

RYAN KIMBRELL

CHAMELEON IN MY CRAFT

Experimental Electro-Acoustic Extended Technique Through Audio Sample Manipulation

OBJECTIVE:

- **EXPAND THE SONIC PALETTE OF THE SAXOPHONE**
- **EXPERIMENT WITH HOW THE SAXOPHONE SOUND CAN BE MANIPULATED BOTH ACOUSTICALLY AND DIGITALLY**
- **EXPLORE OPTIONS OF IMPLEMENTATION OF THESE SOUNDS INTO MUSIC.**

CULMINATING EXPERIENCE OBJECTIVE

PROCESS OF RESEARCH & PRODUCTION

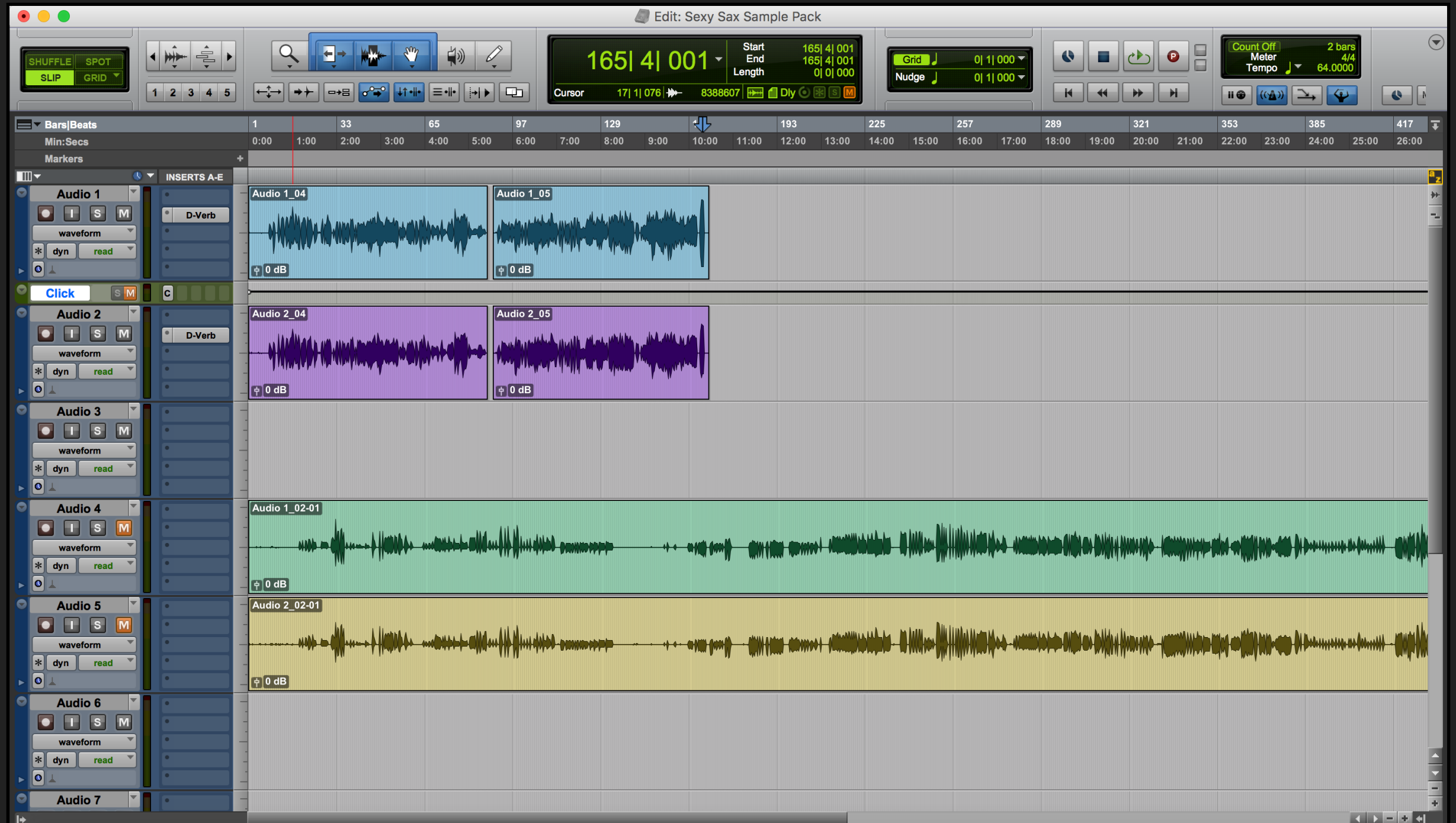
- ▶ Research the acoustic limits of the saxophone through study of extended technique
- ▶ Record an audio sample library of sounds from my saxophone
- ▶ Attempt to emulate pre-existing sounds through the DAW's native audio manipulation tools
- ▶ Evaluate the results of the emulation process, and document my findings

SAXOPHONE: RECORDED SAMPLE GROUP LIST

- ▶ Different Note Lengths
- ▶ Different Pitches
- ▶ Different Attack Qualities
- ▶ Growl
- ▶ Flutter Tongue
- ▶ Inhalation Sounds
- ▶ Scoops
- ▶ Multiphonics
- ▶ Key Noise
- ▶ Air/Wind
- ▶ Pitched Key Tones
- ▶ Metal Sounds

RYAN KIMBRELL

RECORDING/ORGANIZING THE SAMPLE SOUNDS



RECORDING/ORGANIZING THE SAMPLE SOUNDS

- Multiphonics
- Key Clicks
- Air/White Noise
- Inhaled Noise
- Held Notes
- Flutter Tongue

141145149

Set

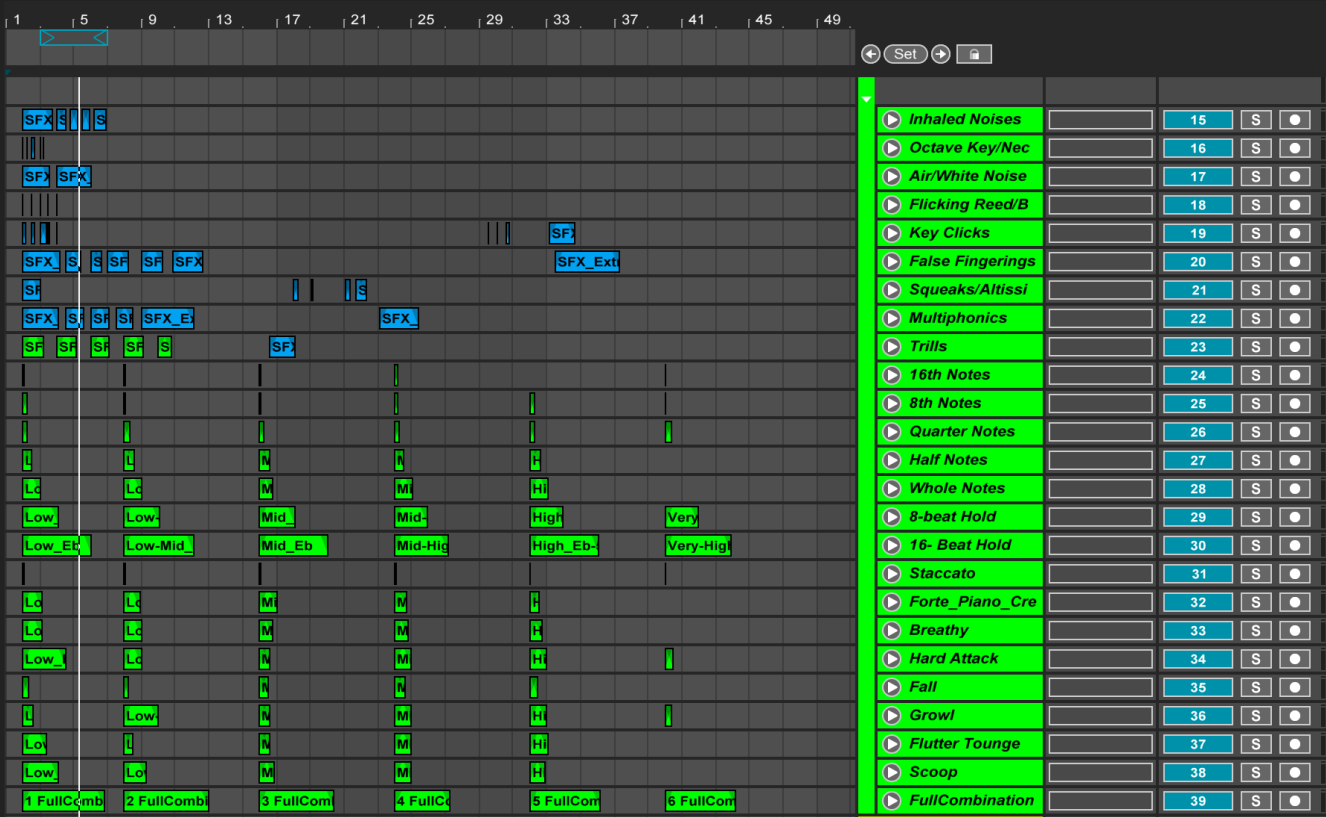
Sample Collection

Master14S0C-inf-inf

None

Inhaled Noises	15	S	●
Octave Key/Nec	16	S	●
Air/White Noise	17	S	●
Flicking Reed/B	18	S	●
Key Clicks	19	S	●
False Fingerings	20	S	●
Squeaks/Altissi	21	S	●
Multiphonics	22	S	●
Trills	23	S	●
16th Notes	24	S	●
8th Notes	25	S	●
Quarter Notes	26	S	●
Half Notes	27	S	●
Whole Notes	28	S	●
8-beat Hold	29	S	●
16- Beat Hold	30	S	●
Staccato	31	S	●
Forte_Piano_Cre	32	S	●
Breathy	33	S	●
Hard Attack	34	S	●
Fall	35	S	●
Growl	36	S	●
Flutter Tounge	37	S	●
Scoop	38	S	●
FullCombination	39	S	●

EDITING THE SAMPLE SOUNDS

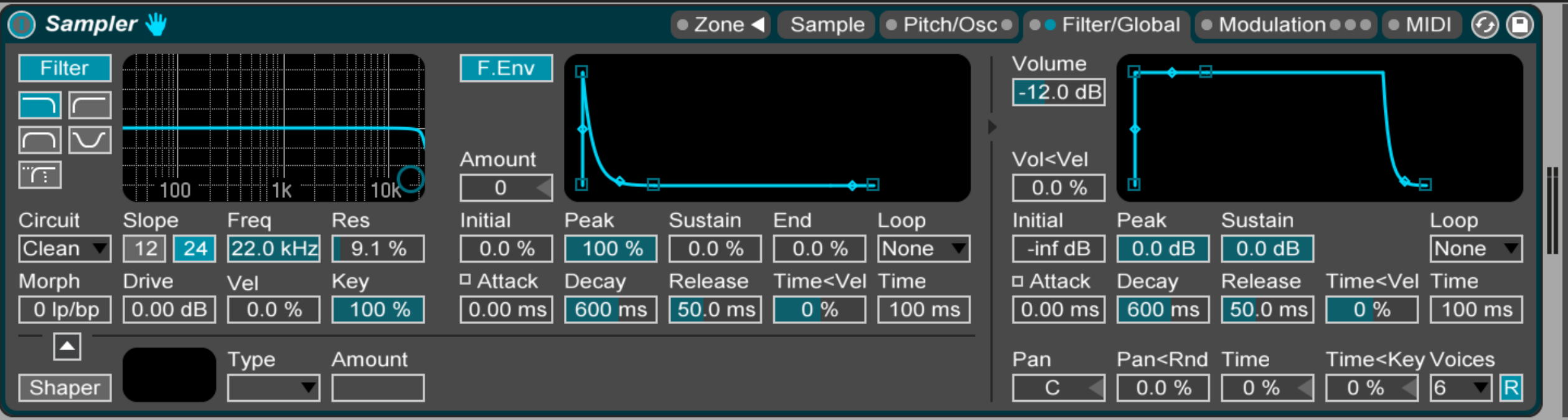


Sounds Attempted:

- ▶ Harmonica
- ▶ Kick Drum
- ▶ Pipe Organ
- ▶ Marimba
- ▶ Snare Drum

Sounds Created:

- ▶ Harmonica
- ▶ Plucked String Bass
- ▶ Woodblock/Cross-Stick
- ▶ Calliope/Steam Organ
- ▶ Tube Marimba
- ▶ Snare/Clap
- ▶ White Noise
- ▶ Water/River Sounds
- ▶ Alarm Noise
- ▶ Other synthesized pad sounds



PLUCKED STRING BASS

- ▶ Started as Kick Drum Emulation
- ▶ Instrument Rack & Sampler
- ▶ Three Samples:
 - ▶ Key Closing (Messy)
 - ▶ Reed Flick
 - ▶ Key Closing (Pitched)
- ▶ Key Closing (Messy)
 - ▶ Turned down 20dB, and ADSR controlled fade-in
- ▶ Reed Flick
 - ▶ EQ: Boost 150Hz, Dip 250Hz, Boost 1kHz, low shelf on high end
 - ▶ Saturated +2.86dBs
 - ▶ ADSR controlled decay (faster decay)
- ▶ Key Closing (Pitched)
 - ▶ ADSR controlled attack (gradual strike)
 - ▶ LPF at 300Hz
 - ▶ ADSR controlled release (long release)

Final Product:

COMBINING THESE SOUNDS TO MAKE MUSIC

Sounds Utilized In Excerpt:

- ▶ Kick Drum
- ▶ Snare/Clap
- ▶ Plucked Bass
- ▶ Woodblock/Cross Stick
- ▶ Calliope/Steam Organ
- ▶ Tube Marimba
- ▶ Water Sounds/White Noise



RESULTS IN COMPARISON TO OBJECTIVE

- ▶ Expansion of Sonic Palette of the saxophone
- ▶ Explored Digital manipulation of sound
- ▶ Created a collection of new sounds and imitated sounds in order to forge new sonic identity and prepare myself to adapt to any sonic environment