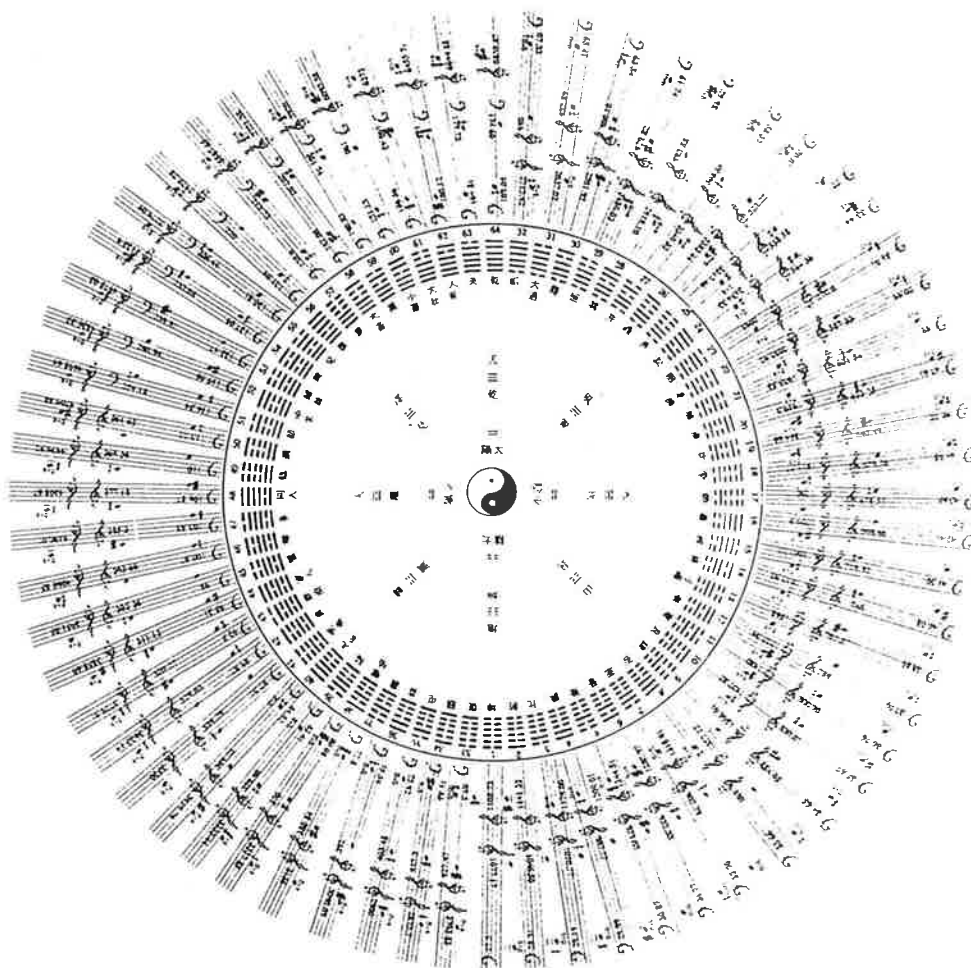


Volume 2 No. 1 1992

LMT

Leonardo Music Journal

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International
Society for the
Arts, Sciences and
Technology



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Information and Editorial Guidelines for Contributors

Aims and Scope

Leonardo Music Journal (LMJ) is an international journal for contemporary composers and sound and multimedia artists. It features articles written by composers and artists about their own work. *LMJ* has three main editorial areas. First, it is particularly concerned with the interplay between new technologies and music, whether in the composing, presenting, recording or dissemination of sound, music and multimedia works. Second, *LMJ* seeks to document ways in which contemporary science is changing our understanding of sound and music, and other ways that science is relevant to contemporary composers and sound artists. Third, it seeks to document the work of composers and sound artists developing new multimedia art forms which combine sound with other media, particularly works which take advantage of new multimedia and interactive technologies.

In addition to documenting the work of composers and sound artists, *LMJ* seeks to address theoretical and historical issues that are relevant to contemporary sound and music making. Issues in experimental sound works and music that do not utilise contemporary science and technology are also addressed to the extent that they represent important elements in the development of new directions in contemporary music, sound and multimedia arts worldwide.

Articles by Composers and Artists

Composers and artists are invited to submit illustrated texts dealing with their current work or reviewing a number of works carried out over an extended period. These texts, which may be written with co-authors, should discuss objectives, approaches, materials and techniques; they may include statements of beliefs and speculation—which should be denoted as such. To provide meaningful information to composers and other artists and art teachers, nontraditional modes of working should be described in adequate detail, and material specifications and sources should be given. Since one of the Journal's primary purposes is to encourage composers and artists to write about their work, the interview format is not accepted. The composers or artist must always be the first author of the text.

General Articles, Historical and Theoretical Perspectives

Authors are invited to submit illustrated texts on subjects of interest to composers and artists, such as new developments in the physical and biological sciences, engineering, mathematics, computer science, theory, history, philosophy and education. Critical and analytical writings about contemporary music and art are encouraged and should treat issues and tendencies beyond the work of a single composer or artist. Discussions bearing on the relationships between disciplines are of special interest to the journal.

Technical Articles

Authors are invited to submit illustrated texts dealing with specialized technical topics. Texts dealing with new materials, the application of new technologies, conservation or restoration of materials used by contemporary artists, and health hazards of materials are encouraged.

Music/Science Forum

The Music/Science Forum features conference and meeting reports, reviews of group art and technology shows, course descriptions of interdisciplinary university teaching programs, and descriptions of organizations dedicated to the interaction of music,

science and technology. Manuscripts should be 500 to 1000 words and may include one illustration.

Manuscript Submission and Acceptance Procedure

An Editorial Board composed of the Journal's Co-Editors determines *Leonardo Music Journal's* content. The review process includes a peer review of all submitted articles, including those solicited by the editors. A request by an editor for a manuscript is no guarantee that it will be published.

Prior to developing a complete manuscript, authors must submit an outline to the editors, who will make a preliminary determination of the topic's relevance to the Journal's aims and scope and provide suggestions for developing a manuscript.

Manuscripts should be sent to the Main Editorial Office or to one of the International Co-Editors. When submitting a manuscript, authors must include a statement indicating that the manuscript has not been published previously and is not being submitted for publication elsewhere.

Authors are notified of acceptance, rejection or the need for revision within four months. Texts are judged on the basis of relevance to the aims and scope of the Journal, originality, rigor of thought and the use of straightforward and precise prose. Texts should be condensed as much as possible. After a manuscript is accepted, it is edited and returned to the author for approval. Edited texts will not be published without the author's approval. *Leonardo Music Journal* is an archival journal and does not accept manuscripts if rapid publication is required. Typical time between submission of a manuscript and appearance in print is one to two years. Adherence to these Guidelines minimizes revisions and shortens the overall editorial processing time.

Preparation of Manuscripts

Texts may fall into either of two classifications: (1) *Articles* of between 2500 and 5000 words, and (2) *Notes* of fewer than 2500 words. Manuscripts should be typewritten, at least double-spaced, and submitted in duplicate. Manuscripts are not returned to authors.

All texts must be submitted in English. Authors not fluent in English should write in their native language, then have the text translated before submitting it.

Since the Journal is read in many countries, authors should avoid esoteric words, non-English words, slang, idioms and colloquialisms. Abbreviations and special terms, especially highly technical terms, should be defined in the text or in a glossary at the end of the text. Acronyms should be spelled out on the first appearance.

Authors should review previous *Leonardo Music Journal* texts for general style and format. Those inexperienced in preparing manuscripts for publication should have a knowledgeable colleague review their manuscripts before submitting them. The *Leonardo Music Journal* staff will not make major editorial revisions and cannot accept manuscripts requiring such revisions.

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Titles

Titles must be descriptive, clearly reflecting the contents of texts and the type of artwork discussed in order to assist indexing and information retrieval services. The use of a two-part title may facilitate meeting this requirement.

Abstracts

An abstract of 200 or fewer words must accompany each *Article* or *Note* summarizing its essential points.

Appendices

Extremely technical or detailed material should be placed at the end of the text in one or more appendices, which should be referred to in the text.

Illustrations

Drawings, sketches, photographs and other graphic work are encouraged. Photographs must have a glossy finish and all illustrations must be ready for reproduction. One color and generally as many as eight black and white illustrations may be used in an *Article*. *Notes* generally contain a limit of four illustrations. No responsibility is assumed for damage to works submitted for reproduction. Photographs of artists/authors are published only when the subjects are an integral part of the artwork, as in the case of performance art. Illustrations are returned to the author after publication. Detailed Illustration Guidelines are available from the Main Editorial Office.

References and Notes

The use of references is strongly encouraged. A list of general references in the form of a bibliography is also desirable. Footnotes are not used; such notes should be formatted as references. References should be numbered in the citation order and listed at the end of the text. Reference numbers should appear in brackets in the text and each number used only once. Discographies are encouraged, to direct readers to recordings of the author's work. The following forms should be used when referring to:

1. *Books and Exhibition Catalogues*: author, title of book (place of publication: publisher, date) page numbers. Example: L. Artel, *Visual or Plastic Arts* (London: John Doe Press, 1976) p. 5.
2. *Periodicals*: author, "title of article", name of periodical, volume/issue number, pages (date). Example: L. Artel, "Art and Technology", *Leonardo* 9, No. 1, 435-441 (1976).

Music Submissions

Leonardo Music Journal publishes a series of compact discs containing original sound and music works. However, *Leonardo Music Journal* does not review unsolicited music. Proposals for publishing an entire compact disc may be submitted to the Main Editorial Office. Compact-disc proposals must be for anthologies of the works of a number of composers. Proposals for compact discs containing the work of a single composer are not considered.

Proofs and Offprints

Proofs of texts are sent to authors for correction of typesetting errors. No textual changes are possible at this time.

Twenty-five offprints are provided to authors free of charge. Authors may place orders for additional offprints when returning corrected proofs. At this time they may also purchase individual copies of the complete issue in which their text appears.

Special Circumstances

Authors wishing to explore options outside of these Guidelines should contact the Main Editorial Office.

INTERACTION

NEW MUSIC FOR GAMELAN

Leonardo Music Journal
CD Series Volume 2

A Collection of New Gamelan Works by Six Composers
curated by Jody Diamond

- | | | |
|---------------------|---|-------|
| 1. A.W. SUTRISNA | <i>Meeting</i> | 14:42 |
| 2. BARBARA BENARY | <i>Vancouver</i> | 5:05 |
| 3. I WAYAN SADRA | <i>Work in Progress</i> | 8:43 |
| 4. LARRY POLANSKY | אלֵּהֵטָא (Al Het) | 1:32 |
| 5. RAHAYU SUPANGGAH | <i>Paragraph</i> | 14:11 |
| 6. LOU HARRISON | <i>Concerto for Piano with Javanese Gamelan</i> | 23:19 |

with performances by

BANG (Bay Area New Gamelan) Jody Diamond, Director

Gamelan Pacifica Jarrad Powell, Director

Gamelan Son of Lion Barbara Benary, Director

INTERACTION

NEW MUSIC FOR GAMELAN

Leonardo Music Journal
CD Series Volume 2

1. A. W. SUTRISNA *Meeting*

Performed by Gamelan Pacifica • Jarrad Powell, Director

PLAYERS Iris Antman • Tom Alexander • Merlin Coleman • Mike Dryfoos • Tom Fallat • Karin Gause • Signy Jakobsdottir • John Keliehor • Jim Madara • Daniel Maguire • Molly McNamara • Steven Miller • Tom Nast • Maria Omo • Jarrad Powell • Susan Seneft • Matthew Sperry • Supardi • A. W. Sutrisna
INSTRUMENTATION Central Javanese gamelan (iron with brass) built by Suhirjan of Yogyakarta • snare drum • Tibetan temple bells • Javanese water-buffalo bells
ENGINEERS Steven Miller • Tom Fallat • Recorded at Sound Sound, Seattle, Washington, 23 November 1991.

2. BARBARA BENARY *Vancouver*

Performed by Gamelan Son of Lion • Barbara Benary, Director

PLAYERS Barbara Benary • Philip Corner • Jenny DeBouzek • David Demnitz • Nick Didkovsky • Rosalie Donatelli • Yves Duboin • Miguel Frascioni • Daniel Goode • Daniel Licht • Laura Liben • David Simons
INSTRUMENTATION iron Javanese-style gamelan built by Barbara Benary
ENGINEER Brian Koonin • Recorded at Danse Mirage Theatre, New York, New York, 20 March 1987.

3. I WAYAN SADRA *Work in Progress*

PLAYERS David Fuqua (*gender*) • Jody Diamond (*gender* and voice) • John Puterbaugh (electronics) • I Wayan Sadra (*gender* and *suling*)

INSTRUMENTATION three bronze *gender* (*slendro*, *pelog barang* and *pelog bem*) from Gamelan Lipur Sih, built by Tentrem Sarwanto of Surakarta • Balinese *suling* • voice • tuned aluminum tubes with rubber mallets, built by Woodstock Chimes • Lexicon (LXP-15) digital effects processor

ENGINEER John Puterbaugh • Recorded at the Bregman Electroacoustic Studio, Dartmouth College, Hanover, New Hampshire, November 1991.

4. LARRY POLANSKY *אל חטא (Al Het)*

PLAYERS Gino Robair Forlin (percussion) • Jody Diamond (voice and percussion)

INSTRUMENTATION small drum • *slendro gender* and *pelog gambang* from the Gamelan Si Madeleine/Si Darius, built at Mills College by Lou Harrison and William Colvig • voice

ENGINEERS Larry Polansky • Steve Curtin • Recorded at the Center for Contemporary Music, Mills College, Oakland, California, 16 June 1988.

5. RAHAYU SUPANGGAH *Paragraph*

Performed by Gamelan Son of Lion • Barbara Benary, Director

PLAYERS Barbara Benary • Philip Corner • David Demnitz • Karen Gilbert • Daniel Goode • Tomoko Hayashi • Alan Katz • Christopher Pashoukos • I Wayan Sadra • Rahayu Supanggah • Adam Weiner

INSTRUMENTATION iron Javanese-style gamelan built by Barbara Benary • *erhu* • piano • bass trombone • violin • *didjeridoo* • clarinet • electric bass

ENGINEER Ben Manley • Recorded in concert at Greenwich House Music School, New York, New York, 20 November 1991.

6. LOU HARRISON *Concerto for Piano with Javanese Gamelan*

Performed by BANG (Bay Area New Gamelan) • Jody Diamond, Director

PLAYERS Belle Bulwinkle (piano) • Joan Bell-Cowan • Jody Diamond • Linda Dobbins-River • Carol Dugan • Gino Robair Forlin • Miguel Frascioni • Peter Garrelick • Brad Hartfield • John Kelley • Caitlin McClure • Jarrad Powell • Eric Reider • Rob Rosen • Carter Scholz • Susan Seneft • Andrew Weintraub

INSTRUMENTATION retuned piano • aluminum instruments of Gamelan Si Betty, built by Lou Harrison and William Colvig

ENGINEER Shafi Hakim • Recorded in the Ives Room at the Harrison/Colvig residence, Aptos, California, 17 July 1987.

Production Credits

Curator: Jody Diamond Project Coordinator: Rebecca Neeley

All recordings digitally remastered by Tom Erbe at the Center for Contemporary Music, Mills College, Oakland, California.

Interaction: New Music for Gamelan —An Introduction

Jody Diamond

Interaction: *New Music for Gamelan* is a diverse collection of new and important works for contemporary gamelan as an international orchestra. I am grateful for the opportunity to present these works and to discuss some of the aspects of their creation and notation. The composers have also contributed statements on their musical backgrounds and ideas, as well as some specific comments on the compositions. The compositions by Lou Harrison, Barbara Benary and Larry Polansky were written and recorded at different times and are important pieces that have been waiting for a chance to be heard. The pieces by Rahayu Supanggah, A. W. 'Dedek' Sutrisna and I Wayan Sadra are the result of a creative residency program that was sponsored by the National Endowment for the Arts International Activities Office and the Festival of Indonesia and coordinated by the American Gamelan Institute. I hope that these recordings and the thoughts and efforts of these exceptional artists will contribute to greater appreciation for international gamelan and the global interaction that created it.

THE RESIDENCIES

The three Indonesian composers, all well known for their skill and experience in new music, were participants in the group New Music Indonesia that toured the United States in the fall of 1991 as part of the Festival of Indonesia in Performance. For two of the residencies, well-established gamelan groups were selected that had made a significant contribution to the development of American gamelan through a decade of composing and performing new music for gamelan. Sutrisna worked with Gamelan Pacifica in Seattle, Washington, and Supanggah worked with Gamelan Son of Lion in New York City. Sadra was invited to Dartmouth College in New Hampshire, where he became the first Indonesian composer in residence at the Bregman Electroacoustic Music Studio (at Dartmouth) and worked with the newly formed Gamelan Lipur Sih. In the six weeks these composers worked with their American counterparts and students, their accomplishments (only partly represented here) were remarkable.

The pieces from the residencies are significant because they allowed for artistic collaboration between the composer and the musicians. This important step in bringing new Indonesian music to the United States had a long history. In 1988–1989, I worked in Indonesia, assisted by Larry Polansky and Sadra, on a national survey of composers and contemporary music. In over 60 interviews with composers from Sumatra, Java and Bali, I often asked, "Do you

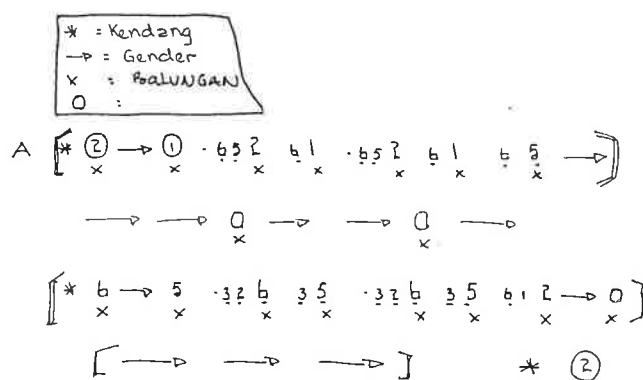


Fig. 1. Detail of notation for *Meeting* by A. W. Sutrisna.

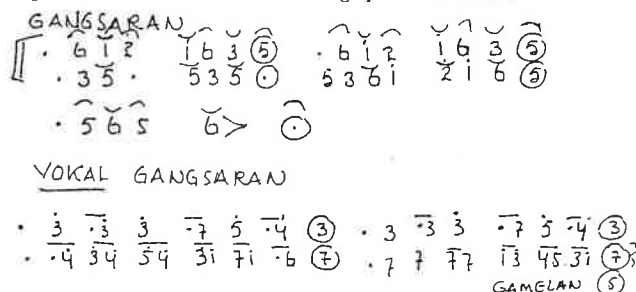


Fig. 2. Detail of notation for *Meeting* by A. W. Sutrisna.

have any pieces that could be played by gamelan groups outside of Indonesia so that your music could be heard by people interested in the new experiments for gamelan?" Repeatedly, the answer was that this would be very difficult, because many new gamelan pieces are created in rehearsal specifically for the musicians who are there at the time. It became clear that the best way for these works to be heard outside of Indonesia was for the composers to work directly with foreign groups and create pieces specifically for *those* players. This would allow the Indonesian composers to have the direct interaction upon which their compositional process is based.

NOTATION: COMMUNICATION AND DOCUMENTATION

Meeting

Meeting, by A. W. Sutrisna, was constructed through many rehearsals—the notation serves only as a reminder of the

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Received 8 September 1992.

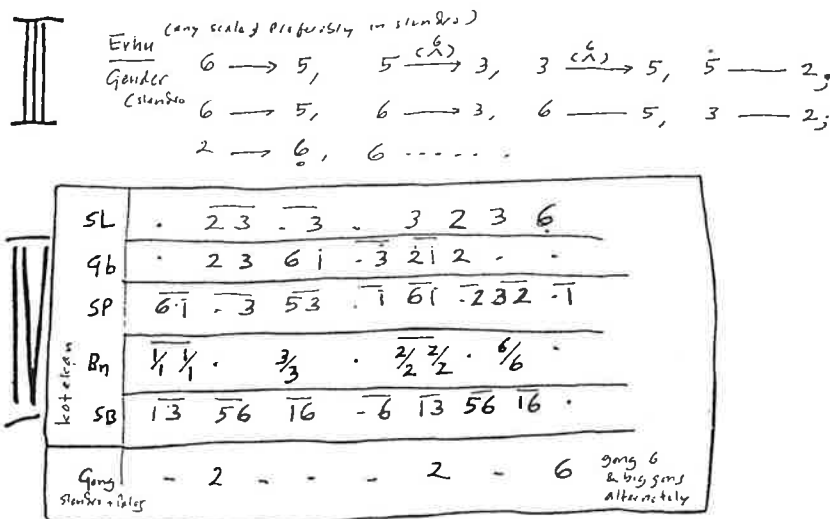


Fig. 5. Detail of notation for *Paragraph* by Rahayu Supanggah.

to be played with two mallets by one player, Polansky creates an instrument with an unfamiliar layout, one that the percussionist was literally playing for the first time. The key to good sight reading is that one's body already knows the instrument; as the eyes concentrate on the notation, almost unconscious signals direct the hands to the keys. But when a player looks at this notation for the first time, there is no habit, no familiarity that ties a particular note on the staff to a particular key on the instrument. The player must acquire physical knowledge of the new instrument as well as a musical understanding of the piece. It is also a challenge, although not nearly as complex, for the

singer to combine the two tuning systems of *slendro* and *pelog* into one scale; there are precedents for this in Javanese practice as well.

Paragraph

Rahayu Supanggah developed *Paraglyph* in rehearsal and created the notation only as a record after the piece had been learned (see Benary's director's statement and Supanggah's composer's statement). Figure 5 shows the notation for two of the five sections. The 6 followed by the line is the transition from the previous section: everyone struck a pitch 6 at the gong and then continued to play it randomly and, gradually,

tion shows the outline of a group improvisation: the instruments that are being played, including the *erhu* (played by Benary) and the *gender* (played by Supanggah), move freely from one pitch to the next (e. g. from 6 to 5, then from 5 to 3 with the use of 6, then from 3 to 5).

Section IV overlaps with the previous section as the instrumental parts are added one at a time. The instruments referred to in the notation are *slenthem* (SL), *gambang* (Gb), *saron panerus* (SP), *bonang* (Bn), *saron barung* (SB) and gongs 2 and 6 in *slendro* and *pelog*. After these instruments have entered, playing the interlocking parts as written (*kotekan*), additional instruments enter, improvising with the set texture. These instruments include piano, bass trombone, violin, *didjeridoo*, clarinet and *erhu*.

*Concerto for Piano
with Javanese Gamelan*

The piano part in Lou Harrison's *Concerto for Piano with Javanese Gamelan* is scored in Western notation, but the piano is retuned to the pitches of the gamelan (Fig. 6). The gamelan parts are a combination of completely written out orchestration and melodic and metric outlines interpreted and realized in Central Javanese style. The piano and the drummer served as conductors, setting the appropriate tempos for each section.

In the first and third movements, the gamelan players use a standard cipher notation that shows the parts for only the *bahungan* (melodic skeleton or framework) and the punctuating group of

Fig. 6. Detail of notation for *Concerto for Piano with Javanese Gamelan* by Lou Harrison.



instruments related to the gong (*pamangku irama* or cradle of time). All other parts—as many as eight different instrumental parts—are realized by the players themselves. These realizations are subject to re-interpretation by the players at each performance, as long as they stay within the melodic outline provided and follow the tempo levels set by the drummer. In the second movement (see Fig. 6), all the gamelan parts are completely scored in a texture that is sparser than full Javanese style. Since there is no drummer in this section, the tempo is set by the pianist. Through the entire piano score, the numbers of the gamelan score are written above each measure. This facilitates communication during rehearsals when it is necessary to either “start at the second gong” for the gamelan or “come in at the fourth system on page three” for the pianist. In rehearsals, the two ‘instruments’ (piano and gamelan) have to develop a common vocabulary for asking and answering questions, an interaction that is reflected in the piece.



The music on *Interaction: New Music for Gamelan* results from an international interaction of inspiration and instrumentation, running the gamut from highly pre-determined composition (אל הרצא [Al Het]) to almost completely open-ended improvisation (*Work in Progress*). Composition for gamelan pro-

vides a meeting ground for artists from different backgrounds who have common musical interests and sensibilities, and as such has become an important arena for international collaboration. The gamelan has truly become an international ensemble, offering composers and performers new possibilities in instrumentation, form, timbre, tuning, improvisation and interdisciplinary interaction. Composers from all over the world are becoming increasingly attracted to the gamelan as a forum for musical experimentation. To quote Lou Harrison: “I, for one, see no reason to write any other music ever again.”

Bibliography

For those interested in more extensive descriptions of gamelan instruments and practices, or further reading on contemporary gamelan music, see the following publications:

Judith Becker and Alan Feinstein, eds., *Karawitan: Source Readings in Javanese Gamelan and Vocal Music*, three volumes. (University of Michigan: Michigan Papers on South and Southeast Asia, 1984).

Judith Becker, *Traditional Music in Modern Java* (Honolulu, HI: Univ. of Hawaii Press, 1980).

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Rustopo, *Perkembangan Gamelan Kontemporer di Surakarta* (The Development of Contemporary Gamelan in Surakarta) (in Indonesian) (Surakarta, Indonesia: STSI). Distributed by the American Gamelan Institute.

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Jody Diamond is the director of the American Gamelan Institute. She is the editor of the international Indonesian arts journal Balungan, and is currently working on a book about Indonesian composers and contemporary music. She has taught at the University of California, Berkeley; Mills College, Oakland, California; and Dartmouth College, Hanover, New Hampshire.

Notes on the Compositions

MEETING

A. W. ('Dedek') Sutrisna, Jurusan Karawitan, STSI Surakarta, Ketingan, Jebres, Surakarta, Central Java, Indonesia 57126.

COMPOSER'S STATEMENT

I started studying gamelan when I was small. My grandfather was a *dhalang* (shadow theater master), the father of Mas Bono [B. Subono], also a *dhalang*, so I knew the sound of gamelan from the beginning of my life. I started studying seriously when I entered SMKI [conservatory high school] in 1976. As soon as I entered SMKI, I became involved in dance music. The compositions that I did in high school were often for dance and for my friends' final exams. I also immediately started working on small music compositions. When I entered ASKI [now STSI, college of the arts] I got even more experience, and as it turned out, more opportunity [to compose].

A serious work of music is hard to define. Usually it involves a lengthy process. Of course all my works are always serious, but there are times when I pay more attention to the sense of seriousness. For example, if I work on a piece for 3 months, that would be serious. But if I work on a piece only one or two days or a week, I would not consider that a very serious piece, even though I myself would take it seriously.

For something serious I look for material that is truly new, during a long period of thought and preparation. At the moment, my pieces cannot be said to be all that serious, because I use material that already exists, although newly arranged, and I do it for a short amount of time. It's as though I have a personal strategy, a method for creating a new work quickly: I take existing material and rearrange it. This new arrangement can be realized by my group, even though I never write anything down formally, because I usually work with the same group of people. So they know and easily accept my way of working. I [only] write notation to help the musicians remember [a piece], because if they rehearse only

once or twice a year, they have to be reminded. Sometimes we forget a piece we have already performed, so the notation helps us remember.

If I make an *iringan* (dance accompaniment), I usually use a group from ASKI. The membership of this group could be said to be always changing, but because we have the same background, in the final analysis there is not really any difficulty in technique and other matters. We—Pak Sadra, Mas A. L., Mas Bono [and myself] [1]—can be said to be the same in certain ways, particularly in our way of incorporating elements of Javanese traditional music in new arrangements. This is in relation to pure concert music—well, what does pure mean?—concert music that is a new creation.

If I have to do a piece to be played by another group, that would be hard and would take a long time. My pieces always take into account the ability of the players. How can we have a strategy so they will do what we want? And what we want also has to be appropriate for them [i.e. we can try to make them do what we want, but we must ask them to do what they are capable of]. I can work with both kinds of players, the ones who have [musical] ability and the ones who don't. For the ones who don't, I have a method that takes advantage of their potential. I don't think it's a problem, except that I can be freer with those who have some ability. Americans, judging from the tape [I heard recently] [2], are already extraordinary. I think I would have a strategy that could take their potential into account, too.

We could develop traditional Javanese music until it is of the same quality as classical Western music, like the works of Mozart and Beethoven, with their extraordinary orchestration. Javanese music is still in a [new] stage of development, it still needs to be fixed up here and there. It used to be better established, and the quality of it was really extraordinary too, but it started becoming farther from the people. Now we must find a strategy to bring it back and have it accepted by the people again [3]. We try this, we try that, while those artists who are

fanatic about the established forms say we are ruining something that was already intact.

If a composer saw the gamelan as merely a set of instruments, and had a unique background and approach to combining those instruments in a composition, I don't think that would be a problem. [On the other hand, for example,] there have been people from Padang Panjang [in West Sumatra] who have studied here [in Solo], but have minimal skill [on Javanese instruments]. But for their final project they successfully make compositions with the gamelan instruments, because they have lots of [Javanese] friends who help by playing in the piece. After this experience, they realize that it is problematic to perceive the gamelan in this way—they say: "Hey, we can't just see the gamelan as a set of instruments. We have to also know the characteristics of the gamelan, why pieces are composed in a certain way, what the relationship is between the instruments." These things must also be understood.

I think that just learning to appreciate new music in Indonesia is not enough to give a picture of the extent to which traditional music has developed here. If people just hear a cassette [recording] or see a video, it is not [a] complete [experience]. They have to know about the developments in a more direct way. They should become directly immersed in [the music], as much as possible. Then they will really know it.

—A. W. Sutrisna

This essay is based on a 1989 interview with A. W. Sutrisna, which was conducted, translated, interpolated and annotated by Jody Diamond.—Ed.

A. W. Sutrisna is a composer and drummer who teaches at STSI Surakarta.

Notes

1. I Wayan Sadra, A. L. Suwardi, B. Subono are members of the faculty at STSI.

2. The tape was of the American group BANG, with pieces by Jody Diamond, Daniel Schmidt and Ingram Marshall (available from the American Gamelan Institute).

3. This reflects a policy at STSI, established by a former director, S. D. Humardani, that change in the traditional arts is what will keep the arts alive and prevent them from becoming forms maintained only for tourists and museums.

Old-Growth Music in the Northwest

The important thing is to see the world as a single place.

—John Cage

What we are witnessing in the world today is an unparalleled waterfall of destruction of a diversity of human cultures; plant species; animal species; of the richness of the biosphere and the millions of years of organic evolution that have gone into it.

—Gary Snyder

In his program notes for the premiere of *Meeting* in the November 1991 concert in Seattle, Washington [1], A. W. Sutrisna describes his piece as a "meeting between the old and new". He further states that "the piece was created while meeting and working together with the American musicians. This meeting has given me a certain inner spiritual experience which goes deep within me." In these words is a recognition that his piece belongs to the past as well as to the present, that its creation is not a solitary act, but an act of communion with the past, that it is, in fact, built upon or made out of the musical intelligence of the past. In addition, he recognizes that the creation and performance of this music is a communal and contextual act, the result of interaction with this particular group of American performers at this particular time and place.

Sutrisna's words remind us that music is not the creation of newness, it is the process of renewal. Ultimately, the composer can claim little for herself or himself. If one writes a piece for piano, what of that piece can one claim? The piano? Hardly. Suppose one decides to use a scale or a chord. Are these things that one can claim for one's own? No. Most scales that one would use or even invent today could be found to have some historical precedent. Likewise, chords are found throughout the Baroque, Classical, and Romantic eras, and of course the unrestricted use of dissonant chords was well established in the first half of the twentieth century. In other words, the piano itself, its mechanical and sonic complexity and richness, and the language of its tunings, scales, arpeggios, and chords represents the manifestation of a musical intelligence that is probably far greater than that of any individual

composer. When the composer writes for the piano, it is a renewal of the life of the instrument and this musical intelligence. At the same time, it is an homage to the past and to the ways of the instrument that have been revealed by the past. One should be careful about how much newness one claims for the piece or how much attention one draws to oneself for its creation. In many ways, it is an old piece, not a solitary act of newness, but a communal act of renewal. Nowhere is this connection with the past more apparent than with the gamelan. In gamelan music, the most powerful presence is the gamelan itself. It has a physical, sculptural, and sacred presence, the power of which derives, not from its newness, but from its oldness. It is the "vision of the ancient chime and bell" that Roscoe Mitchell talks about, which "reminds us of the lyrical power that remains at the heart of mankind's quest for fulfillment" [2].

In speaking of gamelan we often use the word 'traditional'. For many, this so-called tradition is the main thing of importance. There is a desire to study it and document it before it is lost. But we must be careful of this word 'tradition'. Consider what Trinh T. Minh-ha says: "Tradition remains the sacred weapon oppressors repeatedly hold up whenever they need to maintain their privileges" [3]. At the same time, we must be careful of the word *new*. It is worn out by the capitalistic cultural obsession with growth and consumption. It is worn out by the modernist artistic imperative of signature style and renunciation of the past. Somehow this word sounds hollow when we speak of gamelan music. Perhaps we need to resurrect the word *old*. New forests are managed forests—orderly, symmetrical, commodified for the board-foot lumber market and the pollution-spilling paper mills. Old-growth forests are remarkable self-sustaining ecosystems, dark and deep, mysterious, soul-healing. New forests are hot-house seedlings planted in barren land that has been ravaged by machines. Old forests ooze continuously, almost imperceptibly, out of the detritus of the past.

So Sutrisna's music is old-growth music, rich with the remains of the past, yet renewed by the creativity and context of the present. In his work, we discover that, as Suzi Gablik says in *The Reenchantment of Art*, "there is another kind of art, which speaks to the power of connectedness and estab-

lishes bonds, art that calls us into relationship". We can see art not as "the solitary process it has been since the Renaissance, but as something we do with others" [4]. Art not so much as a revolution of style, but as a revolution of context. Ultimately, in art, as in nature, we must honor the ecological principle of unity through diversity: unity achieved, not by sameness and uniformity, but by the interdependence, the interpenetration of the world's cultures, species and things. The composer Toru Takemitsu likes to say that we are in the process of hatching the universal egg (a term he borrowed from R. Buckminster Fuller). To do so we must incubate it slowly. He sees his own work as a contribution to this process. Antonius W. Sutrisna is another composer who is incubating this universal egg.

—Jarrad Powell

Notes

1. *Meeting* premiered in the PONCHO Concert Hall at Cornish College of the Arts on 23 November 1991.
2. Roscoe Mitchell, Liner notes to *The Bell Piece*, ABSOLUT CD #3, *EAR Magazine*.
3. Trinh T. Minh-ha, *Woman, Native, Other* (Bloomington, IN: Indiana Univ. Press, 1989) p. 106.
4. Suzi Gablik, *The Reenchantment of Art* (New York: Thames and Hudson, 1991) p. 106.

VANCOUVER

Barbara Benary, 305 Call Hollow Rd., Stony Point, NY 10980, U.S.A.

COMPOSER'S STATEMENT

I have been writing gamelan music for about 16 years—more or less ever since I had the instruments and ensemble of Gamelan Son of Lion to work with. Gamelan has become more intimate a language to me than the violin and orchestra of my training, and the luxury of being able to work out ideas within a composers' collective has led me to devote the predominance of my compositional work to this ensemble.

I do not regard *Vancouver* as a typical example of my work, as it was conceived specifically as a satirical commentary and, unlike most of my other pieces, makes deliberate reference to classical Javanese form. In the larger sense, my gamelan pieces have tended to fall into one of two categories, which I call abstract and theatrical. The abstract works are the majority; they include process compositions that are based on mathematical struc-

tures or that incorporate structural ideas from various world musics—old or unusual Indonesian forms, Indian *tala*, English change-ringing, etc. The theatrical pieces include dance and shadow-puppet theatre accompaniments, wherein I have more often had occasion to borrow from traditional Javanese form or make deliberate reference to the West.

Vancouver is such a theatrical piece. It is named for the place of its inspiration (a device used in naming pieces in the American Sacred Harp hymn tradition)—in this case the wonderful First International Gamelan Conference held at Expo '86 in Vancouver, British Columbia, Canada, to which my ensemble was invited. This piece is meant to call to mind Americans playing Javanese *karawitan*, sometimes not getting it quite right and thus inadvertently recreating jazz. Jazz, an important American tradition, was one style I did not hear amidst the many experimental American pieces at Expo, and I thought it high time someone explored its possibilities on the gamelan.

Vancouver makes several bridges between the irregular Javanese musical form called *sampak* (used for fights or violent characters in drama) and swing style. Structurally the piece centers around the use of *imbal*—a traditional gamelan device of interlocking parts in which one set of players plays on-beats and the other, off-beats. This begins regularly as in proper Javanese music, then drifts into a swing beat. Two tuning systems are used, with on-beat players using the *pelog* 7-tone scale and off-beat players the 5-tone *slendro* throughout.

—Barbara Benary

Barbara Benary is a composer, instrument-builder and ethnomusicologist.

WORK IN PROGRESS

I Wayan Sadra, Jurusan Karawitan, STSI Surakarta, Kentingan, Jebres, Surakarta, Central Java, Indonesia 57126.

COMPOSER'S STATEMENT

Reflections on a First Experience in Electronic Music

How can I describe my feelings? When I first saw the high-tech equipment at the Bregman Studio at Dartmouth College, my heart sank. It was as if I were a powerless grain of sand, adrift upon a vast desert. I felt sud-

dently surrounded by a tornado of all kinds of information, some of which I could understand and some of which I could not comprehend at all. Maybe this was caused by ignorance or by difficulties with the language. Because of this situation, in the early days of visiting the studio, I felt I had entered a bad dream in an imaginary world I did not comprehend.

My experience with computer, or electronic, music up until then had been limited to taking instructions from other composers, but without understanding the results or the process—for example, when I worked with Larry Polansky and Pauline Oliveros at Telluride [Composer-to-Composer conference in 1990]. Perhaps this was partly why I had a narrow view of electronic music, thinking of it merely as a sound, like ringing in the ears. But now the situation was very different. Perhaps it was my desire to know more that pushed me to define my own purpose. What was I doing in the studio at Bregman? An inner voice told me that this was an opportunity to learn something that I did not yet understand. With this conviction, I summoned up the courage to record the sound of the *suling* [small bamboo flute] (one of the traditional instruments I like the best, because it is easy to take anywhere). John Puterbaugh, after using only a few synthesizer effects like delay and chorus, was able to come up with a recording that reverberated and pulsed and was full of variations.

This made me happy, because I had not even imagined that the results would be like that. I listened to the recording many times at Larry and Jody's house [Larry Polansky and Jody Diamond]. In my imagination I envisioned a mantra or sacred chanting during one section, while another section evoked a complex *kotekan* [of interlocking parts]. How could I express my excitement—one way was to share it with others, with a friend who by chance called from Portland. He asked me what I was doing in Hanover, and I played him the recording over the telephone. Yet behind his admiration was a disturbing question: of what usefulness was my experience in the electronic music studio?

It seemed that my friend was prematurely assuming that I would bring my experience back to my own institution as if I were going to demand that STSI build an electronic music studio. I think this assumption had some

value, at least as a reminder to look for answers to such questions. I believed only that, whatever form my experience took, it would at least be of benefit to myself, if not to anyone else.

When I played the recording for Larry Polansky, he said: it still sounds like a *suling*! I did not comprehend the significance of this statement. What did he mean? Did he not like the recording? I still don't know.

One time Jody Diamond introduced me to John Appleton, the head of the Bregman studio. During our discussion I realized that I could learn a lot about electronic music—for example, basic concepts in electronic music and the different compositional processes that give priority to the design of sounds. I also realized that I might have to leave behind the compositional process that I had always used in Indonesia, where I already knew everything about sound sources, because I was so familiar with the sounds of gamelan, its character and other attributes, forms and arrangements. Appleton gave me some different input, a different principle. Upon consideration, it is not that different from the creative process in compositions that focus on the explorations of sounds made by traditional instruments.

Yet how would the ideas I had encountered during these conversations take form in the studio? This was the most basic problem I could think of. On a conceptual level, even though it was something new, it was something I could understand.

—I Wayan Sadra

This is the first part of an essay by I Wayan Sadra, translated from the Indonesian by Jody Diamond.—Ed.

I Wayan Sadra is a composer, educator and music critic. He is on the faculty of STSI Surakarta.

DIRECTOR'S STATEMENT

Work in Progress is an interactive piece for Javanese metallophones, Balinese bamboo flutes, American-made aluminum chimes, voice, and electronic processing. Sadra composed it as a way of exploring the possibility of live electronics. He also composed a tape piece on the Synclavier synthesizer, *Mimipinya Salju/Snow's Own Dream* (which will be released on the Lyrichord label in 1993 as part of a CD of many of Sadra's works). These two pieces are the first he composed with electronics and were both cre-

Fig. 1. Phrases VII, VIII, and IX of **אל חטא** (Al Het). Staff 1 is voice, staff 2 is percussion played by the singer, staff 3 is *gambang* (*pelog*), staff 4 is *gender* (*slendro*). Phrase IX is the exact middle of the piece and uses the fully chromatic *pelog/slendro* mode.

ated at the Bregman Electroacoustic Music Studio. Most of Sadra's pieces are for traditional Indonesian instruments, often based on the Javanese gamelan ensemble with the addition of instruments (or musicians) from other Indonesian regional traditions, such as Bali, Sunda (West Java), West Sumatra, as well as the introduction of his own musical ideas and concepts. In addition to contemporary instrumental music, he often writes for dance and theater accompaniment.

—Jody Diamond

אל חטא (AL HET)

—for the people of Nicaragua

Larry Polansky, Box 5036, Hanover, NH 03775, U.S.A.

COMPOSER'S STATEMENT

אל חטא (Al Het) was written at the request of Jody Diamond for the International Gamelan Festival, which took place at the Vancouver Expo, but the tremendous difficulty of the work prevented its performance there

(it was later performed several times by Gino Forlin and Jody Diamond). Jody and I had frequently discussed how much of the new and experimental music for gamelan outside of Indonesia had overlooked the more difficult instruments (*gender*, *gambang*, *rebab*, *pesindhen*, etc.), instruments that are considered to be essential in Javanese music. I decided to write a piece that *only* used those instruments, eschewing the *balungan* instruments that seemed to dominate new American music for gamelan.

אל חטא (Al Het) is for singer and percussionist who plays both Central Javanese-style *pelog gambang* and *slendro gender*. The *pelog barang gambang* and *slendro gender* must have *tumbuk* 6 (pitch B in the score). The tuning of the two instruments is not specified—any two that match the above criteria may be used. The piece will vary greatly in register and tuning depending on the particular gamelan used.

אל חטא (Al Het) uses modes of my own construction, inspired in part

by the complexity and richness of *pathet* in Central Javanese music. In classical Central Javanese music, frequent modal borrowings (such as *barang miring*) occur, and contemporary Indonesian composers have experimented with combining and juxtaposing *pelog* and *slendro*. In addition, frequent conversations with my colleagues and friends Lou Harrison and John Chalmers awakened my interest in fresh approaches to mode in composition.

The piece is organized as 17 phrases, each 17 beats long. Each phrase in the vocal part uses a different mode constructed by combining *pelog* and *slendro* pitches. The modes become more complex, using more pitches, towards the middle of the piece and less complex towards the end. Phrase IX is 'fully chromatic', using the 12-note *pelog/slendro* combination. The modal structure of the piece is a retrograde, the modes of phrase I and XVII, II and XVI, VII and X, and so on, are the same. The modes themselves are listed on the final page of the score, but not shown here for the sake of brevity.

The modes also correspond to the rhythmic organization of the piece. Each 17-beat phrase is subdivided into measures of 2, 3, 5, 7, 8, 9, 12 and 17 beats, and the pitches used for each measure are a subset of the mode for that phrase. An example from the score (Fig. 1) shows that phrase VIII uses the 8- and 9-note subsets of the highly chromatic *pelog* mode beginning on the pitch *pelog*3: *pelog*3, *slendro*3, *pelog*5, *slendro*5, *pelog/slendro*6, *pelog*7, *slendro*1, *pelog*2, *slendro*2. Throughout the piece the percussion and vocal parts partition the 17 beats in different, overlapping ways, creating modal and rhythmic dovetailing that seemed to me a natural extension of traditional *pesindhen* and *panerusan* patterns. The number of subdivisions of the 17 beats increases towards the middle and decreases towards the end, so that the beginning and ending of the piece are composed of shorter rhythmic fragments (consequently with more rapidly expanding/contracting modal usage). My idea was that this very short piece would be a kind of dense microcosm of the time expansion/contraction of *irama* in large Central Javanese *gendhing*.

Western notation is used for the piece, combining the two *pathet* into one 12-pitch inflected scale [1] (see Fig. 1):

<i>pelog</i>	2	3	5	6	7
<i>gambang</i>	E	F	G	B	C
<i>slendro</i>	D	E↑	F#	A	B
<i>gender</i>	1	2	3	5	6

The piece presents a formidable challenge for the percussionist. The music itself is extremely difficult, but Forlin also had to learn to 'transpose' the staff notation onto the two instruments, each of which has its own mallet and damping techniques. Forlin's ingenuity, dedication and virtuosity in learning and performing this piece amazed me, and I have always enjoyed simply watching him play it: mallets flying (accurately) between the two instruments (he raises the *gambang* so that the keys are level with the *gender*), and damping with everything from the mallets themselves to his elbows. My deep appreciation goes to both performers for their perseverance in learning this piece.

The **אל חטא** (Al Het) is an important exculpatory Hebrew prayer said at selected times (Yom Kippur, one's own wedding, etc.). In many traditions the chest is pounded during this prayer as an act of contrition. Progressive Jewish communities have often found the **אל חטא** (Al Het) to be an interesting place to rewrite the liturgy, apologizing for many aspects of our own participation in the inequities of modern life. It is more in this spirit than in one of traditional Judaism that I used the prayer as the title and the form for the piece.

As a text for the apology, I wrote a short poem in Spanish. I have always enjoyed literature written in an author's second language. Since gamelan itself was a kind of musical second language to me, I thought—considering the title and the dedication of the piece—it would be important to write the text in the language of those to whom the apology was directed.

Por no escuchar las voces, a los spiritos
del futuro, las echas del cambio.

Por el vivir aqui que no permite el vivir
alla.

Por jugar en el mar en vez de mirar a
las estrellas.

Por no manejar los barcos del cielo,
como Ustedes, con las musica y
la poetica.

—Larry Polansky

Larry Polansky is a composer, performer and theorist. He is the director of Frog Peak Music and is currently on the faculty at Dartmouth College, Hanover, New Hampshire, U.S.A.

Note

1. Note that the *pelog/slendro* interrelationships may be different for each gamelan. See Larry Polansky, "Notes on the Tuning of Three Central Javanese *Slendro/Pelog* Pairs", *Experimental Musical Instruments* 6, No. 2, 1990.

PARAGRAPH

Rahayu Supanggah, Jurusan Karawitan, STSI Surakarta, Kentingan, Jebres, Surakarta, Central Java, Indonesia 57126.

COMPOSER'S STATEMENT

For generations my ancestors were *dhalang* (shadow theater masters) and musicians, including my father and grandmother. Perhaps the arts are in my blood, even though when I was little I wasn't interested in the arts—I wanted to be an engineer. I heard gamelan at home every night (maybe that's why I could play gamelan and do the puppets a little). In my first year at the high school conservatory, I was chosen to represent Indonesia in a group that went to Japan, East Asia and Southeast Asia. That was when I realized that the artistic life might have its advantages and that it might be possible to make a living at it.

After that I was serious about studying music, continuing through school to ASKI. In high school I played a lot, but didn't compose. I spent a lot of time playing with really good musicians. In the early 1970s, or maybe in 1969, we formed music groups outside of school. My group was more experimental than the others. We mixed elements from Bali, Sunda and Java. We didn't follow the rules of *pathet* (the Javanese modal system); we mixed in different tones and sometimes we added instruments that were not from the gamelan. I changed the usual order [of sections]—the form, the *pathet*, the tuning and more. When I mixed in elements from Sunda and Bali, the *pathet* became very unclear. Sometimes it even sounded diatonic, like a Western melody. This was the embryo, the beginning of our experimentation. In retrospect, some of this work seems superficial. But to be innovative, this is what we have to do.

At ASKI, I was never an assistant because I was branded a troublemaker. I don't know why I was that way—maybe artists have an instinctive desire to do things differently; they are not thinking about whether something is a composition or not, basically they just want to make something different. Even after Humardani [1] asked me

to teach, I didn't want to. I was afraid of the institution; I just wanted to be an artist. But I went to Australia to teach for three months, and when I came back I had been hired by ASKI. I was told to teach Balinese and Sundanese music [instead of Javanese] because the old Javanese teachers didn't agree with the experiments I made with *karawitan*.

After Australia, I formed another group at Pusat Kesenian Jawa Tengah [Central Javanese Arts Center]. With Humardani's encouragement, we did a lot of crazy pieces. We tried a lot of new ideas, like arranging diatonic melodies for gamelan. This was the beginning of a new era in my work—I call it *Genjengan*, from *jleng-jleng*, meaning that the arrangements were dynamic, had a lot of contrast and were fast and loud. In 1974, when I was the head of the music department, we did *Wayang Buddha* [a multi-disciplinary theater piece with dance, music, puppets, special lighting, etc.] and other pieces that have become precedents for many future works.

There were certain elements of these experimental pieces that became standard for new works. Free rhythm and fixed rhythm were combined. Unusual vocal lines were used with gamelan, not like the usual *pesindhen* [female soloist] or even like hymns from church. Two elements from different tunings or different *pathet* were layered on each other to become one. Nowadays this is commonplace. Many composers used the voice without melodies, as just sound. Others would just make sounds in free rhythm, or imitate the rhythmic dynamics of Balinese *kebyar*. Also, many *macapat* [solo vocal] melodies became instrumental melodies, like *Srepegan Dandanggula*, which uses the vocal melody from *Macapat Dandanggula*. Another important change was that the drum did not have the same role as before, because *every* musician now had to understand everything [that was going to happen]: when the music was going to change, when it would get loud, etc. So the drummer was no longer like the conductor of the orchestra—the drum was used in almost the same way as the other instruments. I was very productive during that time between 1974 and 1981, when I left for Paris to get my doctorate.

After I came back [from Paris], there were others—Dedek [A. W. Sutrisna], A. L. Suwardi, Pande Made Sukerta—who had matured and

could take my place in making something [innovative]. . . . In our creative process we always work together. We start with an idea, and this will be developed while we rehearse together. "Oh, add this, try this, that's not good, try this"—you'll often hear this during a rehearsal. I always work with friends, and I am not overly authoritarian. I might have an idea of my own, and I will suggest it to my friends, throwing it out—"Try this!" Sometimes my compositions are more flexible and depend on the strengths of the players—like the piece *Joged*, which I did for Balinese musicians. If they had been Javanese musicians it would have been different.

Sometimes I'll have already decided on something [before the rehearsal], and made some notation at home or decisions about the *garapan* [arrangement, working out]. But I don't usually stray too far from the existing vocabulary, because what I make is not truly avant garde, it is not a drastic change. I still worry about getting too far from the gamelan or from *karawitan*, because [if I do,] then who am I composing for? If it is too far out, so far that musicians themselves or the music-loving public can't understand it, can't accept it, then who am I creating for?

It could be difficult to make a composition to be performed in another country. We would have to know the audience, who was going to enjoy it, and maybe know the musical idioms that were familiar to that audience. And we would also have to consider who was going to play. Also, we are not so familiar with the social system and other matters there. I don't presuppose to say, "Oh, I am making a composition to be played over there [in a foreign country]". I'm lucky just to be able to compose. My first thought is for the audience here. If it can be played somewhere else too, then that's a bonus. My priority has to be *komposisi* (new composition) in Indonesia: it is in a serious condition because it has not been widely accepted by the public. *Komposisi* is itself new here, something only talked about since the 1970s. I could brag a little and say that I was one of the pioneers of experimental music in the 1970s, especially in composition for gamelan, starting about 1975. It's something I feel proud of.

—Rahayu Supanggah

This essay is based on a 1989 interview with Rahayu Supanggah, which was

conducted, translated, interpolated and annotated by Jody Diamond.—Ed.

Rahayu Supanggah is a composer and ethnomusicologist. He is on the faculty of STSI Surakarta.

Note

1. S. D. Humardani is a former director of STSI Surakarta.

DIRECTOR'S STATEMENT

The residency of Rahayu Supanggah with Gamelan Son of Lion ensemble in the fall of 1991 provided a welcomed interchange for us all. For the American gamelan players it was an opportunity not only to share another composer's music, but to see how an Indonesian composer works, compared with our own American ways.

The presence of a composer-performer in the ensemble was not in itself new; we are not a single composer's band, as many American new-music ensembles are, but a repertory ensemble, a collective in which composing members use the group as a forum for developing and performing new pieces. In our 16 years of concertizing, rarely have we presented a piece in which the composer did not have an active presence at some time during the preparation, sometimes by letter and telephone, but preferably in the flesh.

The new gamelan repertoire almost necessitates this. In standard Western ensembles the current tradition assumes a separation of composer and performer and assumes the written score as the primary mode of communication. Traditional Javanese music assumes the opposite: a memorized and generally unnotated repertoire in which the composer is anonymous. As an American new-music gamelan we fall in between. We use notation, but there is no single common method of scoring American gamelan music. Some composers provide instructional scores (primarily verbal information); others use Javanese cypher notation (numbers), others use a combination of this with Western staff notation for rhythmic clarity. In most cases the pieces are previously unperformed and unrecorded. Thus, a composer's presence is a great bonus, either for interpreting notation or for rendering it unnecessary.

Collaboration is not synonymous with group composition (a rare phenomenon, but one we have tried on two occasions). Although we take turns as composer, it is generally one

person at a time who is responsible for the development of a piece. Compared to the traditional Western composer-ensemble relationship, I would say our American gamelan collaborative style involves more first-hand interaction. There is more room for performer dialogue and suggestion, more time for the composer to experiment with live players, develop an idea, change it. Rehearsals are a forum both for fitting musical ideas to the capacities of the instruments and the players and for drawing additional ideas from the interaction. I do not know if the nature of gamelan instruments and the tradition they come from has brought us all to this style of working or if the same could happen as easily among contemporary Western composer and ensembles but does not because of the Western tradition of composer as ego. Whatever its origins, ours is a process I value both as a composer whose ideas are nurtured and realized and as a performer who participates in bringing someone else's piece to fruition. It scarcely seems to matter to me which side of the fence I am on.

We found that there was much similarity between Supanggah's method of working with us and the way we have come to work among ourselves. We Americans tend to use talking a great deal, asking our composers questions to help clarify the form of the idea, questions based on a trust that the composer knows what he or she is seeking. The player has the freedom to tell the composer: "That doesn't work"; the composer can also call the limit on outside suggestions: "That's a good idea, but it's another piece." Supanggah's personal style is softer than ours in general; he has definite ideas, but he seems to wait for us to solicit them. Our dialogue is more one of us asking "What would you like us to do?" and him replying, "Would you like to try this?"

Working with Supanggah we got the sense that compositions are meant as transitory phenomena, works created to fit the time and situation, rather than to become eternal fixtures, Works of Art. Of the three pieces he created for us, two are improvisations in which he provided the structural elements and defined the form in response to our questions; however, he discouraged us from practicing them too much before performance and never sought to notate them. The third piece, *Paragraph*, is

more formal, built mostly of Javanese-style material with the addition of improvised Western instruments in one section. He taught us this piece from cypher notation on a chalkboard, a common device in contemporary Indonesian conservatory teaching. The fact that it was in chalk implies something transitory about the nature of notation. His final notation on paper was provided only after we had basically learned the piece. In naming the piece he explained that *Paragraph* denotes a section, as in a paragraph of an essay, the essay being our ongoing musical interaction.

I also was left with the impression that Supangah's compositions are not made as statements of individual innovation but as realizations of a larger, evolving process. Some of the non-classically Javanese sound elements he uses have been used in other pieces by composers in his touring group New Music Indonesia, such as sweeping-broom sounds, juxtaposed *slendro* and *pelog* tunings, juxtaposed instruments of different tunings and traditions. In the American avant-garde we are used to having sound ideas jealously guarded as individual trademarks, almost as personal property; Supangah is not bothered by any of this. It is as if he seeks not the New Idea, but rather the new synthesis that occurs out of his creative interaction with his American performers and current situation.

There was a final public product: our concert on 20 November 1991 that brought a formal end to Supangah's residency and provided the audio and video documentation of the pieces. What the documentation cannot measure, however, is the process—that personal sharing experience of the residency and the development of the pieces. We gamelan members warmly remember and value these aspects equally with, if not even more than, the public product.

—Barbara Benary

CONCERTO FOR PIANO WITH JAVANESE GAMELAN

Lou Harrison, 7121 Viewpoint Rd., Aptos, CA 95003, U.S.A.

COMPOSER'S STATEMENT

Certainly among the instrumental combinations of gamelan with 'Western' instruments, the gamelan with piano is an obvious one. The piano, of course, can be tuned in any way wanted and certainly may be tuned to accord with any gamelan tuning. Also, piano figuration can accord with gamelan figuration, at least up to a point. My friend Belle Bulwinkle was agreeable to the idea of my writing a concerto for her, and, since my 70th birthday party was soon to be celebrated at Mills College (Oakland, California), I took the occasion to compose it. It was first performed, at Mills, by Bulwinkle and the Mills Gamelan (directed by Jody Diamond). Later that year it was performed at the Cabrillo Music Festival at Santa Cruz, California, with the same people playing. The tuning of the piano looks odd to the seasoned gamelan buff because the *pelog* section of many gamelan tends to stay around the D-minor range with the A often not too far from one of the A's of the West. (That would be pitch 5 of *pelog*). In order to accommodate both tuning schemes or systems on the keyboard, it became necessary to re-order the pitches, and it turned out that the *pelog* is notated in roughly D-flat, and the *slendro* is notated in D-major. The note C on the keyboard was not needed, and so I simply left it out. In the Gamelan Si Betty [1] and many other recent gamelan, *tumbuk* (the place where things come together) is on pitch 6 in both tuning systems. The five pitches of the *slendro* and the seven pitches of *pelog* only add up to eleven; this explains the missing note C. Some of the pitches in the tuning lower the piano pitches as much as a minor third. I did not object to this at

all because, down to a certain level, strings sound warmer, richer and more resonant when lowered than when raised.

I found that my concerto-writing for the piano took on almost at once an oddly classical quality (reminiscent of Haydn and Schubert). I wondered about that until I realized that since, at least in the outer movements, I was observing standard Javanese classical form ideas, there was a natural reflection of that classicism in my keyboard approach as well. In short, Javanese classicism seems to have attracted a similar classicism from the Western instrument. The middle movement, more romantic and Schubertian in nature, has as a penultimate feature a little climactic passage that emphasizes overtone 13 just before the final resolution. The tuning of the *pelog* section, which is recorded in this concerto, consists of overtones 12, 13, 14, 17, 18, 19, and 21, with A-440 Hz being equivalent to 18. Overtone 13 in this sequence had always bothered me, despite approval by Pak Cokro [2], and I here made a point of this tone's shocking quality, which then resolves into the final cadence. The *slendro* tuning (which I thought I had invented) was first written down by the scientist and astronomer Claudius Ptolemy during the second century, C.E. in Alexandria. In ascending order, it sounds from pitch 5 an 8/7, 7/6, 9/8, 8/7, 7/6—a neat pair of classical tetrachords separated as usual by a disjunction of a 9-to-8.

—Lou Harrison

Lou Harrison is a composer, humanist and poet.

Notes

1. Gamelan Si Betty was built by Lou Harrison and William Colvig, and is named for Betty Freeman, a supporter of the arts.

2. Pak Cokro is a familiar name for K. R. T. Wasitodiningrat, great Javanese composer and master musician.

ASKI Surakarta (Akademi Seni Karawitan Indonesia)—a college-level music conservatory in Surakarta, Central Java. When the curriculum and degree programs were expanded, the school was upgraded and renamed STSI Surakarta.

balungan—the 'skeletal' melody or melodic framework of a piece, sometimes referring to the instruments that play this part.

barang miring—a technique of modal deviation from *slendro* used by any non-fixed pitch instrument, often implying *pelog*.

bonang—two-octave set of small-pot gongs or metal plates with raised knobs, usually played with two mallets (also called *bonang barung*).

didjeridoo—an Australian aboriginal wind instrument.

erhu—Chinese bowed fiddle.

gambang—multi-octave xylophone, usually played with two mallets.

gender—tube-resonated metallophone, usually played with two mallets.

gendhing—can either refer to a specific form of a piece or can simply mean 'piece'.

irama—temporal relationships or density levels in Javanese music.

karawitan—classical music of Central Java and its performance practice.

kebyar—a dynamic modern style of Balinese gamelan music.

panerusan—elaborating instruments, which allow for the playing of more complex and virtuosic patterns than the *balungan* instruments.

pathet—*pathet* roughly translates as 'mode', but in practice it is a much more complex term that refers to subsets of the two main *laras* (*pelog* and *slendro*) and also to many aspects of musical interpretation and formal organization.

pelog—one of the two main *laras* (tunings), or pitch sets. *Pelog* has seven primary pitches.

pelog barang—one of the three main *pelog pathet*, characterized by the use of *pelog* pitch 7 (p7). Generally, there are two *pelog gender* in a full Javanese gamelan, one of which is *pelog barang*.

pesindhen—female vocalist.

rebab—two-stringed bowed spike fiddle—the melodic leader in a Javanese gamelan.

saron barung—trough-resonated metallophone, usually played with a single mallet (sometimes referred to as *saron*).

saron panerus—trough-resonated metallophone, an octave higher than *saron barung* and usually played with a single mallet.

slendro—one of the two main *laras* (tunings), or pitch sets. *Slendro* has five primary pitches.

slenthem—low-pitched tube-resonated metallophone, usually played with a single mallet.

STSI (Sekolah Tinggi Seni Indonesia) Surakarta—a national performing-arts college with a broad curriculum. Formerly named ASKI Surakarta.

suling—bamboo flute.

tumbuk—a common tone at the same degree of both *slendro* and *pelog* of a particular gamelan, often at pitch 6 or 5; 2 also is used.