Meditation for Electronic Valve Instrument
and Chamber Jazz Ensemble

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This composition for a jazz chamber group, is presented in partial fulfilment of requirements for the degree of Master’s of Arts. The chamber group consists of flute, clarinet, bassoon, French horn, trumpet, trombone, electronic piano, guitar, upright bass, jazz drum kit and a standard string quartet. The author is the intended soloist and plays the EVI, (Electronic Valve Instrument) a MIDI wind controller designed for a trumpet player. The work is based on a meditation technique devised by the author; a combination of techniques used in traditional yoga schools. The music is a referential interpretation and not meant to evoke a meditative experience nor is it meditation music. This is a jazz-inflected composition that uses a mix of prescriptive and aleatoric elements. The solo part is mostly improvised and uses some of the advanced features of the EVI. It is possible however, that the piece could be performed by some other wind instrument even if that instrument did not have the unusual range or flexibility of the EVI. The challenge for the soloist is to negotiate sections of the music where the background is indeterminate i.e., chosen by the supporting ensemble.
ACKNOWLEDGMENTS

I wish first to thank Sten Melin, the director of VICC (Visby International Center for Composers) for his great generosity in providing me the opportunity and space to conceive this work. My inspiration and guiding light at York has been my supervisor Michael Coghlan whose musicality, erudition, and humor I find immensely inspiring. Casey Sokol, my second, has given me great encouragement by his free and creative way in the interchanges I have had with him. My fellow students have been an ever surprising source of knowledge in that they have exposed me to areas of interest that I had never considered.

I have had six decades of life as a professional musician and I could never list all of the composers and performers who have inspired or helped me. Among those who I have worked with personally I must mention particularly the genius of the Berklee College in Boston, the late Herb Pomeroy. Herb was a very important mentor and much of my approach to music, and arranging in particular, is a direct result of his encouragement and faith in my talent and instincts. In 2005 I was fortunate to meet and befriend the composer Michael Colgrass. Michael has been a constant source of inspiration in my musical pursuits and encouraged me to explore graphic notation in musical sketches.

In my spiritual life the most important influence has certainly been Rammurti S. Mishra M.D. (aka Shri Brahamananda Sarasvati) who introduced me to the wisdom of Vedanta and encouraged me to absorb the teachings of the great modern sages Ramana Maharshi and Nisargadatta Maharaj.

My wife Allison, daughter Kailas, and my extended family have endured much as a result of my endless indulgence in noise-making and note-fiddling. I owe them an immense debt which I despair of ever being able to repay.
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BACKGROUND

I think that our initial experiences help to form our responses and preferences in music and ‘imprint’ us in a way to enjoy certain turns-of-phrase and styles. I recall easily from my psychology studies the brilliant experiment of Konrad Lorenz with geese in support of this concept (Lorenz n.d.). The following is offered as a ‘historical prelude’ that might help explain how many of the musical decisions were made in this work. A lot of my writing here is to support the natural, or improvisational part of the composition process.

Being self-taught, I tend to naturally lean on my instincts and in my opinion it has been my greatest luck. By the time I came into contact with professionals and started to study music I already knew what I wanted to express and merely sought out ways to make that happen. My home and environment were pretty barren musically and indeed artfully and I grew up with my dad who was an electrical engineer and two brothers who entered the same field. My first influences were classical and pop music. Jazz was a chance discovery in a local record shop.

In support of my untutored beginning; a friend pointed out to me: “The problem with musical education is that people learn to read before they learn to play” (Findlay 1993). I think this is a very sage insight but I despair of it every being taken seriously in this day of mass, and corporate, education.

As a result of these combined influences a desire for free and unfettered expression arose in me and I found a perfect outlet in jazz. Among my first influences were Chopin, all the pop tunes of the 1950s and the few romantic albums in my father’s collection. I remember particularly the Jackie Gleason album ‘Music for Lovers Only’. Bobby Hackett plays masterfully on these and I think I became ‘imprinted’ with the beautiful melodies and melodic resolutions of standard ballads. This particular album was my introduction to Alone Together, My Funny Valentine, But Not For Me, I'm In The Mood For Love, Love, Is Here To Stay, I Only Have Eyes For You, Body And Soul, I Cover The Waterfront, and many others.

Most of the music on those 25 or so albums were arranged by the gifted George Williams, Billy May and Pete King. The majority of those songs were composed by top notch writers such as George Gershwin, Irvin Berlin, Oscar Hammerstein, Richard Rogers, Jimmy Van Heusen etc. Jackie was the king at producing these albums and getting them out to the public (Williams 2014).

I still play some of the songs that I learned from those albums and most are now jazz standards. Listening again now I am amazed at the beauty of the arrangements and how those song-writers and arrangers have left their mark on me. There is tremendous artistry involved here in what we might consider rather banal offerings today.
By chance I found at the local record shop the Savoy album ‘Top Brass’ which featured five trumpets and rhythm with arrangements by Ernie Wilkins I was transported and practically wore out that disc. I was fortuitously introduced to masterful playing and writing that has influenced me to this day. The music is marvelously unpretentious, virtuosic, and the performances are loose in that charming and articulate jazz fashion. Of course everyone has their individual ‘music imprinting’ story – this was mine.

Most of the music within this compilation comes from a 1955 session with trumpeters Donald Byrd, Ray Copeland, Ernie Royal, Idrees Sulieman and Joe Wilder, pianist, Hank Jones, bassist Wendell Marshall and drummer Kenny Clarke (Dryden n.d.).

![Top Brass album cover]

My original dog-eared copy of the Top Brass LP.

After this came the usual infatuation with other trumpet masters of the day; Louis Armstrong, Harry James, and Rafael Mendez. Much later, during my stay at Berklee College came the jazz giants Miles Davis and Clifford Brown. I note that many of my musical heroes were black musicians and this has been a subject of intrigue for me that I would end up living in South Africa for twenty-three years of my musical life and working with African musicians.

My time at Berklee College in Boston was like being dropped into heaven having come from such a culturally ‘lean’ environment. My arranging teacher, Herb Pomeroy, privately lent me his 78 recordings of the tracks of Birth of the Cool saying: “I can think of no better influence on your writing.” I enjoyed those recordings and maintain a musical group of similar orchestration to this day but, upon hearing the Gil Evans and Miles Davis
collaboration *Miles Ahead*, I realized that the more orchestral treatment was of greater interest to me. I learned more from listening to that album than I have on any studies I have done since. The attendant exotic treatment of great melodies affected me in such a way that henceforth all standard big-band music sounded crude in comparison.

My passion for more explorative harmonies and palettes was fueled by John Lewis’ Orchestra U.S.A. which I had the pleasure of hearing in rehearsal in New York in 1962 (Lewis 1963). In the one recording that I have of them I was singularly impressed by the writing of Gary McFarland who I consider a genius on a par with Gil Evans. It turned out that my first mentor Herb Pomeroy was on that album as was Michael Colgrass, an excellent composer who I was to meet and befriend forty-five years later here in Toronto.

I was generally not a particular fan of what was referred to as Third-Stream Music. Most of it sounded artificial and sterile to me. It seemed that it was a ‘forced’ concept and somehow unnatural. However, with the appearance of players who are comfortable in both jazz and classical settings, the performances and writing in this idiom has improved tremendously and many of these outings are quite charming. The continuous appearance of pop recordings that use orchestral backing has helped engender an articulate language for this kind of musical setting. No doubt my teenage exposure to the romantic music of the Jackie Gleason Orchestra may have predisposed me to enjoy this type of music.
This brings me to the orchestration that I selected for this small composition that is the subject of this thesis. This is the first time I have set out to write an extended work of my own that is not part of a club-jazz style presentation or for a commercial client. It includes many techniques that have interested me as a result of reading my favorite theory book or just from exploring at the piano (Persichetti 1961). The process at first seemed quite sterile as I was approaching the work from a theoretical rather than an emotional perspective. This abated soon though as I started the writing process and related directly to the meditation process which was the intended underpinning to the work. Each of the stages of this yogic meditation has an attendant emotional component and this aspect ended up inspiring the compositional decisions.

A balance of emotional and technical considerations in music has been important to me particularly in my playing career. Without virtuosic technique a convincing performance cannot be executed but without emotional involvement the performance sounds flat. This brings me back to my earlier note about learning to play ‘by ear’ or ‘for fun’ as being very important. Despite the fact that there are bound to be examples of great musicians who were tutored from the beginning, I still propose that my statement is a good general rule. I had the experience of working with unschooled musicians in South Africa (before the advent of the internet) who amazed me with their prowess in the performance of harmonically complex music. Indeed, in one of the albums I produced while living in South Africa (Our World, Soweto String Quartet) I researched Akadinda music from Uganda. As a result of this study any thought that I might have had that African music was primitive went out the window in mere minutes (Wikipedia, Talk:Music of Uganda n.d.).

My composition classes with William (Bill) Maloof at Berklee College of Music were very instructive. Bill was chairman of Music Composition at Berklee for many years. It was he who introduced me to Vincent Persichetti’s book which has been so influential in my writing (Persichetti 1961). I remember Bill saying: “Use these compositional techniques (mirror writing, rows, augmentation etc.) and then when you are finished look at what you have written, play it on the piano and change what you don’t like”. This made a deep impression on me and I think it is very important in the context of composition. I think my objection to much ‘constructed’ music is that it may lack a ‘natural’ element by mechanical adherence to rules. What do I mean by ‘naturalness’? I remember having this insight once while walking in nature: Much of what nature produces has a wildness, a poetic imponderable random
beauty. Many things that man produces are flat, round, square, polished and artificial. This explains, to me, why hand-made objects have such charm – it is because of their naturalness and imperfections.

I think the above is one of the fundamental concerns in the creation of art. It is perhaps a head vs. heart issue. Nature (of which we are a direct product) is the model on which we build what we call ‘art’. To anthropomorphize; Nature has a wisdom that is beyond us. She is continually creative and her logic is inscrutable. She is our actual mother and what we produce is built upon her. Therefore; our ‘child’ creations need to conform in some sense to her sense of purpose in order to have a place in her environs that resonate within her realm. The famous yogi, poet, and mathematician Rama Tirtha, said: “He who would control Nature must first obey her laws” (Tirtha 1978). Such an interesting statement which I love for its poetic conundrum: If you are obeying her laws then you aren’t controlling her! I offer this in support of the ‘tweaking’ of the rules so that the composition retains a natural element. Here the ‘rule’ is the head and the ‘tweaking’ is the heart.

Tweaking is the arranger’s art and, indeed, is the composer’s art too. I propose that his fine working of a musical idea is attractive for most composers. Indeed, the idea may be very simple: Michael Colgrass just draws some shapes that represent melodic contours, Stravinsky in his Rite of Spring articulated an ancient folk tale, someone looks at a tree and is inspired to write a song. However, after the initial decision is made then comes many hours, often months of work gathering materials, researching, sketching, orchestrating, proof reading etc. This is the major part of the process and the ability to stay at this process is essential for the production of any work of art. I propose here that this post-concept part of musical composition is where the art is born and where the beauty is created. Furthermore, it is the natural and soulful part of the process. In all of the concepts above upon which works are based it is the soul and detailed work of the composer that is responsible for the outcome.

My main point here is to explore the inventive and playful part of the process of music (or artful) creation. The rules and analysis and technical aspect are important but not all-important. When an artist is bringing his creation to light he is worshiping beauty. My yoga mentor once pointed this out to me in a simple but profound statement: “Beauty is newness.” It is the pursuit of the new that engages the artist. What is more new than a birth and Nature is ever birthing, the constant creator of newness. A rose is beautiful because we cannot fully absorb it
because of its poetic complexity. The music of Bach is noteworthy in this respect; we cannot possibly follow all of the strands of one of his fugues at once and the confounding of the rational mind leaves the soul free to soar.

The reason the improvisation is so important to me and that I explore it here is that it is the essence of musical flight. All of the process of bringing a piece of art to light is nurturing this playful, random search for the perfect but elusive delightful surprise. I think that Rama Tirtha again points to this spirit in his statement: “A man never rises so high as when he knows not whither he is going.” (Tirtha 1978).

It is my personal experience that only part of what I play when improvising is intended. I remember once playing jazz in a club and having a really difficult time in an improvisation on a particular tune. After the set I was chatting with a fellow musician who I respected greatly. He said to me: “That was great.” I replied: “Come on, I was in a lot of trouble there and it was frustrating.” He said: “Ah yes, but there’s poetry in adversity.” This statement, made some forty years ago, had an immense impression on me and helped me subsequently to relax while playing. Following in this line; a friend said to me once that he was bothered by playing wrong notes in solos. My response was: “The universe must have its say.” This person said later that he had found this notion very useful. It was just a re-framing of my experience of years before.

The improvisational element is particularly important in *Meditation for Electronic Valve Instrument* because of the ‘role’ of the meditator. His ‘job’ is be be continually self-possessed, that is, focused on the source of awareness (Who is it that sees?). This is a particularly difficult job for many of us because our awareness is focused outwards all the time and we only self-reflect upon seeing the results of errant actions. Keeping focused is a Herculean task and many techniques have been developed to help. Meditation is one of these. In this setting the soloist plays the part of the observer of the mind, represented by the orchestra, and comments on the orchestral music while staying aloof. In the meditation process that I propose the meditator watches thoughts like one watches traffic. The sage Nisargadatta Maharaj points this out excellently: “When you happen to walk in a crowd, you do not fight every man you meet - you just find your way between.” (Maharaj 1973, Chapter 72). So the soloist here just threads his way among the various harmonies and tempos and remains true to himself.
Rammurti Mishra elucidated the attitude of dispassionate observation thus:

A judge in a courtroom watches the proceedings and comments appropriately. He doesn’t take sides or get caught up in the emotion of one side or the other but observes as an impartial witness and applies the law. (R. Mishra 1993, paraphrased).

Of course the soloist in this composition is kept busy listening and responding but his successful negotiation of the vicissitudes of the piece is fundamental. There are aleatoric elements that will test him or her and these are analogous to meeting unusual experiences in our meditations (or indeed, in our life). It is not unusual to have challenging thoughts arise in meditation. The type of meditation to which I refer and advocate is not passive, it is work. In yogic meditation practice the body may be still but the meditator is poised with the focus of a man facing a lion. Without a guide or process the mind (the devil’s workshop) will just continue daydreaming. With the application of focused and dispassionate witnessing the mind begins to slow down and an inner clarity ensues.

A partial list of influential recordings is noted in the discography. (page 58)
THE ELECTRONIC VALVE INSTRUMENT (EVI)

A see-through version of the MIDI EVI by inventor Nyle Steiner (photo Sean Cassidy)

The EVI (Electronic Valve Instrument) is a wind (breath controlled) synthesizer and the brainchild of inventor Nyle Steiner (Traum 2019). It is essentially a synthesizer for a trumpet player. It responds to breath pressure, vibrato, portamento, and pitch bend and has a playable range equal to that of the piano. The unusual aspect of this synthesizer is that it is blown, the harder the player blows the more the filter opens. A low-pass filter is commonly used so that breath pressure is directly mapped to brightness, however many other filter control mappings are possible.

The EVI is capable of producing the sounds of many different instruments via an electronic protocol called MIDI and is also capable of playing complex new sounds and even audio samples. Although I have been a trumpet player since high school years I now consider the EVI my primary instrument. I played my first version of this instrument in 1979 and I have owned every version of it since that time. I did the first commercial recording with it on the Blood Sweat and Tears recording Nuclear Blues.
A sister instrument, the EWI, (Electronic Wind Instrument) is essentially a saxophone-style version of the EVI that Nyle produced around 1990 and, being easier to play, is a much more commonly played instrument. Certainly the best known proponent of the EWI was the late great jazz saxophonist Michael Brecker. A history of the EVI up to 1998 is well outlined in a doctoral dissertation by Ronald Paul Cole (Cole 1998).

The inventor has been involved in other projects and has not been manufacturing the instruments for the past twenty years or so and therefore they have been very hard to acquire. In 2018 Swedish inventor Johan Berglund produced an updated the EVI to a solid state format and the instrument. This means that they are now (2019) being more widely played.

The NuEVI by Johan Berglund (photo by Johan Berglund)
THE MEDITATION

The meditation that is used as a reference in this composition consists of a process that I have developed over six decades of yogic practice. It consists of a progression, internally, from gross to subtle. I have produced a small book on the process and rationale (Cassidy 2015). There are five steps to the meditation and, very briefly, they are described by the acronym RELAX:

**R** - Relax

**E** - feel the **E**lectrical body manifest as a tingling sensation

**L** - **L**isten to the sound current - this is the sound that is referred to as **tinnitus** by the medical fraternity.

**A** - the **A**ll seeing eye - note activity in the visual (or the thought) field and view it objectively.

**X** - the unknowable - rest in that which is prior to consciousness or That which sees.

This process is an extrapolation of a technique that was taught to me by my spiritual mentor Rammurti S. Mishra MD aka Shri Brahasmananda Sarasvati. My studies have also involved some Zen training with Philip Kapleau and various therapeutic and associated metaphysical pursuits. The aim of this meditation is to put the meditator in state where he or she is receptive to the experience of enlightenment. No technique will take one to that lofty goal since ultimately no act of volition is necessary because “the seeker is he who is in search of himself” (Maharaj 1973, 6). This is an example of the kinds of conundrum that one meets when exploring Vedanta, Buddhism, and other transcendental spiritual modalities.

The music presented here is built on this process as a frame and is not meditation music or meant to provoke that experience. No serious meditator, in my experience, considers meditation music to be other than a nuisance. Musicians, particularly, don’t care for meditation music as it is usually characterized by very slow tempos and ambiguous progressions or it may just consist of airy drones with occasional unresolved melodic fragments. The only ones to benefit from this music are those that want aural wallpaper for their ‘esoteric treatment parlors’ or the composers who sell this music. I do not mean to imply that this style of music may not be valuable in healing but rather that it is not a help in the context of a serious meditation pursuit.
Throughout this composition a drone appears very often. This is a representation of what I refer to as the Sound Current. A common manifestation of the Sound Current is what is commonly known as tinnitus. I capitalize Sound Current to mark it as something unusual or special. For yogis, this ‘tinnitus’ is just the ‘tip of the iceberg’. Actually for someone who practices Nada Yoga (The yoga of the Sound Current) there are many different sounds that the meditator hears when he becomes absorbed in these internal sounds (Yogapedia 2019). These sounds are enumerated and discussed in the Hatha Yoga Pradipika (Wikipedia, Hatha Yoga Pradipika 2019). It is the experience of the author and many who have explored this practice that external sounds are just a reflection of internal sounds and actually at a certain important point of abstraction (depth of meditation) it is impossible to tell whether a sound is internal or external. The sound current can even be heard internally as music. The word OM is considered by yogis to be a manifestation of this Sound Current. (R. S. Mishra 1959, 133)
THEMATIC CONSIDERATIONS

The composition is quite free thematically though basically jazz in style (essentially ‘crossover’ music, a mix of jazz and classical styles and harmonic materials). Aside from the drone, discussed above, a reoccurring element is the ‘breath shape’ that occurs in the opening in the flute and other tutti winds:

The soloist recapitulates this thematic shape in his last short statement or cadenza (bar 311):

In this demo performance the final statement was performed as below. Interestingly I was not consciously considering this shape as an important seed element.

Graphic notation appears only rarely in this composition; however, generally the high register is favored for energy and the low register for relaxation. The last chord of the piece, which is designed to represent completion or enlightenment covers the widest range in the composition.

The theme, per se, was only addressed upon the writing of this paper. When I had a question about how to proceed, while composing, I referred to the meditation process and chose moods and musical materials that I considered appropriate. It could be said, therefore, that the meditation process is the theme or backbone that supports the music. There was no conscious thought of developing a musical idea. There are many places where I repeat elements and phrases but these are common devices that are part of most western musical compositions and not unique to this work. I did consciously use downward progressions (the addition of flats, bar to bar) to represent relaxation and upward progressions (the addition of sharps, bar to bar) to represent increase of energy or aspiration.
THE CHAMBER GROUP

This group was devised by replacing the standard big band with a more diverse instrumentation. There are no saxophones and the inclusion of a string quartet, bassoon, and French horn are the only unusual elements. In this particular setting the strings are problematic in that they are very soft in comparison to the other instruments and great care has to be taken in the orchestration in order to have them heard. Ideally the string players should have solid-body instruments or close-mount microphones.

Instrumentation:

EVI - soloist
Flute
Clarinet
Bassoon
French horn
Trumpet
Trombone
Electric guitar
Electronic piano
Contrabass
Jazz drum kit
Violin 1
Violin 2
Viola
Cello
THE COMPOSITION: OVERVIEW

This work was conceived and drafted during a composers’ residency at the Visby International Centre for Composers (VICC) in Visby, Gotland, Sweden in January in 2016. I had the treat of three weeks of uninterrupted time at the center during which time I broke the back of this small work. My suite at the center was quite basic and my room only contained a well maintained grand piano. Most of my commercial writing for the past thirty years has been done at a computer using Apple’s Logic so this was a very interesting experience.

I noted during this process that I write differently at the piano or at a table than at the computer and these differences themselves are a worthy subject of study. In my experience I am more comfortable at the piano when working out harmonic ideas. I am more satisfied with simpler harmonies and the slowness of the process lets me dig deeper into the detail. At the computer there is the lack of immediacy because of having to start the program, load a template, and choose sounds before starting. An ideal way of working for me is to start at the piano and then move to the computer for the detail work – such was the process used here.

I was at first intimidated by being presented with only a piano as a composition aid at Visby. Most of my work for the past forty years has been done at a DAW (Digital Audio Workstation). DAWs are very convenient when writing music for film, or music that includes a mix of synthesis and live performance. Apple’s Logic Pro X and its previous incarnations have been my DAW of choice and Logic is particularly powerful in its ability to also produce music parts and scores for performance. I have rarely had the need to use a dedicated notation program like Finale or Sibelius. These would be necessary, no doubt, if writing music that includes graphics or ancient notation. During the writing of Meditation I did also have a laptop and that allowed me to move back and forth easily from piano (to work out ideas) then to Logic to address the arranging and orchestration aspects.

_Meditation for EVI_, from an abstract perspective, is a musical interpretation of a series of experiences on an inner journey in which the soloist performs the part of the observer, the orchestra represents his unfolding experience and the soloist’s performance is a commentary on that experience. The soloist is essentially a commenting, impartial witness in this process.
I would be interested to hear a performance where the soloist performs the piece without rehearsal; in that way the player’s instinctual responses to the unfolding musical background could be evoked. Great jazz soloists excel when faced with surprises and are thus jolted out of their comfort zone. In life, events don’t always happen in logical or planned order. The mind (the thought-field) can be quite chaotic and this is manifest in Meditation by the interjection of extraneous elements.

The composition starts with the hint of a drone (the hearing of this sound indicates the beginning of the inner journey), however the sound current is obscured by the chaos of inner noise (thoughts) and only the breathing is evident. The breathing is the most gross of the vibrations that are followed in the meditation process. I overheard Doctor Mishra once in answer to someone who was complaining of tinnitus: “God is on the line, answer the phone.” (R. Mishra 1993).

Each section of the composition is described separately, from three perspectives:

**Psychological overview:** psychic and emotional considerations

**Musical overview:** the techniques employed in that section

**The soloist:** his or her concerns and responsibilities
THE COMPOSITION: MATERIALS AND PLAN

In planning the piece, I decided to map out the different sections to help keep track of the different elements involved. Below is a pdf of the plan.

<table>
<thead>
<tr>
<th>Energy</th>
<th>Relax</th>
<th>Electrical</th>
<th>Listen</th>
<th>Awareness</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>low</td>
<td>medium</td>
<td>low with intrusions</td>
<td>high</td>
</tr>
<tr>
<td>Keys</td>
<td>Bb down by 4ths or chaotic key changes</td>
<td>no key</td>
<td>drone C with other pitches entering</td>
<td>D, E, F</td>
<td>G</td>
</tr>
<tr>
<td>Emotion</td>
<td>confused</td>
<td>amorphous</td>
<td>focused/gathering</td>
<td>progressing</td>
<td>triumphant</td>
</tr>
<tr>
<td>Musical</td>
<td>melody (breath)</td>
<td>lyrical melody over trills</td>
<td>melody develops over pedal</td>
<td>pedal joins melody - wide octaves</td>
<td>clear big melody recap - parallel open 5ths</td>
</tr>
<tr>
<td>EVI</td>
<td>wide trills over descending progression</td>
<td>saw wave - random chords</td>
<td>random unison</td>
<td>different patches</td>
<td>saw or 4ths or quartal</td>
</tr>
<tr>
<td>Volume</td>
<td>f</td>
<td>pp</td>
<td>mf</td>
<td>p</td>
<td>ff</td>
</tr>
<tr>
<td>Dialogue</td>
<td>Let the body breathe. Let the mind feel.</td>
<td>Feel the electrical body (tingling in the face and hands).</td>
<td>Listen to the Sound Current and locate it in internal space.</td>
<td>Watch the Sound Current and see internal light.</td>
<td>What is it that sees? Rest in that!</td>
</tr>
</tbody>
</table>

In the absence of score paper, I drew some lines on paper and sketched out some harmonic ideas.
A few days were spent working out progressions, particularly those of the ascending variety.

Triads over bass notes are favored for their sonic clarity, flexibility, and harmonic ambiguity.
THE COMPOSITION: ANALYSES BY SECTION

Introduction - Bars 1 to 18

**Psychological overview:** The most superficial state where the mind is in the chaos of the beta (alert wakefulness) state and only the grossest of vibrations are evident i.e., breathing. This section is relatively short.

**Musical overview:** There is only a hint of the sound current then the grossest vibration (the rhythm of breathing) is evident. The tempo, 140 bpm, and the up-tempo jazz rhythm in C represent the chaos of the beta state of the everyday mind. The three breaths are in ever ‘darkening’ harmonic representations C7 alt, C Aolean then F melodic minor. Although these scales are not progressively ‘dark’ in this order, the voicings used make it appear so.

**The Soloist:** Random comments of little consequence representing the wandering and relatively unfocused mind. The soloist does obey the key however and this represents his intention to actively engage the process of quieting the mind.

R - Relax: bars 18 to 69

**Psychological overview:** The meditator actively engages the process by being ‘actively passive’ i.e., stepping back and observing the body processes and allowing the slowing down of mental processes. He does this by observing the breath and (in this case) by actively taking three deep breaths. In the meditation represented here the meditator is ‘relaxed but focused’ hence ‘actively passive’.

**Musical overview:** This section is characterized by slow tempos and ‘dark’ elements (Phrygian and Superlocrian modes). The Superlocrian mode is a term used by Vincent Persichetti (Persichetti 1961, 44). This scale is referred to as the altered dominant mode by jazz musicians.

Bar 18 - The actual relaxation representation begins with a ‘mock slowdown’ i.e., the tempo stays the same but
the note lengths increase until we get to the next section (E - Electrical body) where the inner journey actually begins.


Bar 27 - Although we are in the new tempo of 65 bpm the feeling is of relaxation. There are trio interchanges between the higher strings and higher winds.

Bar 32 - The bassoon introduces another descending phrase in C Phrygian leading to the first sonic introduction of the Sound Current.

Bar 35 - The first clear sounding of the Sound Current drone is followed immediately by the soloist’s comment and three breaths: B Phrygian, D Aeolian, and D Phrygian.

Bar 45 - A solo trumpet introduces a descending line that outlines a C7 altered chord. However, as we settle on a C pedal in the next section the line does not actually function as C7 harmonically.

Bar 49 - A relaxed jazz tempo continues at 70 bpm. This is an open, repeated section where the soloist plays in a relaxed manner and ‘inside the changes’. The chords are noticeably dark here.

Bar 57 - A written clarinet solo over the same background ends on an Ab. This Ab, like all long notes, are ‘echoes’ of the Sound Current.

Bar 65 - Change of meter to 3/4 and a short descending bassoon line with accompanying instruments. The function of the harmonies here is to set up a transition to the next section. The ending chord at bar 68 is essentially an incomplete second inversion of G7 b5, b9

**The Soloist:** The soloist has the option of not playing here as he/she is fully engaged in the process. Any playing should be confined to following the rhythmic activity and harmonies in sync with the orchestra. The first immersed performance for the soloist is at bar 49 where the tempo and jazz background begin. The soloist plays a cadenza/link over the fermata at bar 69 leading into the Electrical Body section.

**E - Electrical body: bars 70 to 127**

**Psychological overview:** The meditator directs his attention to the tingling sensation in different parts of the body. The body, indeed the entire universe, is comprised of vibration and this is the next subtlest manifestation of
this phenomenon after the sensations of the rhythm (vibration) of breathing, the heartbeat and bodily movements.

**Musical overview:** The orchestra members are given trills or small fragments to play at a very low volume.

Bar 70 - In this segment the players play mid-range segments in their own time with sneak-ins and sneak-outs. This is essentially an improvised section and though it is written as 8 bars it is actually without meter and would last ordinarily about a minute until the tempo cue at bar 79.

Bar 79 - A gentle section with a repetitive theme firmly anchored in C minor. The scale from which the harmonies are derived is C altered dominant or C super-Locrian. The ‘darkness’ of this section and the slow tempo are meant to represent a new deeper level of relaxation.

Bar 111 - A ‘Thought Intrusion’. This represents a wandering of attention to the ‘beta level’ of thought and is characterized by highly active elements on the soloist’s part. There is a mock pause at bar 124 in preparation for the next deeper level.

**The Soloist:** The soloist is meant to favor slow moving lines in this section in opposition to the highly active elements of the background. In the tempo section of bars 80 to 110 the soloist essentially lays out and the orchestra takes over.

**L - Listening to the sound current: bars 127 to 201**

**Psychological overview:** The first ‘transcendental level wherein the Sound Current is manifest and the meditator concentrates on it. This is essentially the turning point in the meditation and the meditation begins to turn from the dark and deep sinking into relaxation states and by means of concentration on the internal Sound begins the upward journey into internal states of the lightness of Being.

**Musical overview:** This section marks the transition to a different harmonic direction and after the atonality of the Sound Current section we see the introduction of more major and Lydian chord structures and scales. Also there is an introduction of increasing brightness by the use of the cycle of 5th progressions.

Bar 127 - A meter-less drone section. The musicians fade in and out of mid-range long tones on their instrument
and are free to choose any note they like. They are confined to low dynamics however. The background is essentially atonal though the players will be admonished to make ‘harmonious’ note choices.

Bar 146 - Essentially a change of direction to a more anticipatory feeling by the introduction of cycle of 5th progressions. This section is essentially an introduction to the next solo section.

Bar 172 - A background for the soloist begins a foray into brighter harmonic climes.

Bar 186 to 201 - A dialog ensues between the strings and the EVI.

**The Soloist:** In the drone or dedicated Sound Current section of 127 to 145 the soloist preferably uses a patch where each successive note is a sample of a different instrument. This patch is described in the Sound Cycle Patch in the EVI sounds and patches section. At bar 186 it is recommended that the soloist uses a Random Chord Patch - the construction of this patch is outlined in the EVI sounds and patches section.

A - the All-seeing eye: bars 202 to 257

**Psychological overview:** Here we enter inner space by paying attention to the visual sense. Since vision is one of the subtletest and most important senses it is understandable that much important work would be done here.

**Musical overview:** The music takes an upward turn in terms of energy and harmonic movement. From here on out we favor cycle of 5ths progressions. The intention is to convey a sense of uplift, ease, and lightness.

Bar 202 - A gentle lyrical solo section. The background consists of key changes progressed by adding one sharp in each successive bar. Slash chords are used to give the harmony a sense of ‘emptiness’ or ambiguity. The soloist is only given key indications and it is suggested that he/she selects notes from the indicated Ionian mode in each bar. The section culminates in the increase of tempo and quick transition to the next section.

Bar 227 - Joy Theme. The orchestra comes alive and makes an active statement characterized by fast moving lines at double the 80 bpm tempo. This is meant to convey a sense of ease at the portent of a new vista.

Bar 247 - The soloist enters again and the meter changes to a funk inflected section in 7/4. This is meant to indicate a sense of newness of experience for the meditator and the soloist. The progression chromatically falls but the odd meter is meant to give the sense of floating and the progressions move so quickly that the soloist is given the opportunity to move in any harmonic direction without hindrance. The section is repeated at the whim of the soloist.
Bar 251 - The background drops out to give space to the soloist for a cadenza. At some point the trombone enters with a long note indicating the return of the Sound Current.

**The Soloist:** The change of harmonic progression to an upward direction can pose a bit of a challenge to the soloist as this is unusual territory. Indeed, the invocation of the sense of ‘newness’ is intentional and he/she is invited to explore new territory. Except for the very first section, where the soloist plays within the upward moving progression, the admonition is to play instinctively.

**X - The Unknowable: bars 258 to Fine**

**Psychological overview:** The meditator reaches at last to grasp the Source; himself! Of course it is impossible for a hand to grasp its own wrist but the effort confounds the mind and is meant to invoke a breakthrough or realization: *kensho* in Zen.

**Musical overview:** This section is characterized by pentatonic progressions.

Bar 258 - A rising series of minor chords with ascending melodic movement. The parallel chord movement outlines a Bb minor Pentatonic scale.

Bar 270 - ‘Celebration’ - A change of meter to 3/4 and F minor pentatonic movement.

Bar 282 - The background is thickened by the addition of more 4th material. The soloist switches to a parallel 4th patch i.e., each note played is accompanied by a note a fourth below.

Bar 294 - the rhythm section enters to increase the energy still further and a canonic device is used to create a Pentatonic ‘wall’ of sound. The key feeling is of F minor pentatonic. The soloist switches to a still thicker patch (quartal): each note played is accompanied by a note a 4th below and another note a minor 7th below.

Bar 307 - ‘The Great Recollection’ represents a short burst of energy and a breakthrough or ‘remembrance’. Indeed we have always been what we seek.

Bar 311 - A short ‘summing up’ cadenza or gentle settling into a new yet familiar state of Realization and then the final chord; basically F Lydian, however this chord also has an added Bb in the flute. The voicing could be analyzed as B minor augmented major7 over F Major 7. The chord contains every note of the F Lydian scale plus Bb as the highest note.
Bar 314 - the notes of the final chord drop away leaving the bassoon to fade out last. The bassoon note is an echo of the ever-present Sound Current. The manifest universe still persists though transformed by our awareness unhampered by the cloud of separateness.

**The Soloist:** The admonition here is to express freedom and joy. The key feeling is of F minor.
Works Cited

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Davis, Miles. 1956. "Kind of Blue." Kind Of Blue. Comp. Miles Davis. LP.


Mishra, Rammurti. 1993. "From an informal talk with the author."


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Discography

Ives, Charles. *New Music in Quarter-tones*. Odyssey, 1967

Scores Referenced

APPENDIX A - EVI SOUNDS

The Basic Patch

My sound of choice here and for most situations is a simple saw-tooth wave however, because of the use of breath manipulation of the filter in the EVI the sound is much more expressive than when it is usually heard played from a synthesizer keyboard.

Sound Cycle Patch

In the Sound Current section bar 127 to 145 the EVI patch cycles five different instruments. The instruments, played randomly on each successive note, are; clarinet, french horn, trumpet and trombone, bassoon and english horn. The result is referred to as Klangfarbenmelodie is German for "sound-color melody" as used by Anton Webern.

This patch was created for me by my friend and Los Angeles based EVI virtuoso and programmer Judd Miller.

Screen-grab from the group edit page of the Native Instruments Kontakt sample player.

Chord Cycle Patch

Starting at bar 186 EVI chords are clocked out in the following order top-down:

C G  C Ab G  C G F  C G D  C G Ab
If a melody is played with these successive chords the result is not easily predictable.

Kontakt Chord Cycle Patch by Judd Miller - intervals chosen by the author.
APPENDIX B – SCROLLING SCORE OF THE WORK

A screen capture of a MIDI version of the score (playing from the scoring program Logic Pro X) is available on YouTube at this link. In the event that the score has been updated it will be available by searching “Meditation for EVI – demo” in YouTube. This video also includes a performance (the top track) marked ‘PERFORMANCE’ by the author. Note that this is an improvised performance as required by the score. The logic file has not been finessed to express all of the dynamics. This is a rough guide only. Set YouTube quality 1080p HD and view at full screen for clarity.
APPENDIX C – SCORE OF THE WORK

Meditation for EVI

Bruce Cassidy

Meditation for EVI - 2
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**Dr. - easy fission time (symbol forcelled).**
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