

Jay Harvey Upstage

Saturday, April 26, 2014

Butler ArtsFest: Quantum physics has surprising, often engaging, musical parallels

The third element of **Butler ArtsFest's** alliterative title received its due Friday night at the Schrott Center. We've had "Fables" and "Fairy Tales" (the latter theme continues with two more performances of Butler Ballet's "Cinderella" at Clowes Hall). Now it's time for "Physics" to take a turn.

The 2014 "Fables, Fairy Tales and Physics" series — the second annual festival — entered its "Encore Weekend" with an **Indianapolis Symphony Orchestra** concert called "Quantum: Music at the Frontier of Science." The program devised by guest conductor Edwin Outwater, with the assistance of quantum physicist Raymond LaFlamme, who offered off-the-cuff elucidation from the stage to supplement written narration delivered by Stacy A. O'Reilly of Butler's chemistry faculty.

Outwater also contributed some oral program notes, so the position of words in the program was indispensable. A thorough attempt was made to acquaint the audience with advances in scientific theory that suggest the universe behaves far differently — mainly less predictably — than conventional physics, from Newton to Einstein, had supposed.

Some of the significant late-20th-century music parallels the random behavior of particles. This is far beyond the musical rhetoric we're used to, with its satisfying statement-and-response balances. The first movement of Mozart's Symphony No. 29 in A major introduced the program to show off such features, which typically take the form of balanced dialogue between upper and lower strings. The Mozart music returned in part at the end of the concert, interwoven with extraneous matter suggesting the random movement of particles and the calculated approach to composition taken by Iannis Xenakis.

Throughout, a screen above the stage carried images of moving lights that could be interpreted as stars or particles. The constant motion was restful, and relieved by a few key words and phrases, in addition to portraits of the composers represented and the physicists who changed our understanding of the universe. The visual element steered clear of documentary explicitness; it was commendable that what we saw on the screen seemed designed to have aesthetic appeal.



Edwin Outwater is music director of the Kitchener-Waterloo Symphony.

The position of particles simultaneously in two different places ("superposition") was given a musical parallel in Henry Brant's tribute to Lucretius, the ancient Roman poet who was prescient about modern views of the universe's behavior. Titled after Lucretius' descriptive poem "On the Nature of Things," the work called for a French horn at one corner of the loge and an oboe at the other to supplement the onstage orchestra, including a chamber group of three woodwinds and glockenspiel off to one side. The performance was charming in its partial overlapping of lines emerging from different places in the hall. (The program booklet erred in counting Brant as the only living composer represented; he lived a long time, but he died five years ago today at the age of 94.)

Xenakis' "ST/48-1,240162" was the most challenging to listen to. The score was generated by a computer from programming instructions fed into it by the Greek composer in 1962. Computers were room-filling behemoths in those days, and indeed there was something monstrous about this composition.

John Cage's "Atlas ellipticalis" had a less calculated origin,. He simply derived noteheads and their positions with respect to each other by transferring the images of mapped stars onto a couple of transparencies. The result was an indication of the celebrated "chance" composer's intent to "tame randomness," as Outwater put it from the podium.

I had trouble making an emotional connection with both the Cage and Xenakis works. I did better with Brant, and even the first movement of Weber's Symphony, op. 21, conveyed some fragmented Viennese schmaltz. Its language is a far cry from how the Austrian composer was writing 23 years earlier in "Langsamer Satz" (1905), of which the orchestra offered a tantalizing excerpt. But both pieces seem designed to elicit the listener's sympathy.

The sentimental side of the avant-garde was represented by "The Unanswered Question," one of Charles Ives' more directly appealing works. The solemn string orchestra plays sustained notes in a timeless style that has been dubbed a Druid anthem. A small group of woodwinds, placed to the right of the podium here and conducted separately, chatters with increasing anxiety in response to the solemn interrogation of a solo trumpet. The latter role was undertaken with signs of uncertainty Friday night that went beyond the intended scope of the questioning phrases, but the performance was dependably moving nonetheless.

This program was a welcome stretch for the ISO, and is the sort of thing that tests the mettle of the orchestra perhaps better than some of the more pop-oriented outreach it is required to play for the sake of solvency. If the mainstream is the course symphony orchestras must sail on, it's still worthwhile to paddle up the more intriguing tributaries now and then.