

Of Other Narratives

tracings in the ground of
Collective Autonomy
people–practice–theory–history

Volume 4. Part 3.

Without sensibility no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind. It is thus just as necessary to make the mind's concepts sensible (i.e., to add an object to them in intuition) as it is to make its intuition understandable (i.e., to bring them under concepts). Further, these two faculties or capacities cannot exchange their functions. The understanding is not capable of intuiting anything, and the senses are not capable of thinking anything. *Only from their unification can cognition arise.* But on this account one must not mix up their roles, rather one has great cause to separate them carefully from each other and distinguish them. Hence we distinguish the science of the rules of sensibility in general, i.e., aesthetic, from the science of the rules of understanding in general, i.e., logic.¹

Immanuel Kant (1781), *Critique of Pure Reason*



Building a Golden Wheel

Proem: *Building a Golden Wheel*, written in Kanazawa, Japan, in 1992, was commissioned by Pipeline Contemporary Music Project and composed with the magnificent sound and consummate musicality of trombonist, Simone de Haan, in mind. It was also written at a time when my work on *Collective Autonomy* had hit a plateau; not one that stultified but, on the contrary, one that beckoned further exploration before moving onto the next stage. By now, *Collective Autonomy* had become a vast field and it was time to take stock; to become an occasional cartographer on this space and, where possible, re-map its boundaries and redefine its areas of creative pursuit. I was confident in the territory yet anxious to move through that territory and get on with the journey; a peculiar creative situation, perhaps, but one I reveled in. And the journey itself? One of never-ending discovery.

As with the revision of *Journey Without Goal* so to with *Building a Golden Wheel*: they were both written on a very narrow, make shift desk in a small apartment in Kanazawa, Japan, where, from the window of this work space, I could gaze down at some vegetable patches and small rice paddies. I'd not been in Kanazawa very long, my yet-to-be wife, Miki KIDO, and I were in the process of establishing our beautiful life together, Japan was an utterly new experience, one that constantly left me speechless and amazed, and by this time my engagement with Buddhism was no longer in doubt but rather, a full commitment. In between Miki-chan's work schedule as a performing orchestral musician and mine, we were visiting various temples and with each step I felt a little closer to the source. All of this is germane vis-à-vis *Building a Golden Wheel*, the very title of which was drawn from my Buddhist readings and the nature of which reflects my life at the time of its being written. Significant in all of this, too, is the fact that the only musical instrument I had at hand was an 'A' tuning fork which I'd listen to every now and then to keep me on track regarding pitch.

Discussion with Simone had it that *Building a Golden Wheel* might become a three-movement "Work". As it turned out, my taking up residence in Japan meant that, as a core member of Pipeline, activities were pretty constant and more or less required of me to commute between the two countries. This, on top of a fairly extended recovery period from illness, time and energy considerations, and financial constraints, all led to my decision to withdraw from Pipeline. Indeed, a painful and difficult decision to make.

Thus, on June 28, 1992, *Building a Golden Wheel* and *Journey Without Goal* were offered in the same concert at *THE DOME*, 333 Collins St., Melbourne, as part of ‘Event Two’ in Pipeline’s Concert Series for 1992, and my last performance with them.

“Although perhaps more formal in its design than other Pipeline presentations, this event is representative of the ongoing concern for the exploration of the relationship between composed and improvised musics, the spirit of collaboration between composer and performer, and the maintenance of a dynamic relationship between the composer, performer and listener.”

“This event is dedicated to Keith Humble in recognition of his major commitment to Australian music over many years.”²



The name, *Building a Golden Wheel*, was occasioned while reading Geshe Ngawang Dhargyey’s *Tibetan Tradition of Mental Development*.³ Needless to say, inspiration lay on every page. In some cases this gave rise to contemplation while in others it would find expression directly in the music I was writing. In an effort to understand a little better the course pre-composition traced out I’d taken down notes as I contemplated the text. His explanation regarding the fifth limb of the Seven-Limb Puja became the well-spring of the composition⁴ and in the case of the “Work’s” title, this stemmed from both contemplation and his explanation that:

“The eight branches [of the Noble Eight-fold Path] may be divided into the Three Shikshas [trainings] of the Buddha’s Teachings. There is no understanding of either the literal truth of the Teachings, or the truth apprehended through direct insight, that is not included in these Three Shikshas. The relationship between the Three Shikshas is shown in the Wheel of the Chakra kings, a common symbol for the Buddha’s Dharma.⁵ The fourth and fifth branches are aspects of the Shiksha of Moral Discipline symbolized by the center of the wheel. The eighth branch is the fulfillment of the Shiksha of Concentration, represented by the rim of the wheel (meaning that it encloses all attention). The remaining branches are aspects of the Shiksha of Wisdom, represented by the spikes protruding from the wheel (showing that it destroys all its opponents).⁶ The eight branches are symbolized by the eight spokes.⁷

It is these words of inspiration, then, that lay at the heart of *Building a Golden Wheel*. Given the myriad interconnecting elements that constituted my life-as-lived at the time I find no surprises in the creative terrain the “Work” traverses. And as confidence in my compositional trajectory – the field it covered and its structural predilections – was at a higher point than had been so previously, the piece had much more to do with writing itself than I had to do with its writing. This said, its writing did consume a tremendous amount of time and energy but, the flow between myself and the expressed inspiration I find as remarkable now as I did at the time of writing. *Building a Golden Wheel* represents for me, personally, the first truly ‘high point’ in my compositional endeavor; not because I think it embraces perfection in any sense of that word, but because my life and its vicissitudes fell into harmony with my compositional efforts and inclinations; the two, for the first time, came together in the one space of experience. It was no longer a case of writing music on the one hand, and on the other, living some different aspect. The two, finally, had become synonymous.

The “Work” has its short-comings. But, primarily, it brought into the compositional process, several aspects that had hitherto been separate struggles, aspects that were now harmonious in the context of compositional process; dynamic counterparts in the expression of creative formation. *Building a Golden Wheel* then, stood for a point of arrival in the development of Collective Autonomy and, as I would discover almost immediately after its performance, a point of departure that reduced my compositional output to almost naught. It raised the curtain on an extended period of research that lasted ten years and from which I emerged with *Zen’s Way – through the eye of Gogō-an : Homage to Ryōkan*.⁸

The inspiration derived from Geshe Ngawang Dhargyey’s *Tibetan Tradition of Mental Development*, was, in a formal sense, mapped onto the compositional pages of *Building a Golden Wheel* as three primary energy fields: trombone, and two string trios. Other energies bearing specific characteristics were extrapolated from these. And despite the outward appearance of the score, there was substantial flexibility and freedom at play during the entire composition process. That this freedom wound up generating a fairly tightly wrought performance map (the score) was a matter, just one of many, that would emerge as a serious compositional issue to be addressed in future work and a story to be told at a later date.

Suffice in the present writing to say that I'd discovered, finally, a context for Collective Autonomy that brought into play the improvisational ethos I'd been looking for and committed to discovering. Absolutely crucial to this was a conception I'd been harboring for many years; one embedded in the very foundations of Collective Autonomy, namely, that the creative space in which it functioned, while not being limited by hard-lined division, neither would it preclude dialogue between characteristic entities nor their interpenetration; structures would be established to function as identifiable units but not set in stone; their borders were to remain pliable and open to moulding in the compositional process yet be able to maintain their characteristic identity. Put clearly, whether notated composition or improvisation, whether notation-as-inferential-function or notation in the literal sense, whether improvisation with constraints or improvisation-as-freely-rendered, *INTERPENETRATION* would be ever-present, though not necessarily *always* present in an overt sense and certainly, would not be a structural dependency.

A major key to the 'harmony' that obtains between juxtaposed forces mentioned above in the previous section lies in a compositional concept I arrived at just prior to the writing of *Building a Golden Wheel*. I alluded to the significance of this in the program note for *THE DOME* concert where I referred to this key as "Process Counterpoint". As a hasty interpretation of this epithet could lead one astray, the term, I think, requires some explanation.

"Process Counterpoint", refers to the juxtaposition of at least two unified sets of procedures, each of which has its own inbuilt structural relationships and can therefore be perceived of in its own terms. Crucially, these terms are contextualized by Collective Autonomy. So one can derive from this, that, whatever the processes might be, they are that way because of context and in this, Collective Autonomy is intrinsic. The critical word in this formulation here is "unified". In the literal sense, then, the juxtaposition of these sets of procedures, whether two or two-hundred, are conceived of and heard as a unified whole and furthermore, each constituent set of procedures is conceived of and heard as integral.

Traditionally, "The essence of contrapuntal perception is that horizontal motion of one part may be perceived and differentiated from the simultaneous horizontal motion of another, at the same time."⁹ From a pedagogical perspective, "The study of counterpoint is above all the study of voice leading. Wherever there is voice leading, wherever there exists motion and direction of voices, in any style or period whatsoever, there is counterpoint."¹⁰ Furthermore, the purpose of the study of species counterpoint is "to understand the connection between the fundamental principles of voice leading and the complex and subtle manipulation and individualization of these principles in the compositions of divergent stylistic periods. ... This understanding offers far more to the performer, composer, theorist, or historian than can be achieved through superficial style imitation."¹¹


As should be clear from the above, there is much in traditional counterpoint that has been maintained in my conception of Process Counterpoint. Significant is: 1., the similarities that hinge on the horizontal plane 2., the notion of voice leading and by implication, points of convergence and divergence 3., balance, or an all-embracing egalitarian principle between parts 4., difference between parts being sufficient enough so as to yield them identifiable 5., parts combine as one yet maintain their individuality 6., each part being manipulatable in its own terms and thus able to retain its own integrity 7., simultaneity and juxtaposition as structural necessities 8., all these characteristics are beyond the bondage of style restriction, and 9., the concept of Process Counterpoint, as is the case with traditional counterpoint, concerns itself with musical continuity.

This complex of infinitely variable interrelationships for which I've coined the term, Process Counterpoint, bears potential to unify in myriad ways and into myriad forms. The ten-year period of research I entered in the wake of *Building a Golden Wheel* was witness to my piecing together a very complex compositional methodology. At the time I referred to this body of work as Fundaments and Procedures as Employed in my UNIVERSAL SYSTEM. I began writing an comprehensive exegesis regarding this, articulating as many interrelated facets as was relevant. It proved to be vast. Conceptualized along the lines of Spaces of Activity, it involved potential interrelations between Galaxies, Planetary Systems, Heliocentric Systems, etc. It traversed structural spaces from Universal magnitudes through Regions, Secondary Regions, to Zones, Secondary Zones, Tertiary Zones, General Domains, Local Domains, down to Precincts and Local Addresses. It employed structural concepts like Spheres, Satellites, Gravitational Characteristics, Environments (in accord with established relationships), Localized Form, Localized Structure, and functional devices such as Comets, Meteoroids, Strata, Sub-Strata, Stream, String, etc. These various components and elements were all potentially dynamic and, with the musical space accessible through Temporal and Non-Temporal Components it was potentially possible to jump and leap through the entire range, with restrictions bearing on how interrelationships were predetermined from the outset of any given "Work". And this would be determined by the "Work's" initial inspiration and the vision that stemmed from it. My research work on the Universal System established solid foundations on which musical forms of any size or shape can grow, doing so in a way that is always in touch with home, regardless of how far into the cosmos they wander. This, in essence, means totally new and unexplored territory for

every composition yet facilitates the manipulative means *a priori* as it were. With the watchful eye of Collective Autonomy ever present, always there looking over my shoulder, research on my Universal System showed me how to access that delicate balance between the subjective and objective. It opened up to me the creative middle way and showed me that the way of the middle is only bounded by having extremes. That without the extremes, the middle turns out to be infinite.

Initially, I intended to publish my Universal System in book-form. As a theoretical account however, it was never completed. But the process served its purpose.¹² By about 2003 I found myself having the wherewithal to embrace Collective Autonomy as a fundamental building block in whatever compositional direction seemed appropriate to an initial idea or inspiration. It wasn't style dependent, but nor did it negate the employ of stylistic elements where these might be apposite. The point I'm making here is that Collective Autonomy was no longer something 'outside' to aspire to or to depend on as a benchmark or to define 'the rules of the game'. It was now innate; intrinsic to whatever the creative process might be. And furthermore it was no longer a philosophical concept that defined the terms of engagement with creative pursuit per se but rather, it was coextensive with my life, right across the board. Thus, through to the present I have maintained in practice only those aspects of my Universal System that proved indispensable as structural pillars in the composition process; aspects that enable solid foundations appropriate to the composition at hand. In this, two aspects proved absolutely critical: the notion of gravitation, and the abiding possibility for infinite structural interpenetration; one structural level to another, from the broadest of 'background' considerations to the micro-level of a single interval. From these, implications are infinite. And the overarching lesson from the entire enterprise? That fecund ground lies, not in the extremes but in the middle ...there, poised, already and always vital, where the infinite awaits.

It is precisely this that stands at the heart of my work, where, no matter it be compositional dots-on-paper or scant and scattered material from which to improvise. It is compositionally laid out in such a way that meaning abides and interdependence ever present. It is Collective Autonomy, always, in the making. It embraces Buddhist realms as it goes. These two have become one.

 To return to the nuts-'n-bolts of *Building a Golden Wheel*. The title page refers to it as "a chamber concerto for trombone and double string trio". I guess that's a reasonable enough description if we understand 'concerto' in its original Italian meaning of *concertare*, "to join together" or "unite".¹³ Though certainly, heterogeneity does play a part in the overall experience of the piece. In fact, I sought in its composition to establish an all embracing environment that concerns itself with exchange and this, not only in the more direct sense of 'conversation', but more inclusive so that a sense of 'feeling-as-exchange' might be rendered continuous; an intrinsic aspect of the music's will to move forward or, equally, to hover, to ponder, to contemplate, and decide. This meant finding a way to juxtapose, to situate, to locate, and to profile, the three entities I considered as primary energy fields in ways that move through a series of relational perspectives, each with its own hue. To achieve this vision, some sort of overarching structure was a necessary predetermination.

In *Building a Golden Wheel* notation is, clearly, the predominant means of communication between the composition process and the performers. In fact a cursory glance at the score could have one thinking that notation *is* the piece. One aspect of this communicative medium, the score, I should make very clear. It is anything but notation for its own sake. The work is, utterly, an expression; a shared expression. And, as the act of performance mediates between compositional dots-on-paper and audible sound, it is expressive. That is to say, the performers engage with the expressive act. The mechanics involved with the music as notation need to be overcome and put into the service of expression. It is expression and the will to express that verify and determine the "Work's" communicative power. In this, Simone de Haan was well and truly tuned in. I think this recording is ample testimony to this. And, as the title page states, there are three distinct sources from which expression emerges: trombone, and two string trios.

The first movement of *Building a Golden Wheel* – as it's turned out, the only movement ever written – was realized as a compositional process resting on an arc sectioned into three large-scale chunks of music, the first two of which as realized in this particular performance being the same duration. As an abstract structure, the three large-scale sections each have four subsections. Thus, in all, there are twelve sections – these are labelled on the score as letters A ~ L.¹⁴ That there are twelve sections is no arbitrary choice but rather a decision that ties the broadest background structure to thematic structures and from which developmental material is extrapolated.

The three main sections and their timing run as follows: 1st Section (Exposition) A ~ D (mm. 1 ~ 80) 00' 00" ~ 5' 47"; 2nd Section (Development) E ~ H (mm. 81 ~ 145) 5' 47" ~ 11' 35"; 3rd Section (Re-Cap); I ~ L (mm. 146 ~ 181) 11' 35" ~ 14' 24".

The harmonic and melodic materials find their source in four eight-note collections, crucial as intervallic vectors rather than being rendered in organized melodic configurations. One of these (1.) is rich in intervals that generate seven-note diatonic or quasi diatonic relationships. Another (2.) is rich in whole-tone intervals. A third (3.) is richest in major 3rds and perfect 4ths though also quite rich in semitones and minor 3rds. The fourth (4.) and primary collection is *the* one often referred to as ‘the octatonic scale’, built on the alternation of semitone, tone, semitone, tone, and so on, which is extremely rich in minor 3rds. It is from this latter octatonic collection that the “Work’s” two themes derive and are melodically construed as two complementary collections – one containing seven notes (Theme 1) and the other, five (Theme 2). Theme 1 runs in the ordered form: C[#] - E - D - B - B^b - F - G, while Theme 2 runs: A - C - F[#] - G[#] - E^b, and, as is obvious, together they account for the chromatic gamut. This ordered chromatic gamut is then mapped onto the twelve subsections, A ~ L, so as to determine their respective transposition levels. With this move the background structure is linked to the foreground. But the plot is yet somewhat thicker. The same octatonic collection (4.) that generates the two Themes also generates a collection used as a binding harmonic device and heard as the opening chord of the piece. This is a hexachord that derives from Theme 1 and runs, bottom to top: B^b - B - F - G - D^b - E, and furthermore, is orchestrated in the six strings so that it defines the two trios with a B^b minor triad (trio 1) juxtaposed with an inverted E minor triad (trio 2), with trio 1 beginning at *niente* and opening out to *mf* while trio 2 begins at *ff* and diminuendos to *p*. Thus, the hexachord is heard at the mid-point where the two dynamics merge momentarily. In this sense, then, the opening chord is a snap-shot of the material from which the entire “Work” is made up – the two string trios defined with a sonority that points towards the building blocks for the entire piece.

After a relatively short introductory passage (mm. 1 ~ 7), Theme 1 is enunciated by the viola of trio 2 (mm. 8 ~ 16). A transitional passage then leads to the trombone’s first utterance which states Theme 2 (mm. 36 ~ 56). Theme 2 is accompanied by material in both trios rendering the opening hexachord, though at a different transposition level and entirely with harmonics, thus introducing the trombone as soloist. Theme 2 brings in the not-so-short codetta at D where trio 2 continues the harmonic material while trio 1 establishes a dialogic exchange, first with the trombone and finally, in the closing bars of D where trio 1 renders contrapuntal material, trio 2 takes up the dialogue with trombone. (Example 1). Letter E follows the general character of dialogue which gradually leads the way into the predominance of the other eight-note collections mentioned above. This process culminates on the downbeat of F with the cadential material drawn from the third of the eight-note collections leading to the downbeat on letter F with a sonority drawn from the first of the four eight-note collections; the one rich in diatonic material. Thus, from two themes rich in minor 3rds drawn from the fourth of our eight-note collections (*the* octatonic scale) we have arrived at a sonority built on Perfect 5ths (inverted perfect 4ths) drawn from the first of our eight-note collections, rich in perfect 4ths, arriving at this point almost exactly half way through the piece (Ex. 2.). Also significant here is that the two trios have merged together to become one unit. Letter F, although fairly short, separates them again albeit that they retain close proximity through similarity of gesture (Ex.3.). This provides a foil for the trombone which, by now, is improvising on given pitch material drawn from two eight-note collections (2. & 4.)(Ex.3.). Trio 1 draws material from the eight-note collection, (1.) while trio 2 draws material from (3.). Thus, all four eight-note collections are operative.

Letter G presents the structure’s freest moment with the first bar (m. 119) taking almost a minute in this particular performance (Ex. 3.). Letter F has led through to this moment and, indeed, the unfolding process of the Development, its foundation. Letter G also unfurls a fairly compact, tightly wrought rendering of ‘Process Counterpoint’ that not only underlines the opposition between the two trios but, ironically perhaps, strengthens the foil they provide for the trombone (Ex. 4.). The eight-note collections deployed by both Trio 1 (collection 1.) and trio 2 (collection 3.) continue on into G from F, though at a different transposition level, while the trombone material continues to develop through improvisation the material of the two eight-note collections (2. & 4.). As the relationship between the two trios begins to tighten up going into letter H, the trombone becomes freed of all compositional constraints – there is no rhythmic specificity and the pitch domain allows for the chromatic gamut other than D natural and A^b. This ten-note collection for the trombone at letter H derives from the union of the two eight-note collections (2. & 4.) the trombone has been rendering though to this point. Now they are joined together and through this union at transposition level 9, this ten-note collection is generated (Ex. 5). So, while the trombone is almost entirely free in its rendering, the relationship between the two trios becomes increasingly tighter and this diversity reaches its apotheosis right on the downbeat of letter I – the beginning of the structure’s third major section; the beginning of the Re-Cap (Ex. 6).

The trombone’s freedom to create and contribute to the “Work’s” formal shaping and expressive content during letter H introduces, immediately, Theme 2 at the downbeat of letter I (m.146), the beginning of the Re-Cap (Ex. 6). This is a decisive point in the structural unfolding. The immediate leap from improvisational freedom to precise notation and with it, an equally abrupt dynamic shift from *ff* to *p* is a snap-shot of the “Work’s”

raison d'être. For the performer the leap is no small step. It's a leap across a creative chasm; across two modes of music making, namely, improvisation and precise notation.

With the Re-Cap in view, its entry, as indicated above, has been prepared well in advance of its arrival. In letter H construals of the eight-note material carried over from letter G continued in the strings at the new transposition level, increasingly thinning out but overlapping into a contrapuntal texture by the end of Theme 2. (Note that the Re-Cap reverses the order of the Themes.) The texture thins further into a dialogue orientation, strings only, while re-introducing the opening hexachord in alternation with another hexachord which also derives from the fourth eight-note collection; 'the octatonic scale' (Ex. 7.). These iterations function as an up-beat to letter J (m. 164), the re-statement of Theme 1 (Ex. 8.), again in the trombone, but this time accompanied in the strings by a long, sustained tremolo between two forms of the opening hexachord a semitone apart, leading into letter K (m. 169)(Ex. 8.). Letters K and L then serve as a brief coda to complete the movement.

Letter L, as it stands, seems somewhat truncated. As I explained in the Proem, it was originally intended that *Building a Golden Wheel* be a three-movement work and in fact, preparatory work and sketches on the piece were made with three movements in mind. Thus, in composing the first movement, letter L was written so as to provide a conclusion to the first movement while concurrently performing the function of being an upbeat to the second, planned as the "Work's" slow movement. It was to include an unaccompanied trombone solo in the middle, flanked either side by music for the strings without trombone. The plan for the entire second movement was to render a structural mirror image, pivoting around the unaccompanied trombone solo. Alas, this never materialized. But composition of the first movement to *Building a Golden Wheel* did open up creative ground, casting light on aspects of Collective Autonomy that took the best part of ten years to navigate.

Example 1.

The musical score for Example 1 spans from measure 72 to 76. It is written for multiple staves, likely representing different instruments or voices. The notation includes various musical symbols such as notes, rests, and dynamic markings (p, mf, f, ff, mp, cresc.). There are also performance instructions like 'saxa cord', 'punta d'arco sul pont', 'ord. pesante', 'sub. pesante', 'detache', and 'cresc.'. The score is written in a complex, multi-staff format, with measures 72 and 76 clearly marked at the beginning of their respective sections.

Handwritten musical score for "The Rose Tree" by J. S. Bach. The score is written for a piano and a vocal line. The piano part is in the upper staves, and the vocal part is in the lower staves. The score includes various musical notations such as treble and bass clefs, time signatures, notes, rests, and dynamic markings like "f", "ff", "cresc.", "ord.", "p", "sfz", and "Sub.". It also includes fingerings, slurs, and articulation marks. The score is divided into two systems, each ending with a repeat sign and a fermata. The first system is marked with a "1" and the second with a "2".

110

Handwritten musical score for a piano piece, measures 110-114. The score is written on five systems, each with a grand staff (treble and bass clefs). The key signature has one sharp (F#). Measure 110 has a 3/8 and 4/4 time signature. Dynamics include mp, f, sfz, and sf. There are slurs and accents throughout. Measure 114 has a 7-measure rest in the bass staff.

116

G

cantabile

3
4

4

détaché

pesante

ff *sub. mp* *sub. ff* *ff*

détaché

pesante

ff *sub. mp* *sub. ff* *ff*

détaché

pesante

ff *sub. mp* *sub. ff* *ff*

détaché

pesante

ff *sub. mp* *sub. ff* *ff*

détaché

pesante

ff *sub. mp* *sub. ff* *ff*

G

23

[illegible]

25

[illegible]

Example 6.

145

1 28

Example 7.

159

12'39"

161

32

Example 8.

164

J

165 166 167 168 169

160

K

circular breathe,
timbral change.

161 162 163 164 165 166 167 168 169

¹ This celebrated passage is from ‘The Transcendental Doctrine of Elements, Second Part, The Transcendental Logic’ of Kant’s *Critique of Pure Reason*, A51/B75 ~ A52/B76. Refer to The Cambridge Edition of the Works of Immanuel Kant, Cambridge, United Kingdom: Cambridge University Press, 1997, p. 193 ~ 94. (Emphasis is mine. PT).

The passage has been translated variously. “Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind.” Ref. Manfred Kuehn, *KANT, A Biography*. Cambridge, United Kingdom: Cambridge University Press, 2001, p. 234.

“Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind. It is, therefore, just as necessary to make our concepts sensible, that is, to add the object to them in intuition, as to make our intuitions intelligible, that is, to bring them under concepts. These two powers or capacities cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing. *Only through their union can knowledge arise*. But that is no reason for confounding the contribution of either with that of the other; rather is it a strong reason for carefully separating and distinguishing the one from the other. We therefore distinguish the science of the rules of sensibility in general, that is, aesthetic, from the science of the rules of the understanding in general, that is, logic.”

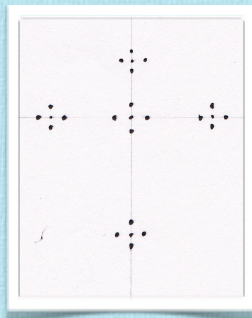
Norman Kemp Smith, *Immanuel Kant’s Critique of Pure Reason*. Macmillan Press Ltd., [1929], p. 93. (Emphasis is mine. PT).

² Quotations from *THE DOME* program, written by Pipeline’s Artistic Director, Simone de Haan.

³ Dhargyey, Geshe Ngawang. *Tibetan Tradition of Mental Development*. New Delhi: Library of Tibetan Works & Archives, 1985 (1974).

⁴ Geshe Dhargyey tells us that this Puja “prepares the way for direct insight into śūnyatā” and that the Tibetan word for pūjā means “to please (the objects of refuge [i.e., the ‘three jewels’ – the Buddha, the Dharma, and the Sangha]) and this we are truly able to do not with external but rather with internal offerings, i.e., our heart-felt devotion and practice of the Dharma.”

In his explanation of the 5th limb of the Seven-Limb Puja – ‘Requesting the Gurus to turn the wheel of the Dharma’ – he suggest that we should make a Mandala offering. This I did and I include here the sketch of the Mandala I made at the time. Geshe Dhargyey’s instruction for this is to “First make four piles at the points representing each of the four directions, placing the first pile closest to you and the others going round clockwise. Then four piles on each of the points representing sub-directions and a final one in the center.” Then he says: “*Visualize that you are making a thousand-spoked golden wheel and offer this to your Guru*. The disciple must request teachings many times to indicate his interest and sincerity and to exalt the glory of the Dharma.” Then, “As you offer the Mandala, repeat the following verse:



“Saluting them with folded hands

I entreat the Buddhas in all the quarters

To make shine the Lamp of the Dharma

For those wandering in the realm of suffering and delusion.”

(*Tibetan Tradition of Mental Development*, pp. 230 ~ 239)

As can be seen from my program notes to *Journey Without Goal*, Geshe Ngawang Dhargyey’s book played no small role in that composition, too.

⁵ Also known as the Dharma-cakra (meaning wheel of the law). The teachings are thought to be eternal in having neither beginning nor end. The symbolism of the wheel derives from the name of the first sermon given by the Buddha known as the *Discourse on Setting in Motion the Wheel of the Law* (*Dharmacakra-pravartana Sutta* in the Pali Canon) in which the Buddha sets out the Four Noble Truths and the ‘three turnings of the wheel.’ (Refer: Damien Keown, *Oxford Dictionary of Buddhism*. Oxford University Press, 2003.)

⁶ The ‘opponents’ to full awakening are the kleśa – defilements, vices, or negative psychological tendencies – thus meaning something like ‘affliction’.

⁷ Dhargyey, Geshe Ngawang. *Tibetan Tradition of Mental Development*, p. 215.

⁸ *Zen’s Way – through the eye of Gogō-an : Homage to Ryōkan*, is an extended composition based on the twenty-eight chapters of the *Lotus Sutra* (*Saddharmapundarikasūtra*). With a duration of just under two hours, it is scored for reciter, clarinets, and two percussionists. Its traversal of the entire sutra interpolates poetry written by the Zen monk, Ryōkan, with the scripture itself, rendered as musical structure. The *Lotus Sutra*, though not fundamental to the sect of Ryōkan-san’s training in the Sōtō School of Zen Buddhism, was nonetheless among his favorite scriptures. Excerpts from the “Work’s” premiere performance can be accessed at http://feeling-to-thought.com/dvd_playlist.html

⁹ Randel, Don Michael, ed. *The Harvard Dictionary of Music, Fourth Edition*. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press, 2003 (1986), p. 216.

¹⁰ Salzer, Felix & Carl Schachter. *Counterpoint in Composition – the study of voice leading*. New York, St. Louis, San Francisco, London, Sydney, Toronto, Mexico, Panama: McGraw-Hill Book Company, 1969, p. xvii.

¹¹ Ibid, p. xix. NOTE: I've included these quotes from Salzer & Schachter because they bear out much that is essential to my concept of Process Counterpoint.

¹² This is not an unusual project for composers who struggle for years in the process of bringing into being a novel form of composition – Messiaen and Xenakis being prime examples in recent times. Among the various benefits of engaging such a project is the clarity that stems from it. A theoretical project becomes the practice of composition itself.

¹³ Randel, Don Michael, ed. *The Harvard Dictionary of Music, Fourth Edition*. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press, 2003 (1986), p. 197.

¹⁴ Letter A, mm. 1 ~ 12; B, mm. 13 ~ 35; C, mm. 36 ~ 53; D, mm. 54 ~ 80; E, mm. 81 ~ 101; F, mm. 102 ~ 118; G, mm. 119 ~ 133; H, mm. 134 ~ 145; I, mm. 146 ~ 163; J, 164 ~ 168; K, 169 ~ 175; L, 176 ~ 181.