their possibilities: The eight cello lines weave together, sounding as if the piece was being played on an enormous harp, whose virtuosic player has fingers made of horse hair.

Sonically, each recording is excellent, though disparities in the sense of space are present. As a collection of individual works, each recording communicates well, but listening to the whole involves several invisible teleportations between recording studios and concert halls occurring between tracks. Still, *Machine Language* is a wonderful disc, full of accessible, well-crafted music that ranges from the intellectual to the mysterious. The technological presence in these pieces is always tasteful, non-abrasive, and expressive.

Part of the intrigue of this music is that it could be programmed on a concert of nearly anything; many of the pieces would pair well with both traditional chamber repertoire and experimental electroacoustic music. There is much fresh air to breathe in Dan Trueman's work, and repeated listening brings more nuance to what is already an enjoyable CD.

Electronic Music, Vol. III, Música Viva Competition Prize Winners 2004—2005—2006: Adrian Moore, Joshua Goldman, Panayiotis Kokoras, Pedro Almeida, Santiago Díez Fischer, Ingrid Obled, Manuella Blackburn, Thomas Peter

Compact disc, mcd 016.07, 2007; available from Miso Music Portugal, Rua do Douro 92, Rebelva 2775-318, Parede, Portugal; telephone (+351) 21-457-5068; fax (+351) 21-458-7256; electronic mail misorecords@misomusic.com; Web www.misomusic.com/.

Reviewed by Ian Whalley
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This collection, the third in a series from Miso Records in Portugal, collates the prizewinners of the Música Viva Competition from 2004 to 2006. The competition has assumed increasing importance on the international circuit, with 2006 being the seventh year it has been held. Entry to the competition is limited to composers under the age of 35. The last few years has attracted an average of 120 applicants from a range of nationalities.

Jury membership for the competition changes each year. Christian Clozier, Trevor Wishart, and Miguel Azguime adjudicated in 2004. In 2005, Annette Vande Gorne, Marek Choloniewski, and Miguel Azguime covered the duties, and in 2006 judging was undertaken by François Bayle, Morton Subotnick, and Miguel Azguime.

The disc contains eight tracks: two works from 2004, and three from each of 2005 and 2006. Given the jury selection of winning works from a large number of entries each year, the sonic production quality is uniformly high. As a documentary of the competition's outcomes, and a reference point for others who may wish to emulate the standards required, the disc is a worthwhile addition to any library.

The disc also gives a clear sense of the aesthetic that was favored over the period of selection, which is remarkable for its cohesiveness in reflecting predominantly academic Anglo/French and sometimes German electroacoustic music styles. Partly this may be a result of the age limit imposed on composers, with younger composers reflecting the voice of their teachers; but perhaps it also reflects on the orientation and backgrounds of the adjudication panels.

Whatever the reason, given the range of approaches available to electronic music over the last decade, the aesthetic uniformity between many

of the works on the disc, and the lack of stylistic progression over the period, is notable. Accordingly, although there are many works included that are strong within established electronic genres, the few works that are stylistically adventurousness and also engage dramatically clearly stand out.

To aid the listening process, the composers have provided biographical and program notes for the disc. The resulting texts vary considerably in both length and quality, and a tighter writing brief would have added to overall presentation.

The first track from the 2004 competition is by Adrian Moore, titled *Dreaming of the Dawn* (14′04″). Largely drawing on the British electroacoustic music tradition, it is inspired by an Emily Dickinson short poem. Sonically, it uses heavily treated woodwind instrumental samples, which appear in the introduction. The work demonstrates an astute control of timing and timbre, and has a clear sense of development. The approach is delicate and sensitive, with a good range of gestures. Stylistically it is an odd mixture, including a comic moment with a chord often heard in horror films, and nods to popular music synthesis. Although a refreshing approach, the stylistic diversity may disturb some traditionalists.

Mr. Moore's work is followed by *Language* (6'27") by Joshua Goldman, also from 2004. This is the shortest work on the disc, and the notes provided are scant. The composer indicates that it is a "stereophonic sound structure composed for seven vocalists (none of who are using their vocal cords)" (p. 5), and that the work should be played in complete darkness within the limits of avoiding damaging hearing and equipment. The approach is pointillistic and sparse, and owes much to the vocal works of Trevor Wishart. There is a keen sense of placement, although this is a little static in some sections. The humor is engaging, and in the context of the disc, the work differentiates due to its use of sound sources.

Three works are presented from 2005, and the next two tracks from that year are a highlight of the disc.

The first is *Anechoic Pulse* (9'40") by Panayiotis Kokoras. Notable here is the delicacy of control, the fine sense of momentum, and the clearly thought-out use of space. The orchestration of the central ideas is subtle, musical, and evocative, and the control of tension and relaxation is finely balanced. The work has clear motives, strong development, and the dramatic structure, although not immediately obvious, is masterful. Better notes of the work would have helped to come to terms with the piece, but the affective language used within an acousmatic style compensates abundantly.

Rota (10:51) by Pedro Almeida follows. A quasi-programmatic approach is taken here, the work making subconscious/experiential reference to seafarers' trips during the Portuguese colonial period, but using abstract sounds rather than direct sonic quotes. Appreciated was the exploration of lower frequencies in this work that seems lacking in

earlier tracks on the disc. Apart from the temptation to interpret musical gestures in terms of extra-musical meaning here which can add to but also detract from the sonic experience, striking in the work is the clear musical/dramatic sense articulated though the astute use of timing and space. To the composer's credit, he is able to do this with minimal gestures in many passages, while also allowing the texture to breathe and the listener to dwell on the delicacy of different sonic moments. Structurally, the manipulation of expectation of the climatic points was also appreciated. For sheer dramatic originality, this is the highlight of the disc.

The final work from 2005 is *Tynajas* (11'33") by Santiago Díez Fischer. The masterful control of frequency range and timbre is evident from the dramatic outset here. The short program notes provided indicate that the sounds should be viewed as animals or little creatures, an interesting idea that begs more explanation. Still, the idea is a delightful one, and one certainly gets a sense of sonic animism in the work, with moments of delicate impishness and a sense of being drawn in and seduced. Stylistically, and in contrast to the previous piece, this follows a more mainstream acousmatic approach that partly makes it sound somewhat dated on one hand, but is redeemed with touches of harmonic spectral technique. Although a reflection of the intention of the work, gestures are small throughout, and one partly yearns for some longer sounds and a greater frequency range to aid dramatic development.

We arrive at 2006 with the sixth track by Ingrid Obled titled *Si Je Regarde* (7'37"). The program notes here are the briefest in the booklet, which does something of a disservice to the piece, as a clear guide to intention here would help listeners. The work is minimalist, with sparse

events and a structure that slowly evolves out of silence after a dramatic beginning. The control of one's expectation is noteworthy, as is the work's cohesiveness. Perhaps greater variety would have helped with the dramatic sense. Still, the brooding nature of the work, and strong concluding section, redeem this.

Causal Impacts (7'00") by Manuella Blackburn, one of two women whose works are included, is the third outstanding track on the disc. Written in a mainstream academic sonic art genre, the sense of production/sonic clarity is astounding here, finely balanced with an intuitively musical approach. Exceptional is the careful control of short gestural sounds sensitively placed in the frequency and space fields. The control of structure and sense of timing is also remarkable.

The disc concludes with Thomas Peter's work *neugut-rand* (9'13"). The author's short program note provides a reasonable guide to the intention of the work, reflecting the contrast between the artificial and the natural. The aesthetic here is cerebral rather than affective, and while the production is outstanding in using some electronically generated sounds, it seems to beg for some more harmonic spectral glimpses to provide contrast. Notable is the clear shape and playful incidental moments, despite the limited range of gestures used.

Within the dominant aesthetic that the disc represents, there is ample music here to savor and delight in, and it includes a fine collection of young composers who may continue the traditions drawn on. Again, the sense of production is generally high across the works presented, and there are some outstanding examples of compositional craft. Beyond this, a concern is that art, while being about the "divine recapitulation" of

Figure 1. Close-up view of a single AudioCube.

Figure 2. Set of AudioCubes configured to display different colors and intensities.

knowledge, is also about the discovery of new knowledge. In these terms, works that explore new ground while drawing on older traditions are to be admired and encouraged, and it would have been interesting to hear more of the stylistic and affective voices of the younger composers included here.

Products

Percussa AudioCubes Sensors/ Controllers

AudioCube: single, €219.00; two or more, €199.00 each; four or more, €162.00 each; eight or more, €158.00 each (pricing includes UPS shipping); Percussa Bvba, Oudenaardse Steenweg 430, 9420 Mere, Belgium; telephone (+32) 477-931533 or Skype bschiett; electronic mail feedback@percussa.com; Web www.percussa.com/.

Reviewed by Martin Eckart
Guelph, Ontario, Canada

The AudioCubes created by Percussa are sold in varying sets of identical white acrylic cubes measuring 75 mm^3 and weighing approximately 400 g each. Each cube sports infrared sensors on the four horizontal faces, one USB port, and a $\frac{1}{4}$-in. unbalanced mono input/output set (see Figure 1). An on/off switch is provided on the bottom face. The white plastic casing is semi-translucent, and when switched on, the cube produces pastel-colored light of varying intensities over the RGB color spectrum (see Figure 2). The cubes are intended for use with a computer running at least Windows XP or Mac OS X 10.4. Percussa's founder Bert Schiettecatte promises that Linux support is in the works. Computer configuration is recommended at 256 MB of RAM and

a Pentium 3/Macintosh G3 or better. The AudioCubes configuration software is provided on the installation DVD, and includes MIDI Bridge (for live performance), Deckabridge (for DJing), Loopshaper (for sound design), and Plugin Wrapper (for production). Sound packs from Loopmasters are also included. Each cube is powered by a battery that can be charged by means of the USB connection. It is highly recommended to download the latest software, firmware, and manuals from Percussa's support page (www.percussa.com/isupport.php) before beginning installation or using.

The installation, configuration, and basic operation of the AudioCubes are moderately easy to work through. It should take about one hour to install the configuration software, the operations manual, and to work through the Quick Start tutorial showing the MIDI control basics. In order to use the provided configuration and control software (MIDI Bridge), some sort of MIDI loop-back driver is also necessary for MIDI communication between Percussa's MIDI Bridge and sequencing/performance software such as Ableton Live!. The installation DVD provides LoopBe1 for Windows XP. Macintosh computer users do not need to install this additional

software. The documentation included is thorough, and up-to-date reference material can be found on the Percussa Web site (manuals.percussa.com/).

The AudioCubes are a sort of "white box" instrument without a premeditated, highly specialized function. Rather, musicians can use the general properties of the cubes to come up with new methods of performing electronic music and art. The AudioCubes are created for use in four manners: (1) as MIDI controllers, sending Note On/Off messages when the cubes' faces interact with one another; (2) as sensors tracking the distance of objects from each of the four faces of each cube; (3) as MIDI continuous controllers affecting the colored lights within each cube; and (4) as modular audio signal generators.

The MIDI Bridge software (running within the included Max/MSP Runtime software environment) provides the basic control interface for the cube functions (see Figure 3). Each cube can be configured to act as a sender, receiver, or sensor by plugging in the USB cable and tweaking the parameters. The cube's color can be set as well as the MIDI in/out ports and the channels for integration with other software. Operation of the cubes with the MIDI Bridge software requires that at least one