STEEL ON BONE
FOR PIANO, STEEL TOOLS, MIMU SENSOR GLOVES AND ELECTRONICS

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Instructions for work

Prepare Electronics:
Ableton Live – 3 channels, all off for opening.
Glover – open and transmitting MIDI.
MiMU Gloves – turned on and connected via WiFi
Steel knitting needles – at least 8mm width and 30cm length.

SECTION 1 (2 minutes)
1. Turn on Channel 1 – delays (with repitching linked to changing delay times) and filter sweep controlled by glove movement.
2. Katana sword positions before beginning first gesture.
3. Full piano scrape then low A drumming-to-scraping alternating pattern using large metal knitting needles. Go between taiko pattern and even an tremolo.
4. Alternating pattern moves to marked notes (A-E-C-F#)
5. On F# use harmonics and tapping attack, moving down the spectrum towards the middle of the string.
6. Repeat 1-3 with channel 2 on (delays controlled by gloves, no filter sweep).
7. Add in upward strum across bass streams.
8. Move strums closer to bridge, then behind the bridge, transitioning to Section 2.

Section 2 (1 minute)

1. Keep moving behind the bridge to the middle section of piano.
2. Create a shepherd-tone pattern with both needles (overlapping glissandi).
3. Interrupt occasionally with muted an unmuted strums in higher register
4. Gradually move to higher position then turn on grain delay (controlled by gloves).
5. Move back to middle position and start a gradual ritardando. Just before the end of the rit, turn off main delay while finishing shepherd-tone pattern.

Interlude (1 minute 30 seconds)

1. Use flat of needles on beams with grain effect – again using katana sword patterns. Tap on frame of piano, lid, edge, then pairs of strings, increasing the intervals (with bass progression down to low A). Use the gloves to alter grain delay, including vertical position and twisting of wrist. Pause and turn off grain delay.

Section 3 (1 minute 30 seconds)

1. Turn on gesture-sensor control for the gloves
2. Two-hand gradual morphing between drumming and scraping on low A
3. Merge into drumming/scraping samples from gestures (alternating fingers), with filter sweeps controlled by gloves.
4. Use flat scraping sample (two fingers) and blend with real string scraping.
5. Move to single-string scraping sample against real scraping. Finish with string scrape while releasing sample.

PROGRAMME NOTES

As a pianist, moving away from the keys and into the body of the piano feels like touching the bones, flesh and sinew of the instrument. It feels both more delicate and precise, and also more violent (for both player and piano) than interfacing with the keyboard. *Steel on Bone* is inspired by two types of films: medical documentaries and the samurai films of Akira Kurosawa. Steel is the material of both the scalpel and the katana, used for healing and for fatal duels. Using steel implements in the body of the instrument, the pianist draws delicate and violent sounds, transmogrifying them using MiMU's multi-sensor gloves.