Western classical music has been traditionally divided into melody, harmony, and rhythm. Color, or timbre, or just plain sound was never part of the basic triumvirate but was relegated to a separate discipline. Writing orchestral music, a composer like Brahms would generally begin with a piano score and work out his orchestration later as a separate step in his creative process. Basically sound was a means of conveying melody, form, programmatic scheme, and other elements and was not considered very meaningful in itself.

But in the first two decades of the twentieth century this attitude began to change radically. Even in the meticulous doublings of Mahler's symphonies we can sense a greater concern for the choice of tone color, and with the Impressionistic works of Debussy and Ravel color becomes so crucial that it would be unthinkable to try to reduce the *Nocturnes* or *Daphnis and Chloe* to a piano arrangement. By now it is safe to say that most composers are more concerned with their choice of sounds than with their choice of melodies, harmonies, or rhythms. For a time the term "sound piece" was frequently used, particularly in reference to the more coloristic works of Penderecki and Ligeti, but in fact the term could be used with some justification for nearly all music written today. Sound has become almost an obsession for contemporary composers.

As the emphasis shifted to sound itself, the palette provided by traditional voices and instruments sometimes seemed too limited, and composers began looking for new colors. Gradually they admitted more and more sounds into the vocabulary of music, often to the extreme distaste of audiences. As early as 1912 the Italian Futurist Luigi Russolo began building noisy instruments he called *intonarumori* and, later, *psofarmoni*. Though neither the instruments nor their scores are extant, it is clear that these devices produced a variety of everyday noises and that Russolo's reputation for loud volumes was well deserved. Meanwhile all the traditional instruments developed new sound possibilities, and the evolution of electronics provided another large set of new sounds.

The piano proved to be especially rich. In 1925 Henry Cowell wrote *The Banshee* (see New World 80203-2, *Sound Forms for Piano*), a bizarre work in which the pianist plays directly on the strings. In 1938 John Cage wrote a work for dance called *Bacchanale* that is played on the keyboard but with various objects inserted in the strings to cause unpianistic sounds. These seminal works were followed up by pieces by many other composers, who gradually accumulated a large repertoire of works for "prepared piano," player piano, and "timbre piano" and developed an immense vocabulary of damping techniques, plucking techniques, harmonics, and other special effects obtainable on a normal concert grand. (See New World 80203-2.) The piano also was useful in combination with voices and wind instruments, which can ring sympathetic vibrations from piano strings.

A variety of special techniques have now become standard vocabulary for wind instruments. Many sliding effects or glissandos are now commonly used on almost all wind instruments, as is flutter-tonguing. Reed players frequently employ sharp explosive attacks known as slap-tonguing, and sometimes partially stop the reed with their tongue to produce "subtones" or "echo tones."
players have even mastered the technique of "circular breathing," which enables them to inhale while playing so that the tone never stops. Brass players now carry an ever-expanding collection of mutes, and produce many special effects by opening the valves only partially. Key clicking and valve thumping offer percussive possibilities, and it is even feasible to interchange mouthpieces—for instance, to play a trombone with a bassoon reed.

One of the most fruitful areas of exploration for wind players has been multiphonics. By employing special "false" fingerings and overblowing in special ways, two or even three different tones may be produced simultaneously. Generally these tones emerge with colors that can be quite effective. The vocabulary of multiphonics has become particularly large and well defined in the flute. Other types of multiphonics can be produced by humming one tone and playing another. In some cases wind players are asked to produce whishing sounds by simply blowing air through their instruments. Of course, composers cannot take all the credit. Performers have had a particularly important role in developing these and other virtuoso techniques, as Eric Salzman has shown (see New Music for Virtuosos, New World 80541-2). Jazz players also deserve credit. In fact, John Coltrane was probably the first person to use multiphonics successfully.

Relatively few bizarre effects are available on stringed instruments. One may bow on the fingerboard or below the bridge, play with the hairs of the bow loosened, and tap the instrument in various ways, and that is about it. However, the possibilities for making subtle adjustments in tone color are enormous. One may bow close to the bridge (sul ponticello), far from the bridge (sul tasto), and anywhere in between. A pitch may be shaded in different ways by playing it on an open string, on a stopped string, or as some sort of harmonic, not to mention different ways of bowing each of these. Plucked notes may be produced at any point on the string, with either hand, with a variety of plectrums, and with the option of a few special techniques such as snap pizzicato. The degree and speed of vibrato may also be varied in all these cases, sometimes bringing about a drastic change in the effect of a tone. Thus any note may be colored according to variations along four or five different parameters, providing an almost unlimited number of subtle nuances. In the nineteenth century only the more gross timbral distinctions were indicated, but now, with the increasing importance of sound, one frequently encounters scores where string colors are defined quite specifically.

Another variable that has interested contemporary composers is the way sound is directed into space. Henry Brant was particularly concerned with these possibilities, some times composing works to be played in the round, with the players surrounding the audience. (See New World 80211-2, Winds of Change, for Henry Brant's Verticals Ascending) In other scores brass players, for example, may be instructed to face different directions as they play or to swing their horns from side to side.

Meanwhile a whole new vocabulary of sound became available with developments in electronics. From the first electronic instruments, such as the theremin and the Hammond organ, engineers and musicians quickly developed a variety of devices for generating and manipulating purely electronic tones. Through the fifties and early sixties most of this work had to be done in large, expensive studios, but as circuitry became more and more miniaturized, remarkably flexible self-contained synthesizers came on the market at moderate prices. Soon the digital circuitry of computers also began to be applied. Sometimes the computer has taken the sound concept all the way from the composer's program to a finished audio tape, and sometimes it has been hooked up in combination with electronic synthesizing equipment.
For some contemporary composers the advantage of using electronics was primarily that it gives better control over the way complex music will be heard. Others found applications in context with traditional instruments, employing electronic circuitry to amplify them, imitate them, distort their timbres, feed their sounds back a few seconds later, and so on. Some saw spatial possibilities and began twirling prerecorded sounds around from one loudspeaker to another. Others, more recently, have become interested in the possibilities of automated music and have designed devices that can compute endless variations of fresh electronic sounds by themselves or perhaps with the help of some other form of input, such as weather information. But for most composers—particularly Edgard Varèse—the attraction to the machines was also a basic attraction to the new sounds that were to be found within their circuitry.

Why this obsession with sound? Of all contemporary composers, perhaps Varèse best clarified this, and not only in his music but in words. He defined music as "organized sound" and frequently spoke of "pure sound." He was not interested in the relatively abstract notions of modes or variations or harmonic progressions. He was concerned with the physical and sensual immediacy of sound itself. Sound was his raw material, his point of departure. His jagged rhythms grew out of whatever sonorities he was working with, and even the formal shapes of his pieces evolved out of this material rather than out of any intellectual formal ideas. Varèse's way of working was strictly intuitive, and somewhat mystical. He spoke of a new dimension in music which he called "sound projection," which he defined as "that feeling that sound is leaving us with no hope of being reflected back, a feeling akin to that aroused by beams of light sent forth by a powerful searchlight—for the ear as for the eye, that sense of projection, of a journey into space" (New Instruments and New Music, from a lecture given at Mary Austin House, Santa Fe, New Mexico, in 1936).

Chou Wen-chung, in his excellent article "Asian Music and Western Composition" in the Dictionary of Contemporary Music, clarifies Varèse's attitude and also draws an arresting parallel with Asian musical principles:

Varèse's concept of music as “organized sound” and of sound as “living matter,” which in itself is of historic consequence, is again a modern Western parallel of a pervasive Chinese concept: that each single tone is a musical entity in itself, that musical meaning lies intrinsically in the tones themselves, and that one must investigate sound to know tones and investigate tones to know music. This concept, often shrouded in poetic and mystic metaphors, is fundamental to many Asian musical cultures. It is manifest in the great emphasis placed on the production and control of tones, often involving an elaborate vocabulary of articulations, modifications in timbre, inflections in pitch, fluctuations in intensity, vibratos, and tremolos, as in ch’in music.

Chou also calls attention to Webern's music, where, particularly in the early works, so much care is taken to define the specific articulation, dynamics, timbre, and vibrato of almost every note.

A fundamental aesthetic distinction is involved here. In attempting to grapple with the basic principles, Western scholars have often said that a single sound in and of itself is meaningless, and that music becomes meaningful only by setting up relationships between notes. But for many musicians in non-Western cultures, for Varèse, perhaps for Webern, and for most composers alive today, a single tone can be expressive all by itself, because it has a color, a volume level, an attack
pattern, and a duration of its own. Sound itself has become elementary and meaningful, as important as the melodies, harmonies, and rhythms that may result from combinations of different sounds. One contemporary composer, Philip Corner, has stated the principle explicitly by programming One Note Once as a work in itself. The principle is also implied in "moment music," best exemplified by Stockhausen's Momente. This rather long piece is made up of isolated "moments," which may be performed in various sequences. There is little connection between one moment and another, and no overall dramatic shape to tie the piece together. The listener is asked to appreciate each moment for its own sake.

Sound then has become a primary element, if not the primary element, in almost all contemporary classical music, particularly that written since World War II, and this is probably the greatest fundamental difference between the music of our time and the classics of the nineteenth century. Even the contrast between nineteenth-century tonality and twentieth-century atonality can be heard as a corollary to this broader distinction. The twentieth-century fascination with dissonance is really a fascination with the sound of dissonance, and if the dissonances no longer resolve to consonances, it is simply because composers are handling them as sounds rather than as harmonies. And who is to say that a sound is not at least as valid as a harmony? One might easily argue that sounds are more valid, since they are acoustical and perceptual realities, while harmonies are to some extent intellectual abstractions. Contemporary listeners have frequently complained about the current absence of agreeable melodies, harmonies, and rhythms, and often with some justification. The point they usually miss is that sound itself has tended to replace these elements. And in the best contemporary music these sounds are as vital as any melodies, harmonies, or rhythms have ever been.

**The Music**

Numerous specific examples of a concern for sound can be found in the music on this recording. In the Chihara, for example, consider the coloristic value of the delicate brush rolls on the suspended cymbal, or the jingle of suspended bells at the very end of the piece, an effect that would be quite difficult to explain in harmonic terms but that sounds right simply because it is the right sound. One may also hear a number of bent notes in Chihara's flute part, generally going flat at the ends of phrases. Such a note is not merely a note but a special kind of note, a specific sound.

In the trombone part at the beginning of the Reynolds one also hears notes that are much more than simply notes. They could perhaps be better described as wails or gestures. Reynolds is particularly inventive in his exploration of sounds in this piece, with many special instrumental effects, such as the hum-and-play passages in the trombone. And the tape part, of course, explores a broad palette of colors as well.

Perhaps the most striking thing about the Kim is its consistent preference for the upper register. Nineteenth-century composers generally balanced their pieces between high and low, but contemporary composers sometimes write pieces that are mostly high or mostly low, simply because they are working with color, and the colors they need happen to be largely in one register. The Kim also demonstrates the contemporary approach to texture as color in those passages where the violin, soprano, and piano scramble after one another on a three-note cluster.

In one sense the Chou may be seen as traditional orchestration, since it is basically a setting of five traditional Chinese melodies. But he goes far beyond what one normally expects from orchestration
and carries the work into the realm of a true sound piece. The basic melodies are heard through a kaleidoscope of constantly changing wind colors, harp colors, and special doublings and octave reinforcements.

ROGER REYNOLDS
*From Behind the Unreasoning Mask* (1975)
Roger Reynolds (born 1934) studied composition with Ross Lee Finney and Roberto Gerhard at the University of Michigan. He received a Fulbright to work in the Cologne electronic music studios, went to France and Italy on a Guggenheim, and from 1966 to 1969 was a Fellow of the Institute of Current World Affairs in Japan. Since then he has taught at the University of California in San Diego, where he also served as director of the Project for Music Experiment. Much of his work has been in multimedia.

The composer has provided the following comments:

*From Behind the Unreasoning Mask* presents an interplay between a four-channel tape (at first sparse, but becoming a dense sonic tapestry) and live performers who respond in diverse ways both to the prerecorded sounds and to each other. Imitation, contradiction, and independence (even between the percussionist's hands, or the breath- and hand-impulses of the trombonist) variously guide the three performers in an evolving strategy for penetrating the growing authority of the tape. The work is carefully notated, but there are improvisatory details. The trombone part is a veritable dictionary of special techniques recently made possible on that instrument.

The four-channel tape is the metaphoric "Mask" of the title behind which the performers act. The forceful, prerecorded events that define the tape are arranged in precisely measured time patterns that, in general, accelerate or retard during the course of the work, constituting a system of reference cues for the performers. Widely spaced in time, these prerecorded attacks—electronically modified instrumental sounds—are meant to evoke a kind of "Unreasoning" monolithic authority, sometimes imitating, sometimes contrasting with, the live sounds.

PAUL CHIHARA
*Ceremony II* ("Incantations") (1974)
Paul Chihara (born 1938) studied composition with Robert Palmer at Cornell, Gunther Schuller at Tanglewood, Nadia Boulanger in Paris, and Ernst Pepping in Berlin. Until mid-1977 he taught at the University of California at Los Angeles, where he directed the Twice Ensemble, which he founded. His works have been played by the Chicago Symphony, the Los Angeles Philharmonic, the Baltimore Symphony, the London Symphony, the New Philharmonia of London, the St. Louis Symphony, and the Houston Symphony. He has received awards from the Fromm Foundation, the Guggenheim Foundation, and the National Endowment for the Arts.

*Ceremony II* ("Incantations") is dedicated to flutist Paul Dunkel, and it is the agile cadenzas and decorative melodies of the flute that dominate the work. By contrast, the two cellos tend to move in regular rhythms, and the percussionist adds washes of cymbal and vibraphone color. The work is based on a five-note set: A, F, E, B flat, D.
CHOU WEN-CHUNG
Suite for Harp and Wind Quintet (1950)
Chou Wen-chung (born 1923) came from China to this country at the end of World War II and studied at the New England Conservatory, Columbia University, and privately with Varèse. A founder of the American Society of University Composers, he has had several college posts, including being on the Columbia University faculty. Chou's Chinese heritage is clearly reflected in his coloristic music, much of which is quite delicate in nature, and some of which employs Chinese titles or texts. His pieces tend to be loosely structured, and sometimes a sound or theme may seem almost accidental, but it is the controlled accident of a fine calligrapher, not the type of accident found in aleatory music. At the same time, he is a master of Western instruments and composition techniques.

The Suite for Harp and Wind Quintet uses Chinese themes. In general these are not subjected to harmonic or contrapuntal elaboration but are simply colored in a basically heterophonic fashion. The five sections of the work are marked Moderato tranquilla, Adagio molto espressivo, Graziosa con moto, Lenta quasi lamento, and Poco allegro festivo.

EARL KIM
Earthlight (1973)
Earl Kim (born 1920) studied with Sessions and Schoenberg. He has received a Prix de Paris, a Brandeis Creative Arts Award, a Guggenheim Fellowship, and a Koussevitzky Foundation commission (for Earthlight). He has taught at Princeton and Harvard. His parents are Korean, but he was born in California, and his style is basically Western. He has worked in a variety of instrumental and vocal forms and sometimes, as in Exercises en Route, with multimedia.

Earthlight is subtitled "romanza for violin con sordino, high soprano, piano, and lights." Spot-lights go up on individual musicians when they are performing and fade out when they are not. The work begins with a unique section involving only three pitches, A, C sharp, and D sharp, and ends with a quiet eighth-note texture on three other pitches, B flat, D, and E. The text is adapted from several works of Samuel Beckett:

That old moonlight on the earth again, that old starlight on the earth again. [Words and Music]
To him I brought this emptied heart, these emptied hands, this mind ignoring, this body homeless, these emptied hands, this body homeless, this emptied heart to him. I brought this mind ignoring, this mind ignoring, to him I brought this emptied heart, this body homeless, these emptied hands, this body homeless, this mind ignoring, these emptied hands, this emptied heart. [Watt]
It's darkening, the earth is darkening. [Cascando]
Before the sea, before the earth, before the sky, at the window, against the air, against
the air, opening shutting grey grey black at
the window grey black. [The Unnamable]
I see my light dying. [Endgame]
To love him my little reviled, my little rejected
to have him, my little to learn him forgot,
abandoned my little to find him, to love him
my little reviled, my little rejected to have
him, my little to learn him forgot abandoned
my little to find him. [Watt]
The flames the tears the stones so blue so calm
the stones so calm. [Waiting for Godot]
One earthlit night, white last moon, in the
earthlight sole regret, white last moon not
even not even that. [Malone Dies]
All dark, all still. [Play]
At me too someone is looking, of me too
someone is saying, He is sleeping, he knows
nothing, let him sleep on. [Waiting for Godot]

SELECTED BIBLIOGRAPHY

Paul Chihara
———. "Studies of Melody in Four Twentieth Century Composers." Dissertation Abstracts (June 1968), 5086a.

Chou Wen-chung
———. "A Varèse Chronology." Perspectives of New Music (fall–winter 1966), 7–10.

Roger Reynolds
SELECTED DISCOGRAPHY

**Paul Chihara**


**Chou Wen-chung**

*Cursive.* Harvey Sollberger, flute; Charles Wuorinen, piano. CRI CD 691.

*Echoes from the Gorge.* New Music Consort. Albany TROY 155.

*Landscapes.* Peninsula Festival Orchestra, Thor Johnson conducting. CRI CD 691.

*Pien.* Group for Contemporary Music, Harvey Sollberger conducting. CRI CD 691.

*YuKo.* Group for Contemporary Music, Harvey Sollberger conducting. CRI CD 691.

*The Willows Are New.* Yi-an Chang, piano. CRI CD 691.


**Earl Kim**

*Bagatelles.* Robert Helps, piano. CRI SD 288.

**Roger Reynolds**


*Coconino . . . a shattered landscape.* Arditti String Quartet. Gramavision R21S 79440.


*The Ivanov Suite.* New World 80431-2.

*Transfigured Wind II.* John Fonville, flute; San Diego Symphony Ensemble, Harvey Sollberger conducting. New World 80401-2.

*The Vanity of Words.* Philip Larson, baritone. Neuma 450-78.

*Versions/Stages.* New World 80431-2.

*Voicespace I.* Philip Larson, baritone. Lovely Music LCD 1801.

*Voicespace III.* Philip Larson, baritone. Lovely Music LCD 1801.

*Voicespace IV.* Philip Larson, baritone. Lovely Music LCD 1801.


Producers: Andrew Raeburn (Reynolds, Chihara); Elizabeth Ostrow (Chou, Kim)

*From Behind the Unreasoning Mask* was recorded at Capitol Studios, Hollywood

Recording engineer: Carson Taylor

Assistant engineer: Hildegarde Hendel

Tape editor and mixing engineer: Jerry Bruck, Posthorn Recordings

All other compositions recorded at Columbia Recording Studios, 30th Street, New York

*Ceremony II*

Recording and editing engineer: Jerry Bruck, Posthorn Recordings

Mixing engineer: Stan Tonkel

*Suite for Harp and Wind Quintet*

Recording and mixing engineer: Stan Tonkel

Tape editor: Don Van Gordon, Soundwave Recording Studios
Earthlight
Recording engineer: Buddy Graham
Tape editor: Don Van Gordon, Soundwave Recording Studios
Mixing engineer: Stan Tonkel

Digital mastering: Dirk Sobotka, SoundByte Productions, Inc., NYC
Cover design: Bob Defrin Design, Inc., NYC
Library of Congress Card No. 77-750592

The original recordings were made possible with a grant from the Rockefeller Foundation.
This project is supported in part by a grant from the National Endowment for the Arts. This
recording was also made possible with a grant from Francis Goelet.

FOR NEW WORLD RECORDS:
Herman E. Krawitz, President; Paul Marotta, Managing Director; Paul M. Tai, Director of Artists
and Repertory; Lisa Kahlden, Director of Information Technology; Virginia Hayward,
Administrative Associate; Mojisola Oké, Bookkeeper; Ben Schmich, Production Associate.

RECORDED ANTHOLOGY OF AMERICAN MUSIC, INC., BOARD OF TRUSTEES:
David Hamilton, Treasurer; Milton Babbitt; Emanuel Gerard; Adolph Green; Rita Hauser; Herman
E. Krawitz; Arthur Moorhead; Elizabeth Ostrow; Don Roberts; Patrick Smith; Frank Stanton.

Francis Goelet (1926-1998), Chairman
© 1977 © 1998 Recorded Anthology of American Music, Inc. All rights reserved. Printed in USA.

ROGER REYNOLDS (b. 1934)
1 FROM BEHIND THE UNREASONING MASK (publ. C. F. Peters Corp.) 17:13
Miles Anderson, trombone; Tom Rainey, percussion; Roger Reynolds, assistant percussionist

PAUL CHIHARA (b. 1938)
2 CEREMONY II ("INCANTATIONS") (publ. C. F. Peters Corp.) 6:33
Paul Dunkel, flute; Timothy Eddy, cello; Fred Sherry, cello; Richard Fitz, percussion

CHOU WEN-CHUNG (b. 1923)
3 SUITE FOR HARP AND WIND QUINTET (publ. C. F. Peters Corp.) 6:45
Cynthia Otis, harp; Paul Dunkel, flute; Stephen Taylor, oboe; Virgil Blackwell, clarinet; Frank
Morelli, bassoon; Stewart Rose, French horn

EARL KIM (b. 1920)
4 EARTHLIGHT (publ. Mobart Music Publications) 15:06
Merja Sargon, soprano; Martha Potter, violin; Earl Kim, piano

Originally released as New World LP NW 237

NO PART OF THIS RECORDING MAY BE COPIED OR REPRODUCED WITHOUT
WRITTEN PERMISSION OF R.A.A.M., INC.
LINER NOTES © Recorded Anthology of American Music, Inc.