

Koozin-17
MUSI 8303
MUSI 4211

Spiritual-temporal imagery in music of Olivier Messiaen and Toru Takemitsu

Timothy Koozin

University of North Dakota, Grand Forks, USA

The Japanese composer Toru Takemitsu has stated that he was so moved by Olivier Messiaen's *Quartet for the End of Time* that he asked Messiaen for permission to use the same instrumentation in a piece of his own. The work which grew out of that encounter, Takemitsu's *Quatrain II*, displays traits which can be traced to Messiaen's music and the procedures Messiaen advocated in his treatise *The Technique of My Musical Language*.

This analysis explores philosophical and technical parallels in the music of Olivier Messiaen and Toru Takemitsu which bear on their treatment of musical time. Takemitsu's music, like that of Messiaen, is essentially metaphorical, and while the musical metaphors derive from very different cultural and spiritual traditions, they give rise to temporal and pitch structures which function similarly.

KEY WORDS Toru Takemitsu, Olivier Messiaen, Odilon Redon, Eihei Dōgen, octatonicism, silence

Combining a modern Western musical syntax with a traditional Japanese aesthetic sensibility, the music of Toru Takemitsu demonstrates the mutual influence of Eastern and Western artistic traditions in the twentieth century. It is clear that this influence moves in more than one direction, since composers who have been most influential on Takemitsu's style, notably Debussy and Messiaen, have themselves been greatly influenced by non-Western music. Takemitsu has stated that he met with Olivier Messiaen, and that the impact of Messiaen's *Quartet for the End of Time* was so profound that he asked Messiaen for permission to use the same instrumentation in a piece of his own.¹ The work which grew out of that encounter, Takemitsu's *Quatrain II* (1977), displays traits which can be traced to Messiaen's music and the procedures Messiaen advocated much earlier in his treatise *The Technique of My Musical Language* (1942).

This study explores philosophical and technical parallels in the music of Olivier Messiaen and Toru Takemitsu which bear on their treatment of musical time. These parallels extend beyond their success in incorporating cross-cultural elements. The music of Takemitsu, like that of Messiaen, is essentially metaphorical, and while the musical metaphors derive from very different cultural and spiritual traditions, they give rise to temporal and pitch structures which function similarly. Both composers provoke an awareness of the eternal, bringing the experience of the musical work into contact with a transcendent spiritual presence. In this way, the musical work projects the composer's conception of time and eternity. While Messiaen's musical techniques and extra-musical imagery create an expression of his Catholic faith, Takemitsu employs

twentieth-century Western musical materials to create a characteristically Japanese image of time.

For Messiaen, a conception of time begins with a single articulated event, a beat, superimposed against an infinite temporal background:

Let us not forget that the first, essential element in music is Rhythm, and that Rhythm is first and foremost the change of number and duration. Suppose that there were a single beat in all the universe. One beat; with eternity before it and eternity after it. A before and after. That is the birth of time. (1958, 11)

As is so often the case, Messiaen's musical thought is a theological representation, and his image of the birth of time can be viewed as an analog for the creation in the book of Genesis. It is also significant that in discussing the essence of rhythm, Messiaen first of all invokes the idea of number, not as a quantifier in the sense of a number of things, but rather as an abstract entity which here represents a span of time. He continues:

Imagine then, almost immediately, a second beat. Since any beat is prolonged in the silence which follows it, the second beat will be longer than the first. Another number, another duration. That is the birth of Rhythm. (11)

Messiaen's musical rhythm is not merely a closed system of temporal divisions, but rather a conception in which temporal events emerge from a background of infinite silence, pointing metaphorically to an awareness of the eternal. By employing rhythmic techniques which objectify the flow of time, and metaphorically invoking the idea of time itself, Messiaen projects musical events against an undifferentiated background of eternity.

Messiaen's temporal aesthetic is remarkably close to one represented in Takemitsu's music and in many traditional Asian art works, in which "beauty is the appearance of eternity in time" (Nishida 1958, 40). Oriental cultures are deeply rooted in a religio-aesthetic sensibility which

not only apprehends the immediately sensed world of "differentiated" objects and feelings, but - in and with that - the underlying "undifferentiated," sacred unity that empowers and is the ground for everything. (Pilgrim 1986, 138)

Referential pitch collections favored by both Messiaen and Takemitsu, including the octatonic and whole tone collections, are in a sense "undifferentiated" by virtue of their symmetry, since there is no *a priori* hierarchy among the constituent elements of such a collection. The "particularity" of pitch constructs is in this way dissolved into a static and undifferentiated field. The metaphorical value of a pitch structure which is unchanged by various operations of transposition and inversion was certainly not lost on Messiaen, who wrote of "the charm of impossibilities" inherent in his "modes of limited transposition" (1956, 1:13, 59). In the case of Takemitsu, sustained octatonic or whole-tone-derived pitch structures merge with the ultimate background of silence drawn into the work. This results in a temporal structure comparable to the spiritual and artistic representations of an undifferentiated temporal background which are prominent in traditional Japanese culture.

The idea of time thirteenth-century time, which permeates as an immediately discrete objects and the eternal.

Whereas earlier liberation from the experiential view of phenomena as a re

"Being-time" means the Buddha statue is time everyday time in the p

Study the principle t (Nishiyama and Steven

According to Dōgen enlightenment, the reflection of the w expressed aesthetic traditional Japanese mythological view power visited by h

"Being-time"-re aesthetic sensibility or events in a work philosophy of *satis* of Japan" to the ap Japanese arts (198 expressive meaning Japanese paintings: objects and traces This brings the i undifferentiated c eternity in the wo

Takemitsu regard movement within nature, he writes, meaning of touch state" (10). This a which emphasis is within tone itself. tone as a self-contained aesthetic sensibility event manifests a *present*" (Cleary 1991 dynamic state of revealed in an imr

The idea of time represented as a unity of opposites can be traced to the thirteenth-century writings of the Japanese Zen master, Dōgen.² In this image of time, which permeates traditional Japanese arts and religions, reality is conceived as an immediately experienced continuum which the differentiated world of discrete objects and events unites with the undifferentiated ultimate reality of the eternal.

Whereas earlier Buddhist thought conceived enlightenment in terms of liberation from the natural temporal cycles of birth and death, Dōgen's is an experiential view of time, and liberation comes through perception of natural phenomena as a representation of "being-time."

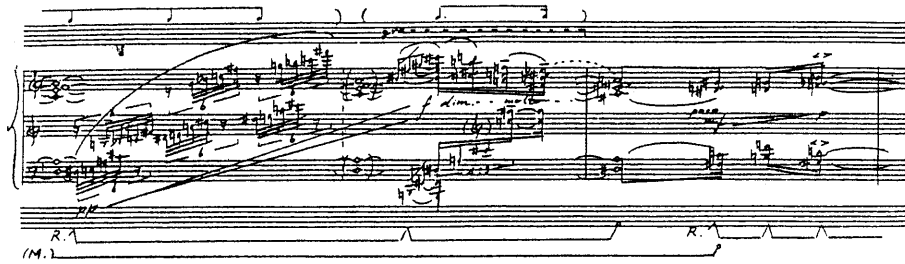
"Being-time" means that time is being; i.e., "Time is existence, existence is time." The shape of a Buddha statue is time. Time is the radiant nature of each moment; it is the monumental everyday time in the present...

Study the principle that everything in the world is time. Each instant covers the entire world. (Nishiyama and Stevens 1977, 1:68)

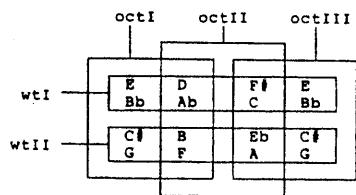
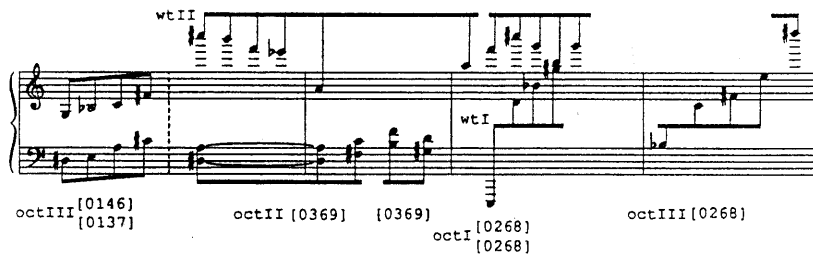
According to Dōgen, a true understanding of time and eternity constitutes enlightenment, through the recognition that every occurrence in nature is a reflection of the whole of creation (Stambaugh 1990, 22). This temporal idea is expressed aesthetically in the heightened sensitivity for natural beauty in traditional Japanese culture, which in turn can be traced to the Japanese mythological view of the natural world as a paradisaical embodiment of sacred power visited by heavenly and earthly deities (Pilgrim 1986, 141).

"Being-time" – reflected in every event at every moment – is also related to an aesthetic sensibility which appreciates the beauty of isolated, independent objects or events in a work of art. Takemitsu himself describes this quality, relating "the philosophy of satisfaction with a single note to be found in the traditional music of Japan" to the appreciation of spatial and temporal discontinuities prevalent in Japanese arts (1987, 10). In music, poetry and drama, silences infused with expressive meaning may be integral to the work, much in the same way that Japanese paintings and picture scrolls may project relatively small, isolated objects and traces of images onto a larger background of indeterminate space. This brings the immediate context of the art work into contact with the undifferentiated continuum of all silence and space, creating a metaphor for eternity in the work.

Takemitsu regards the sensing of timbre as "the perception of the succession of movement within sound." Defining timbre as both spatial and temporal in nature, he writes, "It is, as symbolized in the word *swari* (which also has the meaning of touching some object lightly), something indicative of a dynamic state" (10). This attitude toward timbre is reflected in his own composition, in which emphasis is not so much on the motion of tones, but rather on the motion within tone itself. In his reverence for the pure, unadorned sound of the musical tone as a self-contained objectification of nature, Takemitsu displays a temporal/aesthetic sensibility close to that described by Dōgen, who writes that every event manifests a totality, a "passage of whole strength" experienced in the "immediate present" (Cleary 1986, 108-09). Similarly, Takemitsu concentrates on timbre as a dynamic state of spatial and temporal "movement within sound," which is revealed in an immediate aesthetic continuum of the here-and-now.



© 1988 Schott Japan Company Ltd. Used by permission.



Example 1 Toru Takemitsu, *Les yeux clos II*, mm. 22-26.

Takemitsu's music with musical gestures that are inaudible. In his and certainly even sonorities toward motion of the timbre gestural endings of music as an active total silence. Moments of atmosphere of intense employed consist development, but increasing resonance.

Each phrase in *I* of the sostenuto expressive silence sound is complete of silence. The transcription by Susan Sontag performs "installs within the absolute state of craving for the clarity of speech" (1969, 4- communion, as a barrier or difference the inner silence).

In Takemitsu's form a static background embracing background the octatonic III referential force in materials are present elements identified. Example 1, octatonic common symmetry at the bottom of interpenetration. form complementary materials exclusive octatonic III and chords in the upper suggesting whole.

At m. 25, registral and whole tone intervals whole tone collection 26 with the [0268] I {B \flat C E F \sharp }.

Takemitsu's music often hovers on the threshold between sound and silence, with musical gestures which characteristically begin softly and gradually fade to inaudibility. In his solo piano piece, *Les yeux clos II* (1988), much of the music, and certainly every phrase ending, involves the gradual fading of delicate sonorities toward silence (Example 1). This focuses attention on the dynamic motion of the timbral event. The lack of any clear point of termination in such gestural endings creates the effect of drawing the surrounding silence into the music as an active presence. This is often accomplished without long spans of total silence. More often, sustained, fading sonorities are used to create an atmosphere of intense, rarefied quietude. Because gestural shapes of this kind are employed consistently, the piece evolves not so much in terms of formal development, but rather, through sonorities which move toward silence with increasing resonance and expressive power.

Each phrase in *Les yeux clos II* is a play of resonances, enhanced with exacting use of the sostenuto and sustain pedals, which moves toward completion in an expressive silence. The music is, in this sense, transcendental - the movement in sound is completed as it merges gradually with the undifferentiated continuum of silence. The transcendent quality of Takemitsu's music is related to one which Susan Sontag perceives in some modern art works, in which the pursuit of silence "installs within the activity of art many of the paradoxes involved in attaining an absolute state of being described by the great religious mystics" and reflects "a craving for the cloud of unknowing beyond knowledge and for the silence beyond speech" (1969, 4-5). Listening to Takemitsu's music, we may share in a sense of communion, as we are drawn toward that same silence. That is, there is no barrier or difference between the background of silence drawn into the music and the inner silence of our contemplation.³

In Takemitsu's music, sustained fields of octatonic sounds are often used to form a static background, a sonorous continuum which merges with the all-embracing background of silence to convey an image of eternity. In *Les yeux clos II*, the octatonic III collection gradually attains the status of a fundamental referential force in the piece.⁴ However, the manner by which octatonic-derived materials are presented may at times be quite complex, with different referential elements identified with specific registral areas. In the climactic phrase shown in Example 1, octatonic and whole tone references are integrated through their common symmetrical characteristics and juxtaposed in registral space. The graph at the bottom of the example summarizes potentials for octatonic/whole tone interpenetration. At m. 22, a complete octatonic III collection is segmented to form complementary tetrachords. Measures 23 and 24 provide octatonic II pitch materials exclusively in the lower and middle scores. The tetrachord common to octatonic III and octatonic II, {D# F# A C} accommodates this shift smoothly. The chords in the upper score exceed octatonic II boundaries, with the highest melody suggesting whole tone derivation.

At m. 25, registral segmentation of the octatonic I collection into complementary [0268] tetrachords accommodates the simultaneous projection of octatonic and whole tone implications, with tetrachords common to octatonic I and the whole tone collections heard in specific registers. The passage comes to rest at m. 26 with the [0268] tetrachord common to octatonic III and whole tone I {B \flat C E F#}.

Like Messiaen, Takemitsu employs evocative titles which serve as metaphors to remind us that the universe of his music has nothing in common with the everyday world. Whereas Messiaen's titles often suggest biblical imagery, Takemitsu's titles do not impose a specific meaning. They are to be grasped intuitively, suggesting a reality closer to dream. In *Les yeux clos II*, the dissipating timbres of octatonic-referential sounds, which characterize each phrase-ending, create a static sonorous background which is completed in a silence imbued with meaning. Silence, which is closely linked to intensity of expression in Takemitsu's music, has also often been associated with the stillness of contemplation found in meditation and prayer. This is one way in which the expressive power of Takemitsu's *Les yeux clos II* relates to the lithograph of Odilon Redon (1840-1916), shown in Example 2.

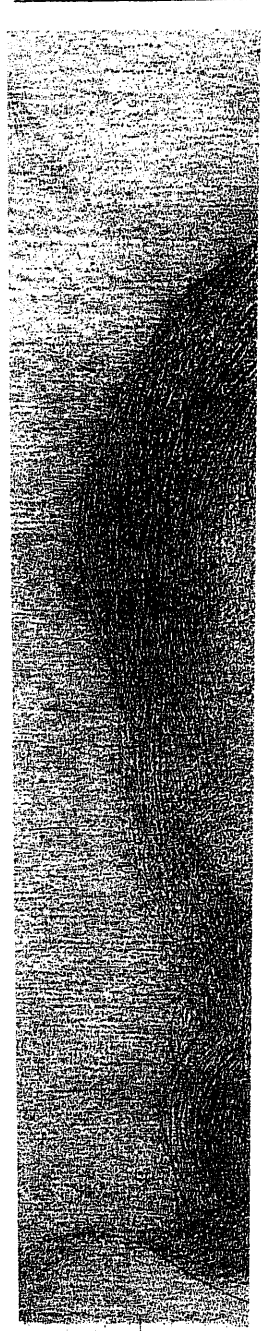
Takemitsu first saw Redon's *Les yeux clos* (1890) at the Art Institute of Chicago in 1968, later borrowing its title for three works, the piano pieces of 1979 and 1988 and a movement from the orchestral work, *Visions*, premiered in 1990. Redon, the foremost symbolist painter, considered the color black to be "the most essential of all colors" and "an agent of the spirit" (Werner 1969, x). Using gradations of darkness to instill meaning beyond the subject represented, he creates a whole visible only in its symbolic fragment. The floating image only partially emerges from an undifferentiated background devoid of any sense of time and realistic space. With closed eyes, the figure is turned inward, as if to shut out appearances in order to concentrate upon the invisible world of the psyche. The theme of isolation and mysterious reality of the unseen and unheard invites comparison with the active silences and rarefied quietude found in much of Takemitsu's music.

Describing his expressive aims, Redon wrote that he wished to place "the logic of the visible in the service of the invisible" (Werner 1969, xii). In discussing the recurrent themes of silence and closed eyes in Redon's works, one author writes,

Silence here is not associated with fear or pessimism, but with the suggestion of reflective and spiritual experience. Silence negates the intrusions of the contingent and objective world, giving rein to that undefined state of thoughtfulness that the idealist art of Redon seeks to provoke... Both silence and closed eyes indicate that Redon is concerned with the mind rather than the recording of objective phenomena. (Hobbs 1977, 158-59)

There is a parallel between a musical work which objectifies silence and a visual image depicting a meditative figure with eyes closed; both works seek to embody a deeper reality beyond that of concrete sounds and images. The analogy is especially meaningful considering the close relationship between the acts of listening and meditation in Eastern thought. Dōgen closely associates understanding and thinking with listening and receptivity, writing that if you wish to understand the word of the Buddha, "you should listen to it. Listen until you understand" (Stambaugh 1990, 117).

The aesthetic goals of Redon are also somewhat comparable to those of Messiaen, who, like Redon, strives to give shape to a spiritual world in terms of sensuous perception. In discussing the "charm of the vague," Redon describes an aesthetic which is not unlike Messiaen's regard for the "charm of impossibilities" inherent in symmetrical pitch and rhythmic formations; for Messiaen, these symmetries are ideal for expressions of both sensual beauty and the deeper truths of the Catholic faith (Werner 1969, xii; Messiaen 1956, 1:13).





Example 2 Odilon Redon, *Les yeux clos*.

Decidé, vigoureux, granitique, un peu vif

wtI

octIII

wtI octIII pentatonic

third relations

octIII

Example 3 Olivier Messiaen, *Quatuor pour la fin du temps*, No. 6.

The opening of the sixth movement from the *Quartet for the End of Time*, "Dance of Fury for Seven Trumpets" is shown in Example 3. A monody scored for the quartet in forceful octave doublings throughout, it is intended to suggest imagery of the apocalypse from the Revelation of St John the Divine. In his *Technique of My Musical Language*, Messiaen describes this piece as "An irresistible movement of steel... a formidable granite of sound." Messiaen quotes this piece in his treatise primarily to discuss the added rhythm values employed. The occasional sixteenth note or dotted value added to the predominantly duple metrical structure creates small groupings of five, seven, eleven or thirteen sixteenth notes, so that the potential for metrical regularity is thwarted with incorporation of prime numbered rhythmic values (1956 1:16-17).

In "Dance of Fury for Seven Trumpets," rhythms of added value function to obviate perception of a steady pulse. The frenetic quality in this music derives from the rapid stream of sixteenth-note beats, which do not group to form larger, even metrical units. Since the only steady pulse in this music is one which is almost too rapid to be experienced kinesthetically, the effect, though powerful and energetic, is somewhat analagous to that of a pulseless, floating rhythm.

Messiaen's rhythm of added value is precisely that - an external, abstracted temporal agent added to dislodge the sound event from metrical context. As Messiaen states in his treatise,

we shall replace the notions of "measure" and "beat" by the feeling of a short value (the sixteenth-note, for example) and its free multiplications, which will lead us toward a music more or less "ametical." (1:16-17)

Vcl. I

Vcl. II

Vcl. III

Vcl. IV

E

While countless c to understand Mes thought. Messiaen rhythm with the ide nature, an unfathc added value, isorh objectify the flow music. Time itself, tions of the compo speak with the dire

The sixth movem of symmetrical and five-note whole tor second and third r whole tone I.⁵ As t common to the whc set {E F# Bb C}. throughout the exa shift from whole to the common tetrac

Vascillation betw example is interrup of the aggregate p pentatonic collectic and E) and two pen

As metaphors, I structures become the spiritual world achieves freedom processes to pitch s again illustrates N parameter for dev score of the piano

The image shows a musical score for four instruments: voice, clarinet, violin, and piano. The tempo is marked 'Même mouvt' (Molto) with a metronome marking of quarter note = 66. The piano part features a complex 11-tuplet figure in measure 55, which is highlighted with a box and the letter 'G'. The score is in a key with one sharp (F#) and a common time signature.

Example 4 Messiaen, *Quatuor*, No. 7, mm. 54-55.

While countless composers have made use of irregular rhythms, it is important to understand Messiaen's rhythmic processes in the context of his religious thought. Messiaen closely associates the detached abstraction of musical rhythm with the idealized abstraction of time itself. Time is an elemental force of nature, an unfathomable and direct manifestation of God. Using rhythms of added value, isorhythm cycles, and other rhythmic/numerical devices to objectify the flow of time, Messiaen brings a sense of absolute time into the music. Time itself, undifferentiated and infinite, is a force beyond the manipulations of the composer. For Messiaen, its invocation in music allows nature to speak with the direct voice of God.

The sixth movement, like the work as a whole, is based on an interpenetration of symmetrical and diatonic elements. Example 3 begins with a passage based on a five-note whole tone I collection. The unaccented passing B naturals found in the second and third measure are foreign to the otherwise explicit projection of whole tone I.⁵ As the beamed figures in Example 3 indicate, the largest subset common to the whole tone I and octatonic III collections is the symmetrical [0268] set {E F# Bb C}. These pitch classes receive marked contextual emphasis throughout the example at phrase beginnings, highpoints and endings. After the shift from whole tone I to octatonic III reference beginning at m. 5, one member of the common tetrachord, E, is withheld until the ending of the phrase at m. 6.

Vascillation between whole tone I and octatonic III projection throughout the example is interrupted at the climax of the passage, which provides pitch classes of the aggregate previously withheld in the form of third-related triads and pentatonic collections. Brackets on the score indicate tertian harmonies (C, A, Db and E) and two pentatonic collections, one a semitone transposition of the other.

As metaphors, Messiaen's rhythms of added value and symmetrical pitch structures become tools for remaining in touch with the spiritual world. Just as the spiritual world is free of the dimensions of time and space, Messiaen's music achieves freedom from causal connections which traditionally link rhythmic processes to pitch structure. Example 4, an excerpt from the seventh movement, again illustrates Messiaen's abstraction of rhythm as a wholly independent parameter for development. At measure 55, the 11-tuplet figure in the upper score of the piano part gives the same sequence of pitches found at m. 5 in

Example 3, here accompanied by purely octatonic III figuration in the other parts. The violin figure at letter G projects once again the same [0268] tetrachord emphasized in Example 3 and in the Takemitsu excerpt shown in Example 1, {B \flat C E F \sharp }.⁶

In Example 5, from the opening of the *Quartet for the End of Time*, isorhythms, nonretrogradable rhythms and symmetrical pitch collections create a musical stasis, which is Messiaen's metaphor for eternity. Messiaen's abstraction of rhythm, and of time itself, as a mystical and metaphysical ideal is represented with the isorhythm—a perfect metaphor for infinite time. Conceptually, the overlapping isorhythmic cycles of repetition are not unlike nonretrogradable rhythms, which create, as Messiaen writes, "a certain unity of movement (where beginning and end are confused because identical)" (1956, 1:21). Since these cycles are not directed toward a goal of termination, there is an implication that we are being brought into contact with cycles which extend infinitely beyond the boundaries of the piece.⁷

Pitch and rhythm cycles in the 'cello and piano parts are shown with brackets in Example 5, following the labels Messiaen provides in his treatise. The "color" of 29 chords in the piano part is cycled through a "talea" of seventeen rhythmic values (29 and 17 both being prime numbers). The diagram of the piano's rhythmic cycle shows that it can be parsed into five segments, the first four forming non-retrogradable rhythms.⁸ The second segment is an irregular diminution of the first, incorporating an added dotted value. The third segment, a regular diminution, is augmented in the fourth segment. The fifth shows a gradual augmentation from the sixteenth to the half note value. The isorhythmic 'cello part is comprised of a five-note whole tone collection set to overlapping nonretrogradable rhythmic cells.⁹

A striking feature of the first movement is the contrast between the strict, patterned structure of the piano and 'cello parts and the freedom of the violin and clarinet parts, which provide an early example of Messiaen's birdsong. Messiaen's representation of birdsong is related to his representation of time itself as an elemental cosmic force, in that both images depict the action of God in nature. Birds have often been regarded as a metaphor for the spiritual and transcendental, and in the preface to the score, Messiaen states that birdsong represents "our desire for light, for the stars and for the things of heaven."

Employing the same instrumentation as that of Messiaen's *Quartet*, Takemitsu's *Quatrain II* also suggests the legacy of Messiaen in its melodic and harmonic figuration, texture, extremely slow tempo, and juxtaposition of octatonic and whole-tone-derived layers. In the passage shown in Example 6, the glissandos on harmonics and whole tone implications in the strings were very likely influenced by Messiaen's 'cello writing in the previous example, which Messiaen described as a rhythmic pedal "whose airy sonority envelops and unifies all the rest in its mysterious halo" (1956, 1:26). Here, the 'cello repeatedly slides up the interval of the tritone sounding double stops three octaves apart. The notated outer boundaries of the 'cello glissando figure project dyad {C \sharp G}, which is common to whole tone II and octatonic I. Violin glissando harmonics contribute to projection of whole tone II, and at m. 27, a shift to octatonic I.

Each of the three examples shown from *Quatrain II* display long-sustained sonorities which fade to a quiet intensity bordering on silence. As in Takemitsu's *Les yeux clos II*, a single octatonic collection is projected as a static referential force,

Violon

CLARINETTE en Si b

VIOLONCELLE

PIANO

von

Clar.

vcllo

von

Clar.

vcllo

A

Bien modéré, en poudroisement harmonieux (comme un oiseau)

VIOLON

CLARINETTE en Si b (comme un oiseau) *p expressif*

VIOLONCELLE *ppp (vibrato)*

PIANO *ppp legato (très enveloppé de pédale)*

von vers la pointe)

Clar.

celle *plissé*

von

Clar.

celle *pliss*

A X M H A N B O Y P I

Example 5 Messiaen, *Quatuor*, No. 1, mm. 1-9.

Extremely slow $\text{♩} = 38$

Example 6 Takemitsu, *Quatrain II*, mm. 22-30.

so that while local events may project a mixture of whole tone, octatonic and totally chromatic implications, global structure is unified through a sonorous octatonic background. In Example 6, whole tone II reference in the strings is juxtaposed against octatonic I projection in the clarinet and piano. Octatonic I reference is most explicit in the lower and middle registers of the piano, and three occurrences of non-octatonic I pitch A4 are circled on the score. Priority of the octatonic I collection is confirmed in the piano part as the phrase comes to rest on a chord forming the [0134679] octatonic septachord, a favored pitch structure found in many of Takemitsu's works.

Takemitsu explores a variety of textures employing unison and octave doublings in *Quatrain II*, another trait it shares with Messiaen's *Quartet*. In Example 7, the clarinet and strings double on a melody based on whole tone I. The chromatically dense piano part is more ambiguous, projecting a mixture of implications which are gradually clarified. Octatonic I reference is reaffirmed with the return of ringing piano chords forming the octatonic I septachord in the last nine measures of the example. In all Takemitsu's octatonic-referential works, the potential for explicit surface-level octatonicism is eventually realized. In Example 8, the clarinet and piano double on a variant of their melodic material from Example 6, here heard in a context derived wholly from octatonic I, the referential collection most fundamental to the global pitch structure of the work.

Projecting a static octatonic background into an undifferentiated background of silence, Takemitsu uses long-sustained, fading sonorities to concretize the experience of a silent, invisible world—a world of the mind. This transcendental quality of Takemitsu's aesthetic is suggested in his words, "to make the void of silence live is to make live the infinity of sounds" (Benitez 1974). In Example 9, from Takemitsu's choral work, *Grass*, the quiet resonances of textless vocalizations point toward a meaning beyond one expressible with specific words. Takemitsu's instructions in the opening measures call for sounds produced with mouth closed, beginning imperceptibly and gradually dying away. Clearly, the

The musical score is divided into two systems. The first system (mm. 127-143) includes staves for woodwinds (wt I, wt II) and piano (oct I, oct III). The woodwinds play melodic lines with various articulations and dynamics. The piano part features complex textures with multiple octaves and dynamic markings such as *pp*, *mp*, *p*, and *ppp*. Performance instructions include *Ped.* and *finely*. The second system (mm. 144-143) continues the piano part with specific rhythmic patterns indicated by the numbers [0134679] and [0134679].

Example 7 Takemitsu, *Quatrian II*, mm. 127-143.

oct I *(N) Slower than $\text{♩} = 38$ desirable*

Example 8 Takemitsu, *Quatrain II*, mm. 322-326.

intention is to create as little division as possible between the sound event and the silence which surrounds it. In this way, the vocal sounds point toward their own transcendence in the silence which grows out of the first phrase. The vague suggestion of octatonicism in the first phrase is confirmed in the extended passage shown below it.

When a text does finally emerge near the end of the work, it is with an image of "one time," all encompassing, experienced in the immediacy of the moment, "all at once." In both its text and musical structure, *Grass* is a transcendental work. As in the visual image of Redon or the philosophy of Dōgen, differentiated temporal events shape an awareness of the universal and eternal.

The musical languages of Takemitsu and Messiaen exemplify the mutual influences of Oriental and Western artistic traditions in the twentieth century. Paul Tillich points out that in traditional Japanese landscapes, as in the modern works of Klee, Seurat and Kandinsky, mystical representations of ultimate reality display "that stylistic element in which the particularity of things is dissolved into a visual continuum" (1986, 227). Another writer identifies "the fascination for the formless, for the elementary modes of matter" in works by modern artists with "the discovery of the sacred manifested through the substance itself," which characterizes religious experience in pre-Christian and present-day Asiatic societies (Eliade 1986, 182). Takemitsu's fascination with the substance of pure timbre corresponds to a kind of reverence for artless, natural phenomenon. In a work like Messiaen's *Quartet for the End of Time*, the objectifica-

mm. 1-3 oct II *♩ = about 72*

- closed mouth
 - ◐ half closed mouth
 - opened mouth
 - ◑ open mouth gradually for a determined length of time
- and all at once
one time
out of some place
I was standing in this grass
All I have to do

mm. 1-3 OctII OctI

*1 All entrances should be imperceptible.

- closed mouth
 - ◐ half closed mouth
 - opened mouth
 - open mouth gradually for a determined length of time
 - l.v. let vibrate
 - d.a. dying away
- and all at once
- our time
- I was standing in this grass
- All I have to do
- was recorded in my cells
- That is why I took the shape of a man
- and even talked about happiness

Words by Shuntaro Tanikawa
Translated by W.S. Merwin

mm. 14-17 OctIII

*2 Vowels (a, o, i, e, u) are desirable to be pronounced not so articulate.

Example 9 Takemitsu, *Grass* for male chorus.

tion of time, amidst the stasis of symmetrically conceived sounds, serves to represent elementary modes of matter which are associated with biblical images to represent symbolically an Apocalyptic re-creation of the world from a state of virtuality.

While Takemitsu and Messiaen each articulate their aesthetic and spiritual values according to their own means, parallels between the composers are profound. In the works of both, musical form may point toward a formless background of eternity, as musical and extra-musical metaphors suggest an awareness of the infinite. Takemitsu's affinity for the music of Messiaen goes far beyond his predilection for symmetrical pitch groupings and other surface features common to both composers. The musics of Messiaen and Takemitsu each represent a kind of spiritual rhetoric, in which each composer takes a transcendental approach in shaping musical time as his ultimate otherworldly gesture.

Notes

1. Stated in an interview, which took place November 14, 1989 at Columbia University. I wish to thank Toru Takemitsu for permission to refer to this interview. I am also grateful to the Office of Research and Program Development at the University of North Dakota for assistance in securing permissions to reprint musical examples. Finally, I wish to thank Jonathan Kramer for his invaluable insights and helpful criticism.
2. The literature on Dōgen is vast; valuable sources on his conception of time include Nishiyama and Stevens (1977), Kasulis (1985), Cleary (1986) and Stambaugh (1990). For perspectives on the particular and the universal as time components in Japanese culture, see also the modern writings of Northrop (1946), Nishida (1958), Fraser (1975), Abe (1985) and Koozin (1990). The Buddhist philosophies of Dōgen and Nishida Kitaro are discussed and compared in Moore (1967) and Kasulis (1985, 98n).
3. The idea of silences imbued with expressive meaning is closely related to the Japanese aesthetic value of *ma*, which generally refers to gaps in space or time, but can also refer to the edge or moment of change where two different worlds meet, as in the moment when fading sound merges with silence. The aesthetic/temporal idea of *ma* is discussed in Isozaki (1979), Pilgrim (1986), and related to the music of Takemitsu in Koozin (1990).
4. The octatonic collection can be transposed to form only three non-duplicating sets, which are labelled by van den Toorn (1983, 50):

octI E F G A \flat B \flat B D \flat D
 octII F F \sharp A \flat A B C D E \flat
 octIII F \sharp G A B \flat C D \flat E \flat E

To incorporate the two whole tone collections, I extend this idea:

wtI C D E F \sharp G \sharp A \sharp
 wtII D \flat E \flat F G A B

Other examples of octatonic structure in *Les yeux clos II* are discussed in Koozin (1991).

5. These passing projection of N his treatise. T tetrachords a added non-wh

- It should be no B \flat clarinet is v
6. This violin fig Example 8, dis
 7. As Griffiths p moving at diff of retrogressio
 8. Johnson discu traditional Ind
 9. The Whole T structure thro each of the m constitute the 'cello part of 1 whole tone co in Example 3 reference at lc 'cello part is d

References

- Abe, Masao. (1985)
 Benitez, J.M. (1974) mophon, MG241:
 Cleary, Thomas, tr: Hawaii Press.
 Eliade, Mircea. (1986) Diane Apostolos-
 Fraser, J.T. (1975) C Goldwater, Robert.
 Griffiths, Paul. (198 Press.
 Hobbs, Richard. (19
 Isozaki, Arta. (1979
 Johnson, Robert Sh
 Kasulis, Thomas, I *Shōbōgenzō*. In *Dōge* Hawaii Press.
 Koozin, Timothy. (30/1.
 — (1991) Octaton 29/1.
 Messiaen, Olivier. Satterfield. Paris: — (1958) *Confere*

5. These passing tones can also be accounted for by regarding the passage as a projection of Messiaen's mode 6 of limited transposition, as Messiaen does in his treatise. The mode 6 is an eight-member set comprised of two diatonic tetrachords a tritone removed, which form a whole tone collection plus an added non-whole tone tritone dyad:

C D E F F# G# A# B

It should be noted that in both the Messiaen and Takemitsu score excerpts, the B \flat clarinet is written in transposition, not at concert pitch.

6. This violin figure is remarkably similar to Takemitsu's string writing in Example 8, discussed below.
7. As Griffiths points out, these cycles suggest independent threads of time moving at different speeds, and sometimes in different directions in the form of retrogressions (1985, 16).
8. Johnson discusses Messiaen's derivation of this rhythm pattern from traditional Indian rhythms listed by Sharngadeva (1989, 36-37).
9. The Whole Tone I collection is projected at local and large-scale levels of structure throughout the *Quartet*. Griffiths infers a principal tonal center in each of the movements, noting that taken together, these focal pitch classes constitute the same five-note whole tone collection as that found here in the 'cello part of the first movement (1985, 96). This also recalls the five-note whole tone collection noted at the opening of the sixth movement, discussed in Example 3, suggesting an interesting correspondence in whole tone reference at local and global structural levels. The rhythmic structure of the 'cello part is discussed in Johnson (1989, 62-63).

References

- Abe, Masao. (1985) *Zen and Western Thought*. Honolulu: University of Hawaii Press.
- Benitez, J.M. (1974) Jacket notes for *Toru Takemitsu: Miniatur II*. Japanese Deutsche Grammophon, MG2411.
- Cleary, Thomas, translated by (1986) *Shobogenzo: Zen Essays by Dogen*. Honolulu: University of Hawaii Press.
- Eliade, Mircea. (1986) The Sacred and the Modern Artist. In *Art Creativity, and the Sacred*, edited by Diane Apostolos-Cappadona, pp. 179-183. New York: Crossroad Publishing Company.
- Fraser, J.T. (1975) *Of Time, Passion, and Knowledge*. New York: George Braziller, Inc.
- Goldwater, Robert. (1979) *Symbolism*. New York: Harper and Row.
- Griffiths, Paul. (1985) *Olivier Messiaen and the Music of Time*. Ithaca, New York: Cornell University Press.
- Hobbs, Richard. (1977) *Odilon Redon*. Boston: Little, Brown and Company.
- Isozaki, Arta. (1979) *Ma: Japanese Time-Space*. *The Japan Architect* 54 (February): 69-81.
- Johnson, Robert Sherlaw. (1989) *Messiaen*. 2nd ed. Berkeley: University of California Press.
- Kasulis, Thomas, P. (1985) The Incomparable Philosopher: Dōgen on How to Read the *Shōbōgenzō*. In *Dōgen Studies*, edited by William R. LaFleur, pp. 83-98. Honolulu: University of Hawaii Press.
- Koozin, Timothy. (1990) Toru Takemitsu and the Unity of Opposites. *College Music Symposium* 30/1.
- (1991) Octatonicism in Recent Solo Piano Works of Toru Takemitsu. *Perspectives of New Music* 29/1.
- Messiaen, Olivier. (1956) *The Technique of My Musical Language*. 2 vols. Translated by John Satterfield. Paris: Leduc.
- (1958) *Conférence de Bruxelles*. Paris: Leduc.

- Moore, Charles A. (1967) *The Japanese Mind: Essentials of Japanese Philosophy and Culture*. Honolulu: University of Hawaii Press.
- Nishida, Kitano. (1958) *Intelligibility and the Philosophy of Nothingness*. Tokyo: Maruzen Company, Ltd.
- Nishiyama, Kōsen and John Stevens (1977) *Shobogenzo*. 4 vols. Tokyo: Daihokkaikaku.
- Northrop, F.S.C. (1946) *The Meeting of East and West*. New York: Macmillan Company.
- Pilgrim, Richard B. (1986) Foundations for a Religio-Aesthetic Tradition in Japan. In *Art Creativity and the Sacred*, edited by Diane Apostolos-Cappadona, pp. 138-154. New York: Crossroad Publishing Company.
- Sontag, Susan (1969) The Aesthetics of Silence. In *Styles of Radical Will*, pp. 3-34. New York: Farrar, Straus and Giroux.
- Stambaugh, Joan (1990) *Impermanence is Buddha-nature: Dōgen's Understanding of Temporality*. Honolulu: University of Hawaii Press.
- Takemitsu, Toru (1987) My Perception of Time in Traditional Japanese Music. Translated by Daniel Starr and Syoko Aki. *Contemporary Music Review* 1: 9-13.
- Tillich, Paul (1986) Art and Ultimate Reality. In *Art, Creativity and the Sacred*, edited by Diane Apostolos-Cappadona, pp. 219-235. New York: Crossroad Publishing Company.
- van den Toorn, Pieter. (1983) *The Music of Igor Stravinsky*. New Haven: Yale University Press, 1983.
- Werner, Alfred (1969) *The Graphic Works of Odilon Redon*. New York: Dover.

Contemporary Music Review
1993, Vol. 7, pp. 203-21
Photocopying permitted

Time and Li

Jerome Kohl

University of Washington

From his earliest piece innovative treatment c only of such audacious examination of the "st seven operas, together 2) and *Lucifer's Dream* (5 which links substance

KEY WORDS Karl processes

Innovative treatme Stockhausen's mus principle is the tr continuum (Stockh with *Gruppen* and *Z* to most previous "

His current proje on such an audacic that reason alone. named for the day life, including birth and time is also a p Michael and Lucif Michael opposes f

In 1971 Stockha from about .00025 minutes, possibly downward anothe several movemen However, *Light*, additional four oc "Duration registe octave-notation s middle C and the 4, the next higher range.¹