

7. Compositions for double bass and live electronics

Taudrium (Zack Settel)

The American Zack Settel (b. 1957) is an important composer of live computer music. He has contributed a lot to the development of live signal processing, especially with spectral techniques like cross-synthesis.

‘Taudrium’ (1992) for double bass with live electronics is a challenging 15-minute piece featuring a variety of double bass and electronic techniques. The Columbian bass virtuoso Maurizio Romero commissioned it. ‘Taudrium’ features three distinct sections.

Section ‘A’ starts out with very little material: a high note is played with different arco and pizzicato techniques to vary the timbre. The high tones are interrupted by low pizzicati. Some high tones are prolonged with an artificial, long reverb, in order to create a counterpoint against the ongoing bass part. Then, a long crescendo on a ‘tremolo sul ponticello’ is generating an impressive electronic sound. A complex bass sonority like this proves to be suitable to control the electronic effect Settel composed here. Settel explains: *“The base's amplitude envelope (i.e. rapid changes in the instrument's intensity) is continuously tracked and used to control (gate) the output gain of a sampler; depending on the samples being ‘gated’, much of the live instrument's articulations will be retained in the electronic output signal.”*³³

This transformed sound leads us into section ‘B,’ to be played ‘en dialogue.’ Trills, double-stopped harmonics, tremoli and other colours interrupt legato figuration. These sustained interruptions are harmonized by sampled, that are being triggered in the manner explained above. As the section progresses, these ‘electronic’ multiple stops develop into a very complex, dense texture.

After this counterpoint of rapid bass figures and electronic disruptions comes an improvised section. Bass and electronics create an imaginative landscape of harmonic and other glissandi. The computer records the live bass effects and plays them back in an electronically modified way somewhat later. The gestures are recognizable yet different, making this section interesting.

Section ‘C’ also starts with the superimposition of live-generated material. The double bass plays a slow bass line, reminiscent of the ‘walking bass’ from jazz tradition.

³³ Quote is taken from email correspondence with Zack Settel.

The computer repeats the whole line and small fragments of it while the bass is playing a long glissando moving the bow from normal position to the bridge. The glissando goes through a delay in addition, which creates a very dissonant timbre. My critique on this part of the piece is that it could be performed by an acoustic bass quartet as well. It would be different if the live samples were processed in a more significant way.

In the coda of 'Taudrium' the electronics do have an added value. The bass player is busy with aggressive, rapid double stops. Then, some heavy pizzicato action is sent through a flanger: a complex gamelan-like sonority is the result, which in the coda fades out together with a high harmonic in the live double bass.

Zack Settel certainly wrote idiomatically for double bass and electronics. 'Taudrium' shows that it is possible to do elegant things with double bass and live electronics. However, I feel that the focus of the piece as a whole is a bit unclear because of all the different techniques employed. The live bass part sounds too much like a show-off, due to the wishes of the virtuoso that commissioned the piece. There are many things possible on a double bass; it is not necessary to use all of it in one piece.