is integral to the original experience, and the lack of visuals, particularly the light shows, that help give clarity to certain scenes throughout. Regarding the latter, Neuma seems to understand the importance of visuals in the opera, as they link both a PDF and scrolling video recording of the full libretto from their Web site, including descriptions of the various light shows and character actions. The libretto is an essential listening companion, especially for the various "Mathematics" movements during the opera, in which important thematic information is communicated. Additionally, there is one other commercially available DVD release by Neuma that contains the visuals and surround-sound audio (Neuma DVD 450-203), though it only contains three scenes and not the full opera.

All of that said, this recording of *Archimedes: A Planetarium Opera* is the only full release of the opera, and thus represents the sole method of hearing the entirety of this fantastic work outside of an actual planetarium. Though it is simply not possible to deliver the full experience of surround sound, live performance, and light shows within the bounds of a stereo compact disc set, this album is as faithful a representation of the opera as can be possible given the constraints. Further, it is indicative of

the quality of both the opera and this release that it is worth experiencing even with these technological constraints in mind. In sum, the opera's themes are relevant and poignant, the music is composed with an incredible sensitivity and attention to detail, and the quality of both the performances and the recording are exceptional. I only hope to be able to see this performed live in a planetarium at some point in the future.

Agostino Di Scipio and Dario Sanfilippo: *Machine Milieu*

Compact disc and digital download, 2021, available from Toxo Records, Naples, Italy. www.toxorecords.com or from www.bandcamp.com.

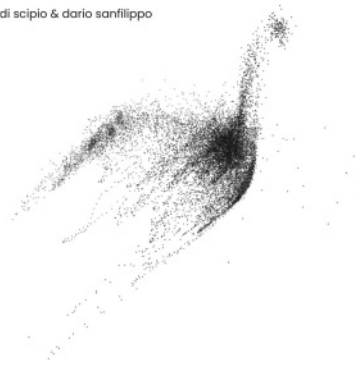
Reviewed by Daniele Pozzi
Graz, Austria

Machine Milieu is an album based around a live electronics project by Agostino Di Scipio and Dario Sanfilippo that brings together two dynamical computer music systems, independently developed and designed to interact with each other through the performance environment. The two systems might be considered as extensions or variations of Di Scipio's *Audible Ecosystemics* works—particularly “Background Noise Study” and “Feedback Study” (2003–2005), and of Sanfilippo's “Audible Icarus” (2012–2018) and the Single-Fader Versatility project (2013–2019). Their collaboration culminated in July 2021 with a self-titled release on Toxo Records, available both as a digital album and as a compact disc.

doi:10.1162/COMJ_r_00607

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machine milieu
agostino di scipio & dario sanfilippo



In this performance duo, Di Scipio and Sanfilippo make use of different audio programming and DSP techniques, microphones, loudspeakers, piezo discs, and carton pipes to create a hybrid assemblage in which both performers and technological devices lean on the shared acoustic environment as a medium of energetic and informational exchange. According to the duo, “the idea is to consider the human performer, equipment, and performance space as three sites of agency mutually connected in the medium of sound, capable of developing an integral and possibly autonomous ‘performance ecosystem’ based on site-specific sonic information only.” To describe the complex musical dynamics of such a system, in the liner notes they write that “it resulted more in a kind of quartet than a duo: an ensemble with two human performers and two [sonic] machines, the latter claiming their autonomy more often than not.”

The twelve tracks in this collection were recorded in Di Scipio's studio in L'Aquila in June 2014 and December 2015. Track by track, Di Scipio and Sanfilippo explore different couplings of their two computer music systems and the surrounding environment, as well as various forms of live intervention. In the liner notes they mainly describe

three modes of performance. In some sessions, they frequently interfered with their own system's operations, either through the computer interface or by manipulating analog and mechanical components of the electroacoustic setup (microphones, piezo discs, studio speakers, small acoustic resonators, etc.). In other takes, they “contrast the machines in their autonomous process, in an attempt to force them to reach a somewhat stable state, heard as a prolonged sonic texture.” Finally, they also performed “with minimal (if any) intervention, letting the two systems proceed unsupervised for several minutes,” giving rise to sounding situations “they would never achieve when operating as separate systems, in separate contexts.” In particular, the performance approach characterized by minimal interventions is found in the first four tracks of the release.

In this respect, the opening track, “Metastable,” is likely the most radical. The system, set up in the simplest self-regulating feedback configuration, is initialized and allowed to perform without any further intervention. The local acoustic environment (the rather quiet background noise heard in the surroundings of Agostino's studio, with windows open wide) is recursively amplified, producing soft Larsen tones in the middle and low registers. Throughout the track these appear, disappear, and reappear again, in between the sound of footsteps, people chatting in the distance, and vehicles passing by. The sonic dialogue between the local acoustic situation and the Larsen tones draws attention to the relationship of the electroacoustic setup to the concrete space in which it is installed. This relationship is central to the “ecosystemic” approach that grounds the *Machine Milieu* project, reflecting a practice that experiences