

DAN SENN'S LYDE INSTRUMENTS

BY JASON BAKER

Dan Senn is a composer and artist whose work often involves exploring new sounds and instrument building, drawing on his training in both music and art. In 2002, Senn created a new set of instruments, called “lydes,” first for workshops with school children, then for use in concert performance and recording. Simple in construction, made from metal pot lids and dowel handles, these instruments are accessible to a wide variety of performers and audiences. Lydes produce a unique sound, at times similar to an Indonesian gamelan—vocal, edgy, and always unpredictable.



According to Senn, “These utterly unpretentious-pretentious instruments, available to anyone, anywhere, are powerful, opaque, and naturally anthropomorphized, as are all sculptural instruments, because of sonic characteristics non-transferrable, even ‘individualistic’ instrument-to-instrument. While this is true to a far lesser degree with all non-digital instruments, where the perfection aims to eclipse human perception, the Western focus has long been on a scalar rigidity that celebrates transparency and uniformity between instruments. The concept of seeking out instruments that began as common implements is diametric to traditional Western (musical) values.”

ORIGINS

The development of lyde instruments grew out of a challenge Senn faced while teaching a middle school residency in Tacoma, Washington. He was responsible for “sound art classes culminating in a performance for the entire school. The scores were drawn out in the school’s visual art classes and then taught and performed by the sound art classes.” According to Senn, it was a “transformative experience that revealed the potential for creating complex and repeatable musical structures for untrained musicians and even children.” These beginnings influenced Senn’s contribution to a series of workshops at the Museum of Glass in Tacoma.

CONSTRUCTION

The Danish word “lyde” translates as “sound.” The instrument is constructed by attaching an aluminum pot lid to a piece of wooden doweling and utilize a striking instrument consisting of a stick with one end wrapped in duct tape. In addition to being highly accessible “found sound” objects, these materials were previously used in the “Scrapercussion” instruments Senn invented in the early 1980s and were readily available when constructing lydes for use with school children.



A set of four lydes



Scrapercussion #4, Canberra School of Music, Australia

The instruments have a constant sustain, with each creating its own unique sound; no two lydes sound the same. Therefore, pitches are not specifically written in the music. The uniqueness of these instruments comes from combination of various overtones, and even ex-

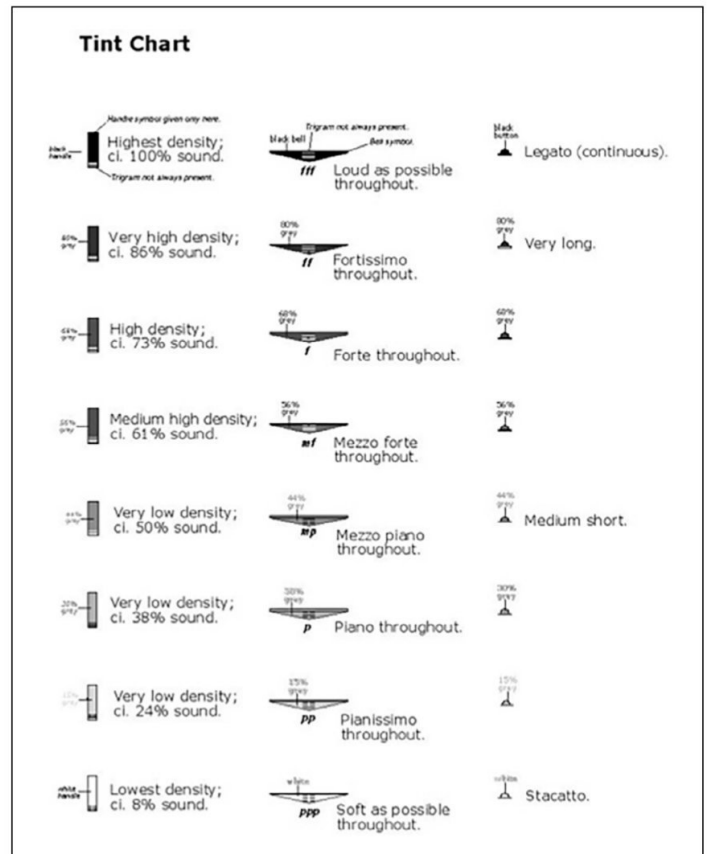
traneous sounds such as buzzing that may occur due to sympathetic vibration when more than one is played simultaneously. While this might sound like a recipe for cacophony, the timbres and tonalities produced are ironically beautiful, haunting, and pleasing to the ear in a very traditional sense.



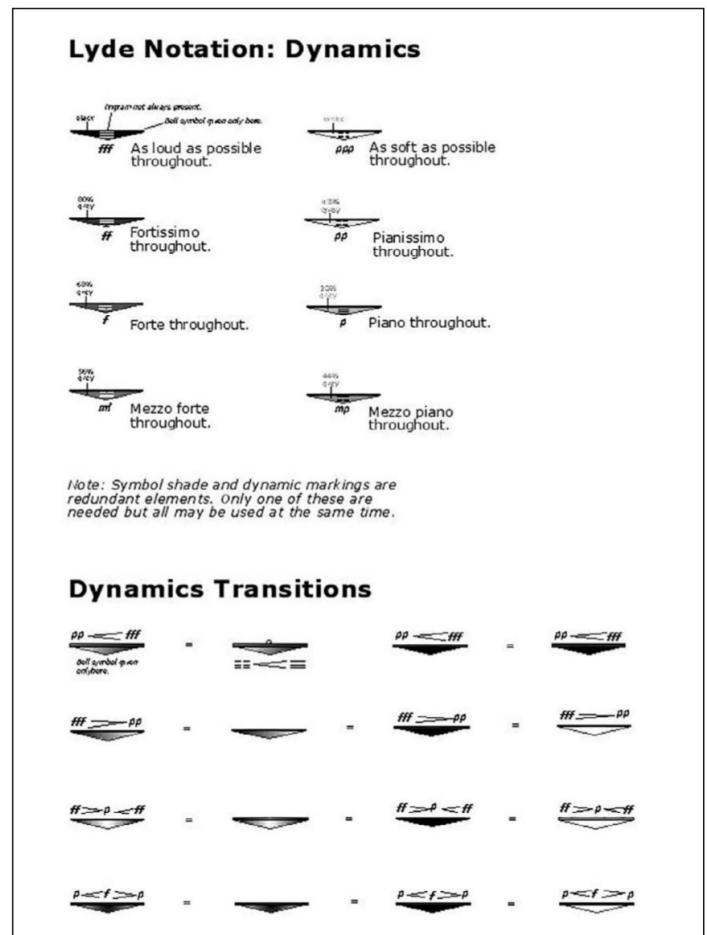
“Joy” from The Book of Changes in Sound, Lycon L58

NOTATION

Notation of music for lyde instruments is categorized into non-linear graphic notation (useful for untrained musicians) and linear scores (more closely resembling standard Western notation, useful for trained musicians). Non-linear graphic notation uses a set of 64 symbols (called “Lycons”), derived from the 64 hexagrams of the I-Ching. Each lycon indicates performance factors such as dynamics, striking positions, muting, and density of sound based on the tint of the coloring.



Tint Chart



Dynamic Indications

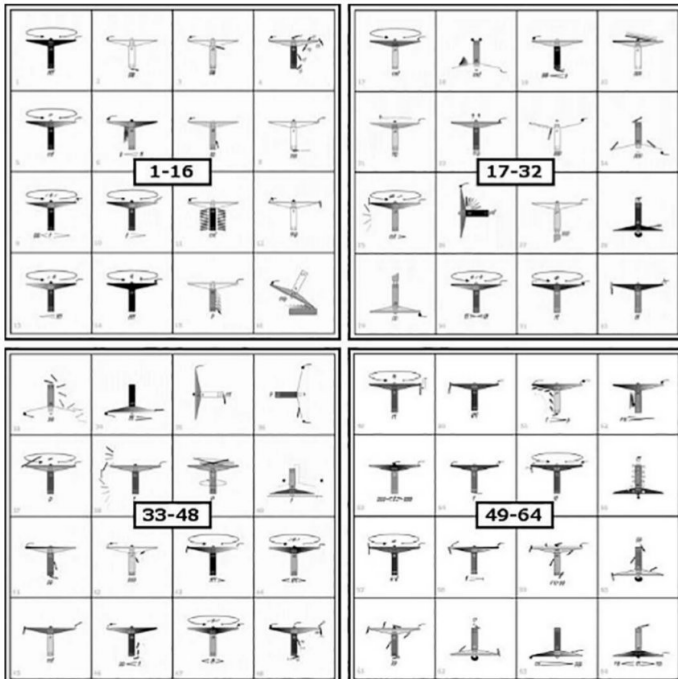
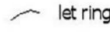
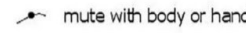
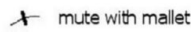


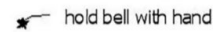



Chart of 64 Lycons

Lyde Notation: Muting

-  let ring
-  mute with body or hand
-  mute with mallet
-  mute with finger on outer plane
-  mute with body
-  hold bell with hand

 Low-high-low density strikes on metal, syncopated beats, *ppp*, mute with body.

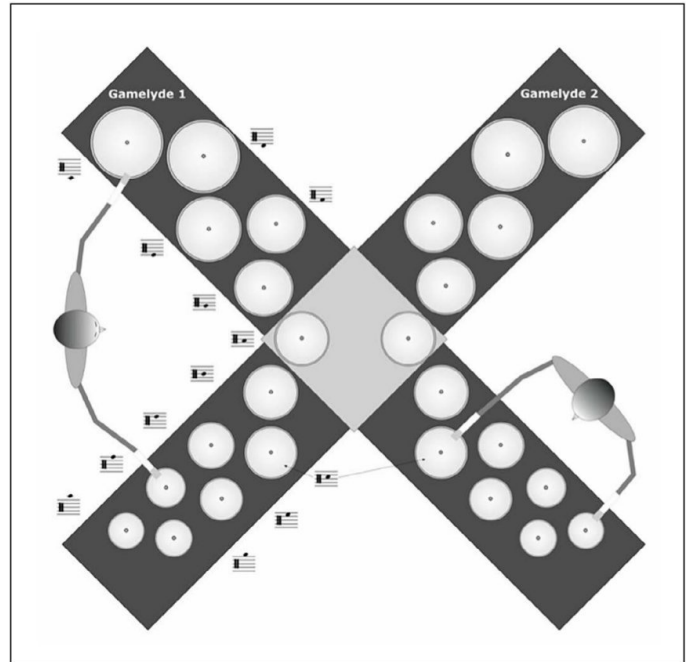
 High-low-high density strikes on wood, regular beats, *ppp*, let ring.

 High density irregular strikes, *fff-ppp*, mute with finger.

Muting Indications

This notation approach can be seen in the following score examples.

nation of specific rhythms, pitches, and timing between multiple performers.



Setup of a two-player gamelyde.

While lydes are not scored in exact pitches, the use of a staff shows the relative contour of high to low sounds.

Lyde Score 5: Glisan and NW 12th.

Lyde Score 6: Glisan and NW 11th.

Lyde Score 7: Glisan and NW 9th.

Lyde Score 8: Davis and NW 9th.

Non-linear score examples

Linear scores are often used when a group of players performs on setups of multiple lydes, called "gamelydes." This notation is more familiar to Western musicians and classically trained percussionists, allowing the coordi-

Dam Patch, Dog Barking

for Gamelydes Two and Four, two percussionists,
pre-recorded violin and video, and dance.
30 minutes**.

Video, sound and instruments by Dan Senn

Dan Senn
BMC

The musical score is written for two lyde players and a pre-recorded violin. It is in 4/4 time and consists of 68 measures. The score includes various dynamics such as *mf*, *f*, *ff*, and *p*. Key performance instructions include "turn lyde" and "Strike (hit) Gam 1 lydes w/hard surface of mallet." Timing cues are provided throughout the score, such as (0:05), (0:39), (0:47), (1:01), (1:21), (1:33), (1:53), (2:17), (2:53), (3:17), (3:40), (3:53), (4:13), (4:30), (4:46), (5:02), and (5:18). A copyright notice at the bottom reads "Copyright © 2012 Dan Senn".

Excerpt of score for gamelyde duo in linear notation

▶ Tap to play Video



Dam Patch, Dog Barking

APPLICATIONS

Due to the accessible nature (both in construction and performance) of lydes to both musicians and non-musicians, as well as their handheld portability, Senn has organized informal groups of performers called Space Bands. Typically consisting of 8–30 performers, Space Bands move about a space (pedestrian walkways in a city, church courtyards, etc.), exploring how these sounds interact in a given acoustical environment. Past events have occurred in Prague, Münster, and Portland, Oregon.



Space Band performance in Münster

Senn also uses many of these sounds in his own solo improvisations using electronics, which he calls “Ableton Live Sets.” These include sampled lyde sounds with a 13-inch MacBook Pro running Ableton Live, a LaunchPad Pro and LaunchPad MK3, and a Scarlet 6i6 interface with four discrete outputs to a 4-channel sound system. Performances often include video projections with which they are coordinated.

▶ Tap to play Video



“Slight of Hand” by Dan Senn

Jason Baker is Associate Professor of Percussion at Mississippi State University. He serves as Associate Editor of New Literature Reviews for *Percussive Notes* and chair of PAS University Pedagogy Committee. He is active as a soloist and freelance musician throughout the Southeast and has released three solo CDs, two etude books, and numerous compositions and arrangements for solo and ensemble percussion. **RIS**



