Think of One, Two Ways

By: Steven Lewis
Based off of the original jazz standard *Think of One,* by Thelonious Monk

Introduction

Think of One, Two Ways, was an experimentation into extending the facets of my skillset to include previously unexplored applications of live performance, sound processing, and interactive programing. Composing and arranging music in this manner displays the breadth of an interdisciplinary skillset, and moreover, an understanding of how to incorporate that diversity into a workflow which enables progressive experimentation based upon the layering of iterative expansions derived from previous compositional outputs. This system guarantees that even while it may sound entirely unrelated, the final output of the entire process is highly dependent upon the perforative execution of the source material. As it pertains to this example, the subsequent second "way" of *Think of One, Two Ways is* highly predicated on my drumming performance, the execution and effectiveness of which is augmented by an acute understanding of the historical and cultural familiarity regarding the chronological evolution of the drums' role in jazz: a transformation from a supportive, time-keeping device, to a featured vehicle for jazz soloing and interactivity.

The "Two Ways" of iterative compositions included in this submission can be thought of as followed:

- <u>Way One</u>: Adapting the melody of Monk's *Think of One* to the drum set, followed why a solo over the form of the piece.

- <u>Way Two</u>: a detailed undertaking of processing Way One; a form of algorithmic composition where the programming assumes a vital role in transforming the original source material into various sound objects, which can then be re-organized using a hybrid experimental approach best described as an amalgam of Plunderphonics, Musique Concrete, Sound Design, and Experimental Jazz. As discussed in detail below, the creative use of delays and filter techniques were pivotal to the outcome of this iteration.

Historical Perspectives:

Initially recorded on Thelonious Monk's *Monk¹* album, *Think of One* features some of Monk's seminal playing characteristics, such as repeated, percussive-like tones in the melody, swift dynamic changes, and jarring syncopation. However, Monk's journey into his prosperous tenure with Prestige Records was a painful process, one where he oft at times was on the outside of the jazz community nexus looking in. As noted jazz author David Dicaire states, the years between his departure from Minton's Playhouse in Harlem and being signed to the Riverside jazz label (and eventually to Prestige) were some of the most trying of his musical life:

> The ensuing years were lean for Monk; it was simply a case of him being too ahead of his time. His creative piece that were shunned by critics and audiences foreshadowed the future movements of hard bop and free jazz…he recorded sporadically and scarcely performed live…few understood Monk, a genuine original who was labeled by many as being too spaced out to deal with.²

There was no denying that Monk had an inherent uniqueness about him, a singularity that many within the jazz world would have difficulty accepting for years. However, with an unorthodox technique based upon playing the posteriors of chord progressions, percussive

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¹ Thelonious Monk, *Monk,* performed by Thelonious Monk, Prestige, CD, 1954.

² David DiCaire, *Jazz Musicians: 1945 to the Present* (North Carolina: MacFarland and Company Publishers, 2006), 24.

whimsy, and the stride piano proclivities of his predecessors, Monk's alternative playing style

was eschewed for the primly orchestral, ephemeral, polished romanticism of Ellington's piano

playing. This did not deter Monk's motivations; Bud Powell, Teddy Washington, and Duke

Ellington may have influenced him, but Monk desired to play music that best suited his own

conception of what jazz meant to him. After years of financial and collaborative struggles, this

aforementioned creative resolve led to a universal laudation occurring in various waves, with

new adherents subscribing to the genius of Monk - especially during periods when agreed upon

music notions had finally arrived to the point where Monk's musical existence had already been

established for years:

> …Incorporated killer fractured chord combinations and perverse melodies into his playing . His fertile imagination and obscure humorous side gave his music an unearthly feeling. He achieved more with less. He left open spaces in his playing and could create a complete mood with a few sparse notes….the affect of such diverse music led to him being regarded differently by certain musical factions…the hard bopper believed his music was that of the messiah. The free jazz/avant garde movement embraced him like a long lost brother. The contemporary school heralded him as one of its godfathers.[3]

At least eighty-nine albums credit Monk as being the leader or leading collaborator

during the recording process, with *Think of One* only being recorded a select number of times.

Other compositions recorded on more prominent record labels, such as Blue Note, Columbia,

Legacy and Le jazz record labels were able to sustain an increased amount of jazz contacts, thus,

were able to distribute Monk's music like *Epistrophy, Evidence*, and *Ruby, My Dear* to a broader

audience.

In an effort to refrain from more popular song choices in his library, contemporary jazz

artists have elected to record some of Monk's lesser known works, with examples being Bill

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[3] Ibid.

Carrother's recording of *Off Minor* on his album *Home Row*[4] and Ari Hoenig's recording of *Green Chimneys* as a solo drum piece on his solo drum album *Time Travels.* [5]

Originally recorded by Julius Watkins on French Horn, Sonny Rollins on Tenor Saxophone, Percy Heath on Bass, Willie Jones on drums, and Thelonious Monk on piano, the 1953 recording of *Think of One* has been the basis for many modern jazz performers who wish to express their artistic divergence upon the tune. Such examples include jazz luminaries Jean Michel Pilc[6], Danillo Perez[7], Lynne Arriale,[8] and Sam Yahel[9], and David Binney's recording of *Alisio*[10].

Musical Considerations

The drummer must convert or orchestrate the pitches of the melody properly so that the melody is recognizable to the audience, assuming that listener is versed in *Think of One*. While the pitches can never quite be the exact tone of a note played on a tonal instrument, through tuning, pitch bending, and amassing an ardent awareness of the melody, a drummer can imitate the notes that will, at the very least, recall a harkening of the melody. The goal is achieving an accuracy through simplicity, for playing any superfluous or extraneous notes that deviate from the melody will diminish the overall effect that clarity will have on the piece. This is relatively simple to do with Monk's original arrangement, as the melody's oft-repeating single note

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[4] Bill Carrothers, *Home Row,* performed by Bill Carrothers, Piroquet, CD, 2008.

[5] Ari Hoenig, *Time Travels,* performed by Ari Hoenig, 1K Recordings, CD, 1999.

[6] Jean Michel Pilc, *Threedom,* performed by Jean Michel Pilc, Dreyfuss Jazz, CD, 2011.

[7] Danillo Perez, *Panamonk,* performed by Danillo Perez, Impulse!, CD, 1996.

[8] Lynne Arriale, *Live at Montreux,* performed by Lynne Arriale, TCB Records, CD, 2006.

[9] Sam Yahel, *Hometown,* performed by Sam Yahel, Posi-Tone, CD, 2009.

[10] David Binney, *Alisio,* performed by David Binney, Criss-Cross, CD, 2010.

motives already emulate a sort of percussive cacophony, with notes designated with staccatos or

"unswung" rhythms of varying density:

Figure 1: *Think of One's* **Original Melody, mm.1-20**

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Figure 2: *Think of One's* **Melody Applied to Drumset**

Pitch bends and inflections could be written in. However, I leave the tuning to the drums

to each individual player, as such a physically demanding instrument as the drums requires a

certain idiosyncratic comfort with the natural amount of resistance the drums provide against the

motions exe luted to produce a desired sound. Depending on the tuning approach (usually drunm

are tuned in either major 3rds or perfect 4ths, but even this is widely debated) and the dimensions

of the drums used, the amount of pressure needed to "bend" pitches will differ.

Drumset

Think of One

Thelonius Monk
Steven Lewis

Solo Begins

The solo is over the form of *Think of One,* which is a standard 32-measure AABA song form. However, since there are no vamps, or any other kind of neither rhythmic nor harmonic assistance from a supportive source, the drummer is given an opportunity to display a more melodic faction of his playing while also retaining the possibility for obfuscating how obvious they outline the piece's form. This creates certain challenges, most notably that the drummer has the possibility of thinking melodically whilst resisting the tendency to resort towards practiced patterns of. Hence, the drummer in this solo format is playing the role that a saxophone may play within the context of a quartet or otherwise. An adherence is to form is not only necessarily for performance competency, but a helpful guide in developing motivic material loosely based off of the melody.

As mentioned above, a more abstract approach can be taken to percussive jazz soloing, one where the drummer utilizes melodic motifs while obfuscating form by refraining from outlining the commonplace phrasings of four, eight, or sixteen measure in length. Form is metaphorically treated as a frame to canvas, where a drummer does not reveal the form until the solos end. I opt for a hybrid approach in this solo, where melodic ideas are hinted at by means of orchestrations around the drum set while never outlining the form in any obvious manner until the end of each repetition of the form. This is best exemplified (and best executed) by utilizing extreme dynamic changes, cross-rhythms of varying rhythmic values, and changes to drum timbre throughout the form, but especially when phrase ending are expected to resolve. My performance goals have always centered around developing a highly personal approach to jazz improvisation, deriving from melodic adaptivity to traditionally non-tonal instruments, as well as a vocabulary of traditional Indian Tabla rhythms and phrases being orchestrated to the

primary percussion instrument in jazz. These unique orchestrations, filtered through sequences of odd-valued cross rhythms, help create a "wash" of ideas that seemingly blend into one another, further accentuating this semi-surrealist approach, often reminiscent of the soloing styles trailblazer by boat-bop drummers Elvin Jones and Tony Williams:

Figure 3: Annotation of *Think of One's* Drum Solo

Use To Transition to Rubato...

Free Solo
(back to head)

Think of One, Way Two

Artistic Motivations

Blending electronic and acoustic musical styles addresses one of the fundamental challenges continuously faced by electronic musicians; the lack of traditional, visual stimuli associated with demonstrations of instrumental virtuosity. This was demonstrated in Reich's *Writing on Music*, in a story shared by John Cage:

> …even in the mort recent electronic music, the audience was falling asleep…That was because the music was coming out of loudspeakers. Then, in 1958 - the Town Hall program of mine- we were rehearsing the Williams Mix, which is not an uninteresting piece, and the piano tuner came in to tune the piano. Everyone attention went award from the *Williams Mix* to the piano tuner because he was live. [11]

Cage was discussing tape music being played onstage for an audience, but the challenges of this indelible fact have persisted to current live sound processing, or computer music styles: turning a knob or pressing a key command is simply not as physically demonstrative an act as a playing nearly any string woodwind, brass, or percussion instrument, thus, not as visually engaging. However, where computer musicians are limited by the lack of physicality inherent to their instrument, acoustic instrumentalists are crucially limited to the physical dimensions and raw material from which their instruments are

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[11]Reich, S. (2002). Writings on music, 1965-2000. Oxford University Press.

constructed.[12] By combining the improvisatory principles of jazz with the seemingly endless sound design

possibilities of electronic music, physical virtuosity can be displayed while augmenting the limited

acoustic plausibilities of an instrument. This has been done in myriad experimental settings, and

particularly relevant to this author are the experiments involving acoustic drum augmentation through

means of physical modeling with bistable cymbal resonators[13], in-drum sensor placement and web-cam

gestural monitoring[14], as well as real-time beat tracking as control input for FM and AM Synthesis during

live sound processing[15]. Drums are an ideal instrument for such experiments, as they are the only

instrument in typical jazz settings to not be constrained by the improvisational limitations imposed by

Western tonality, simultaneously qualifying as an instrument for improvisation in the electro-acoustic

sense; unbound by the expectations of traditionally accepted tonal and temporal structure as a means to

denote form, the drums can be thought of as a vehicle for improvisation where such models are predicated

on the judicious alteration and hierarchical organization of music through deriving content from the non-

tonal facets of sound: what John Cage referred to as the entire field of sound.

       The artistic decision to hybridize experimental approaches with traditional performative

techniques is nothing inherently novel, and what Cage referred to as a "Composition By Process"[16] and

Pauline Oliveros as an "attentional process by within a participant and among a group which can depend

gradually with repeated experience."[17] These sentiments are shared by jazz improvisors, indicating that

the true prodigiousness shared amongst interactive computer and experimental jazz musicians is

predicated on the ability to listen deeply so as to acutely understand the acceptable parameters for the

modification of another's sound. This musical empathy was a foundation upon which Thelonious Monk

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[12] Winkler, T. (2001). Composing interactive music: techniques and ideas using Max. MIT press.

[13] Piepenbrink, A., & Wright, M. (2015, May). The Bistable Resonator Cymbal: An Actuated Acoustic Instrument Displaying Physical Audio Effects. In *NIME* (pp. 227-230).

Gray, R., Lindsell, S., Minster, R., Symonds, I. M., & Ng, K. (2009). An Augmented Snare Drum. In *ICMC*.

[15] Champion, C., & Zareei, M. H. AM MODE: Using AM and FM Synthesis for Acoustic Drum Set Augmentation.

[16] Holmes, T. (2012). Electronic and Experimental Music: Technology, Music, and Culture. Routledge.

[17] Holmes, T. (2012). Electronic and Experimental Music: Technology, Music, and Culture. Routledge.

based his aesthetics upon, and of paramount importance in effectively utilizing live sound processing within any sort of group context.

This modified iteration of the solo drumset version of *Think of One* are attempts at augmenting the sonic qualities of the acoustic drums by using the audio signal of the recorded performance as the input to a host of sound processing modules within Max/Msp~. Included below are a select number of methods used to process the drum solo:

- Sequenced, Algorithmic Beat-Slicing

- Delay and Filtering with Multi-Channel Msp~ Objects

- Multi-tap Delays with ["Poly~]

- Discreet Sampling of Beat Slicing Excerpts

- Automated Pitch-Shifting

These individually processed components are then pieced together, similarly to the way in which fixed media, tape, or musique concrete was constructed by early electro-acoustic composers, such as Pierre Schaeffer, Iannis Xenais, or Karlheinz Stockhausen (albeit with digital tools). This process facilitates a composer being able to intently listen to the processed sounds over long periods of time so as to assess how these seemingly disparate parts are to be fused together in an effort to create a stand-alone piece by means of augmenting a previously finished musical performance. This transformation of *Think of One* from a vehicle for jazz improvisation to a through-composed, fixed media piece can be thought of as an alternative way of organizing sound based upon one's own performative talents.

Amongst the literary criticisms, readings, scores and music the author has studied, it has become apparent that one of the primary musical concerns for the vast majority of 20th century experimental composers was the way in which form would be effectively conveyed and and subsequently interpreted by the listener; form was the way in which sound materials transcended the "newness" or novelty of electronic music to become the means of presenting a process of composition. In a sense, the foundational source material - the entire field of sound - was, in effect, less important than the way in which these resources were utilized to convey a process, or a what Curtis Road refers to as an organizational "macro-

form timescale" in his book, *Microsound* [18] Roads reinforces the need to develop an organized musical

hierarchy through quoting Varèse's thoughts regarding his attempts to focus on developing musical forms

that could simultaneously exist on a macro and micro-timescales:

> *Form is the dominant element in all works of art and my essential preoccupations, when I compose, is to focus on the form, on the structure of the work I have conceived.* [19]

In his essay *Liberation of Sound*, Varèse's aesthetic considerations are further elaborated upon,

referring to his music as "a collision of sound masses…moving at different speeds and different angles"

[20].These quotes are almost indicative of a workflow that describes a stochastic process to composition:

noises or sounds (whatever they may be) are hierarchically prioritized through a decision making process

to such a refinement that form can then be recognized by trying to relate one sound to another. While this

organizational process provides context for source materials, the hierarchical structuring of the sound also

facilitates a necessary process vital to recognizing the existing macro and micro-musical temporalities

occurring throughout a piece of music. Recognizing this layering in temporalities reveals a symbiotic

relationship between the individual sounds and the subsequent decisions the composer makes while in the

process of organizing the material into a coherent structure. As Roads states in Composing Electronic

Music: A New Aesthetic:

> The bottom-up planing approach to "a process of internal development produced by interactions on low levels of structures- like a seed growing into a mature plant. In this approach, processes of attractive and repulsive pattern formation unfolding on lower levels of structure can lead to an articulation of meso and macrostructures[21].

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[18]Roads, C. (2004). *Microsound*. MIT press.

[19] Roads, C. (2015). Composing electronic music: a new aesthetic. Oxford University Press, USA.

[20]Varèse, E., & Wen-Chung, C. (1966). The liberation of sound. *Perspectives of new music*, *5*(1), 11-19.

[21] Roads: Composing Electronic Music: A New Aesthetic